

KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM

Present: **Shri. Preman Dinaraj, Chairman**
Shri. S. Venugopal, Member
Shri. K. Vikraman Nair, Member

Petition No. OP 43/19

In the matter of : 1. Petition filed CSEZA for the approval of the additional Capital Expenditure for the FY 2017-18.
: 2. Approval of CAPEX plan for the MYT period from 2018-19 to 2021-22.

Petitioner : Cochin Special Economic Zone Authority

Petitioner represented by : Shri. K.C Ramakrishnan, Secretary,
Shri. Krishna Varma K, Consultant
Shri. K.C Seetharaman, CA
Shri. Ratheesh Pandey, Engineer (Electrical)

KSEB Ltd represented by : Shri. K.G.P Nampoothiri, EE, TRAC.
Shri. Manoj G, AEE, TRAC.

Order dated 2.12.2019

1. M/s Cochin Special Economic Zone Authority (hereinafter referred to as the petitioner or CSEZA), on 20.02.2019, had filed a petition for the approval of additional capital expenditure of Rs 5,08,80,000/- incurred during the financial year 2017-18, for the installation of 636 kWp Roof Top Solar Plants in the buildings within the area of CSEZA. The summary of the issues raised in the petition is given below.
 - (i) As part of the target of achieving 40 GW by Government of India through roof top solar power, Ministry of Commerce has directed CSEZA to setup grid connected roof top solar plants on the available roof areas of building owned by CSEZA. M/s PEC Ltd, a public undertaking under Ministry of Commerce is one of the organization recognized by MNRE for the installation of Solar plants. M/s. PEC Limited submitted a detailed project report and proposed to install

636kWp of Solar Plant in buildings within CSEZA with a total capital cost of Rs.5.088 Crores. It is also reported that out of total capital cost of Rs.5.088 Crores, MNRE will provide a capital subsidy at the rate of Rs.18.75/Watt. Thus a total capital subsidy of Rs. 1.1925 Crores is available for the project.

- (ii) The balance fund of the project after accounting the MNRE subsidy shall be met from the surplus in power distribution system account maintained by the Licensee. The CSEZA also submitted that the plant was commissioned in August 2017 and from the date of commissioning till 31.03.2018, they could generate 512356 units from the Plant.
- (iii) The petitioner M/s CSEZA prayed to approve and regularize the Capital Expenditure of Rs. 5.088 Crores incurred by CSEZA towards installation of 636kWp rooftop solar plant and also to approve the depreciation of same while truing up the account from 2017-2018 onwards. The petition is admitted as OP No. 43/19.

2. In the mean while M/s CSEZA, on 13.05.2019 has submitted the details of the Capital Investments proposed for the MYT period from 2018-19 to 2021-22. The summary of the capital investment proposed for the MYT period is given below.

SL No.	Year	Estimated Amount- Rs in Lakh
1	2018-19	24.97
2	2019-20	377.36
3	2020-21	14.69
4	2021-22	14.15
	Total	431.17

3. The year wise details of the Capital Investment proposed for each year of the MYT period is given below;

Sl No	Description	Quantity	Rate	Amount (Rs)
FY 2018-19				
1	Supply of 3G GPRS Modem for web enabled energy monitoring system	15 Nos	15120	2,26,800.00
2	Construction of fencing around 110KV CSEZ Substation Control Room building			3,30,000.00
3	Construction of Aluminium fabrication works and constructing one operator cabin room partition at CSEZ 110KV Substation control room using aluminium fabrication with glass	1 No.		1,25,000.00
4	Supply Installation testing and commissioning of 2 Nos Air Conditioners at 110 KV Substation CSEZ, Kakkanad	Ls		78,415.00

5	Supply of 3 Nos Earth rods for using up to 110KV at 110KV Substation CSEZ, Kakkanad	3 Nos	5,000.00	15,000.00
6	Supply and Installation of one 5 kVA inverter with Battery Set for 110KV Substation Control room	1 No.		1,25,000.00
7	Supply of Prepaid Energy Meter (Model No Power logic ION 6200 Schneider Electric Make) for Power Distribution System	10 Nos		2,43,540.00
8	Construction of Store Room in 110KV Substation			9,55,152.00
9	Supply of 3G GPRS Modem (Model No. F2414-Four Faith Make) for Web Enabled Energy Monitoring System	25 Nos.	15,720.00	3,93,000.00
Total				24.97 Lakh
FY 2019-20				
1	Purchase of 1 No megger unit	1	30,000	30,000
2	Procurement of Computer Peripherals & Office Equipment			2,64,950.00
3	Replacement of Existing Isolator type HT Panel with New IP 67 Indoor VCB Type HT Panel in HT distribution System near SDF-16 building at CSEZ			2,70,000.00
4	Supply installation Testing of 30 V, 40 Ah battery bank for 1250 KVA transformer No.2 at SDF-17	1 No.	45,000.00	45,000.00
5	Supply installation Testing & Commissioning of new 650 kWp Grid Tied Solar Power Plant			3,29,15,887.00
6	Supply installation, testing and Commissioning of 2 Nos 110kV, 31.5kA, 800A triple pole, centre post rotating, horizontal double break isolator without earth switch in 110kV Substation Metering side			9,29,880
7	Providing RTU panel in 110kV Substation, for Open Access to CSEZA			4,47,120.00
8	Supply of 3G GPRS Modem (Model No F2414-Four Faith Make) for Web Enabled Energy Monitoring System in CSEZ, Kakkanad	25 Nos.	16,000.00	4,00,000.00
Total				377.36 Lakh
FY 2020-21				
1	Purchasing of 10 Nos Energy Meter for Power Distribution System	10 Nos.	24,354.00	2,43,540.00
2	Supply of 1 No 11KV / 0.415 KV 500 KVA trolley mounted unitized Transformer	1 No.	8,00,000.00	8,00,000.00
3	Supply of 3G GPRS Modem for Web Enabled Energy Monitoring System	25 Nos.	17,000.00	4,25,000.00
Total				14.69Lakh
FY 2021-22				

1	Replacing of 30V, 40Ah battery bank for control supply of 1250 KVA transformer No.1 at SDF-17	1 No.	45,000.00	45,000.00
2	Replacing of 30 V, 40Ah battery bank for control supply of 1250 KVA transformer at SDF - 43	1 No.	45,000.00	45,000.00
3	Supply of Power and Energy Meter (Model No. Power logic ION 6200Schneider Electric Make) for Power Distribution System in CSEZ, Kakkanad	10 Nos.	30,000.00	3,00,000.00
4	Supply of 3G GPRS Modem for Web Enabled Energy Monitoring System	25 Nos.	17,000.00	4,25,000.00
5	Supply of 2 Nos. 110KV.800A triple pole Isolators for EHT maintenance as spare in 110KV substation			5,94,000.00
Total				14.15Lakh

4. The Commission conducted hearing on the petition on 17.06.2019 at Court Hall of the Commission at Thiruvananthapuram. During the hearing, Sri. Krishna Varma, Consultant, CSEZA presented the matter on behalf of CSEZA. Sri. K.G.P Nampoothiri, Executive Engineer, KSEB Ltd presented the comments on behalf of KSEB Ltd.

5. During the hearing, the petitioner submitted the following;

- (i) As per the directions of the Ministry of Commerce, the CSEZA has to set up roof top solar plants at the available roof tops on the buildings owned by it. MNRE has given a deadline of 31st March 2017 to complete the installation. CSEZA has installed 636 kWp roof top solar plants through M/s PEC Ltd, a public sector undertaking under Ministry of Commerce. The total project cost is Rs 5,08,80,000/-.

The work was fully completed and capitalized on 25th August 2017. A total of 512356 units was generated from the plant from the date of commissioning till 31.03.2018, and thus avoided the purchase of power from KSEB Ltd to that extent.

The petitioner also submitted that, out of the total capital cost of Rs 5,08,80,000/-, MNRE will provide achievement linked incentive @Rs 18750/kWp totaling Rs 1,19,25,000/- for 636 kWp capacity. The incentive is yet to be received.

- (ii) In order to provide better service to the 156 consumers within the area of supply of 105 acres of land, CSEZA proposed a capital investment of Rs 431.17 lakh during the MYT period from 2018-19 to 2021-22. The proposed capital investments are mainly proposed under the following heads.

- (a) For purchasing 3G/4G modems and energy meters for facilitating the web enabled pre-paid energy metering.

- (b) Additional works proposed at 110 kV substations.
- (c) Installation of additional 650 kWp grid connected solar PV.
- (d) Purchase of spare transformers, additional computers and other accessories etc.

6. Based on the deliberations during the hearing, the observation and directions on the CAPEX plan submitted by the petitioner is given below,

- (i) The capital cost claimed for the 636kWp solar plant is much higher than the benchmark capital cost fixed by the CERC for the year. The petitioner has claimed that, the capital cost is within the benchmark capital cost fixed by MNRE. However, the petitioner has not produced the documentary evidence in support of their claim in this regard, the same has to be produced.

Hence, the petitioner shall produce a copy of the orders issued by the MNRE on the cost of the roof top solar plants installed during the financial year 2017-18.

- (ii) The petitioner shall also submit the method and details on the selection of the EPC contractor M/s PEC Limited and the basis of the EPC contract price of Rs 5,08,80,0000/-.
- (iii) The Commission hereby clarifies that, the petitioner has to get the 'achievement linked incentive' of Rs 1,19,25,000/- from MNRE immediately. The Commission may approve the capital cost after prudence check, duly considering the incentive also available from MNRE.
- (iv) The average cost of the prepaid energy meter including modem proposed in the MYT period from 2018-19 to 2021-22, claimed is more than Rs 40000/- per meter. The Commission observed that, the average cost of a smart meter including modem is less than Rs.10,000/-.

Hence Commission direct that, the licensee shall submit a comprehensive proposals for metering and data communications for the purchase of energy meters, modems and associated accessories through open tenders.

The licensee shall also substantiate with supporting documents the essentiality for replacing the existing pre-paid meters. In this regard, the licensee has to submit the details of the existing meters and modems, including the month and year of the purchase of meters, cost of the meters, warranty period, working or not, and any other relevant details.

- (v) In the capital investment plan submitted for the MYT period, the petitioner proposed to replace the number of existing assets with new

one. However, the petitioner CSEZA has not submitted the details of the existing assets proposed to be replaced with new one.

Hence the licensee has to submit the following details of the existing assets proposed to be replaced with new one, with necessary supporting details and documentary evidences,

- (a) Date of purchase/ installation
- (b) Total cost of the assets as on date of commissioning/ installation
- (c) Source of the assets,
- (d) Depreciation allowed,
- (e) Balance useful life

The licensee also need to submit the supporting documents for the cost of the new assets claimed in the MYT petition.

- (vi) It is also noted that, the licensee has proposed to purchase transformers, tripole isolators etc as spares. M/s CSEZA has to substantiate with reasons, the need for maintaining these items as spares.
- (vii) M/s CSEZA shall submit the basis of the estimated cost of installation of the 650 kWp Grid Tied Solar Power Plant proposed in the year 2019-20.

The Commission directed M/s CSEZA to submit the above details within 10 days from the date of this order, with a copy to the respondent KSEB Ltd. It was also directed that the respondent KSEB Ltd shall offer its comments, if any, within seven days from the date of receipt of the details from M/s CSEZA.

7. In compliance of the directions of the Commission, the petitioner submitted the details on 13.08.2019. The summary of the details submitted by the petitioner is given below.

- (i) MNRE vide the letter dated 04.03.2016, while specifying the budget provision for implementing the 'grid connected rooftop and small solar power plants program' for the five year period from 2015-16 to 2019-20, has adopted the benchmark cost as Rs 7.50 crore per MW. The petitioner has produced a copy of the letter of MNRE dated 04.03.2016.
- (ii) MNRE vide the letter dated 30.11.2016, allocated M/s PEC Ltd, a CPSU as the expert PSU for facilitating grid connected solar plants in the Ministry of Commerce and Industry. Based on the benchmark cost of Rs 7.50 crore/MW of MNRE in the year 2016-17, M/s PEC Ltd, the work was awarded to M/s PEC Ltd at a total cost of Rs, 5,08,80,000/-., i.e, @Rs 80000/kWp. This cost also include the overhead expenses of M/s PEC.

- (iii) MNRE vide the letter dated 30th March 2017 has revised the incentive for 'Grid connected roof top solar power plant programme for Government sector @Rs 16250/kWp. Hence the total incentive eligible for the 636 kWp solar plant will be Rs 1,03,35,000.00.
- (iv) The cost of the existing meters installed at CSEZA in the year 2006 was Rs 28,000/- per meter, and these meters was procured and installed as part of the total metering system package.

The existing modems (140 nos) were installed in July 2013 @Rs 17,025/- per modem. Subsequently, additional 45 Nos modems were installed at a cost of Rs 21,793 per modem.

There is communication lag and data breaking for some of the modems. Due to this, metering personnel has to frequently go to the modems and reset the modems to restart the communications. In order to resolve the problem, CSEZA has to procure new 3G modems for faster and effective communication.

CSEZA proposed to procure 40 modems in 2018-19, 25 modems in the year 2019-20, 25 Nos in the year 2020-21 and 25 Nos in 2021-22.

CSEZA procured 40 modems in the year 2018-19 at a cost of Rs 14000/- per modem.

In view of the observation of the Commission, CSEZA would invite expression of interest for completely revamping the entire prepaid metering system with latest state of the art technology for metering and data communication system, and the details will be submitted to the Commission separately for approval. However, the Commission may grant approval for the cost of modems already procured by CSEZA in the year 2018-19.

- (v) CSEZA submitted the details of the existing assets proposed to be replaced with new ones.
- (vi) CSEZA has presently 12 Nos of 11kV /415 distribution transformers in service. The spare transformer is proposed to take care of urgent replacement for providing timely supply to consumers in the event of failure of any of the existing distribution transformers. This would reduce the time required to install new transformers. Therefore CSEZA proposes to procure 1 no 11kV /415 V, 500 kVA trolley mounted type unitized transformer as spare.
- (vii) CSEZA has proposed to Install 650 kWp solar plants in the year 2019-20 at a cost of Rs 329.16 lakh. The cost is the lowest quote in the public tender floated by CSEZA. Additionally other expenses likely to be incurred such as O&M cost, charges to be paid to Electrical inspectorate has been considered in the petition.

8. Even with repeated directions, KSEB Ltd has not submitted the comments in compliance of the direction of the Commission as per the daily order dated 27.06.2019.

Analysis and Decision

9. The Commission has examined in detail the petition filed by M/s CSEZA for the approval of the capital investment plan of CSEZA for the additional Capital Expenditure for the FY 2017-18, and CAPEX plan proposed for the MYT control period 2018-19 to 2021-22, as per the provisions of the Electricity Act, 2003 and the Kerala State Electricity Regulatory Commission (Terms and Condition for Determination of Tariff) Regulations, 2018 and ordered as follows.
10. CSEZA, Kakkanadu is a Government owned Special Economic Zone, constituted under the SEZ Act, 2005, under the Ministry of Commerce and Industry, Department of Commerce, Government of India. CSEZA as the Developer of the Zone provides the necessary infrastructure and other related services to the Zone with the objective of promoting exports and creating employment opportunities. CSEZA is a deemed distribution licensee for providing electricity distribution within the Cochin Special Economic Zone.
11. The Commission has appraised the Capital investment plan submitted by M/s CSEZA and the decisions of the Commission on the same is given in the following paragraphs..

(1) Installation of the 636kWp Solar Plant installed by the petitioner in the year 2017-18.

The Commission noted that, M/s CSEZA installed 636 kWp Solar plant at their premise at a total cost of Rs 5,08,80,000.00, through the CPSU M/s PEC Ltd. The plant was commissioned on 25th August 2017, and electricity has been generating from the plant since then.

The plant was installed by the CSEZA, as per the initiatives of the Central Government to install grid connected roof top solar plants at the premises of the Government institutions including PSUs. MNRE has allocated M/s PEC Ltd, a CPSU as the expert PSU for facilitating grid connected solar plants in the Ministry of Commerce and Industry. The petitioner submitted that, as per the letter of the MNRE dated 30th March 2017, the petitioner is eligible to get Achievement Linked Incentive from MNRE @16250/kWp. Thus the total incentive available for the 636 kWp solar plant will be Rs 1,03,35,000.00. The petitioner approached the MNRE through M/s PEC Ltd for getting the incentive.

Commission noted with displeasure that, though the plant was commissioned in August, 2017, the petitioner sought the approval of the investment only in February 2019. The petitioner as a deemed licensee has to get the prior approval for capital investment as per the provisions of the KSERC (Terms and

Conditions of Tariff) Regulations, 2014. The Commission hereby orders that, henceforth, the petitioner has to get prior approval of the Commission for such investments.

Since the plant was installed as per the initiatives of the Central Government, and the same was commissioned in August, 2017, the Commission hereby approve the installation of 636 kWp grid connected solar plant as below.

Capacity of Plant	:	636 kWp
The total cost proposed by CSEZA	=	Rs 5,08,80,000/-
Incentive from MNRE @ Rs 16,250/-/kW	=	Rs 1,03,35,000/-
Net capital expenditure	=	Rs 4,05,45,000/-

The petitioner submitted that, the fund for the project is met from the CSEZA's own funds available under the power distribution accounts. Commission noted that, the amount under power distribution account is the net surplus allowed to be retained with the petitioner after meeting its all prudent expenses including the statutory return. Hence the petitioner is not eligible to get depreciation, interest on debt and return on equity with this fund. The petitioner may note this direction while filing the Truing Up petitions from the FY 2017-18 onwards and ARR petitions of the subsequent years henceforth.

With the observation, the Commission hereby approve the installation of the 636 kWp solar PV at a cost of Rs 4,05,45,000/- in the financial year 2017-18.

(2) Capital Invest plan for the year 2018-19

As detailed under paragraph 3 above, the petitioner proposed a total capital investment of Rs 24.97 lakh under various head in the year 2018-19. The decision of the Commission on each item is given below:

- (i) Purchasing of 15 Nos 3G /4G modem for the Web enabled Pre-paid Metering System.

The petitioner proposed to purchase 15 Nos GPRS modem at a total cost of Rs 2,26,800.00 lakh.

The Commission in the Daily Order dated 27.06.2019, directed the petitioner to submit a comprehensive proposal for metering and data communication for the purchase of energy meters, modems and associated accessories through open tenders.

The petitioner vide the letter dated 13.08.2019 submitted that, they had already purchased 40 modems in the FY 2018-19 @Rs 14,000/- per modem. In view of the direction of the Commission,

CSEZA would invite expression of interest for completely revamping the entire prepaid metering system with latest state of the art technology for metering and data communication system, and the details will be submitted to the Commission separately for approval. However, the Commission may grant approval for the cost of modems already procured by CSEZA in the year 2018-19.

Since the 40 modems are already purchased by the petitioner, the Commission approve the purchase of 15 Nos 3G/4G modem @ Rs 14000/- modem. The Commission further directs that all capital expenditure exceeding Rs 5 Lakhs shall necessarily be submitted to the Commission for prudency check prior to incurring of the expenditure.

- (ii) Construction of Fencing around 110 KV Sub-Station at a cost of Rs 3.30 lakh.

The petitioner proposed to construct the fencing around the existing 110 kV substation at a total cost of Rs 3.30 lakh. The Commission considered the submission of the petitioner. The Commission noted that the 110kV substation is located inside the CSEZA area, which is a restricted area with adequate security. The petitioner during the hearing submitted that, fencing is already available in the yard. Therefore the Commission rejects the proposal to construct fencing around 110kV substation control room.

- (iii) Construction of Aluminium fabrication works for operator cabin room at 110 KV Substation control room at the cost of 1.25 Lakh

CSEZA submitted that due to the emission of heat radiation from 11 KV feeder control panels room temperature in the substation building is higher than usual. Also, there is complaint from substation operator that at times, there is four smell entering inside substation from the nearby chemical industries and from the common effluent treatment plant'. Hence it has become difficult for the operating staff to work without an operator cabin room. Therefore it is proposed to construct a cabin room in the 110KV Substation control room.

The Commission hereby approves the proposal.

- (iv) Supply Installation testing and commissioning of 2 Nos Air Conditioners at 110 KV Substation at the cost of 0.78 Lakh

The petitioner submitted that, the operating cabin as proposed as item (iii) above has to be air conditioned. The cost of providing 2 Nos air conditioner unit in control room is estimated for Rs 78,415/-.

The Commission hereby approve the proposal.

- (v) Purchasing of 3 Nos Earth rod for the use of 110 KV substation at the cost of 0.15 Lakh

CSEZA submitted that the present earth rod in use is damaged and new 3 Nos earth rods are necessary to carry out the preventive maintenance works and breakdown maintenance works safely. The total cost estimated is Rs 15,000/-

The Commission hereby approves the proposal.

- (vi) Purchasing of 5 kVA inverter with Battery for 110 KV Substation at the cost of 1.25 Lakh

The petitioner submitted that, the 110 KV substation have a 5 KVA inverter with Battery for the DC control supply to the auxiliary relays in control room. These inverter systems are very old, installed many years back and performance is not satisfactory. Hence the petitioner proposes to replace the same and the total cost estimated is Rs 1,25,000/-.

Commission noted that, the petitioner has not submitted the detail of the existing 5 kVA inverter with battery presently installed at the 110 kV substation, including its date of purchase, its cost etc.

However, the Commission provisionally approve the proposal, but at the time of truing up, the petitioner has to provide the following details of the existing 5kVA inverter with battery.

- (a) Date of purchase/ installation.
- (b) Total cost of the assets as on date of commissioning/ installation.
- (c) Source of the assets,
- (d) Depreciation allowed,
- (e) Balance useful life

- (vii) Purchasing of 10 Nos Energy Meter for Power Distribution System

In the original petition, the petitioner propose to purchase 10 energy meters for power distribution at a total cost of Rs 2.44 lakh. However, vide the letter dated 13.08.2019 the petitioner informed that, they deferred the purchase of meters and will be included in the comprehensive plan on the purchase of meters and modems.

Hence the Commission does not approve the cost for purchase of 10 Nos Energy meter for Power Distribution System.

- (viii) Construction of Store Room in 110 KV Substation at the cost of 9.60 Lakh

CSEZA submitted that, the 110 KV Substation Control Room includes a Storage place with roofing sheet supported by tubular structures at corners without all-round walls. The existing open storage area is insufficient to store all the spare items and electrical materials like CSS transformer, LBS switches, measuring equipment and tools etc. In order to have a closed and protected store room to keep spares and valuable items, it is proposed to construct store room at a total cost of Rs 9.60 lakh. The petitioner has also provided the detailed estimate of the construction of the store-room.

The Commission approves the proposal of CSEZA.

- (ix) Purchasing of 25 Nos 3G /4G modem for the Web enabled Pre-paid Metering System (15 numbers approved)

As already discussed under item (i) above, the petitioner had purchased 40 modems @Rs 14,000/-. Out of its 25 Nos are accounted under item (ix) and the balance 15 Nos are accounted under item (i).

- (x) Summary of the Capital Investment plan approved for the year 2018-19 is given below.

Sl No	Description	Proposed	Approved
		Amount (Lakh)	Amount (Lakh)
1	Supply of 3G GPRS Modem for web enabled energy monitoring system	2.27	2.10
2	Construction of fencing around 110KV CSEZ Substation Control Room building	3.30	0.00
3	Construction of Aluminium fabrication works and constructing one operator cabin room partition at CSEZ 110KV Substation control room using aluminium fabrication with glass	1.25	1.25
4	Supply Installation testing and commissioning of 2 Nos Air Conditioners at 110 KV Substation CSEZ, Kakkanad	0.78	0.78
5	Supply of 3 Nos Earth rods for using up to 110KV at 110KV Substation CSEZ, Kakkanad	0.15	0.15
6	Supply and Installation of one 5 kVA inverter with Battery Set for 110KV Substation Control room	1.25	1.25

7	Supply of Prepaid Energy Meter (Model No Power logic ION 6200 Schneider Electric Make) for Power Distribution System	2.44	0.00
8	Construction of Store Room in 110KV Substation	9.60	9.60
9	Supply of 3G GPRS Modem (Model No. F2414-Four Faith Make) for Web Enabled Energy Monitoring System	3.93	3.50
	Total	24.97	18.63

(3) Capital Investment plan for the year 2019-20

- (i) Purchase of 1 No. Megger Unit at the cost of Rs 0.30/- Lakh

CSEZA submitted that the existing Megger (Insulation testing equipment) available for the power distribution system at 110 KV substation is very old and recently it became faulty. The same was purchased more than 10 years back and is unserviceable now. Hence, it is required to procure a new megger unit for insulation testing of power circuits, transformers and other equipment in power distribution system at a cost of Rs 30,000/-.

The Commission hereby approves the proposal of CSEZA.

- (ii) Purchase of Computer Peripherals & Office Equipments at the cost of Rs 2.65/-

M/s CSEZA proposes to purchase the following computer peripherals and office equipment at a total cost of Rs 2.65 lakh as detailed below.

Sl No	Item	Quantity	Unit	Rate (Rs)	Amount (Rs)
1	Desktop computer	3	Nos	40000	120000
2	Laptop	1	Nos	54000	54000
3	Windows 7 Professional software	3	Nos	9500	28500
4	Hard Disk for NAS	2	Nos	12400	24800
5	ADSL Modem	1	Nos	1800	1800
6	Laptop LCD screen	2	Nos	4800	9600
7	Key board & Mouse	2	Nos	950	1900
8	Network cable and connections	1	Set	2200	2200
9	Wi-Fi dongle for desktop	3	Nos	850	2550
10	Printer Cartridge Colour	3	Nos	2600	7800
11	Printer Cartridge black	8	Nos	850	6800
12	Service charges	LS	LS	5000	5000
	Total				264950

The Commission noted that, the petitioner had included the consumables like printer cartridge etc in the proposal. As per the records available with the Commission, there is only limited staff engaged in power distribution since all the O&M activities etc are being outsourced. Hence it is not clear whether the proposal for computer and other peripherals are exclusively for power distribution or for the entire activities of CSEZA. The petitioner also has not submitted the immediate reason for the purchase of these purchase. Further, there is no supporting documents for the cost claimed for these purchase.

Considering these reasons, the Commission is not in a position to approve the proposals in its present shape. If required, detailed justification may be provided at the time of truing up consideration.

- (iii) Replacement of Existing Isolator type HT Panel in SDF 16 (one incoming & 6 no's outgoing feeders) with IP 67 Indoor VCB Type HT Panel at the cost of Rs 27.00 Lakh

CSEZA submitted that the existing HT Panels make of ELECTROTECNICA, KOLKATA installed at SDF 16 in CSEZ power distribution system are about 17 years old (2001 model). Now it is very difficult to obtain its spare parts for repair and maintaining the same. Now frequent power failures occurred and this HT panels are causing supply interruption to the consumers in 11 KV Ring 2B feeders. In view of the above, in order to ensure the safety of work men and to avoid electrical fire hazard, it is required to replace the existing LBS type HT panels in SDF 16 with new HT panels having VCB protections.

CSEZA had proposed for the replacement of this old HT panel earlier in MYT petition 2015-18 and in principle approval was obtained from KSERC. Due to administrative reasons the above work was not implemented. In view of the above CSEZA again include this work on new MYT petition 2018-22 for completing the same during 2019-20.

The Commission provisionally approve the proposal.

However, at the time of truing up, the petitioner shall submit the actual cost of completion of the work with all supporting documents. Further, the following details of the existing assets replaced with the new assets shall also be provided in the petition for truing-up.

- (a) Date of purchase/ installation.

- (b) Total cost of the assets as on date of commissioning/ installation.
 - (c) Source of the assets,
 - (d) Depreciation allowed,
 - (e) Balance useful life
- (iv) Replacing of 30 V, 40 Ah battery bank for 1250 KVA transformer No.2 at SDF-17 at the cost of Rs 0.45 Lakh.

The petitioner submitted that, existing battery bank for control supply to No.2 transformer 1250 KVA at SDF-17 is old and hence required to replace the same. The estimated cost of 30V, 40 Ah battery bank for 1250 KVA transformer No.2 at SDF-17 is about Rs 45,000/-.

Commission noted that, the petitioner has not submitted the details of the existing battery bank for 1250 kVA No.2 transformer. However, the Commission provisionally approve the proposal, but at the time of truing up, the petitioner shall furnish all the details of the old assets replaced with the new one.

- (v) Supply installation Testing & Commissioning of new 650 kWp Grid Tied Solar Plant at the cost of Rs 329.16 Lakh

In order to meet the Solar RPO, the petitioner proposed to install 650 kWp solar PV plant at their premises at a total cost of Rs 329.16 lakh. The petitioner submitted that, the cost is based on the lowest quote in the public tender floated by CSEZA. Additionally other expenses likely to incur such as O&M cost, charges to be paid to Electrical inspectorate has been considered in the petition. However, the petitioner has not submitted the tender details and other documents in support of their claim.

MNRE vide the office memorandum dated 16th July 2019 has approved the benchmark capital cost of 'Solar PV system with capacity 100 kW to 500kW' @Rs 45/Wp. Hence the Commission provisionally approve the cost of 650 kWp solar PV at Rs 292.50 lakh.

- (vi) Supply, Installation, testing and Commissioning of 2 Nos 110kV, 31.5kA, 800A triple pole, centre post rotating, horizontal double break isolator without earth switch in 110 KV Substation Yard in Metering side at the cost of Rs 9.30 Lakh

CSEZA submitted that the 110 kV substation have 8 nos. 110 KV yard isolators out of which 2 Nos isolators are frequently causing mechanical troubles and misalignment resulting 110 KV supply interruption at many times. Hence it is proposed to

procure two nos. new 110kV, 31.5kA, 800A triple pole, centre post rotating, and horizontal double break isolator without earth switch, upright mounting with Motor Operating Mechanism required to replace the defective isolators and to give uninterrupted supply to CSEZ consumers at a cost of Rs 9.30 lakh.

The Commission provisionally approve the proposal. However, the petitioner has to follow proper procedure for the supply, installation, testing and commissioning, and disclose the details at the time of truing up.

- (vii) Supply, Installation, testing and Commissioning of RTU in 110 KV Substation at the cost of Rs 4.50 Lakh

CSEZA has proposed the installation of Remote Terminal Unit. to facilitate Open Access. CSEZA submitted it decided to defer this item, since open access not being pursued right now.

- (viii) Purchasing of 25 Nos 3G /4G modem for the Web enabled Pre-paid Metering System at a total cost of Rs 4.00 lakh.

The petitioner deferred the item and proposed to include in the comprehensive proposals on meter procurement plan to be submitted before the Commission subsequently.

- (ix) Summary of the Capital Investment plan approved for the year 2019-20.

Sl No	Description	Proposed	Approved
		Amount (Lakh)	Amount (Lakh)
1	Purchase of 1 No megger unit	0.30	0.30
2	Procurement of Computer Peripherals & Office Equipment	2.65	0.00
3	Replacement of Existing Isolator type HT Panel with New IP 67 Indoor VCB Type HT Panel in HT distribution System near SDF-16 building at CSEZ	27.0	27.0
4	Supply installation Testing of 30 V, 40 Ah battery bank for 1250 KVA transformer No.2 at SDF-17	0.45	0.45
5	Supply installation Testing & Commissioning of new 650 kWp Grid Tied Solar Power Plant	329.16	292.50
6	Supply installation, testing and Commissioning of 2 Nos 110kV, 31.5kA, 800A triple pole, centre post rotating, horizontal double break isolator without earth switch in 110kV Substation Metering side	9.30	9.30
7	Providing RTU panel in 110kV Substation, for Open Access to CSEZA	4.47	0.00
8	Supply of 3G GPRS Modem (Model No F2414-Four Faith Make) for Web Enabled Energy Monitoring System in CSEZ, Kakkanad	4.00	0.00
	Total	377.33	329.55

(4) Capital investment plan for the financial year 2020-21

- (i) Purchasing of 10 Nos Energy Meter for Power Distribution System @ Rs 2.43 lakh.

Since the petitioner deferred this item and proposed to include in the comprehensive plan on procurement of meters to be submitted before the Commission, the approval is not required at this stage.

- (ii) Purchasing of 1 No. 11/ 0.415 KV 500 KVA trolley mounted type unitised Transformer as spare in Power distribution system at the cost of Rs 8.00 Lakh

CSEZA power distribution systems have 8 Nos of 11KV/433V power distribution transformers of various capacities up to 1250 KVA. In order to meet emergency backup supply to the consumers during transformer failure, CSEZA proposed to purchase one No 500 KVA trolley mounted Unitized transformer as a spare transformer.

The petitioner had not submitted sufficient reason for the purchase of spare transformer including the breakdowns, if any, happened during the past.

However, the Commission provisionally approves the proposal. At the time of truing up of accounts, the petitioner shall submit necessary details of the actual cost incurred for the purchase of the spare transformer.

- (iii) Supply of 3G GPRS Modem for Web Enabled Energy Monitoring System at the cost of Rs 4.25 lakh.

Since the petitioner deferred this item and proposed to include in the comprehensive plan on procurement of meters to be submitted before the Commission, the approval is not required at this stage.

- (iv) Summary of the capital investment plan approved for the year 2020-21

Sl No	Description	Proposed	Approved
		Amount (Lakh)	Amount (Lakh)
1	Purchasing of 10 Nos Energy Meter for Power Distribution System	2.44	0.00
2	Supply of 1 No 11KV / 0.415 KV 500 KVA trolley mounted unitized Transformer	8.00	8.00
3	Supply of 3G GPRS Modem for Web Enabled Energy Monitoring System	4.25	0.00
	Total	14.69	8.00

(5) Capital Investment plan for the year 2021-22

- (i) Replacing of 30 V, 40 Ah control system battery bank of No1 transformer at SDF-17 at the cost of Rs 4.50 Lakh.

The petitioner submitted that, existing battery bank for control supply to No.1 transformer 1250 KVA at SDF-17 is old and hence required to replace the same. The estimated cost of 30V, 40 Ah battery bank for 1250 KVA transformer No.1 at SDF-17 is about Rs 45,000/-.

Commission noted that, the petitioner has not submitted the detail of the existing battery bank for 1250 kVA No.1 transformer. However, the Commission provisionally approve the proposal, but at the time of truing up, the petitioner all the details of the old assets replaced with the new one.

- (ii) Replacing of 30 V, 40 Ah battery bank for control system of 1250 KVA distribution Transformer at SDF-43 at the cost of Rs 4.50 Lakh

CSEZA submitted that the existing battery bank for control supply to 1250 KVA transformer at SDF-43 is old and its guaranty period is expired and hence required to replace the same.

Commission noted that, the petitioner has not submitted the detail of the existing battery bank for 1250 kVA transformer at SDF-43. However, the Commission provisionally approve the proposal, but at the time of truing up, the petitioner all the details of the old assets replaced with the new one.

- (iii) Purchasing of 10 Nos Energy Meter for Power Distribution System at the cost of Rs 3.00 lakh.

Since the petitioner deferred this item and proposed to include in the comprehensive plan on procurement of meters to be submitted before the Commission, the approval is not required at this stage.

- (iv) Purchasing of 25 Nos 3G /4G modem for the Web enabled Pre-paid Metering System at the cost of Rs 4.25 lakh

Since this item also deferred by the petitioner and proposed to include in the comprehensive plan on procurement of meters to be submitted before the Commission, the approval is not required at this stage.

- (v) Supply of 2 Nos 110 KV 800 A triple pole Isolators as spare in 110 KV substation at the cost of Rs 6.00 Lakh

110 kV substation of CSEZA have 8 Nos of 110 KV yard isolators and some of these isolators are showing mechanical troubles and misalignment, resulting in 110 KV supply interruption. Hence it is proposed to procure two Nos of new 110kV, 31.5 kA, 800A triple pole, centre post rotating, and horizontal double break isolators as spare, to meet the emergency and to ensure un interrupted supply to CSEZ consumers.

The Commission provisionally approves the proposal.

- (vi) Summary of the Capital Investment plan approved for the year 2021-22 is given below.

Sl No	Description	Proposed	Approved
		Amount (Lakh)	Amount (Lakh)
1	Replacing of 30V, 40Ah battery bank for control supply of 1250 KVA transformer No.1 at SDF-17	0.45	0.45
2	Replacing of 30 V, 40Ah battery bank for control supply of 1250 KVA transformer at SDF - 43	0.45	0.45
3	Supply of Power and Energy Meter (Model No. Power logic ION 6200Schneider Electric Make) for Power Distribution System in CSEZ, Kakkanad	3.00	0.00
4	Supply of 3G GPRS Modem for Web Enabled Energy Monitoring System	4.25	0.00
5	Supply of 2 Nos. 110KV.800A triple pole Isolators for EHT maintenance as spare in 110KV substation	6.00	6.00
Total		14.15	6.90

12. The summary of the Capital Investment approved for the MYT period from 2018-19 to 2021-22 is given below.

Year	Proposed by CSEZA	Approved by the Commission
	(Rs. Lakh)	(Rs. Lakh)
2018-19	24.97	18.63
2019-20	377.33	329.55
2020-21	14.69	8.00
2021-22	14.15	6.90
Total	431.14	363.08

13. The petitioner submitted that, the fund for the project is met from the CSEZA's own fund available under the power distribution accounts. Commission noted that, the amount under power distribution account is the net surplus allowed to retain with the petitioner after meeting its all prudent expenses including the statutory return. As per truing up of accounts approved for the period upto the year 2016-17, the net accumulated surplus available with the petitioner after meeting all expenses including statutory surplus is Rs 1208.90 lakh. The assets created with the net surplus allowed to retain with the licensee is not eligible to claim depreciation, interest on debt and return in equity. The petitioner shall comply with this direction while filing the petitions on truing up of accounts of the years 2018-19 to 2021-22.

Cochin Special Economic Zone Authority (CSEZA) being a PSU under the Ministry of Commerce and Industry, most of the infrastructure of the zone is created with the grant from the Central Government. Hence, the petitioner shall also clarify that, whether any grant is available for the creation of infrastructure for the years 2017-18 to 2021-22. If so, provide the details of the proportion of the grant available for the creation of the electricity distribution infrastructure. These details shall be submitted before the Commission at the time of truing up for the years 2017-18 onwards, with all supporting documents. If no grant is available for the creation of the infrastructure, the same shall also provide with supporting documents.

14. The Commission has noted that the cost estimate of CAPEX for the MYT period was based on the limited quotations received from the suppliers. But as per the details submitted, it is not clear whether the rates quoted are based on competitive quotations. Hence, the Commission here by clarify that, the provisional approval given by the Commission in this order based on the estimate of the petitioner cannot be taken as granted on the proposals submitted by the petitioner. CSEZA shall invite competitive quotations for the supply, installation, testing and execution of each works as per the prudent practices followed in the Country and shall submit the details at the time of truing up,

15. The additional capital investment made in the year 2017-18 and the Capital Investment plan for the MYT period from 2018-19 to 2021-22 is hereby approved with decisions and observations detailed in the paragraphs 11 to 14 above.

The petition disposed off.

**Sd/-
K. Vikraman Nair
Member**

**Sd/-
S. Venugopal
Member**

**Sd/-
Preman Dinaraj
Chairman**

Approved to issue

**G Jyothichudan
Secretary**