

**Generating Stations already commissioned and leading to constraints in Inter-state transmission system (ISTS)  
due to delay in commissioning of associated intra-state transmission system**

Exhibit-III

Sl. No.	Station	Final Capacity (MW)	Capacity Commissioned (MW)	Control area	Associated transmission system	Associated transmission system yet to be commissioned	Remarks
<b>A. Western Region</b>							
1	IEPL	2x270	2x270	Maharashtra	LILO of 400 kV Koradi-II-Wardha at IEPL	LILO of 400 kV Koradi-II-Wardha at IEPL	Over loading of 400 kV Wardha-Parli D/C and 400 kV Wardha-Akola-Aurangabad D/C leading to restrictions in power transfer to Southern Region.
2	Tiroda APL	3x660 (ph-1) 2x660 (ph-2)	3x660	Maharashtra	765 kV Tiroda-Koradi-Akola-Aurangabad ckt.1 & 2 400 kV Tiroda-Warora S/C 400 kV Tiroda-Warora D/C	1) 2nd circuit of 765 kV Tiroda-Koradi-Akola 2) Commissioning of Akola-Aurangabad at 765 kV 3) 400 kV Aurangabad-Bableshtar-Kudus D/C	
3	APL, Mundra	4x330 (St-1), 2x660 (St-2), 3x660 (St-3)	4x330 (St-1), 2x660 (St-2), 3x660 (St-3)	Gujarat	400 kV APL-Sami-Dehgam D/C 400 kV APL-Hadala S/C 400 kV APL-Versana D/C 400 kV APL-Zerda 2xD/C 220 kV lines to Gujarat system	400 kV APL-Zerda 2xD/C	The Mundra-Mohindergarh HVDC bipole is operating with SPS as the lines to Gujarat from APL Mundra are inadequate. Even LTA of 1495 MW from APL Mundra to Haryana has been granted with SPS. Failure of SPS can lead to complete outage of APL Mundra complex and loss of 4500 MW generation and cascading.
<b>B. Southern Region</b>							
4	Vemagiri(GMR)	370	370	AP	400 kV Vemagiri-Vijaywada D/C (PG)	1. Termination of 2 ckts of Vemagiri-Vijaywada 400 kV at Narasaraopet	Restriction in import of ER-SR corridor due to Generation in Vemagiri complex. As on date gas generation is low and therefore constraint is not experienced; however position would change. causing overloading of 400 kV Vijaywada-Nellore D/C
5	Jegurupadu	220	220		400 kV Vemagira-Vijaywada D/C (AP)		
6	Konaseema	445	445		400 kV Vijaywada-Nellore		
7	Gauthami	464	464		400 kV SS at Narasaraopet, termination of 2 ckts of Vemagiri-Nunna		
8	GMR (BRG)	237	237		400 kV at Narasaraopet		

Sl. No.	Station	Final Capacity (MW)	Capacity Commissioned (MW)	Control area	Associated transmission system	Associated transmission system yet to be commissioned	Remarks
9	North Chennai Exp.	2x600	2x600	TN	400 kV NCTPS-SV Chatram and 400 kV Almathy-Thiruvelem	400 kV Almathy-Thiruvalem D/C	Vallur/North Chennai complex insecure
10	Mettur Stage-III	1x600	1x600	TN	400kV Mettur-Arasur DC line & 400 kV Mettur-Thiruvalem D/C	400kV Mettur-Thiruvalem D/C line	Overloading of 400 kV Hosur-Salem D/C line and Creating congestion on S1-S2 Corridor
<b>C. Northern Region</b>							
11	Kawai	2x660	2x600	Rajasthan	400 kV Kawai-Anta D/C 765 kV Anta-Phagi 2xS/C lines 400 kV Kawai-Chabra	Anta and Phagi sub-stations are yet to be ready	System is n-1 insecure, oscillations observed frequently. Loss of entire Chabra/Kawai/Kalisindh complex possible.

**List of substations with inadequate outlets adversely affecting transfer capability**

S.No.	400/220kV Substation name	State	Transformation capacity	Outlet
<b>Northern Region</b>				
1	Sohawal	UP	2*315	No outlet
2	Shahjahanpur	UP	2*315	No outlet
3	Jaipur South	Rajasthan	2*500	220kV JaipurSouth-Chaksu D/C
4	Jind	Haryana	2*500	No outlet
5	Kotputli	Rajasthan	2*315	No outlet
6	Lucknow-PG	UP	1*315+1*500	220kV Lucknow-Chinhat & 220kV Lucknow-Sitapur
7	Manesar	Haryana	2*500	No outlet
8	New Wanpoh	J & K	2*315	No outlet
9	Samba	J & K	2*315	No outlet
10	Mundka	Delhi	2*315	220/66 kV ICTs (No 220kV Ckts)
11	Deepalpur	Haryana	2*315	220kVDeepalpur-Barhi D/C
12	Nawada	Haryana	2*315	220kV Nawada-A5 faridabad D/C
13	Sonepat	Haryana	2*315	220kV Sonepat-Mohana D/C
14	Loni Road	Delhi	2*315	220/66 kV ICTs (No 220kV Ckts)
15	Deedwana	Rajasthan	1*315	As reported 220kV Deedwana-Sujangarh D/C commissioned (Loading is not available)
16	Nakodar	Punjab	2*315	220kV Nakodr-Noormehal D/C
17	Panchkula	Haryana	2*315	220kV Panchkula-Rewali D/C
18	Bhiwani (PG)	Punjab	1*500	No outlets
<b>Western Region</b>				
1	Pune	Maharashtra	3X315	Inadequate 220KV outlets
2	Sholapur(Pg)	Maharashtra	2X 315	Outlets not planned/commissioned
3	Taptithanda	Maharashtra	-	Outlets not planned/commissioned
4	Aurangabad(Pg)	Maharashtra	2X 315	Outlets not planned/commissioned
5	Warora	Maharashtra	2X 315	Outlets not planned/commissioned
6	Kala	DNH	2X 315	Inadequate 220KV outlets
<b>Southern Region</b>				
1	Munirabad	Karnataka	2*315	1. 230kV Munirabad - Lingapur DC 2. 230kV Munirabad - Kalyani SC
2	Cochin	Kerala	2*315	1. 230kV Cochin - Kalamaserry DC 2. 230kV Cochin - Brahmapuram DC
3	Trivandrum	Kerala	3*315	1. 230kV Trivandrum - Pothencode 1,2,3,4
4	Tiruvalam	Tamil Nadu	2*315	1. 230kV Tiruvalam - SPKoil SC 2. 230kV Thiruvalam - Thiruvalam
5	Mettur Stage -3	Tamil Nadu	2*315	1. 230kV Mettur ST3 - Gobi SC 2. 230kV Mettur ST3 - Mettur ST2 SC 3. 230kV Mettur ST3 - Mettur Auto SC
6	Khammam	Telangana	2*315	1. 230kV Warangal - Durshed DC 2. 230kV Waranagal - Nagaram DC
<b>Eastern Region</b>				
1	Bolangir	Odisha	2X315	Nil
2	Keonjhar	Odisha	2X 315	Nil
<b>North Eastern Region</b>				
Nil				