MINUTES OF MEETING

OF THE

MUMBAI DISTRIBUTION NETWORK ASSESSMENT COMMITTEE (M-DNAC)

Date :- 23 December, 2024 at 15.00 Hrs.

Venue :- Through Video Conferencing.

Present :- Dr. Prafulla Varhade, Chairman (Commission's Officer)

Shri. Dineshchandra Saboo, Member (External)

Shri. Dilip Dumbre, Member (Ombudsman's Officer) (On leave) Shri. Rakesh Guhagarkar, Member (Commission's Officer)

Licensee's representatives:

Shri. Ganesh Balasubramanian — AEML-D

Shri. Shishir Mahulkar — AEML-D Smt. Smita Gavasane — AEML-D Shri. Sanjay Lambat — AEML-D

Shri Shriram Savarkar — TPC-D

Shri Vikas Koul — TPC-D Shri Harsh Chougule — TPC-D Smt. Hawwa Inamdar — TPC-D

Discussions held:-

- 1. AEML-D received the power supply application from MHADA Gruhanirman Bhavan Kalanagar. Accordingly, AEML-D assessed its own network position and communicated to TPC-D on 27 November 2024 along with information to M-DNAC that it will require Consumer Substation (CSS) to supply the power and hence the proposal comes under level (3) of the Scenario 53 (d).
- 2. Subsequently, TPC-D also informed that their network is also present near the location and hence can provide power supply to the said project. Further, TPC-D informed that it will also require CSS and communicated its confirmation on 29 November 2024 (to both AEML-D and the M-DNAC) about the proposal that it is under level (3) of the Scenario 53 (d)
- 3. In view of the above, both the licensees were asked to follow the procedure laid down under Case No. 182 of 2014 in respect of present power supply application. Accordingly, AEML-D and TPC-D submitted their respective cost proposals in sealed envelopes on 16 December 2024 and 20 December 2024 respectively.

4. Thereafter, M-DNAC held its meeting through Video Conferencing on 23 December 2024 wherein the sealed envelopes submitted by AEML-D and TPC-D were opened (both virtually present) in the presence of the representatives of the Licensees. The representatives of the Licensees briefly elaborated their respective cost estimations and responded to queries raised by the Committee during the meeting.

5. Observations of the Committee on the Licensees' cost estimations:-

A. It is observed that the assessed Maximum Demand (MD) by TPC-D as well as AEML-D is same as both the licensees have considered norms of MSEDCL as the common norms.

B. AEML-D's cost proposal dated 9 December 2024:

The summary of item-wise details and cost submitted by AEML-D is as follows:

Sr. No.	Item	Unit	Quantity	Cost (Rs.)
1	11/0.4 kV Dry Type Distribution	Nos.	2	49,56,000
	Transformer – 1500 kVA			
2	11 kV 400sq. mm. Cable	Mtrs.	210	5,22,858
3	RMU	Nos.	1 9,28,986	
4	Other Material (panel, jointing and earthing,			14,77,615
	cable inside substation, termination, etc.)			
5	Civil cost			21,24,738
6	Cost of services (labour, Installation, testing,	Nos.	1	3,37,118
	commissioning)			
7	Contingency Charges @ 7% of material &			7,24,312
	labour cost)			
	Total (Rs.)			1,10,71,627

^{*}RI and MCGM Access charges not considered as 11kV cable is already inside the plot, due to existing substation

C. TPC-D's cost proposal dated 9 December, 2024:

Item-wise details and cost as submitted by TPC-D are as follows:

A	MATERIAL/ EQUIPMENT	Qua ntity	Unit	Unit Price (Rs.)	Cost (Rs. Lakh)
1	RMU, 4way 2 CBL, W/Bkr 0/G, 11kV, 630A Motor	1	EA	7,88,904.6	7.9
2	Dry Type Distribution Transformer, 11kV/433V, 1500kVA	2	EA	40,76,954.8	81.5
3	Feeder Pillar 11/C,2000A BKR, 6W, 630A O/G Fuse	2	EA	2,69,546.5	5.4
4	Cable 11kV AL 3C 300 SQMM XLPE	300	M	2,245.8	6.7
5	Cable 11kV AL ARM 1C, 185 SQMM XLPE	120	M	602.0	0,72
6	Joint 11kV HS 3C 300 SQMM XLPE	2	EA	17,138.0	0.3

A	MATERIAL/ EQUIPMENT	Qua ntity	Unit	Unit Price (Rs.)	Cost (Rs. Lakh)
7	Cleat HDPE 88 MM Bore 3CX300 SQMM XLPE	2	EA	501.5	0.0
8	Termination 11kV HS I/D 3C 300 SQMM XLPE	2	EA	6,095.9	0.1
9	Term 11kV PO ID 1C 185 SQMM XLPE	12	EA	1,972.0	0.2
10	Cable, 1.1kV, 4Cx300 SQMM XLPE AL, PVC, AR, FRLS	360	M	1,355.8	4.9
11	Disc, Tiles RCC, 460 X 180 X 45 MM THK,	750	EA	61.0	0.5
12	Pipe Hope 160 MM DIA 7.7-8.6 MM TH PN4	28	EA	2,716.0	0.8
A	TOTAL MATERIAL	_			109.1
B	SERVICES				
I	HT Excavation and backfilling charges-Internal	80	M	1,530.0	1.2
2	HT Excavation and backfilling charges-External	70	M	2,250.0	1.6
3	Labour charge for HT Joints-11kV/22kV/33kV	2	EA	6,200.0	0.1
4	Labour charge for HT Termination (3C+1C)	14	EA	4,500.0	0.6
5	Cable Laying Charges	300	LS	394.0	1.2
6	Testing of CSS Equipments	1	EA	45,035.1	0.5
7	Installation of CSS Equipments	1	EA	1,50,050.3	1.5
S	Transportation charge	1	EA	2,15,190.0	2.2
9	LT CSS Indoor (8M X 5M) - 1 TRF, 1 RMU, 1 LTP	2	EA	4,37,762.3	8.8
	SUB TOTAL Service				17.6
	18 % GST on Total Services cost	18%			3.2
В	TOTAL Services				20.8
C	Reinstatement charges				
1	Reinstatement charges External-Mastic Asphalt 25mm thick-3rd yr DLP		M	13,660.0	19.1
2	Reinstatement charges Internal charges - Asphalt	80	M	2,500.0	2.0
	SUB TOTAL Service				21.1
	18 % GST on RI Charges	18%			3.8
C	TOTAL RI charges				24.9
D	Contingency Cost	7 %			9.1
E	TOTAL $(A+B+C+D)$:				163.9

6. After going through both the cost proposals, it is seen that the cost submitted by TPC-D is much higher than the cost submitted by AEML-D. It is observed that HT mains in the case of TPC-D are of two types, i.e. one is about 300 Meters - 3C 300 sqmm cable whereas another is about 120 Meters - 1C armoured cable. Similarly, HT mains in case of AEML-D are also of two types, i.e. one is about 210 Meters - 3C 400 sqmm cable

- whereas another is about 40 Meters 3C 150 sqmm cable. Thus, in case of AEML-D, required cable length is less.
- 7. Further, AEML-D has assessed no RI charges as compared to Rs 24.93 lakh (150 meters) RI Charges for TPC-D. TPC-D accepted that it will have to pay RI charges due to presence of its network away from the consumer's premise.
- 8. Further, M-DNAC observed that though TPC-D proposed Distribution Transformers (**DT**) of 1500 kVA capacity with 300 sqmm cable and AEML-D proposed DT of 1500 kVA capacity with 400 sqmm cable, price of DT proposed by TPC-D is almost double than that of AEML-D i.e. Rs. 40.77 Lakh against Rs. 24.78 Lakh. Hence, M-DNAC asked TPC-D to explain the reasons in detail for such a huge cost difference. TPC-D explained that the cost quoted by it is as per its annual approved cost data which is based on its last Purchase Orders. Further, generally the quantity purchased by TPC-D is smaller in number whereas AEML-D might have received the lower cost by purchasing large quantities of DTs with some different technical norms. However, the committee was not convinced by the justifications given by TPC-D representatives towards higher cost of DTs considered by them.
- 9. Hence, to verify the estimated cost, M-DNAC compared the cost of major items with the annual cost data submitted by both utilities and following differences are observed:

	Material Type	Unit	Cost of AEML-D			Cost of TPC-D			
S N			Per Unit Cost (Rs.)			Per Unit Cost (Rs.)			
			As per Annual Cost Data	As per Proposa 1	Cost in Estimate (Rs.)	As per Annual Cost Data (Without escalation)	As per Annual Cost Data (With escalation)	As per Proposal	Cost in Estimate (Rs.)
1	11/0.4 kV Dry Type DT – 1500 kVA	Unit	25000 USD = Rs. 21,50,000 (As 1USD = ~ Rs. 86)	247800	4956000	4015974	4417571	4076955	8153910
2	11 kV Cable								
A	3C - 400sq. mm.	Meter	2490	2490	522858				
В	3C - 300sq. mm.	Meter				2016	2218	2246	673728
С	1C - 150sq. mm.	Meter	1586	1586	63437				
D	1C - 185sq. mm. Armoured	Meter				550	606	602	72240
3	LT Cable								
A	4Cx500 sq. mm.	Meter	602	602	505571				
В	4Cx300 sq. mm.	Meter				1219	1341	1356	488095
4	RMU								

	Material Type	Unit	Cost of AEML-D			Cost of TPC-D			
			Per Unit Cost (Rs.)			Per			
S N			As per Annual Cost Data	As per Proposa 1	Cost in Estimate (Rs.)	As per Annual Cost Data (Without escalation)	As per Annual Cost Data (With escalation)	As per Proposal	Cost in Estimate (Rs.)
A	RMU with FRTU CBNT, 2C+2I, I/D, N-EXT	Unit	928986	928986	928986				
В	RMU,4way 2 CBL, W/Bkr 0/G, 11kV, 630A Motor	Unit				752085	827293	788905	788905
5	Other				4094775				6209123
	Total				11071627				16386000

- 10. From the above table, it is observed that all costs quoted by TPC-D in its estimate are different than its Annual cost data values whereas in case of AEML-D, only DT cost is different against its Annual cost data value. M-DNAC decided to accept both the proposals' costs with variations at this time instructing both the licensees to take due care henceforth and submit their proposals in line with annual cost data only.
- 11. M-DNAC observed that the cost quoted by AEML-D is the lowest cost. Further, as the network of AEML-D is relatively closer to the point of supply, the cables required from its network are of shorter length and there is no issue of RI charges for AEML-D as its network exists in the said premises.
- 12. In view of the above, the M-DNAC has decided to allow AEML-D to release power supply connection to "MHADA Gruhanirman Bhavan Kalanagar." The total cost submitted by AEML-D of Rs. 110.72 Lacs shall be the ceiling cost (with no further incremental cost) for its ARR as mentioned in Case No. 182 of 2014.

Sd/-Shri. Rakesh Guhagarkar, Member (Commission's Officer) On leave Shri. Dilip Dumbre, Member (Ombudsman's Officer)

Sd/-Shri. Dineshchandra Saboo, Member (External) Sd/-Dr. Prafulla Varhade, Chairman (Commission's Officer)