

TRANSMISSION CORPORATION OF TELANGANA LIMITED

TSTRANSCO - Augmentation Scheme-IV - Erection of 315 / 500 MVA ICT's at 400kV Suryapet, Asupaka, Veltoor, Dichpally & Gajwel Sub-stations - Administrative Approval – Accorded.

T.O.O. (CE-400kV) Ms.No.1311

Dt.14.02.2022

Read the following: -

PROCEEDINGS:

- 1. Load flow studies were carried out for 2024-25-time frame duly considering Telangana State Demand of 16900MW (as per 19th EPS Electric Power Survey report).
- 2. The observations of the above load flow studies are as follows:
 - a) The loading on 400/220kV ICTs at 400kV Dichpally SS and 400kV Veltoor SS are crossing full load limit during normal and N-1 contingency conditions.
 - b) To meet the loads incident during next Rabi and Kharif seasons-2022, the ICT augmentation at 400kV Gajwel SS and 400kV Suryapet SS are necessary.
- 3. In view of the above, it is proposed to augment ICTs at the following sub-stations.

S.No.	Name of substation	Existing ICT Capacity	
		(MVA)	Capacity (MVA)
1	400kV Dichpally SS	3 x 315	4 x 315
2	400kV Veltoor SS	4 x 315	2 x 315 + 2 x 500
3	400kV Gajwel SS	3 x 315 + 1 x 500	2 x 315 + 2 x 500
4	400kV Suryapet SS	2 x 315	3 x 315

- 4. CEA has also accorded approval for augmentation of ICTs at above 400kV Sub-stations.
- 5. As per the present load conditions, erection of another 315MVA ICT at 400kV Asupaka SS is necessitated, as the Sub-Station is having only one no.315 MVA ICT.
- 6. Accordingly, Augmentation Scheme–IV is formulated for installation of 315 / 500MVA ICTs at the above 400kV Sub-stations. The Scheme contemplates the following works:

S. No	Name of the Substation & existing ICT capacity (MVA)	Description of work	Proposed ICT Capacity (MVA)
1	400kV Suryapet Substation (2x315MVA)	Dismantling of existing 315MVA ICT at Veltoor Sub-station and erection at Suryapet SS	2x315 + 1x315
2	400kV Asupaka Substation (1x315MVA)	Dismantling of existing 315MVA ICT at Veltoor Sub-station and erection at Asupaka SS	1x315 + 1x315
3	400kV Veltoor Substation(4x315MVA)	Installation of 2 Nos. 500MVA ICTs in place of 2 Nos.315MVA ICTs	2x315 + 2x500
4	400kV Dichpally Sub-station (3x315MVA)	Dismantling of existing 315MVA ICT at Gajwel Sub-station and erection at Dichpally SS	3x315 + 1x315
5	400kV Gajwel Substation (3x315+1x500MVA)	Installation of 1 No. 500MVA ICT in place of 315MVA ICT	2x315 + 1x500+ 1x500

- 7. After careful examination, TSTRANSCO hereby accords Administrative approval for "Augmentation Scheme-IV Erection of 315 / 500 MVA ICT's at 400kV Suryapet, Asupaka, Veltoor, Dichpally & Gajwel Sub-stations" at an estimated cost of Rs.117.73Crs. and Interest During Construction of Rs.9.68 Crs. The total cost of the scheme including IDC is Rs.127.41Crores as per the Annexure enclosed.
- 8. Chief Engineer/400kV/Vidyut Soudha is authorized to take up the above works and shall provide the necessary budget as per the scope.
- 9. The scheme will be executed with Loan sanctioned by REC/PFC/any other Financial Agencies.
- 10. This order is issued with the concurrence of the JMD/TSTRANSCO vide Regd. No.447, dated:09.02.2022.

(BY ORDER AND IN THE NAME OF TRANSMISSION CORPORATION OF TELANGANA LIMITED)

Encl:Annexure

D.PRABHAKAR RAO CHAIRMAN AND MANAGING DIRECTOR

To:

- 1. Chief Engineer/ 400kV/TSTRANSCO/ Vidyut Soudha, Hyderabad. Copy to:
- 1) Executive Director (Finance)/ TSTRANSCO/ Vidyut Soudha/Hyderabad.

- 2) Chief Engineer/Transmission/TSTRANSCO/Vidyut Soudha/Hyderabad.
- 3) Chief Engineer/ Construction/TSTRANSCO/Vidyut Soudha/Hyderabad.
- 4) Chief Engineer/ 400kV/Construction/TSTRANSCO/Warangal.
- 5) Chief Engineer/LIS/TSTRANSCO/Vidyut Soudha/Hyderabad.
- 6) Chief Engineer/ Power Systems/TSTRANSCO/ Vidyut Soudha/Hyderabad.
- 7) Chief Engineer/ SLDC/TSTRANSCO/ Vidyut Soudha/Hyderabad.
- 8) Chief Engineer/ Telecom/TSTRANSCO/ Vidyut Soudha/Hyderabad.
- 9) Chief Engineer/ Civil/TSTRANSCO/ Vidyut Soudha/Hyderabad.
- 10) Chief Engineer/Comml.& RAC/TSTRANSCO/VS/Hyd.
- 11) Chief General Manager/HRD/TSTRANSCO/Vidyut Soudha/Hyderabad.
- 12) Chief Engineer/Metro Zone/ TSTRANSCO/ Hyderabad.
- 13) Chief Engineer/Rural Zone/ TSTRANSCO/ Hyderabad.
- 14) Chief Engineer/ Karimnagar Zone /TSTRANSCO/ Karimnagar.
- 15) Chief Engineer/Warangal Zone/ TSTRANSCO/ Hyderabad.
- 16) SE(T) to CMD/TSTRANSCO/VidyutSoudha/ Hyderabad.
- 17) Superintending Engineer/Power Systems/TSTRANSCO/Vidyut Soudha/Hyd.
- 18) Superintending Engineer/400kV/Const./Metro/TSTRANSCO/Hyderabad.
- 19) Superintending Engineer/400kV/Const./Rural/TSTRANSCO/Hyderabad.
- 20) Superintending Engineer/400kV/Const./TSTRANSCO/Warangal.
- 21) DE(T) to Director (Projects)/TSTRANSCO/ VS/ Hyd.
- 22) DE(T) to Director (Transmission)/TSTRANSCO/ Vidyut Soudha/ Hyd.
- 23) ADE(T) to Director (Lift Irrigation Schemes)/ TSTRANSCO/ VS/ Hyderabad.
- 24) AE(T) to Director (Grid Operations)/ TSTRANSCO/VS/ Hyderabad.
- 25) P.S. to JMD (Finance, Comml., & HRD) /TSTRANSCO/VS/Hyd.
- 26) Company Secretary/TSTRANSCO/ Vidyut Soudha/Hyderabad.
- 27) Estate Officer/TSTRANSCO/ Vidyut Soudha/Hyderabad.
- 28) Central Record Section 2 copies.

ANNEXURE

(T.O.O. (CE-400kV) Ms.No.1311, Dt.14.02.2022)

ABSTRACT ESTIMATE

Augmentation Scheme-IV- Erection of 315 / 500MVA ICT's at 400kV Suryapet, Dichpally, Gajwel, Asupaka & Veltoor Sub-stations

S. No.	Description of Work	Capacity (MVA)	Amount Rs. in Lakhs
1	Cost estimate for Dismantling of existing 315MVA ICT at Veltoor Substation and erection of above 315MVA, 400/220 kV ICT at Suryapet Substation	315 MVA	1,088.29
2	Cost estimate for Dismantling of existing 315MVA ICT at Veltoor Substation and erection of above 315MVA, 400/220 kV ICT at Asupaka Substation	315 MVA	213.75
3	Cost estimate for Augmentation of 2 Nos 500MVA, 400/220 kV ICT at Veltoor Substation	1000 MVA	5,377.87
4	Cost estimate for Dismantling of existing 315MVA ICT at Gajwel Substation and erection of above 315MVA, 400/220 kV ICT at Dichpally Substation	315 MVA	891.17
5	Cost estimate for Augmentation of 500MVA, 400/220 kV ICT at Gajwel Substation	500 MVA	2,688.93
6	Total amount :		10,260.01
7	Special T & P @ 1% on (6):		102.60
8	Contingencies @3% on (6):		307.80
9	Estt. and other charges @ 10.75% on (6):		1,102.95
10	Grand Total (6-9):		11,773.36
	or Say (Rs. in Crores) ::		117.73
	Interest During Construction (Rs. in Crores):		9.68
	Total Scheme Cost including IDC (Rs. in Crores):		127.41

Sd/-CHIEF ENGINEER /400kV