

TRANSMISSION CORPORATION OF TELANGANA LIMITED

TSTRANSCO-Palamuru Rangareddy Lift Irrigation Scheme— Extension of Power Supply at 400kV and 220 kV level to Pumping stations at Narlapur, Yedula, Vattem in Nagarkurnool District, Uddandapur in Mahaboob Nagar district and at KP Laxmidevipalli in Rangareddy District—Bulk Load works—Revised Administrative Approval—Accorded.

T.O.O. (CE-400kV) Ms.No.467

Dt.:25.10.2019

Read the following: -

Ref: 1.Lr.No.CE/PRLIS/DCE(P)/MBNR/PLM-RNR/922, Dt, 23.07.2016.

- 2. No. 51/4/(40th)/PSPA-II-2017-92-103 of CEA Dt.16.02.2017
- 3. T.O.O. (CE-Projects-II) Ms.No.11, Dt. 09-05-2017.
- 4. U.O.No.ED(LIS)/SE(LIS)/DE-II(LIS)/ADE2/D.No.1260/18, Dt:10.09.2018
- 5.Lr.No.ENC(I)/DCE IV/OT-6/AEE-14/PRLIS/CE400kV/TSGENCO,Dt :03.09.2019

PROCEEDINGS:

- 1. Administrative approval was accorded for Palamuru-Rangareddy Lift Irrigation Scheme for extension of power supply (Total load of 3836.681MVA) to pumping stations at Narlapur, Yedula, Vattem, Uddandapur and KP Laxmidevipalli at an estimated cost of Rs.3170.84Crs.(including development charges) for Bulk Load and Deposit Contribution works, vide reference (3) cited above.
- 2. Subsequently, Chief Engineer/PRLIS/I&CAD dept. vide letter dated 20.05.2017 informed the revised rated input power of pump motors of various pumping stations duly including the future extension and vide letter dated 18.05.2018 informed that the cost of power transformers is already covered in the cost of pumping station E&M equipment (I&CAD Scope).
- 3. Meanwhile, certain revisions are proposed in the scheme to reduce the transmission losses, to improve system voltage and to optimize the scheme cost. The revised scheme is found feasible and the approval from CEA is awaited.
- 4. Hon'ble Chief Minister of Telangana State inspected the Narlapur, Yedula and Vattem Pumping station woks on 29.08.2019 and instructed to complete the projects by next kharif season.

- 5. In this connection, a meeting was held with I & CAD officials on 03.09.2019 to review the execution plan of PRLI scheme. During the meeting, detailed discussions were held regarding scope of TSTRANSCO & I&CAD and it was proposed to take up the works in Phased manner as per the revised scheme.
- 6. The assets created for Bulk Load works i.e. up to metering arrangement are the property of TSTRANSCO and all the assets created for DC works (works pertaining to the consumer) i.e. beyond the metering arrangement are the property of consumer and are to be capitalized separately.
- 7. Accordingly, Palamuru Rangareddy Lift Irrigation Scheme (Bulk load works) is formulated for extension of Power Supply to Pumping Stations at Narlapur, Yedula, Vattem, Uddandapur and KP Laxmidevipalli. The scheme consists of following lines and substations:

Sl. No.	Description		
1	Pump House at Narlapur		
a)	400kV QMDC line from proposed 400/11kV Yedula LI SS to proposed 400/11kV Narlapur LI SS -30kM		
b)	Erection of 400/11kV SS at Narlapur(upto metering point) (9x160MVA & 2x25MVA 400/11kV PTRs+1x125MVAR Bus Reactor)		
2	Pump House at Yedula		
a)	400kV QMDC line from 400/220kV Dindi SS to proposed 400/11 kV Yedula LI SS (60kM)		
b)	400kV QMDC line from 400/220kV Veltoor SS to proposed 400/11 kV Yedula LI SS (50kM)		
c)	Erection of 2 Nos 400kV Quad Moose bays at 400kV Veltoor SS for Yedula Feeders		
d)	Erection of 2 Nos 400kV Quad Moose bays at 400kV Dindi SS for Yedula Feeders		
e)	Erection of 400/11kV SS at Yedula(upto metering point) (10x160MVA and 2x25MVA 400/11kV PTRs+1x125MVAR Bus Reactor)		
3	Pump House at Vattem/Karvena		
a)	400kV QMDC line from proposed 400/11kV Yedula LI SS to proposed 400/11kV Vattem LI SS -60kM		
b)	400kV QMDC line from proposed 400/11kV Vattem LI SS to proposed 400/11kV Uddandapur LI SS -50kM		
c)	Erection of 400/11kV SS at Vattem (upto metering point) (10x160MVA and 2x25MVA 400/11kV PTRs+1x125MVAR Bus Reactor)		

4	Pump House at Uddandapur
a)	400kV QMDC line from 400kV Maheshwaram SS to proposed 400/11kV Uddandapur LI SS (65kM)
b)	Erection of 400/11kV SS at Uddandapur SS(upto metering point) (6x160MVA and 2x25MVA 400/11kV PTRs+1x125MVAR Bus Reactor)
5	Pump House at KP Laxmidevipalli
a)	220kV DC line from 400/220/132kV Kethireddypalli SS to 220/11kV Laxmidevipalli LI SS-46kM
b)	Erection of 2 Nos 220kV bays at 400/220/132kV Kethireddypalli SS
c)	Erection of 220/11kV KP Laxmidevipalli SS (upto metering point) (4x80MVA and 2x25MVA 220/11kV PTRs)

8. After careful examination, TSTRANSCO accords revised Administrative approval for "Palamuru Ranagreddy Lift Irrigation Scheme- extension of Power Supply for a CMD of 5907.88MVA at 400kV & 220kV level to Pumping Stations at Narlapur, Yedula, Vattem, Uddandapur and KP Laxmidevipalli" at an estimated cost of Rs.2432.44Crores for Bulk Load works (including development charges) as detailed below:

S.No	Description	Amount (Rs.in Crs)
1	Scheme cost for Bulk Load works(as per annexure)	1841.65
2	Development Charges @ Rs.1000 per KVA for a CMD of 59,07,880 KVA	590.79
	Grand Total	2432.44

- 9. The approval accorded at para no.8 is subject to instructions issued by TSTRANSCO on release of services and tariff as may be in force from time to time.
- 10. Chief Engineer/400kV/Vidyut Soudha is here by authorized to take up the above works.
- 11. An amount of Rs.2432.44Crores shall be collected from I&CAD department for taking up the works by TSTRANSCO.

12. This order is issued with the concurrence of Joint Managing Director (Finance, Comml., & HRD) vide regd. No. 3812, Dt: 15.10.2019.

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

Encl: Annexure.

D.PRABHAKAR RAO CHAIRMAN AND MANAGING DIRECTOR

To:

Chief Engineer/400kV/TSTRANSCO/ Vidyut Soudha, Hyderabad.

Copy to:

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

ANNEXURE COST ESTIMATE FOR PALAMURU RANGAREDDY LIFT IRRIGATION SCHEME (Bulk Load Works)

Sl.	(Bulk Load Works)	Amount
No.	Description	(Rs. in Crs)
I. 1	Pump House at Narlapur	
a)	400kV QMDC line from proposed 400/11kV Yedula LI SS to proposed 400/11kV Narlapur LI SS -30kM	125.43
b)	Erection of 400/11kV SS at Narlapur(upto metering point) (9x160MVA & 2x25MVA 400/11kV PTRs+1x125MVAR Bus Reactor)	86.90
2	Pump House at Yedula	
a)	400kV QMDC line from 400/220kV Dindi SS to proposed 400/11 kV Yedula LI SS (60 kM)	250.86
b)	400kV QMDC line from 400/220kV Veltoor SS to proposed 400/11 kV Yedula LI SS (50 km)	209.05
c)	Erection of 2 Nos 400kV Quad Moose bays at 400kV Veltoor SS for Yedula Feeders	22.56
d)	Erection of 2 Nos 400kV Quad Moose bays at 400kV Dindi SS for Yedula Feeders	22.56
e)	Erection of 400/11kV SS at Yedula(upto metering point) (10x160MVA and 2x25MVA 400/11kV PTRs+1x125MVAR Bus Reactor)	122.66
3	Pump House at Vattem/Karvena	
a)	400kV QMDC line from proposed 400/11kV Yedula LI SS to proposed 400/11kV Vattem LI SS -60kM	250.86
b)	400kV QMDC line from proposed 400/11kV Vattem LI SS to proposed 400/11kV Uddandapur LI SS -50kM	209.05
c)	Erection of 400/11kV SS at Vattem (upto metering point) (10x160MVA and 2x25MVA 400/11kV PTRs+1x125MVAR Bus Reactor)	96.51
4	Pump House at Uddandapur	
a)	400kV QMDC line from 400kV Maheshwaram SS to proposed 400/11kV Uddandapur LI SS (65kM)	271.77
b)	Erection of 400/11kV SS at Uddandapur SS(upto metering point) (6x160MVA and 2x25MVA 400/11kV PTRs+1x125MVAR Bus Reactor)	96.51
5	Pump House at KP Laxmidevipalli	
a)	220kV DC line from 400/220/132kV Kethireddypalli SS to 220/11kV Laxmidevipalli LI SS-46 kM	49.98
b)	Erection of 2 Nos 220kV bays at 400/220/132kV Kethireddypalli SS	10.40
c)	Erection of 220/11kV KP Laxmidevipalli SS (upto metering point) (4x80MVA and 2x25MVA 220/11kV PTRs)	16.57
	Total-I	1841.65
II	Development Charges @ Rs.1000 per KVA for a CMD of 59,07,880KVA	590.79
	Grand Total(Total-I+II)	2432.44

Sd/-CHIEF ENGINEER/400kV