

**KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM**

Petition No: OP 31/2024

Present : **Sri. T.K. Jose, Chairman**
Adv. A. J. Wilson, Member
Sri. B. Pradeep, Member

In the matter of : Petition filed by M/s Smart City (Kochi) Infrastructure Private Limited for the approval of Capital Investment plan for the year 2024-25

Petitioner : M/s Smart City (Kochi) Infrastructure Private Limited

Represented by : Sri.Jinu John Jacob, Company Secretary
Sri.Ranjithlal, Senior Manager- Asset & Infrastructure

Respondent : M/s Kerala State Electricity Board Limited

Represented by : Sri. Ajith Kumar K.N, Executive Engineer, KSEB Ltd
Sri.Shan B.S, Asst. Executive Engineer, KSEB Ltd
Smt. Archana M, Asst. Engineer, KSEB Ltd

Date of Hearing: : 26.09.2024 at Court Hall of the Commission

ORDER DATED 26.03.2025

1. M/s SmartCity (Kochi) Infrastructure Private Limited (hereinafter referred to as SCK or the licensee or the petitioner) is an Information Technology Special Economic Zone in Kochi, Kerala. SCK is a Joint Venture company formed by Government of Kerala (16% holding) and Dubai Holding (84% holding) for development of infrastructure for knowledge-based industries. Smart City is spread over an area of 246 acres (99.6 ha) and envisions a minimum 8.8 million sq ft of built-up space out of which at least 6.21 million sq ft will be specifically for information technology and services. Total 246 acres of land of SCK divided into Land-A-131.41 Acres, land-B-100.66 Acres & Land-C-13.94 Acres.
2. The licensee has filed the petition for the approval of capital investment plan for the year 2024-25. The proposal is for the installation of a standby transformer. The licensee is having 2 Nos 33/11 KV substations inside the license area to meet the consumer requirement. These substations have an 8 MVA, 33/11 KV transformer each for distributing power. The proposal is for the installation of additional 8 MVA Transformer at an estimated of Rs.190.17 lakh and the schedule of completion of the project is 12 Months.

3. The licensee has filed the petition before the Commission to comply with the statutory provisions of the Electricity Act, 2003, Tariff Regulations 2021, Electricity (Rights of Consumers) Rules, 2020, Rights and Obligations of the Distribution licensee and to provide Reliability of supply & to meet the Standards of performance.
4. The hearing on the petition was conducted on 26-09-2024 at the Court Hall, Office of the Commission. Sri.Jinu John Jacob, Company Secretary, Sri. Ranjithlal, Senior Manager - Asset & Infrastructure represented the petitioner Sri.Ranjithlal made a presentation on the petition before the Commission and the team representing the petitioner replied to the queries of the Commission.
5. The licensee has submitted that they are having only one transformer each at substations and are facing challenges due to non-availability of Standby transformer;
 - a) Breakdown of the transformer will lead to the power failure to all the consumers.
 - b) During Last transformer inspection, corrosion was noticed at LT side cable entry box of the transformer due to aging. For the repair/replacement of this part shutdown of the transformer is needed at least 24 hrs.
 - c) Unable to shut down the transformer for efficient preventive maintenance which can lead to breakdown of transformer.
6. The licensee has also stated that the repair/replacement works of the transformer parts during breakdowns were taking long lead time and the failure of transformer will lead to power shutdown to the consumers for long duration. Accordingly, the licensee proposes to install a standby transformer at Substation-1 at SCK land-A, as majority of consumers is under that substation.
7. The Scope of Work includes the following;
 - a) Supply, Installation, Testing & Commissioning of 8 MVA ONAN, DYn11 Transformer and associated works.
 - b) Supply, laying & Testing of 11 kV,33kV Cables.
 - c) Supply, Laying & Testing of Control cables.
 - d) Supply & Installation of Earth pits as required.
 - e) Supply, Installation & Testing of RTCC panel
 - f) Supply, Installation & Testing of NIFPS (Nitrogen Injection Fire Protection System) for transformer and Associated Civil works.
 - g) Clearance from Statutory bodies
8. The split up of the estimated cost of Rs.190.17 lakh for SITC of additional 8 MVA Transformer is shown below;

Table 1
Estimate for SITC of additional 8 MVA Transformer

Description	Qty	UOM	Supply		Installation	
			Rate	Amount	Rate	Amount
SITC of 33 / 11 KV, Dyn11 with NGR, Oil filled, ONAN / ONAF step down transformer with OLTC of -10% to + 10% in step of 1.25% along with AVR & RTCC and other accessories as per specification, data sheet, and related IS.						
8 MVA including NIFPS system for Transformer (Repeat of JN 22445) Make: VOLTAMP	1	NO.	16500000.00	16500000.00	600000.00	600000.00
Supply,Laying,Testing & Termination of 19 Core 2.5 SQMM Copper PVC Armoured Cable for Transformer to Transformer Breaker.Cost of Copper Lugs for both the end to be included with this scope of supply. (Make: Polycab)	50	MTR	800.00	40000.00	100.00	5000.00
Supply, laying, testing and commissioning of 33 KV, 3C x 400 sq.mm.AI XLPE (E) armoured cable	50	MTR.	3500.00	175000.00	700.00	35000.00
Supply & connection of the Heat shrinkable type cable end terminations (Indoor type) for 33 KV, 3C x 400 sq.mm.AI XLPE (E) armoured cable.	2	NO.	21000.00	42000.00	7000.00	14000.00
3CX2.5 SQ MM. CU XLPE Armoured	200	NO.	225.00	45000.00	100.00	20000.00
Supply, laying, testing and commissioning of 11 KV, 1C x 240 sq.mm.Cu XLPE (E) armoured cable	150	MTR.	5000.00	750000.00	400.00	60000.00
Supply & connection of the Heat shrinkable type cable end terminations (Indoor type) for 11 KV, 1C x 240 sq.mm.AI XLPE (E) armoured cable.	12	NO.	3500.00	42000.00	400.00	4800.00
SITC of rod type earthing station for various electrical equipments and systems as per Specification , IS:3043 and standard drawing complete with following. 'Earthing system should offer a resistance less than 2 ohms throughout the year. Providing masnory enclosure with heavy duty CI cover plate having locking arrangement and water piping etc with 64KG charcoal/coke and 5kg salt as required as per IS 3043 Amended upto date				-		-
Cast Iron 100mm dia Earth Rod 3mtr length	3	NO	23000.00	69000.00	9500.00	28500.00
50X 6 Gi strip	175	MTR.	360.00	63000.00	80.00	14000.00
32X10 G.I Strips	-	MTR.	400.00	-	100.00	-
32 X 3 G.I Strips	R/O	MTR.	180.00		85.00	
25 X 6 G.I. Strips	R/O	MTR.	190.00		90.00	
25 X 6 CU Strips	-	MTR.	1522.00	-	60.00	-

Liaison fees for preparing necessary documents for 33KV Power Feeder as per load requirements and drawings for getting N.O.C / Approval from Statutory authorities / Electrical Inspector. (All statutory fees will be paid by Client) The rates offered by the vendor shall be inclusive of all the above mentioned items including all approvals from various statutory authorities and trial run as well as including all the taxes and duties	1			-	200000.00	200000.00
Civil work for breaking/Cutting the concrete for the basement of existing 11kV panel incomer for cable entry	1	LS		-	100000.00	100000.00
Supply, fabrication and erection of steel.	1.5	TON	110000.00	165000.00	30000.00	45000.00
Total				17891000.00		1126300.00
Grand Total						1,90,17,300.00

9. As per the split up details out of the total cost of Rs.190.17 lakh, the major expenditure of Rs.165 lakh in the estimate is towards the cost of VOLTAMP make 8 MVA transformer including NIFPS included system for Transformer.
10. The licensee in the petition has mentioned the technical justification;
 - Proposed investment improves the reliability of supply to Consumers.
 - Redundancy for transformer hence efficient maintenance of equipment shall be ensured and life of equipment shall be extended.
 - Majority of the consumer's power requirement met from substation-1.
11. Sri.Shan B.S, Asst. Executive Engineer, KSEB Ltd presented the comments of KSEB Ltd and vide letter dated 30.09.2024 submitted written comments of KSEB Ltd. It was submitted that the existing distribution system of the licensee comprises two separate 33/11kV substations with one 8MVA,33/11kV transformer at each substation resulting in a total station capacity of 16 MVA. The licensee's contract demand is only 3 MVA. KSEB Ltd submitted that demand growth projection or necessity of future demand has not been established by the licensee. Hence it is inferred that capacity addition by installing a new transformer will only lead to further underutilisation. KSEB Ltd suggested that it will be more prudent to interlink 11kV lines from the existing two substations rather than to install a standby transformer. It was further submitted that when compared with the prevailing Cost data of KSEB Ltd, the rates taken for 8 MVA 33/11 kV transformer by M/s Smart City are exorbitant (Rs. 77.97084/- Lakhs vide SI No 212 of cost data 2023). It was also submitted that the Schedule of work is not attached and Cost Benefit Analysis is not done.
12. With regard to funding pattern, the licensee has proposed that the project will be financed through the internal accruals of main business' own fund. KSEB Ltd

stated that the method of infusion of capital with supporting evidence is essential to prove that profit generated is adequate to finance the project through internal accruals and requested the Commission to approve the Capital Investment Plan only after prudence check.

13. Considering the petition submitted by the licensee, the views presented by the licensee during the hearing, the clarifications submitted by the licensee, the counter statements furnished by KSEB Ltd, the Commission is of the view that proposed cost is on the higher side compared to the prevailing market rates. Commission is also of the view that the huge investment will lead to underutilization. *Accordingly, the Commission presently defers the approval of the proposal. The licensee shall explore the possibility of interlinking the 11kV lines from the existing two substations rather than installing a standby transformer at high cost. The licensee shall submit before the Commission a detailed report on the possibility of interlinking 11kV lines from the existing two substations along with proper cost benefit analysis as part of the Mid Term Review to be filed before the Commission.*

Orders of the Commission

14. **The Commission, after considering the petition filed by M/s. Smartcity for the approval of capital investment plan, views presented by the licensee during the hearing and details provided by the licensee, presently defers the approval of the proposal. The licensee shall explore the possibility of interlinking the 11kV lines from the existing two substations rather than installing a standby transformer at high cost. The licensee shall submit before the Commission a detailed report on the possibility of interlinking 11kV lines from the existing two substations along with proper cost benefit analysis as part of the Mid Term Review to be filed before the Commission.**
15. The petition is disposed of. Ordered accordingly.

Sd/-
Sri. T.K Jose
Chairman

Sd/-
Adv. A. J. Wilson
Member

Sd/-
Sri. B. Pradeep
Member

Approved for issue
Sd/-
C.R.Satheesh Chandran
Secretary