Status of margins available at existing ISTS substations (non RE) for proposed RE integration

All figures are in MW (as on 31-03-2023)

Name of station	Transformation Capacity (MVA)						Capacity Allocated (MW)	Aditional Margin on existing / UC system		Additional Margin with ICT Augmentation		No. of Trfs required for RE integration	Remarks
	Existing		Under Implementation		Planned			220kV level	400kV level	220kV level	400kV level		
	765/400kV	400/220kV or 400/132kV	765/400kV	400/220kV	765/400kV	400/220kV							
Gujarat													
Pirana 400/220kV		**2x315MVA, 400/220kV**					0	300	0	0	0	0	400kV & 220kV overloading.
							Total GUJ:	**300**	**0**	**0**	**0**	**0**	**300**
Maharashtra													
Solapur 765/400/220kV	**2x1500MVA, 765/400kV**	**2x315MVA+1x500MVA , 400/220kV**					258	0	1242	0	0	0	• Presently, 258MW capacity has been allocated at 400kV level & balance 1242MW margin is left at 400kV level. • Further, Solapur PP for 1.5GW potential has been planned alongwith Solapur PP - Solapur (PG) 400 kV D/c line (twin HTLS), for which 2 bays has been reserved at Solapur (PG). • No margin for injection at 220kV level as overloading in 220kV downstream network.
Aurangabad 765/400/220kV	**2x1500MVA, 765/400kV**	**2x315MVA, 400/220kV**					0	0	1000	0	0	0	Overloading in 220kV downstream network.
Kolhapur 400kV							0	0	0	0	0	0	Overloading observed in 400kV Kolhapur (PG)-Kolhapur(MSETCL) D/c line.
Parli (PG) 400/220kV		**2x500MVA, 400/220kV**					300	0	0	0	0	0	300MW capacity has been allocated at Parli (PG) S/s. Overloading in 220kV downstream & Parli 400kV network.
Parli (New) 765/400kV	**2x1500MVA, 765/400kV**						277	0	423	0	0	0	277MW capacity has been allocated at Parli (New) S/s at 400kV level and accordingly balance 423MW margin is left at 400kV level out of 700MW.
							Total MAH:	**0**	**2665**	**0**	**0**	0	**2665**
Madhya Pradesh													
Khandwa 400/220kV		**2x315+ 1x500MVA, 400/220kV**					300	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.

Status of margins available at existing ISTS substations (non RE) for proposed RE integration

All figures are in MW (as on 31-03-2023)

Name of station	Transformation Capacity (MVA)						Capacity Allocated (MW)	Aditional Margin on existing / UC system		Additional Margin with ICT Augmentation		No. of Trfs required for RE integration	Remarks
	Existing		Under Implementation		Planned			220kV level	400kV level	220kV level	400kV level		
	765/400kV	400/220kV or 400/132kV	765/400kV	400/220kV	765/400kV	400/220kV							
Indore 765/400/220kV	**2x1500MVA, 765/400kV**	**2x500MVA, 400/220kV + (1x500MVA with sectionalisation at 220kV for RE injection)**					324.4	150	0	0	0	0	500MVA, 400/220kV ICT has been approved in the 2nd WRPC(TP) meeting and all the works have been completed. 324.4MW LTA has been granted on this ICT and balance 150MW margin is left on the ICT. Overloading in 220kV downstream network.
Jabalpur PS 765/400	**2x1500MVA, 765/400kV**						0	0	1000	0	0	0	765/400kV ICT overloading.
Seoni 765/400/220kV	**3x1500MVA, 765/400kV**	**2x315MVA + 1x500MVA 400/220kV**					0	0	0	0	0	0	Overloading in 220kV downstream network.
Rajgarh 400/220kV		**2x315MVA, 400/220kV**		**1x500MVA, 400/220kV with sectionalisation at 220kV for RE injection**			0	143.76	0	284.8	0	1	St-II Connectivity of 156.24MW has been granted to Sprng Vayu Vidyut Pvt Ltd.at Rajgarh S/s (Existing) . Overloading in 220kV downstream network. Further, St-II Connectivity of 190.2MW has been granted to VEH Jayin Renewables Private Limited through 400/220kV, 500MVA ICT sectionalised at 220kV for RE injection as agreed in 10th CMETS WR held on 30.08.2022.
Satna 765/400/220kV	**2x1000MVA, 765/400kV**	**2x315+1x500MVA, 400/220kV**		**1x500MVA, 400/220kV**			0	0	0	0	0	0	Overloading in 220kV downstream network.
							Total MP:	**293.76**	**1000**	**284.8**	**0**	**1**	**1578.56**
Chhattisgarh													
Dharamjaygarh 765/400kV	**2x1500MVA 765/400kV**						0	0	900	0	0	0	765/400kV ICT overloading.
Champa 765/400kV	**6x1500MVA 765/400kV**						0	0	1500	0	0	0	765/400kV ICT overloading.
Bilaspur PS 765/400kV	**3x1500MVA 765/400kV**						0	0	1000	0	0	0	765/400kV ICT overloading.
							Total Chhat:	**0**	**3400**	**0**	**0**	**0**	**3400**
							Total WR	**593.76**	**7065**	**284.8**	**0**	**1**	**7943.56**
Andhra Pradesh													
Kurnool (New) 765/400kV	**2X1500 MVA, 765/400 kV**						1725	0	240	0	1000	1	Additional margin is with the availability of Kurnool New - Maheshwaram 765kV D/c corridor. LTA of 1465 MW has been granted with Narendra-Pune 765kV D/c line which is expected by Jul'24 (considering SPV transfer by Jan, 2023).
							Total AP:	**0**	**240**	**0**	**1000**	**1**	**1240**
Karnataka													

Status of margins available at existing ISTS substations (non RE) for proposed RE integration

All figures are in MW (as on 31-03-2023)

Name of station	Transformation Capacity (MVA)						Capacity Allocated (MW)	Aditional Margin on existing / UC system		Additional Margin with ICT Augmentation		No. of Trfs required for RE integration	Remarks
	Existing		Under Implementation		Planned			220kV level	400kV level	220kV level	400kV level		
	765/400kV	400/220kV or 400/132kV	765/400kV	400/220kV	765/400kV	400/220kV							
Hiriyur 400/220kV		2x315 MVA + 1x500 MVA, 400/220 kV					541	59	0	0	0	0	LTA of 300 MW granted at Hiriyur.
							Total Kar:	**59**	**0**	**0**	**0**	**0**	**59**
Kerala													
Palakkad (400/220kV)		2x315 MVA + 1x500 MVA, 400/220 kV					0	300	0	0	0	0	
							Total Ker:	**300**	**0**	**0**	**0**	**0**	**300**
Tamil Nadu													
Pugalur(Existing) 400/230kV		2x315 MVA + 1x500 MVA, 400/230 kV					300	300	0	0	0	0	
Malekottaiyur(Kalivendapattu) 400/230kV		2x315 MVA + 1x500 MVA, 400/230 kV					NIL	500	0	0	0	0	
Nagapattinam PS 765/400kV	Charged at 400 kV						NIL	0	1000	0	0	0	
							Total TN:	**800**	**1000**	**0**	**0**	**0**	**1800**
							Total SR	**1159**	**1240**	**0**	**1000**	**1**	**3399**
Rajasthan													
Chittorgarh 765/400kV	765/400kV : 2x1500MVA						NIL	0	0	0	0	0	
Ajmer 765/400kV	765/400kV : 2x1500MVA						NIL	0	0	0	0	0	
Bassi		400/220 kV : 2x315MVA +1x500MVA					NIL	0	0	0		0	220kV overloading
Bhiwadi		400/220 kV : 3x315MVA					NIL	0	0	0		0	220kV overloading
Kankroli		400/220 kV : 3x315MVA					NIL	0	0	0		0	220kV overloading
Kota		400/220 kV : 2x315MVA					NIL	0	0	0		0	220kV overloading
Bhinmal		400/220 kV : 2x315MVA		400/220 kV : 1x315MVA			NIL	0	0	0	0	0	
Neemarana		400/220 kV : 1x315MVA +1x500MVA					NIL	300	0	0	0	0	
Sikar		400/220 kV : 2x315MVA +1x500MVA					NIL	0	0	0		0	220kV overloading
Jaipur (South)		400/220 kV : 2x500MVA					NIL	400	0	0	0	0	
Kotputli		400/220 kV : 2x315MVA				400/220 kV : 1x500MVA	NIL	150	0	0	0	0	

Status of margins available at existing ISTS substations (non RE) for proposed RE integration

All figures are in MW (as on 31-03-2023)

Name of station	Transformation Capacity (MVA)						Capacity Allocated (MW)	Aditional Margin on existing / UC system		Additional Margin with ICT Augmentation		No. of Trfs required for RE integration	Remarks
	Existing		Under Implementation		Planned			220kV level	400kV level	220kV level	400kV level		
	765/400kV	400/220kV or 400/132kV	765/400kV	400/220kV	765/400kV	400/220kV							
							Total RAJ	**850**	**350**	**0**	**0**	**0**	**1200**
Haryana													
Kaithal		**400/220 kV : 3X315MVA**					NIL	150	0	0	0	0	
Panchkula		**400/220 kV : 2X315MVA+500MVA**					NIL	0	0	500	0	1	
Bahadurgarh		**400/220 kV : 315MVA +500MVA**		**400/220 kV : 1X500MVA**			NIL	150	0	0	0	0	
Sonepat		**400/220 kV : 2x315MVA**					NIL	0	0	500	0	1	
Manesar		**400/220 kV : 2X500MVA**					NIL	250	0	0	0	0	
							Total HARY	**550**	**0**	**1000**	**0**	**2**	**1550**
Uttar Pradesh													
Kanpur(New)	**765/400 kV : 2x1500MVA**				**1x1500**		NIL	0	1250	0	0	0	220kV Not available
Fatehpur	**765/400kV : 2x1500MVA;**	**400/220 kV : 2X315MVA**					NIL	0	0	500	0	1	
Mainpuri		**400/220 kV : 2x315MVA +500MVA**					NIL	150	0	0	0	0	
Sohawal		**400/220 kV : 2x315MVA**		**400/220 kV : 1X500MVA**			NIL	100	0	0	0	0	
Lucknow (new)	**765/400 kV : 2x1500MVA**						NIL	0	500	0	0	0	
Balia	**765/400 kV : 2x1500MVA**						NIL	0	850	0	0	0	220kV Not available.
Bareilly(New)	**765/400 kV : 2x1500MVA**						NIL	0	500	0	0	0	
Varanasi	**765/400 kV : 2x1500MVA**						NIL	0	500	0	0	0	
							Total UP	**250**	**3600**	**500**	**0**	1	**4350**
							Total NR	**1650**	**3950**	**1500**	**0**	**3**	**7100**
Odisha													
Jeypore		**2x630MVA (400/220kV)**						500	0	0	0	0	
Keonjhar		**2x315MVA (400/220kV)**					0	300	0	0	0	0	
Pandiabil		**2x500MVA (400/220kV)**					0	400	0	0	0	0	
Rengali		**2x315MVA (400/220kV)**					0	100	0	0	0	0	
Angul	**4x1500MVA**						0	0	2500	0	0	0	
Total							**Total Od:**	**1300**	**2500**	**0**	**0**	0	**3800**

Status of margins available at existing ISTS substations (non RE) for proposed RE integration

All figures are in MW (as on 31-03-2023)

Name of station	Transformation Capacity (MVA)						Capacity Allocated (MW)	Aditional Margin on existing / UC system		Additional Margin with ICT Augmentation		No. of Trfs required for RE integration	Remarks
	Existing		Under Implementation		Planned			220kV level	400kV level	220kV level	400kV level		
	765/400kV	400/220kV or 400/132kV	765/400kV	400/220kV	765/400kV	400/220kV							
Jharkhand													
Chaibasa		**2x315MVA (400/220kV)**					0	400	0	0	0	0	
Daltonganj		**2x315MVA (400/220kV)**					0	400	0	0	0	0	
Ranchi		**2x315MVA (400/220kV)**		**1x315MVA**				800		400	0	0	Additional 400MW would be available after commissioning of 3rd 400/220kV, 500MVA ICT at Ranchi (expected by Feb 2023)
Ranchi (New)	**2x1500MVA**						0	0	900	0	0	0	
Chandwa	-	-	-	-	-	-		0	900	0	0	0	
Dhanbad		**2x500MVA (400/220kV)**						300					
Total							**Total Jh:**	**1900**	**1800**	**400**	**0**	0	**4100**
Bihar													
Banka		**2x200MVA + 1x315MVA (400/132kV)**		**2x500MVA (400/220kV)**			0	100	0	400	0	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		**2x200MVA + 1x315MVA (400/132kV)**					0	200	0	0	0	0	132kV level
Motihari		**2x200MVA + 1x315MVA (400/132kV)**					0	500	0	0	0	0	132kV level
Chandauti		**3x500MVA (400/220kV)**					0	900	0	0	0	0	
Muzaffarpur		**2x315MVA + 1x500MVA (400/220kV)**					0	600	0	0	0	0	line corridor available for 2 lines
Saharsa		**2x500MVA (400/220kV)**					0	900	0	0	0	0	
Sitamarhi		**2x500MVA (400/220kV)**					0	900	0	0	0	0	
							Total Bihar:	**4100**	**0**	**400**	**0**	0	**4500**
West Bengal													
Durgapur-B		**3x315MVA (400/220kV)**						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		**3x500MVA (400/220kV)**						300					
Subhasgram		**2x315MVA + 1x500MVA (400/220kV)**					0	600	0	300	0	0	Additional 300MW would be available after commissioning of 6th 400/220kV, 500MVA ICT at Subhasgram by CESC (expected by 2024)
Jeerat-New	**2x1500MVA**						0	0	2400	0	0	0	
Medinipur	**2x1500MVA**						0	0	1500	0	0	0	

Status of margins available at existing ISTS substations (non RE) for proposed RE integration

All figures are in MW (as on 31-03-2023)

Name of station	Transformation Capacity (MVA)						Capacity Allocated (MW)	Aditional Margin on existing / UC system		Additional Margin with ICT Augmentation		No. of Trfs required for RE integration	Remarks
	Existing		Under Implementation		Planned			220kV level	400kV level	220kV level	400kV level		
	765/400kV	400/220kV or 400/132kV	765/400kV	400/220kV	765/400kV	400/220kV							
							Total WB:	900	3900	600	0	0	5400
							ER-Total	8200	8200	1400	0	0	17800
							All India Total	11602.76	20455	3184.8	1000	5	36242.56

Disclaimer

The margins indicated at the exisiting ISTS substation may vary depending on network topology, Load-Generation balance, etc.

Status of margins available at Existing / Under Construction / Planned ISTS RE Pooling Stations for proposed RE integration

All figures are in MW (as on 31-03-2023)

Name of station	Region	RE PS Category	State	Transformation Capacity (MVA)						Pooling station capacity (MVA)	Capacity Allocated (MW)	Aditional Margin on existing / UC system		Additional Margin with Planned/Future ICT/Line Augmentation		Remarks
				Existing		Under Implementation		Planned [Approved/Under Approval]				220kV level	400kV level	220kV level	400kV level	
				765/400kV	400/220kV	765/400kV	400/220kV	765/400kV	400/220kV							
Bhadla 765/400/220kV	**NR**	**GEC-II & 66.5 GW REZ**	**Rajasthan**	**3x1500**	**7x500**		**1x500**			3580	3580					No further margin available
Bikaner 765/400/220kV	**NR**	**66.5 GW REZ & Beyond**	**Rajasthan**	**2x1500**	**2x500**	**1x1500**	**1x500**	**1x1500**		4825	3875				**950**	No further margin available for connectvity. 3275MW LTA has been granted at Bikaner PS. Power flow is being influenced by LTA at Bikaner-II also. 600MW margin available with planned 1x1500MVA, 765/400kV ICT (3rd) at Bikaner PS along with part of Phase-II system (Bikaner-II & onwards).Enhancement margins of 950MW (400kV) may require additonal corridors beyond Bikaner-II PS/Bikaner-III PS. Bikaner-III PS and onwards system is approved in NCT (24 months schedule) [expected Schedule-Jun'25]
Fatehgarh Pool (400kV)	**NR**	**GEC-II & 66.5 GW REZ**	**Rajasthan**							2200	2200					No further margin available
Bhadla-II 765/400/220kV	**NR**	**66.5 GW REZ & Beyond**	**Rajasthan**	**2x1500**	**4x500**	**2x1500**	**4x500**	**1x1500**		5945	5945					No further margin available for connectvity. LTA of 4245MW is granted/received at Bhadla-II PS.Margin available may be evacuated with under implementation Phase-II system and part of Phase-III scheme incl. 1x1500MVA, 765/400kV ICT (5th) at Bhadla-II which is envisaged by Dec'24 (tentative). No further margin is available for power evacuation.
Fatehgarh-II 765/400/220kV	**NR**	**66.5 GW REZ & Beyond**	**Rajasthan**	**4x1500**	**8x500**	**2x1500**	**1x500**		**2x500**	5460	5460					No further margin available for connectvity. LTA of 5110MW is granted at Fatehgarh-II PS. Margin available for 350MW LTA (at 220kV level) is with 1x500MVA, 400/220kV ICT (10th) at Fatehgarh-II i.e. part of Phase-III system which is by Dec'24 (tentative). No further margin is available for power evacuation.
Bikaner-II 400/220kV	**NR**	**66.5 GW REZ & Beyond**	**Rajasthan**				**2x500**		**5x500**	5460	5460					No further margin available for connectvity. 2492 MW LTA is already received/granted at Bikaner-II PS. Recently 765/400kV ICT (4th) at Bikaner is awarded which can also accomodate LTA at Bikaner-II PS upto 2900 MW. For power evacuation from Bikaner-II, Power flow is being influenced by LTA at Bikaner also. For LTA quantum >2900 MW at Bikaner-II PS , additonal corridors beyond Bikaner-III PS along with 400/220kv Bikaner-II ICTs (5x500MVA) is required . Bikaner-III PS and onwards system is approved by MOP (24 months schedule) [expected Schedule-Jun'25]
Fatehgarh-III Section-I (erstwhile Ramgarh-II) 400/220kV	**NR**	**66.5 GW REZ & Beyond**	**Rajasthan**				**4x500**		**1x500**	2280	2280					No further margin available for connectvity. 2280 MW Connectivity and 1980MW LTA has already been granted at 220kV level at Fatehgarh-III one section. 1980MW LTA may be evacuated is with Phase-II system . Additional 300MW LTA (beyond 1980 MW) can be evacuated based on transformer augmentation in Ph-III subject to approval. M/s Adani vide letter dtd 21/03/23 submitted their dissent for GNA transition for their 1500MW solar project in Fatehgarh-III PS (300MW at Sec-I) as per CERC (Connectivity & GNA to the ISTS) regulation 2022
Fatehgarh-III Section-II 765/400/220kV	**NR**	**66.5 GW REZ & Beyond**	**Rajasthan**					**6x1500**	**5x500**	5525	5525					No further margin available for connectvity. 4233MW LTA has been received/granted at Fatehgarh-III (Section-ii). Margin available for LTA is with Phase-III scheme. Margin is subject to 6x1500MVA, 765/400kV ICTs at Fatehgarh-III (part of Phase-III System). Phase-III system is under bidding & envisaged by Dec'24 (tentative). M/s Adani vide letter dtd 21/03/23 submitted their dissent for GNA transition for their 1500MW solar project in Fatehgarh-III PS (1200MW at Sec-II) as per CERC (Connectivity & GNA to the ISTS) regulation 2022

Status of margins available at Existing / Under Construction / Planned ISTS RE Pooling Stations for proposed RE integration

All figures are in MW (as on 31-03-2023)

Name of station	Region	RE PS Category	State	Transformation Capacity (MVA)						Pooling station capacity (MVA)	Capacity Allocated (MW)	Aditional Margin on existing / UC system		Additional Margin with Planned/Future ICT/Line Augmentation		Remarks
				Existing		Under Implementation		Planned [Approved/Under Approval]				220kV level	400kV level	220kV level	400kV level	
				765/400kV	400/220kV	765/400kV	400/220kV	765/400kV	400/220kV							
Bhadla-III 765/400/220kV	**NR**	**Beyond 66.5GW**	**Rajasthan**					**2x1500**	**10X500**	6500	2950	2550	1000			Connectvity Margins at Bhadla-III PS (Expected Schedule-Dec'24) is available for about balance 3.55GW (Out of 6.5GW potential). LTA of 950MW already received at Bhadla-III PS. For power evacuation from Bhadla-III, about 2600MW LTA is already granted (Ramgarh applicant) and balance 300MW LTA margin is avalilable. M/s Adani vide letter dtd 22/02/23 submitted their dissent for GNA transition for their 1500MW solar project in Ramgarh PS as per CERC (Connectivity & GNA to the ISTS) regulation 2022.For power evacuation beyond 2900MW capacity,6 GW HVDC system (Bhadla-Fatehpur) under Ph-III will be required which is approved by MOP (with 42 months schedule) [expected by Dec'26].
Fatehgarh-IV (Section-1 400/220kV	**NR**	**Beyond 66.5GW**	**Rajasthan**						**5X500**	2060	2060					No further margin available for connectvity in Section-1. 730MW LTA has been received/granted at 220kV level for evacuation with Ph-III . Evacuation Margin available for additional 1330MW with Phase-III scheme. Phase-III system is under bidding & envisaged by Dec'24 (tentative). For evacuation of power beyond 1330MW, additional transmisison system from Fatehgarh-IV (Section-2) is already evolved and under approval with NCT (for evacuation capacity of about 4 GW) [expcted schedule by Sep'25]
Ramgarh 765/400/220kV	**NR**	**Beyond 66.5GW**	**Rajasthan**					**3x1500**	**2X500**	7500	2750			300	**250**	For power evacuation from Ramgarh (through Ramgarh-Bhadla-III) , about 2600MW LTA is already granted (Ramgarh applicant) and balance 300MW LTA margin is avalilable beyond Bhadla-III. For power evacuation beyond 2900MW capacity,6 GW HVDC system (Bhadla-Fatehpur) under Ph-III will be required which is approved by MOP (with 42 months schedule) [expected by Dec'26]. For power evacuation of about 2 GW potential (beyond 2900MW) at Ramgarh, system is under approval. M/s Adani vide letter dtd 22/02/23 submitted their dissent for GNA transition for their 1500MW solar project in Ramgarh PS as per CERC (Connectivity & GNA to the ISTS) regulation 2022
Bikaner-III 765/400/220kV	**NR**	**Beyond 66.5GW**	**Rajasthan**					**6X1500**	**5x500**	4000	400	1600	2000			For power evacuation,Bikaner-III PS and onwards transmisison system along with 765/400kV Bikaner ICT is required which is approved by MOP (with 24 months schedule) [expected Schedule-Jun'25]
NP Kunta 400/220kV	**SR**	**GEC-II**	**Andhra Pradesh**		**4x500 MVA, 400/220 kV**					2000	1500	300	0	0	0	
Pavagada 400/220kV	**SR**	**GEC-II**	**Karnataka**		**5x500 MVA, 400/220 kV**		**1x500 MVA, 400/220 kV**			3000	3050	0	0	0	0	Connectivity of 3050 MW granted at Pavagada PS. Pavagada PS has been closed for all purpose regarding grant of Connectivity at 220kV level.
Tuticorin-II GIS (erstwhile Tirunelvelli (PG) 400/230kV)	**SR**	**GEC-I**	**Tamil Nadu**		**3x500 MVA, 400/230 kV**		**2x500 MVA, 400/230 kV**			2500	2220.1	154.9	0	475	0	Connectivity of 2220.1 MW and LTA of 2170.1 MW has been granted at Tuticorin-II GIS. Power transfer from Tuticorin upto 1870 MW has been considered through existing/under implementation sysyetm. However for transfer of additional quantum from Tuticorin-II GIS to NEW grid shall require Narendra-Pune 765kV D/c line which is expected by Jul'24. 230kV line bay is not available for allocation for grant of Connectivity for injection of power. However, margins available in the already allocated line bays may be utilized for grant of Connectivity through sharing of dedicated infrastructure.

Status of margins available at Existing / Under Construction / Planned ISTS RE Pooling Stations for proposed RE integration

All figures are in MW (as on 31-03-2023)

Name of station	Region	RE PS Category	State	Transformation Capacity (MVA)						Pooling station capacity (MVA)	Capacity Allocated (MW)	Aditional Margin on existing / UC system		Additional Margin with Planned/Future ICT/Line Augmentation		Remarks
				Existing		Under Implementation		Planned [Approved/Under Approval]				220kV level	400kV level	220kV level	400kV level	
				765/400kV	400/220kV	765/400kV	400/220kV	765/400kV	400/220kV							
Koppal PS 400/220kV	SR	66.5 GW REZ	Karnataka				5x500MVA, 400/220kV			2500	2753.6	0	0	0	0	Koppal PS has been closed for all purpose regarding grant of Connectivity. LTA of 1740 MW has been granted/agreed for grant at Koppal PS. Power transfer beyond 1200 MW from Koppal PS towards NEW Grid shall require Narendra-Pune 765kV D/c line which is expected by Jul'24.
Gadag PS 400/220kV	SR	66.5 GW REZ	Karnataka				5x500MVA, 400/220kV			2500	2435	0	0	0	0	Gadag PS has been closed for all purposes regarding grant of Connectivity. LTA of 1110 MW has been granted/agreed for grant at Gadag PS. Power transfer is being influenced by RE generations at Koppal PS also. Further power transfer beyond 360 MW from Gadag PS towards NEW Grid shall require Narendra-Pune 765kV D/c line which is expected by Jul'24.
Karur PS 400/230kV	SR	66.5 GW REZ	Tamil Nadu				2x500 MVA, 400/230 kV		3x500 MVA, 400/230 kV	2500	420	580	0	1500	0	LTA of 420 MW has been granted at Karur PS with Narendra-Pune 765kV D/c line which is expected by Jul'24.
Kurnool-III PS 765/400/220kV	SR	66.5 GW REZ	Andhra Pradesh			3x1500MVA, 765/400kV	9x500MVA, 400/220kV			4500	0	4500	0	0	0	Kurnool-III PS and associated transmission system is under implementation and expected by Nov'24.
Ananthapuram PS 400/220kV	SR	66.5 GW REZ	Andhra Pradesh				7x500MVA, 400/220kV			3500	0	3500	0	0	0	Ananthapuram PS and associated transmission system is under bidding stage.
Bidar PS 765/400/220kV	SR	66.5 GW REZ	Karnataka			3x1500MVA, 765/400kV	5x500MVA, 400/220kV			2500	0	2500	0	0	0	Bidar PS and associated transmission system is under bidding stage.
Koppal-II PS 765/400/220kV	SR	181.5 GW REZ	Karnataka					2x1500MVA, 765/400kV	4x500MVA, 400/220kV	2000	485	1515	0	0	0	Pooling Station has been identified considering 1000 MW of BESS and Koppal-II PS & associated transmission system is under bidding stage.
Gadag-II PS 400/220kV	SR	181.5 GW REZ	Karnataka						4x500MVA, 400/220kV	2000	830	1170	0	0	0	Pooling Station has been identified considering 1000 MW of BESS and Gadag-II PS & associated transmission system is under bidding stage.
Bhuj PS	WR	GEC-I	Gujarat	4x1500MVA, 765/400kV	8x500MVA, 400/220kV				1x500MVA, 400/220kV	4500	3366	634		500		Bhuj PS has been planned for evacuation of 4.5GW power from generation projects. Presently, 3366MW capacity has been allocated at Bhuj PS. Additional margin of 634MW is available with Bhuj-II-Lakadia-Vadodara765kV corridor which has been commissioned. Further, with additional 9th 400/220kV ICT at Bhuj PS, additional 500MW can be evacuated beyond 4000MW in case of injection at 220kV level. Above margin can also be availed at 400kV level upon requirement.
Radhanesda PS 400/220kV	WR	GEC-II	Gujarat		2x500MVA, 400/220kV					1000	700	250				700MW capacity has been allocated to GPCL at Radhanesda. With availability of Bhuj-II-Lakadia-Vadodara765kV corridor which has been commissioned, 250MW margin is available on existing 2x500MVA, 400/220kV ICTs and Radhanesda-Banaskantha 400kV D/c line (Twin AL-59).
Jam Khambhaliya PS 400/220kV	WR	66.5 GW REZ	Gujarat		4x500MVA, 400/220kV					2000	416.4	783.6				Presently, 416.4MW capacity has been allocated at Jam Khambhaliya PS (excluding Vaayu Mevasa who has filed Petition No. 20/MP/2021 along with IA No.29/2021 for relinquishment & Airpower whose connectivity has been revoked) . 783.6MW margin is available as total 1200MW can be evacuated from Jam Khambhaliya (GIS) PS. Above margin can also be availed at 400kV level upon requirement.
Bhuj-II PS 765/400/220kV	WR	66.5 GW REZ	Gujarat	2x1500MVA, 765/400kV	4x500MVA, 400/220kV					2000	1048.5	951.5				Bhuj-II PS has been planned for evacuation of 2GW power from generation projects. Presently, 1048.5MW capacity has been allocated at Bhuj-II PS. With the availability of Bhuj-II-Lakadia-Vadodara765kV corridor which has been commissioned, additional margin of 951.5MW is available. Above margin can also be availed at 400kV level upon requirement.
Lakadia PS	WR	66.5 GW REZ	Gujarat	2x1500MVA, 765/400					4x500MVA, 400/220kV	2000	0			2000		Lakadia PS has been planned for evacuation of 2GW power from generation projects.

Status of margins available at Existing / Under Construction / Planned ISTS RE Pooling Stations for proposed RE integration

All figures are in MW (as on 31-03-2023)

Name of station	Region	RE PS Category	State	Transformation Capacity (MVA)						Pooling station capacity (MVA)	Capacity Allocated (MW)	Aditional Margin on existing / UC system		Additional Margin with Planned/Future ICT/Line Augmentation		Remarks
				Existing		Under Implementation		Planned [Approved/Under Approval]				220kV level	400kV level	220kV level	400kV level	
				765/400kV	400/220kV	765/400kV	400/220kV	765/400kV	400/220kV							
Khavda I PS (9GW)	WR	66.5 GW REZ and beyond	Gujarat			3x1500MVA, 765/400kV		4x1500MVA, 765/400kV (Under Bidding) 1x1500MVA, 765/400kV (Planned)		9000	9000				10795	Ph-1: 3GW transmission system under implementation with schedule as Jan'24. Ph-2: 5GW transmission system has been awarded with implementation schedule of Mar'25. Ph-3: 7GW transmission system has been planned and approved in NCT meeting. Ph-4: 7GW transmission system has been planned & being taken up in ensuing NCT meeting. Ph-5: 8GW transmission system has been planned being taken up in ensuing NCT meeting. Presently, 30GW system has been planned for evacuation of power from generation projects at Khavda and the same is expected to be progressively commisioned from Jan'24 to Mar'27. At present, 11.4GW margin is available.
Khavda II PS (9.3GW)	WR	66.5 GW REZ and beyond	Gujarat			4x1500MVA, 765/400 kV		5x1500MVA, 765/400kV		10500	3755					
Khvada III PS (7.6GW)	WR	66.5 GW REZ and beyond	Gujarat			3x1500MVA, 765/400 kV		4x1500MVA, 765/400kV		7500	6450					
Solapur PS (1.5GW)	WR	66.5 GW REZ	Maharashtra						4x500MVA, 400/220kV	1500	260			1240		Solapur PS has been planned for evacuation of 1.5GW power from generation projects and has been agreed in NCT meeting. Presently, 260MW capacity has been allocated at Solapur PS at 220kV level and accordingly balance 1240MW margin is left.
Wardha PS	WR	66.5 GW REZ	Maharashtra						5x500MVA, 400/220kV	2500				2500		Wardha PS has been planned for evacuation of 2.5GW power from generation projects.
Kallam PS	WR	66.5 GW REZ :1GW 181.5GW: 1GW	Maharashtra				4x500MVA, 400/220kV			2000	1922.6					Presently, 1923MW capacity has been allocated at Kallam PS at 220kV level and 66MW at 400kV level. No margin is available at 220kV level at Kallam PS. Transmission system for evacuation of 1GW power is under implementation and is expected by Oct'23 and 1GW scheme augmentation scheme is expected by Apr'24.
Pachora PS (near Agar)	WR	66.5 GW REZ	MP				3x500MVA, 400/220kV		3x500MVA, 400/220kV	2500	1000	500		1000		Pachora PS has been planned for evacuation of 2500MW power from generation projects. Pachora Ph-1 (1.5GW) system is under implementation with schedule as progressively by Nov'23 and Pachora Ph-2 (1GW) has been planned. Presently, 1000MW capacity has been allocated at Pachora PS and 1500MW margin is left.
Chhatarpur PS	WR	66.5 GW REZ	MP						3x500MVA, 400/220kV (Under Bidding)	1500	0			1500		Chhatarpur PS has been planned for evacuation of 1500MW power from generation projects. Chhatarpur PS and associated system is currently under bidding stage with schedule as 18 months from SPV transfer.
Neemuch PS	WR	66.5 GW REZ	MP				2x500MVA, 400/220kV			1000	500	500				Neemuch PS has been planned for evacuation of 1GW power from generation projects and associated transmission system is expected to be be commissioned progressively by Feb'24. Presently, 500MW capacity has been allocated at Neemuch PS and 500MW margin is left.
Mandsaur PS	WR	181.5 GW REZ	MP					3x1500MVA, 765/400kV	5x500MVA, 400/220kV	2000	0			2000		Mandsaur PS (near Neemuch) has been planned for evacuation of 2GW power from generation projects.
Dhule PS	WR	181.5 GW REZ	Maharashtra						4x500MVA, 400/220kV	2000	0			2000		Dhule PS has been planned for evacuation of 2GW power from generation projects.
									All India Total	**138335**	**84597.2**	**21989**	**3000**	**15015**	**11995**	**52001**

Status of margins available at Existing / Under Construction / Planned ISTS RE Pooling Stations for proposed RE integration

All figures are in MW (as on 31-03-2023)

Name of station	Region	RE PS Category	State	Transformation Capacity (MVA)						Pooling station capacity (MVA)	Capacity Allocated (MW)	Aditional Margin on existing / UC system		Additional Margin with Planned/Future ICT/Line Augmentation		Remarks
				Existing		Under Implementation		Planned [Approved/Under Approval]				220kV level	400kV level	220kV level	400kV level	
				765/400kV	400/220kV	765/400kV	400/220kV	765/400kV	400/220kV							

Note:

Capacity allocated and margins indicated above are w.r.t connectivity at a particular pooling station. Evacuation of power to grid would depend on the development of transmission corridor identified with respective generation project.