

Status of margins available at existing ISTS substations (non RE) for proposed RE integration									All figures are in MW (as on 31-07-2024)
Name of station	Existing / UC/ Planned MVA Capacity	Capacity Allocated/ Under Process (MW)	Additional Margin on existing / UC system		Line Bays required for RE integration		Additional Margin with ICT Augmentation		Remarks
			220kV level	400kV level	220kV level	400kV level	220kV level	400kV level	
Gujarat									
Navinal (GIS) 765/400kV	4x1500MVA, 765/400kV	300	0	0	1	0	0	0	
		Total GUJ:	0	0	1	0	0	0	0
Maharashtra									
Parli (PG) 400/220kV	2x500MVA, 400/220kV	300	0	0	0	0	0	0	300MW capacity has been allocated at Parli (PG) S/s. Overloading in 220kV downstream & Parli 400kV network.
		Total MAH:	0	0	0	0	0	0	0
Madhya Pradesh									
Khandwa 400/220kV	2x315+1x500MVA, 400/220kV	300	0	0	0	0	0	0	300MW Stage-II connectivity & 300MW LTA from Masaya Solar at Khandwa has also been granted. Overloading in 220kV downstream network.
Indore 765/400/220kV	2x500MVA, 400/220kV + (1x500MVA with sectionalisation at 220kV for RE injection)	924.4	150.6	400	1	1	0	0	324.4MW LTA has been granted on 1x500MVA with sectionalisation at 220kV for RE injection & 600MW has been granted on 400kV bay
Jabalpur PS 765/400	2x1500MVA 765/400kV	0	0	0	0	0	0	0	765/400kV ICT overloading.
Rajgarh 400/220kV	2x315MVA, 400/220kV+ (2x500MVA with sectionalisation at 220kV for RE injection)	1092	0	0	3	0	155	0	Margins at 220kV bay of Sprng: 298.24MW has been granted / agreed for grant to M/s Sprng. Overloading in 220kV downstream network. Margins at 400/220kV ICT-III& IV: 793.6MW has been granted/agreed/received at extended 220kV bus of Rajgarh S/s through addl. 400/220kV, 500MVA ICT(s) for RE injection. About 155MW FURTHER MARGINS EXIST FOR RE INJECTION AT RAJGARH S/s
		Total MP:	150.6	400	4	1	155	0	705.6
Chhattisgarh									
Dharamjaygarh 765/400kV	2x1500MVA 765/400kV	0	0	900	0	1	0	0	765/400kV ICT overloading.
Champa 765/400kV	6x1500MVA 765/400kV	0	0	1500	0	2	0	0	765/400kV ICT overloading.
Bilaspur PS 765/400kV	3x1500MVA 765/400kV	0	0	1000	0	1	0	0	765/400kV ICT overloading.
		Total Chhat:	0	3400	0	4	0	0	3400
		Total WR	150.6	3800	5	5	155	0	4105.6

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			220kV level	400kV level	220kV level	400kV level	220kV level	400kV level	
Andhra Pradesh									
Kurnool (New) 765/400kV	2X1500 MVA, 765/400 kV	2714	0	0		1	0	250	
		Total AP:	0	0	0	1	0	250	250
Karnataka									
Hiriyur 400/220kV	2x315 MVA, 400/220 kV + 1x500 MVA, 400/220 kV	600.3	0	0	0		0	0	
		Total Kar:	0	0	0	0	0	0	0
Kerala									
Palakkad (400/220kV)	2x315 MVA, 400/220 kV + 1x500 MVA, 400/220 kV	0	300	0	2	0	0	0	
		Total Ker:	300	0	2	0	0	0	300
Tamil Nadu									
Pugalur(Existing) 400/230kV	2X315 MVA + 1X500 MVA, 400/230 kV	655	0	0			0	0	Pugalur(Existing) has been closed for all purpose regarding grant of Connectivity.
Malekottaiyur(Kalivendapattu) 400/230kV	2X315 MVA + 1X500 MVA, 400/230 kV	NIL	500	0	2		0	0	
Nagapattinam PS 765/400kV	Charged at 400 kV	NIL	0	1000		2	0	0	
		Total TN:	500	1000	2	2	0	0	1500
		Total SR	800	1000	2	3	0	250	2050
Rajasthan									
Chittorgarh 765/400kV	765/400kV : 2x1500MVA	NIL	0	0	0	0	0	0	
Ajmer 765/400kV	765/400kV : 2x1500MVA	NIL	0	0	0	0	0	0	
Bassi	400/220 kV : 2x315MVA +1x500MVA	NIL	0	0	0	0	0		220kV overloading
Bhiwadi	400/220 kV : 3x315MVA	NIL	0	0	0	0	0		220kV overloading
Kankroli	400/220 kV : 3x315MVA	NIL	0	0	0	0	0		220kV overloading
Kota	400/220 kV : 2x315MVA	NIL	0	0	0	0	0		220kV overloading
Bhinmal	400/220 kV : 2x315MVA+1x315 MVA UC	NIL	0	0	0	0	0	0	
Neemarana	400/220 kV : 1x315MVA +1x500MVA	NIL	300	0	1	0	0	0	
Sikar	400/220 kV : 2x315MVA +1x500MVA	NIL	0	0	0	0	0		220kV overloading

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			220kV level	400kV level	220kV level	400kV level	220kV level	400kV level	
Jaipur (South)	400/220 kV : 2x500MVA	NIL	400	0	1	0	0	0	

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			220kV level	400kV level	220kV level	400kV level	220kV level	400kV level	
Kotputli	400/220 kV : 2x315MVA+1X500MVA (Planned)	NIL	150	0	1	0	0	0	
		Total RAJ	850	350	3	0	0	0	1200
Haryana									
Kaithal	400/220 kV : 3X315MVA	NIL	150	0	1	0	0	0	
Panchkula	400/220 kV : 2X315MVA+500MVA	NIL	0	0	0	0	500	0	
Bahadurgarh	400/220 kV : 315MVA +500MVA+500MVA (UC)	NIL	150	0	1	0	0	0	
Sonepat	400/220 kV : 2x315MVA	NIL	0	0	0	0	500	0	
Manesar	400/220 kV : 2X500MVA	NIL	250	0	1	0	0	0	
		Total HARY	550	0	3	0	1000	0	1550
Uttar Pradesh									
Kanpur(New)	765/400 kV : 2x1500MVA+1x1500	NIL	0	1250	0	1	0	0	220kV Not available
Fatehpur	765/400kV : 2x1500MVA; 400/220 kV : 2X315MVA	NIL	0	0	0	0	500	0	
Mainpuri	400/220 kV : 2x315MVA +500MVA	NIL	150	0	1	0	0	0	
Sohawal	400/220 kV : 2x315MVA +500MVA	NIL	100	0	1	0	0	0	
Lucknow (new)	765/400 kV : 2x1500MVA	NIL	0	500	0	1	0	0	
Balia	765/400 kV : 2x1500MVA	NIL	0	850	0	1	0	0	220kV Not available.
Bareilly(New)	765/400 kV : 2x1500MVA	NIL	0	500	0	1	0	0	
Varanasi	765/400 kV : 2x1500MVA	NIL	0	500	0	1	0	0	
		Total UP	250	3600	2	5	500	0	4350
		Total NR	1650	3950	8	5	1500	0	7100
Odisha									
Jeypore	400/220kV: 2x630MVA		500	0	0		0	0	

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			220kV level	400kV level	220kV level	400kV level	220kV level	400kV level	
Keonjhar	400/220kV: 2x315MVA	0	300	0	1		0	0	

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			220kV level	400kV level	220kV level	400kV level	220kV level	400kV level	
Pandiabil	400/220kV: 2x500MVA	0	400	0	3		0	0	
Rengali	400/220kV: 2x315MVA	0	100	0	1		0	0	
Angul	765/400: 4x1500MVA	0	0	2500		2	0	0	
Total		Total Od:	1300	2500	5	2	0	0	3800
Jharkhand									
Chaibasa	400/220kV: 2x315MVA	0	400	0	2		0	0	
Daltonganj	400/220kV: 2x315MVA	0	400	0	1		0	0	
Ranchi	400/220kV: 2x315MVA + 1x500MVA		800		0		400	0	Additional 400MW would be available after commissioning of 3rd 400/220kV, 500MVA ICT at Ranchi (expected by Feb 2023)
Ranchi (New)	765/400kV: 2x1500MVA	0	0	900		1	0	0	
Chandwa	400kV switching		0	900		1	0	0	
Dhanbad	400/200kV: 2x500MVA		300						
Total		Total Jh:	1900	1800	3	2	400	0	4100
Bihar									
Banka	400/132kV: 2x200MVA + 1x315MVA (existing) 400/220kV: 2x500MVA (under construction, expected by Oct 2024)	0	100	0	1	0	400	0	100MW at 132kV level in the existing system and 400MW at 220kV level with the implementation of "Augmentation of 400/220kV, 2x500MVA ICT at Banka" Scheme expected by Oct 2024
Lakhisarai	400/132kV: 2x200MVA + 1x315MVA	0	200	0	1	0	0	0	132kV level
Motihari	400/132kV: 2x200MVA + 1x315MVA	0	500	0	1	0	0	0	132kV level
Chandauti	400/220kV: 3x500MVA	0	900	0	2	0	0	0	
Muzaffarpur	400/220kV: 2x315MVA + 2x500MVA	0	600	0	2	0	0	0	line corridor available for 2 lines
Saharsa	400/220kV: 2x500MVA	0	900	0	2	0	0	0	
Sitamarhi	400/220kV: 2x500MVA	0	900	0	2	0	0	0	
		Total Bihar:	4100	0	11	0	400	0	4500

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West Bengal									
Durgapur-B	400/220kV: 3x315MVA		0				300		220kV overloaded in present case under N-1. 300MW margin would be created after reconductoring of Durgapur - Parulia 220kV D/c line by DVC
Maithon-B	400/220kV: 3x500MVA		300						
Subhasgram	400/220kV: 2x315MVA + 1x500MVA	0	600	0	1		300	0	Additional 300MW would be available after commissioning of 6th 400/220kV, 500MVA ICT at Subhasgram by CESC (expected by 2024)
Jeerat-New	765/400: 2x1500MVA	0	0	2400		2	0	0	
Medinipur	765/400: 2x1500MVA	0	0	1500		1	0	0	
		Total WB:	900	3900	1	3	600	0	5400
		ER-Total	8200	8200	20	7	1400	0	17800

All India	All India Total	10800.6	16950	35	20	3055	250	31055.6
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Disclaimer

The margins indicated may vary depending on network topology, Load-Generation balance, etc. For any clarification/information, CTU may be contacted.