

Amendment No. 2 dated 06.06.2023

to

RFP documents for selection of Transmission Service Provider to establish transmission system for “Transmission Scheme for Solar Energy Zone in Ananthpuram (Ananthapur) (2500 MW) and Kurnool (1000 MW), Andhra Pradesh” through tariff based competitive bidding process

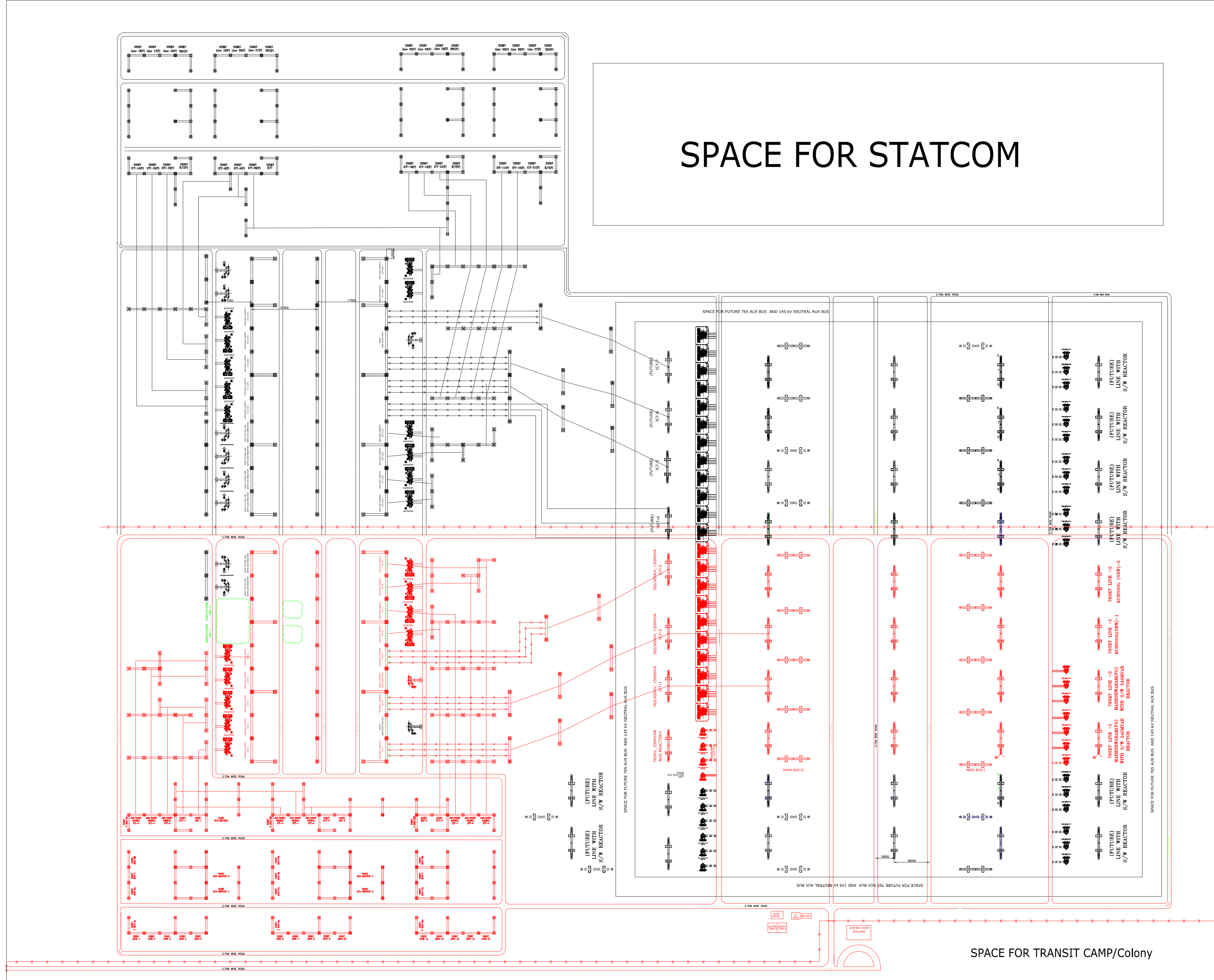
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		400kV Kurnool-III PS				1.	Single Line Diagram	C/ENGG/SR/REZ/KUR-III/EXTN./SLD/001	0	
	1.	Single Line Diagram	Developer yet to be finalized by BPC. The finalization of drawings is in the scope of developer. The same may be availed from the developer on finalization.		--	2.	General Arrangement	C/ENGG/SR/REZ/KUR-III/EXTN./GA/001	0	
	2.	General Arrangement			--					
3.	LOCATION DETAILS OF EXISTING SUBSTATIONS OF PGCIL a) Kurnool-III PS 765/400/220kV					LOCATION DETAILS OF EXISTING SUBSTATIONS OF PGCIL a) Kurnool-III PS 765/400/220kV : 15° 1'13.71"N, 78° 8'17.02"E Note: The above coordinates/location of substation indicated is approximate. Exact coordinates for the corresponding bays/gantry for termination of the respective line shall be finalized by the TSP in coordination with actual site.				
4.	Clause No. 2.6 of RFP 2.6 Project Schedule Transmission Scheme for Solar Energy Zone in Ananthpuram (Ananthapur) (2500 MW) and Kurnool (1000 MW), Andhra Pradesh					Clause No. 2.6 of RFP 2.6 Project Schedule Transmission Scheme for Solar Energy Zone in Ananthpuram (Ananthapur) (2500 MW) and Kurnool (1000 MW), Andhra Pradesh				
	S. No.	Name of the Transmission Element	Scheduled COD in months from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element	S. No.	Name of the Transmission Element	Scheduled COD in months from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
	i.	.....	.....	41.97	.....	i.	.....	.....	41.98	.....
	ii.	.....	.....	20.99	.....	ii.	.....	.....	20.99	.....
	iii.	.....	.....	2.22	.....	iii.	.....	.....	2.22	.....

S. No.	Existing Provisions					Revised Provisions				
	iv.			31.49		iv.			31.49	
	v.			2.22		v.			2.22	
	vi.			1.10		vi.			1.10	
	.					.				
	.					.				
5.	ANNEXURE 8 -UNDERTAKING AND DETAILS OF EQUITY INVESTMENT					ANNEXURE 8 -UNDERTAKING AND DETAILS OF EQUITY INVESTMENT				
	Format 1: Bidders' Undertakings					Format 1: Bidders' Undertakings				
										
	8. We confirm that our Bid meets the Scheduled COD of each transmission Element and the Project as specified below:					8. We confirm that our Bid meets the Scheduled COD of each transmission Element and the Project as specified below:				
	Transmission Scheme for Solar Energy Zone in Ananthpuram (Ananthapur) (2500 MW) and Kurnool (1000 MW), Andhra Pradesh					Transmission Scheme for Solar Energy Zone in Ananthpuram (Ananthapur) (2500 MW) and Kurnool (1000 MW), Andhra Pradesh				
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	iii.			2.22		iii.			2.22	
	iv.			31.49		iv.			31.49	
	v.			2.22		v.			2.22	
	vi.			1.10		vi.			1.10	
	.					.				
	.					.				

S. No.	Existing Provisions					Revised Provisions				
6.	Schedule: 2 of TSA					Schedule: 2 of TSA				
	Transmission Scheme for Solar Energy Zone in Ananthpuram (Ananthapur) (2500 MW) and Kurnool (1000 MW), Andhra Pradesh					Transmission Scheme for Solar Energy Zone in Ananthpuram (Ananthapur) (2500 MW) and Kurnool (1000 MW), Andhra Pradesh				
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	iv.			31.49		iv.			31.49	
	v.			2.22		v.			2.22	
	vi.			1.10		vi.			1.10	
7.	Schedule: 5 of TSA					Schedule: 5 of TSA				
										
	Proportionate Transmission Charges payable for each Element of the Project:					Proportionate Transmission Charges payable for each Element of the Project:				
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	iv.		31.49			iv.		31.49		
	v.		2.22			v.		2.22		
vi.		1.10			vi.		1.10			

A
B
C
D
E
F



NORTH

LEGEND

PRESENT SCOPE

TO BE IMPLEMENTED UNDER TRANSMISSION SCHEME FOR EVACUATION OF POWER FROM RE SOURCES IN KURNOOL WEZ (3000MW) /SEZ(1500 MW) PART A& B

FUTURE SCOPE

FENCE

NOTES:

1. ALL DIMENSIONS ARE IN mm AND ARE TENTATIVE.
2. LOCATION OF ALL BUILDINGS, DG SET AND LT STN ARE TENTATIVE.
3. THREE GANTRY TYPE ARRANGEMENT (I.E. ARRANGEMENT HAVING SINGLE GANTRY IN TIE BAY) SHALL BE CONSIDERED FOR 765 AND 400KV YARD
4. ABOVE DRAWING IS TENTATIVE AND SPAN FOR MAIN AND JACK BUS ARE ALSO INDICATIVE. SAME SHALL BE FINALISED DURING IMPELEMENTATION OF TRANSMISSION SCHEME FOR EVACUATION OF POWER FROM RE SOURCES IN KURNOOL WEZ& SEZ PART A & B

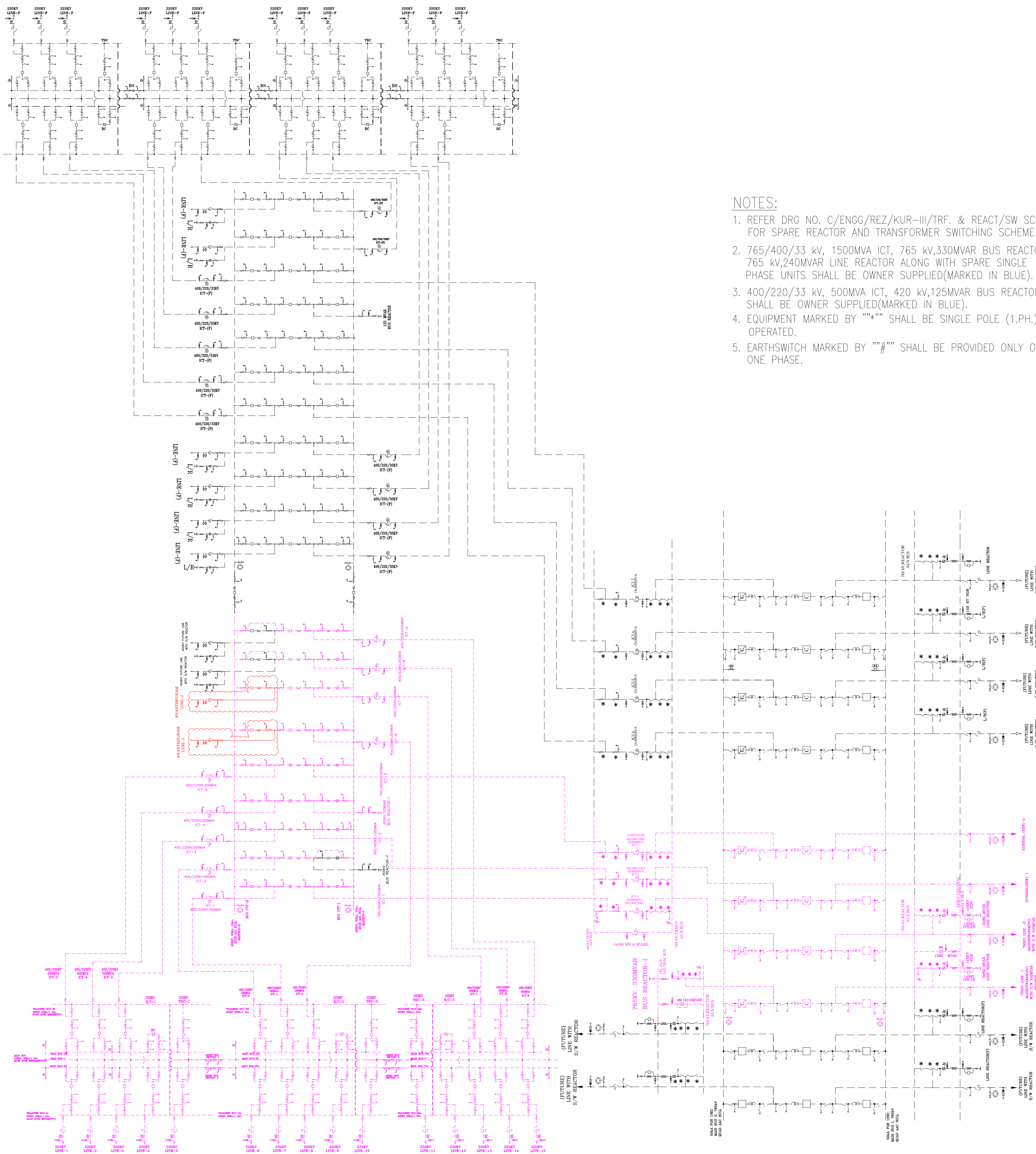
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

PROJECT :
TRANSMISSION SCHEME FOR SOLAR ENERGY ZONE IN ANANTHPURAM (ANANTHAPUR) (2500 MW) AND KURNOOL (1000 MW), ANDHRA PRADESH

TITLE :
765/400/220KV KURNOOL -III POOLING STATION

DATE	DRAWING NO.	SCALE	REV.
May 2023	C/ENGG/SR/REZ/KUR-III/GA/001	N.T.S	00

A
B
C
D
E
F



- NOTES:
- REFER DRG NO. C/ENGG/REZ/KUR-III/TRF. & REACT/SW SCHEME/01 FOR SPARE REACTOR AND TRANSFORMER SWITCHING SCHEME.
 - 765/400/33 kv, 1500MVA ICT, 765 kv,330MVAR BUS REACTOR, 765 kv,240MVAR LINE REACTOR ALONG WITH SPARE SINGLE PHASE UNITS SHALL BE OWNER SUPPLIED(MARKED IN BLUE).
 - 400/220/33 kv, 500MVA ICT, 420 kv,125MVAR BUS REACTOR, SHALL BE OWNER SUPPLIED(MARKED IN BLUE).
 - EQUIPMENT MARKED BY ""*"" SHALL BE SINGLE POLE (1.PH.) OPERATED.
 - EARTHSWITCH MARKED BY ""#"" SHALL BE PROVIDED ONLY ON ONE PHASE.

LEGEND OF 220kV EQUIPMENTS (TABLE-3)

	220 KV EQUIPMENTS	SYMBOL
1.	245KV CIRCUIT BREAKERS (3PH)	
2.	a. 1600 AMP	
	b. 3150 AMP	
3.	i)245KV ISOLATORS DOUBLE BREAK,1600 A (3PH)	
	a. WITH 2 E/S	
	b. WITH 1 E/S	
	c. TANDOM WITHOUT E/S	
	ii)245KV ISOLATORS DOUBLE BREAK,3150 A (3PH)	
	a. WITH 2 E/S	
4.	b. WITH 1 E/S	
	245KV CT (1 PH)	
	a. 1600AMP WITH 120% (1Ph)	
5.	b. 2500AMP WITH 150% (1Ph)	
	245KV CVT (1 PH), 4400 pF	
6.	216KV SURGE ARRESTOR (1PH)	
7.	1600 AMP., 0.5 mH WAVE TRAP (1PH)	

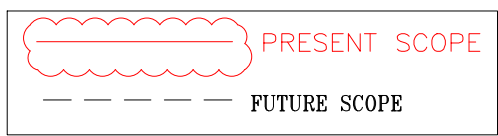
LEGEND OF 400kV EQUIPMENTS (TABLE-2)

SL. No.	DESCRIPTION	SYMBOL
1.	500 MVA AUTO TRANSFORMER 3-PH., 400/220/33 KV (OWNER SUPPLIED)	
2.	400KV,3150A,63kA,1sec,SF6,3PH CIRCUIT BREAKER WITH CLOSING RESISTOR	
3.	400KV,3150A,63kA,1sec,SF6,3PH CIRCUIT BREAKER WITH CLOSING RESISTOR WITH CSD	
4.	400KV,3150A,63kA,1sec,SF6,3PH CIRCUIT BREAKER WITHOUT CLOSING RESISTOR WITH CSD	
5.	400KV,3150A,63kA,1sec, 3-PHASE ISOLATOR WITH ONE EARTH SWITCH	
6.	400KV,3150A,63kA,1sec, 3-PHASE ISOLATOR WITH TWO EARTH SWITCH	
7.	400KV,3150A,63kA,1sec, 1-PHASE ISOLATOR WITH ONE EARTH SWITCH (INDIVIDUAL POLE OPERATED)	
8.	400KV,3150A,63kA,1sec, 1-PHASE ISOLATOR WITHOUT EARTH SWITCH (INDIVIDUAL POLE OPERATED)	
9.	400KV,CURRENT TRANSFORMER (1-Ø) 3000A,6 CORE 63kA,1sec	
10.	400KV ,1-PH CVT (4400pF)	
11.	336KV,20KA LIGHTNING ARRESTER (1-Ø)	

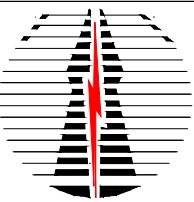
LEGEND OF 765kV EQUIPMENTS (TABLE-1)

SL. No.	DESCRIPTION	SYMBOL
1.	1500 MVA AUTO TRANSFORMER(BANK OF 3x1 PH.) 765/400/33 KV (OWNER SUPPLIED)	
2.	765KV,3150A,50kA,1sec,SF6,3PH,CIRCUIT BREAKER WITHOUT CLOSING RESISTOR WITHOUT CSD	
3.	765KV,3150A,50kA,1sec,SF6,3PH CIRCUIT BREAKER WITHOUT CLOSING RESISTOR WITH CSD	
4.	765KV,3150A,50kA,1sec,SF6,3PH CIRCUIT BREAKER WITH CLOSING RESISTOR WITH CSD	
5.	765KV,3150A,50kA,1sec,SF6,3PH CIRCUIT BREAKER WITH CLOSING RESISTOR WITHOUT CSD	
6.	765KV,3150A,50kA,1sec,SF6,3PH CIRCUIT BREAKER WITHOUT CLOSING RESISTOR WITH CSD FOR 1PH. REACTOR SWITCHING.	
7.	765KV,3150A,50kA,1sec,SF6,1PH. CIRCUIT BREAKER WITHOUT CLOSING RESISTOR FOR 1PH. SPARE REACTOR SWITCHING	
8.	765KV,3150A,50kA,1sec, 3-PHASE ISOLATOR WITH ONE EARTH SWITCH(KNEE TYPE VERTICAL BREAK)	
9.	765KV,3150A,50kA,1sec, 3-PHASE ISOLATOR WITH TWO EARTH SWITCH(KNEE TYPE VERTICAL BREAK)	
10.	765KV,3150A,50kA,1sec, 1-PHASE ISOLATOR WITH ONE EARTH SWITCH (INDIVIDUAL POLE OPERATED) (KNEE TYPE VERTICAL BREAK)	
11.	765KV,3150A,50kA,1sec, 1-PHASE ISOLATOR WITHOUT EARTH SWITCH (INDIVIDUAL POLE OPERATED) (KNEE TYPE VERTICAL BREAK)	
12.	765KV,CURRENT TRANSFORMER 3000A,50kA,1sec 120% EXTENDED CURRENT RATING 1-Ø	
13.	765KV ,1-PH CVT (8800pF)	
14.	624KV, 20KA LIGHTNING ARRESTER (1-Ø) DISCHARGE CURRENT,20KA	

LEGEND



POWER GRID CORPORATION
OF INDIA LIMITED



(A GOVERNMENT OF INDIA ENTERPRISE)

PROJECT:
TRANSMISSION SCHEME FOR EVACUATION OF POWER FROM RE SOURCES IN KURNOOL
WIND ENERGY ZONE (3000MW) /SOLAR ENERGY ZONE (1500 MW) PART A AND PART B

SUBSTATION: KURNOOL-III PS SUBSTATION(EXTN.)

TITLE: SINGLE LINE DIAGRAM

DATE	SCALE	DRG.NO.	REV
JAN 2023		C/ENGG/SR/REZ/KUR-III/EXTN./SLD/001	0