



Sub.: 400kV Augmentation Scheme-V - Augmentation of 500/315 MVA ICTs at 400kV Maheswaram, Shankarpally, Dindi & Kethireddypally Substations - Administrative Approval - Accorded.

T.O.O.(CE-400kV) Ms.No.2440

Date: 18.07.2025

Read the following:

PROCEEDINGS :

Load flow studies were carried out by Power Systems wing, for the expected power demand of 5000 MW for 2025-26 & 5800 MW for 2026-27 time frame for improvement of existing Transmission Network in GHMC area, and the following are proposed.

- i) Augmentation of existing 2x500MVA ICT capacity to 3x500MVA at 400kV Maheswaram Substation, as the existing ICT loadings under N-1 contingency is 108%.
- ii) Augmentation of existing 3x315 MVA + 1x500 MVA to 1x315 MVA + 3x500 MVA at 400kV Shankarpally Substation.

CEA has approved both the proposals.

2) As per the field recommendations, it is proposed for Augmentation of ICT capacities at 400kV Dindi and Kethireddypally Substations with additional 315MVA ICTs to avoid over loading of existing ICTs and to meet future load growth in the area.

3) Accordingly, 400kV Augmentation Scheme - V is formulated for installation of 500/315MVA ICTs at the following 400kV Substations. The Scheme contemplates the following works:

Sl. No.	Name of the 400kV Substation	Existing ICT Capacity (MVA)	Proposed ICT Capacity (MVA)		ICT Capacity after Augmentation	Net ICT Capacity Addition (MVA)
			Addition	Deletion		
1	Maheshwaram	2 x 500	1 x 500	-	3 x 500	500
2	Shankarpally	3x315 + 1x500	2 x 500	2 x 315	1x315 + 3x500	370
3	Dindi	2 x 315	1 x 315	-	3 x 315	315
4	Kethireddipally	2 x 315	1 x 315	-	3 x 315	315
Total Additional Capacity proposed under the Scheme :						1500

4) After careful examination, TGTRANSCO accords Administrative Approval for Augmentation of 500/315 MVA ICTs at 400kV Maheswaram, Shankarpally, Dindi & Kethireddypally Substations as above, at an estimated cost of Rs.163.57 Crore and Interest During Construction (IDC) of Rs.9.82 Crore. The total cost of the Scheme including IDC is Rs.173.39 Crore.

- 5) The Chief Engineer/ 400kV, Vidyut Soudha, Hyderabad is authorized to take up the works and FA&CCA (Accounts & CFO) shall provide the necessary budget as per the scope of works.
- 6) The Scheme will be executed with financial assistance from PFC/ REC/ HUDCO/ any other Financial assistance or from Internal resources.
- 7) This Order is issued with the concurrence of the Joint Managing Director (Fin., Comml. & HRD), TGTRANSCO vide Regd. No.1273, Dated 10.04.2025.

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

Encl.: Annexure.

D. KRISHNA BHASKAR, IAS
CHAIRMAN AND MANAGING DIRECTOR

To

The Chief Engineer/400kV, TGTRANSCO, Vidyut Soudha, Hyderabad
The FA & CCA / Accounts & CFO, TGTRANSCO, Vidyut Soudha, Hyderabad

Copy to:

The Chief Engineer/Comml.&RAC, TGTRANSCO, Vidyut Soudha, Hyderabad.
The Chief Engineer/P&MM, TGTRANSCO, Vidyut Soudha, Hyderabad
The Chief Engineer/Construction, TGTRANSCO, Vidyut Soudha, Hyderabad.
The Chief Engineer/Power Systems, TGTRANSCO, Vidyut Soudha, Hyderabad.
The Chief Engineer/SLDC, TGTRANSCO, Vidyut Soudha, Hyderabad.
The Chief Engineer/Transmission, TGTRANSCO, Vidyut Soudha, Hyderabad.
The Chief Engineer/Civil, TGTRANSCO, Vidyut Soudha, Hyderabad.
The Chief Engineer/Telecom, TGTRANSCO, Vidyut Soudha, Hyderabad.
The Chief Engineer/400kV/ Construction, TGTRANSCO, Warangal
The Chief Engineer/Metro Zone, TGTRANSCO, Erragadda, Hyderabad.
The Chief Engineer/Rural Zone, TGTRANSCO, Erragadda, Hyderabad.
The Superintending Engineer/400kV/Const./Metro, TGTRANSCO, Hyderabad.
The Superintending Engineer/Schemes & Designs/Construction, Vidyut Soudha/Hyd
The Superintending Engineer/Power Systems, TGTRANSCO, Vidyut Soudha, Hyd.
The SE(Technl.) to CMD/TGTRANSCO/Vidyut Soudha / Hyderabad.
The DE(Technl.) to Director/ Projects,TGTRANSCO, Vidyut Soudha, Hyderabad.
The ADE(Technl.) to Director/Grid & Transmission Management, TGTRANSCO, VS, Hyd.
PA to Director/Finance, TGTRANSCO, Vidyut Soudha, Hyderabad.
The Company Secretary, TGTRANSCO, Vidyut Soudha, Hyderabad.
The Estate Officer, TGTRANSCO, Vidyut Soudha, Hyderabad.
Central Record Section - 2 copies

400kV Augmentation Scheme-V

Erection of 500 / 315 MVA, 400/220kV Inter-Connecting Transformers (ICTs) at
400kV Maheswharam, Shankarpally, Dindi & Kethireddipally Sub-stations

ABSTRACT ESTIMATE

Sl. No.	Description of Work	Augmentation Capacity (MVA)	Amount (Lakh Rs.)
A)	400kV Transmission System:		
1	Augmentation of 1 No. 500MVA, 400/220 kV ICT at Maheshwaram 400kV Substation	500	4,529.24
2	Dismantling of existing 2 Nos. of 315MVA, 400/220kV ICTs at Shankarpally 400kV Substation, and Erection of 2 Nos. 500MVA, 400/220kV ICTs at Shankarpally 400kV Substation (2 x 500 - 2 x 315 = 370 MVA)	370	7,537.83
3	Erection of 315MVA, 400/220 kV Auto Transformer at Dindi 400kV Substation (Dismantled ICT at Shankarpally)	315	1,239.36
4	Erection of 315MVA, 400/220 kV Auto Transformer at Kethireddipally 400kV Substation (Dismantled ICT at Shankarpally)	315	947.78
	Total (A) :		14,254.21
B)	Special T & P @ 1% :		142.54
C)	Contingencies @ 3% :		427.63
D)	Estt. and other charges @ 10.75% :		1,532.33
E)	Grand Total :		16,356.71
	or Say (Rs. in Crores) ::		163.57
F)	Interest During Construction (Rs. in Crores) :		9.82
G)	Total (including IDC) - (Rs. in Crores) :		173.39

Sd/-
CHIEF ENGINEER / 400kV