

पावर सिस्टम ऑपरेशन कॉर्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

POWER SYSTEM OPERATION CORPORATION LIMITED



(A wholly owned subsidiary of POWERGRID)

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NLDC/Operational Feedback 1614

Dated: 31st March, 2015

To

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| <p>1. The Member (Power System)
 Central Electricity Authority
 Sewa Bhawan, R.K. Puram,
 New Delhi</p> | <p>2. COO, CTU
 POWERGRID
 'Saudamini', Plot No.2,
 Sector-29, Gurgaon</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|

Subject: Prioritisation of Transmission Systems under implementation to relieve congestion.

Ref: NLDC/Operational Feedback/ dated: 7th February, 2014.

Madam/Sir,

This is further to NLDC's communication dated 07.02.2014 on prioritisation of transmission system to relieve congestion. Subsequent to this, a number of elements have been added in the system. However, there has also been an addition of considerable quantum of generation in different parts and a large quantum of generation is expected to be commissioned in near future. Under such condition, in order to transmit the power from one part of the country to another, it is important that matching transmission network is also in place. Though transmission systems have been planned and are under execution, some of the network elements are to be accorded higher priority to relieve present and foreseen congestion.

In order to address this, a list of the elements (generation and transmission), which are critical in terms of smooth transmission of power, has been prepared and segregated into the following four categories:

a) Inter-State Transmission Systems already approved and under different stages of construction and to facilitate smooth evacuation of power (Annex - I). The list of lines has been segregated into sub-groups, namely:

A. Evacuation of Power from Generation complexes of Chhattisgarh and Odisha

- i. Within Chhattisgarh
- ii. Within Odisha
- iii. Strengthening WR-NR Corridor and related links
- iv. Within Western Region

B. Eastern - North Eastern and Eastern-Northern Region Corridors

contd/-

C. Western - Southern Region and related links

D. Eastern - Southern Region and related links

E. Southern Region and S1-S2 corridor

F. Evacuation of power from Gujarat

G. North-Eastern Region

H. Northern Region

I. Eastern Region

While, all the corridors mentioned above have priority, however, inter-se priority within the subgroups has been highlighted.

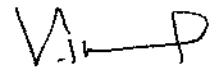
- b) Generating Stations already commissioned and leading to constraints in Inter-state transmission system (ISTS) due to delay in commissioning of associated transmission system (Annex - II)
- c) Congestion experienced in Inter-regional corridors due to delay in Commissioning of Generating Stations (Annex - III)
- d) New generation and adjacent areas connected through interim LILO arrangement (Annex - IV) and likely to accentuate congestion

The prioritisation of transmission elements has been attempted keeping in view the requirement of the system and foreseen congestion in near future. The above may kindly be considered and taken up at the appropriate forum for the needful action.

This may please be considered as Operational Feedback by NLDC under the Section - 4j of the NLDC Rules, 2005.

सधन्यवाद,

भवदीय,



(वी. के. अग्रवाल)

कार्यपालक निदेशक, रा. भा. प्रे. के.

Copy to:

- 1. Secretary, CERC
- 2. Director (OM), MoP

Inter-State Transmission Systems already approved and commissioning of which are expected to relieve congestion								
S No.	Name of the Transmission elements	Inter/ Intra Region	Name of the Region(s)	Approval Reference	Executing Agency	Approved Timeline	How it will Relieve the system/particular line	Latest Status of likely commissioning schedule as per information available at CEA/RPC websites / Remarks
A. Evacuation of Power from Generation complexes of Chhattisgarh and Odisha								
A.(i) Within Chhattisgarh								
1	765 kV Champa pooling station - Raipur pooling station D/C	Intra Region	Western Region	29th SCM of WR on 10.09.09	POWERGRID	May-14	Will help in evacuation of power from Chhattisgarh area and improve connectivity among pooling stations	Line commissioned but Champa Pooling Station is not ready
2	765 kV Raigarh (Kotra) pooling station - Champa pooling station Ckt 1	Intra Region	Western Region	29th SCM of WR on 10.09.09	POWERGRID	May-14		Likely Mar-15
3	765 kV Champa pooling station - Dharamjaygarh ckt 1	Intra Region	Western Region	29th SCM of WR on 10.09.09	POWERGRID	May-14		Line commissioned but Champa Pooling Station is not ready
4	765 kV Raigarh (Kotra) pooling station - Champa Pooling station 2nd ckt	Intra Region	Western Region	36th SCM held on 29.08.13	POWERGRID	-		
5	765 kV Champa Pooling station - Dharamjaygarh Pooling Station - 2nd ckt	Intra Region	Western Region	36th SCM held on 29.08.13	POWERGRID	-		
A.(ii) Within Odisha								
6	400 kV Talcher- Bramhapur D/C	Intra Region	Eastern Region	SCM of ER on 05.05.07	Talcher Transmission Co. Ltd.	Sep-13		No progress so far.
7	400 kV Bramhapur- Gazuwaka D/C	Inter Region	Southern Region & Eastern Region	SCM of ER on 05.05.07	Talcher Transmission Co. Ltd.	Sep-13	Strengthens NEW Grid-SR inter-connection	No progress so far.
8	400 kV Talcher-Rourkela D/C (Ckt no. 3 & 4) with Quad cond.	Intra Region	Eastern Region	SCM of ER on 05.05.07	Talcher Transmission Co. Ltd.	Sep-13	Relieve Loading of 400kV Talcher-Rourkela D/C	No progress so far.
A.(iii) Strengthening WR-NR Corridor and adjacent links.								
9	±800 kV Champa Pooling Station - Kurukshetra HVDC Bipole (2 x 3000 MW)	Inter Region	WR-NR	32nd SCM of WR on 13.05.11	POWERGRID	2016-17	Will help in evacuation of power from Chhattisgarh area directly to NR	Dec-15. Stg-I clearance (191 Ha) obtained in Aug'14. Stage-II awaited.
10	765 kV Gwalior - Jaipur (1st Ckt) S/C	Inter Region	Western Region & Northern Region	29th SCM of WR on 10.09.09	POWERGRID	Mar-14	Provides alternate path to Bina - Gwalior - Agra, thus Strengthens WR - NR corridor	Revised target is Mar-15; Involves Wildlife Sanctuary, Clearance awaited. Critical
11	765 kV Gwalior - Jaipur (2nd Ckt) S/C	Inter Region	Western Region & Northern Region	29th SCM of WR on 10.09.09	POWERGRID	Mar-14		Revised target is Jun-15 Involves Wildlife Sanctuary, Clearance awaited. Critical
12	765 kV Jabalpur-Orai D/C	Inter Region	Western and Northern Region	31st SCM of NR on 02.01.2013	POWERGRID	-	Enhance WR-NR TTC, Provides alternate path to upcoming Champa-Kurukshetra HVDC	
13	765 kV Orai-Aligarh D/C	Within NR	Western and Northern Region	31st SCM of NR on 02.01.2013	POWERGRID	-		
14	LILO of Agra-Meerut at Aligarh	Within NR	Western and Northern Region	31st SCM of NR on 02.01.2013	POWERGRID	-		

Inter-State Transmission Systems already approved and commissioning of which are expected to relieve congestion								
S No.	Name of the Transmission elements	Inter/ Intra Region	Name of the Region(s)	Approval Reference	Executing Agency	Approved Timeline	How it will Relieve the system/particular line	Latest Status of likely commissioning schedule as per information available at CEA/RPC websites / Remarks
A.(iv) Within Western Region								
15	765 kV Aurangabad-Solapur D/C	Intra-region	Western Region (Maharashtra)	37th SCM held on 05.09.14	POWERGRID	Nov-15	Parallel path to Wardha-Parli-Solapur D/C	Mar-16.
16	400 kV Aurangabad - Boisar line D/C line	Intra-Region	Western Region (Maharashtra)	30th SCM of WR held on 08.07.10	POWERGRID	-	-	Revised Target is Jun-15. Stage-I Forest clearance (138ha.) awaited. Proposal at PCCF office Nagpur, Severe ROW problem.
17	765 kV Aurangabad (PG) - Padghe (PG) D/C	Intra Region	Western Region	29th SCM of WR on 10.09.09	POWERGRID	Aug-14	-	May-15. Forest clearance awaited.
18	400 kV D/C Vadinar-Amreli	Intra Region	Western Region		GETCO	Jul-13		Mar-15
19	765 kV Dharamjaygarh - Jabalpur Pooling Station D/C	Intra Region	Western Region	29th SCM of WR on 10.09.09	POWERGRID	Dec-13	Would facilitate evacuation of power from generation complexes of Odisha & Chhattisgarh to load centres	Revised target is Jun-15. Stage-I Forest clearance for Chattishgarh portion(298Hac.) received in Oct'14.
20	765 kV Dharamjaygarh - Jabalpur (JTCL) D/C	Intra Region	Western Region	29th SCM of WR on 10.09.09	Sterlite Grid Ltd.	Mar-14		Revised target is Apr-15.
21	765 kV Indore - Vadodara S/C	Intra Region	Western Region	28th SCM of NR on 23.02.10	POWERGRID			Charged at 400 kV
22	765kV Akola - Aurangabad 2x S/C	Intra-Region	Western Region (Maharashtra)	Tiroda, APL Evacuation and East-West transfer within Maharashtra	MSETCL-APL JV	Mar'13	Facilitate evacuation from APL, Tiroda and would help in East to West transfers within Maharashtra	One circuitCharged at 400 kV
23	400 kV D/C Bableshwar-Kudus	Intra Region	Western Region	32nd SCM of WR on 13.05.2011	MSETCL		Facilitate East to West transfers within Maharashtra	Sep-15
24	765 kV Jabalpur - Bhopal (BDTCL) S/C	Intra Region	Western Region	29th SCM of WR on 10.09.09	Sterlite Grid Ltd. (BDTCL)	Mar'14	Would facilitate evacuation of power from generation complex of Orissa & Chhattisgarh to load centre	Apr'15.
25	765 kV Dhule-Vadodara (BDTCL) S/C	Intra Region	Western Region	28th SCM of NR on 23.02.10	Sterlite Grid Ltd. (BDTCL)	N/A		Vadodara 765 kV S/S expected in Apr'15
26	400 kV D/C Amreli-Kasor	Intra Region	Western Region		GETCO	Jun-13	Evacuation from Kutch area	Apr-15
27	400 kV Essar Mahan-Bilaspur Pooling Station D/C	Intra Region	Western Region			Mar-13	400 kV Korba-Vindhyachal ckt 2 presently LILO at Essar Mahan would be made through offering better reliability	Severe ROW problem reported
28	765 kV Raipur pooling station - Rajnandgaon D/C	Intra-region	Western Region	36th SCM held on 29.08.13	POWERGRID	N/A	1. Facilitates power evacuation from IPPs in Chhattisgarh 2. strengthens regional network	-
29	765 kV Rajnandgaon-Warora D/C	Intra-region	Western Region	36th SCM held on 29.08.13	POWERGRID	N/A	1. Facilitates power evacuation from IPPs in Chhattisgarh 2. strengthens regional network	-
B. Eastern - North Eastern and Eastern-Northern Region Corridors								
30	400 kV Rajarhat-Purnea D/C (LILo of one ckt. each at FSTPP and at Gokarna)	Intra Region	Eastern Region	SCM on 28 Dec 2010	POWERGRID	-	Relieve loading of 400 kV Farakka-Malda D/C and will improve ER-NR and ER-NER transfer capability which is presently being enhanced through topology changes at Malda/Dalkhola which somewhat reduces reliability.	April'16

Inter-State Transmission Systems already approved and commissioning of which are expected to relieve congestion								
S No.	Name of the Transmission elements	Inter/ Intra Region	Name of the Region(s)	Approval Reference	Executing Agency	Approved Timeline	How it will Relieve the system/particular line	Latest Status of likely commissioning schedule as per information available at CEA/RPC websites / Remarks
C. Western - Southern Region and adjacent links								
31	HVDC Raigarh (Kotra)-Pugalur Bi-pole (2 x 3000 MW)	Inter-regional	Western Region and Southern Region	Discussed during 36th SCM of SR held on 4.09.13.	POWERGRID	N/A	For power transfer from IPPs in Chhattisgarh to SR region	-
32	765 kV Wardha – Nizamabad D/C	Inter Region	Western Region & Southern Region	36th SCM of WR held on 29.8.13	POWERGRID	N/A	Strengthen NEW-SR connectivity	
33	765 kV Nizamabad-Hyderabad D/C	Intra Region	Western Region & Southern Region	36th SCM of WR held on 29.8.13	POWERGRID	N/A	Strengthen NEW-SR connectivity	
34	765 kV Narendra-Kolhapur D/C	Inter-region	Western Region and Southern Region	27th SCM held on 30.07.07	POWERGRID	N/A	More AC transmission lines connecting NEW grid and SR grid will bring stability in Grid	Revised Target is Dec-15. However, efforts are being made to complete it earlier by Jun-15
D. Eastern - Southern Region and adjacent links.								
35	765 kV Angul - Srikakulam D/C	Inter Region	Eastern Region & Southern Region	30th SCM of WR held on 13.04.10	POWERGRID	June'15	Provide alternate path to SR from the eastern side	Revised Target is Dec-15. Forest clearance Processing of forest case very slow at state Govt. level. Critical
36	765 kV Srikakulam - Vemagiri D/C	Intra Region	Southern Region	33rd SCM of SR held on 30.09.11	POWERGRID	Mar-17		Aug-16
37	765 kV Vemagiri - Khammam D/C	Intra Region	Southern Region	31st SCM of SR held on 16.11.10. Final order by CERC awaited.	POWERGRID under TBCB		Provide alternate path to SR from the eastern side	
38	765 kV Khammam-Hyderabad D/C	Intra Region	Southern Region	31st SCM of SR held on 16.11.10. Final order by CERC awaited.	POWERGRID under TBCB		Provide alternate path to SR from the eastern side	
E. Southern Region and S1-S2 corridor								
39	400 kV UPCL-Mylatti-Kozhikode	Intra Region	Southern Region	35th SCM of SR on 04.01.2013 for implementation through tariff based competitive bidding (TBCB)	-	-	North Kerala Drawl capacity increases and will be having reliable supply	-
40	400 kV Mysore-Kozhikode D/C	Intra Region	Southern Region	16th SCM of SR held on 20.01.03	POWERGRID	Nov-12	Constraints between S1 & S2 zones will be relieved	Revised target is Mar'15 .Completion uncertain as work completely held-up in stretch of 50 Kms since more than 05 year due to severe ROW problem in Karnataka portion of line forest clearance in Karnataka. Work re-started from Dec'13.
41	765kV Madhugiri Pooling Station - Salem Pooling Station S/C	Intra Region	Southern Region	29th SCM of SR on 27.08.2009	POWERGRID	Sep-14		Revised Target is Jun-15. Severe ROW being faced in Karnataka.
42	400 kV Mettur - Thiruvellur D/C	Intra Region	Southern Region		TANTRANSCO	Jan-15		Both ckts. were charged on 17.03.2015 upto location no. 192.
43	400kV Vijayawada - Nellore 2nd D/c	Intra Region	Southern Region	32nd SCM of SR on 08th June 2011 17th SRPC meeting on 12 August 2011	POWERGRID	Nov-14	NEW Grid-SR Constraint on SR side will be relieved, particularly in case Vemagiri complex gas generation goes up.	Jun-15
44	400 kV New Somanhalli- Salem D/C	Intra Region	Southern Region	30th SCM of SR on 13.04.2010	POWERGRID	Nov-14	Constraints between S1 & S2 zones will be relieved	Jun-15.
45	400 kV Gooty-Madhugiri D/C	Intra Region	Southern Region	28th SCM of SR on 15.06.09	POWERGRID	June, 2014	Facilitates power transfer from NEW Grid	Jun-15. ROW being faced towards Karnataka end.
46	400 kV Tirunelveli-Muvattupuzha(Cochin) D/C	Intra Region	Southern Region	18th SCM of SR on 05.03.2004	POWERGRID	2007	Kerala Drawl capacity increases. Presently charged at 220 kV from Tirunelveli to Edamon.	ROW problems
47	400kV Karaikudi-Pugalur D/C	Intra Region	Southern Region	29th SCM of SR on 27.08.2009	TANTRANSCO	Mar-14	Facilitate Evacuation of Wind Generation Located in Tirunelveli & Madurai area	Feb-15. Work under Progress. Issues involved and are being sorted out.
48	400 kV Edamon (KSEB) - Muvattupuzha (PG) D/C	Intra Region	Southern Region		POWERGRID		Constraints between S1 & S2 zones will be relieved	March-15. Completion uncertain due to severe ROW problem.

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S No.	Name of the Transmission elements	Inter/ Intra Region	Name of the Region(s)	Approval Reference	Executing Agency	Approved Timeline	How it will Relieve the system/particular line	Latest Status of likely commissioning schedule as per information available at CEA/RPC websites / Remarks
49	400 kV Tirunelveli-Kanarpatty (TN Wind) D/C line	Intra Region	Southern Region	29th SCM of SR on 27.08.2009	TANTRANSCO	2016-17	Facilitate Evacuation of Wind Generation Located in Tirunelveli & Madurai area	2016-17
50	400 kV Kanarpatty-Kayathar	Intra Region	Southern Region	29th SCM of SR on 27.08.2009	TANTRANSCO	-		-
51	400 kV Trichur-Kozhikode D/C	Intra Region	Southern Region	30th SCM of SR held on 13.04.10	POWERGRID	-	North Kerala drawl capacity would be augmented	NA
52	400 kV Madhugiri-Yelahanka D/C with Quad cond.	Intra Region	Southern Region	29th SCM of SR on 27.08.2009	POWERGRID	June, 2014	Facilitates power supply to load centers of Karnataka	Jun-15. ROW being faced at Madugiri end.Critical
53	400 kV Alamathy-Thiruvalem D/C line	Intra Region	Southern Region		TANTRANSCO			Mar-15
F. Evacuation of Power from Gujarat								
54	400 kV Mundra-Zerda line-1 D/C	Intra-Region	Western Region	Adani Power, Mundra(Bid-II)	GETCO	May'12	Facilitate Mundra, APL generation evacuation and would relieve 400kV Mundra-Sami-Dehgam D/C lines. Presently the 4620 MW generation complex is N-1 secure only with System Protection Schemes (SPS); this needs to be corrected.	Revised target is Apr'15. WIP/Severe RoW Issue and Forest Clearance pending, waiting for SBWL meeting
55	400 kV Mundra-Zerda line-2 D/C	Intra-Region	Western Region	Adani Power, Mundra(Bid-II)	GETCO	May'12		Revised target is Mar'15. WIP.Severe RoW issues and Forest Clearance pending for Regional Committee Meeting
56	400 kV Vapi (PG) - Navi Mumbai	Intra-Region	Western Region (Gujarat - Maharashtra)	25th SCM of WR held on 30.09.06	POWERGRID	Sep'10	Facilitate evacuation of generation from Gujarat to meet demand in Mumbai and adjoining areas	Revised target is Dec-15. Due to severe ROW portion at Navi-Mumbai end,Line now decided to be terminated at Kudus S/stn. of MSETCL. Contingency arrangement to connect Vapi-Navi Mumbai with Navsari-Boisar line by passing ROW area to form Vapi Navsari line (24 Ckm) commissioned in Mar'13.40KV D/C Vapi-Kala portion (61 Ckm) commissioned in Dec-15. Balance matching with readiness of Kudus S/S by MSETCL.
57	400 kV Vapi-Boisar D/C line	Intra-Region	Western Region (Gujarat - Maharashtra)	WRSSS for Mundra UMPP, Part-B	POWERGRID	-		Severe ROW problem being faced in Maharashtra & DNH on almost all locations. * Completion uncertain.
G. North Eastern Region								
58	220 kV Mariani (New) (PG) - Mokokchung (Nagaland)	Intra Region	North Eastern Region	SCM of NER on 25.06.2008	POWERGRID	Mar-14	Enhancement of drawal capability of Nagaland	Revised Target was Jan-15. ROW problem is being faced in Nagaland.
59	400/220 kV , 2x315 MVA ICTs at Bongaigaon (NTPC)	Intra Region	North Eastern Region	SCM of NER on 25.06.2008	NTPC		Enhanced drawal capability of Arunachal Pradesh(Capital Area) & Assam(Gohpur Area)	Ranganadi - Nirjuli Ckt-II : Work started. Survey completed. 2 nos foundation completed. Forest clearance not received
60	132 kV Ranganadi - Nirjuli D/C	Intra Region	North Eastern Region	Comprehensive Scheme for Strengthening of Transmission System in NER & Sikkim, 30.10.12	POWERGRID	yet to be accorded		
61	132 kV Mokokchung (PG) - Mokokchung (Nagaland)	Intra Region	North Eastern Region	N/A	DoP, Nagaland	Dec-14	Enhancement of drawal capability of Nagaland	Revised Target was Nov-14. Severe ROW problem
62	LILO of 132 kV Ranganadi - Itanagar at Pare HEP	Intra Region	North Eastern Region	N/A	DoP, Arunachal Pradesh		Enhancement of drawl capability of Arunachal Pradesh & Evacuation of Pare HEP Power	
63	132 kV Killing (Byrnihat) - EPIP I (MePTCL)	Intra Region	North Eastern Region	N/A	MePTCL	Dec-13	Enhancement of Drawal capability of Meghalaya	Revised Target is Mar-15. No issues of forest clearance and no court cases. Work held up due to non payment of compensation to the land owners.At the present the assessment is prepared and likely to be cleared within this financial year.
64	400 kV Silchar (PG) - Melriat (PG) [Charged at 132 kV]	Intra Region	North Eastern Region	SCM of NER on 25.06.2008	POWERGRID	Jun-14	Enhancement of drawal capability of Mizoram	Revised target is Dec-15. Major portion of line in forest. severe ROW in vicinity of Aizwl town due to stiff resistance from influential local owner.

Inter-State Transmission Systems already approved and commissioning of which are expected to relieve congestion								
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65	220/132 kV, 2x50 MVA ICTs at Kukurmara	Intra Region	North Eastern Region	N/A	AEGCL	Dec-13	Enhancement of Drawal capability of Assam	Yet to be completed
66	220 kV Bongaigaon (AEGCL) - Rangia (AEGCL)	Intra Region	North Eastern Region	N/A	AEGCL	Dec-13	Enhancement of Drawal capability of Assam	Yet to be completed. ROW Problems
67	132 kV Melriat (New) (PG) - Sihmui (Mizoram)	Intra Region	North Eastern Region	N/A	POWERGRID	Mar-14	Enhancement of drawal capability of Mizoram	Revised Target is dec-15. Stage-I forest clearance awaited.
68	132 kV Aizawl (PG) - Zemabawk LILO at Melriat	Intra Region	North Eastern Region	N/A	P&E Dept, Mizoram	Dec-13	Enhancement of Drawal capability of Assam	Revised Target was Dec-14. Yet to be completed
69	LILO of 400 kV Ranganadi HEP (NEEPCO) - Balipara (PG) at Biswanath Chariyali (PG) (Pooling Point)	Intra Region	North Eastern Region	N/A	POWERGRID	Jun-15	Enhancement of Drawal capability of Assam	Revised Target is Mar-15. Site works deferred due to disturbance in Assam
70	400/220 kV , 1x315 MVA ICT at Balipara	Intra Region	North Eastern Region	SCM of NER on 13.12.2014	POWERGRID	May-17	Increased reliability of operation in NER Grid	
71	132/33 kV, 2x50 MVA ICTs at Nirjuli	Intra Region	North Eastern Region	SCM of NER on 13.12.2014	POWERGRID	May-17	Enhancement of Drawal capability of capital area of Arunachal Pradesh	
H. Northern Region								
72	765 kV S/C Anpara D - Unnao	Intra Region	Northern Region		UPPTCL	Jan-12	Evacuation path for Anpara-D, Unit 1 & 2	Mar-15
73	400 kV Bareilly-Kashipur D/C	Intra Region	Northern Region	27th SCM held of NR on 30.05.09	POWERGRID	Dec-14	Strengthening of inter-connection of Uttarakhand system with Northern GRID	Revised target is Mar-15. Completion matching with Bareilly sub station.
74	400 kV Roorkee-Saharanpur D/C (Quad)	Intra Region	Northern Region	27th SCM held of NR on 11.06.2009	POWERGRID	Dec-14	Strengthening of inter-connection of Uttarakhand system with Northern GRID	Revised target I Mar-15. Completion uncertain. Severe ROW problem in western UP.
75	765 kV S/C Mainpuri - Unnao	Intra Region	Northern Region		UPPTCL			Aug-15
76	765 kV Jaipur (RVPNL) - Bhiwani 1st Ckt	Intra Region	Northern Region	28th SCM held of NR on 09.03.10	POWERGRID		Alternate path between Gwalior & Bhiwani	Mar-15.
77	765 kV Jaipur (RVPNL) - Bhiwani 2nd Ckt	Intra Region	Northern Region	28th SCM held of NR on 09.03.10	POWERGRID		Alternate path between Gwalior & Bhiwani	Revised Target is Mar-16. Award placed in Nov'13. Stringing commenced from Dec'14.
78	765 kV Bareilly-Meerut S/C	Intra Region	Northern Region	29th SCM held of NR on 20.01.11	POWERGRID	Sep-13	For strengthening east-west corridor in NR (UP)	
79	400kV Jalandhar-Amritsar D/C (LILO of 400 kV ParbatiPool-Amritsar D/C Line at Jalandhar S/s)	Intra Region	Northern Region	32nd SCM held on 27.09.13	POWERGRID	NA	Strengthen Connectivity of Amritsar with Grid	
80	765 kV S/C Hapur-Greater Noida	Intra Region	Northern Region		UPPTCL		Relieve high loading in western UP	Mar-15
81	400 kV Rosa- Shahjahanpur D/C	Intra Region	Northern Region	29th SCM held on 20.01.11	UPPTCL	NA	Evacuation from Rosa	
82	400 kV D/C Mohindergarh - Bhiwani	Intra Region	Northern Region	33rd SCM of NR held on 23.12.2013	TBCB	NA		NA
83	400 kV Kashipur-Roorkee D/C	Intra Region	Northern Region	27th SCM held of NR on 30.05.09	POWERGRID	Dec-14	Strengthening of inter-connection of Uttarakhand system with Northern GRID	Revised Target is Mar-15. Completion matching with Bareilly S/S.(Delayed due to late handover land)
84	400 kV Malerkotla-Amritsar D/C	Intra Region	Northern Region	32nd SCM held on 27.09.13			Strengten Connectivity of Amritsar with Grid	Sep-16.
I. Eastern Region								
85	LILO of 400 kV Baripada-Mendasal at New Dubri	Intra Region	Eastern Region		POWERGRID	Nov-12	Will provide stability to North-Central Odisha transmission system	May-15; Progress affected due to ROW problem & forest clearance
86	400 kV D/C Raghunathpur TPS -Ranchi (PG)	Intra Region	Eastern Region	SCM for ER held on 05-05-07	DVC	Aug-10	Evacuation from Raghunathpur TPS would improve.	Mar-15

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										
Sl. No.	Station	Final Capacity (MW)	Capacity Commissioned (MW)	Total Capacity (MW)	Control area	Associated transmission system	Associated transmission system yet to be commissioned	Interim arrangement	Remarks	Latest Status as per information available at CEA/RPC websites
A. Western Region										
1	Tiroda APL	3x660 (ph-1) 2x660 (ph-2)	5x660	3300	Maharashtra	765 kV Tiroda-Koradi-Akola-Aurangabad ckt.1 & 2, 400 kV Aurangabad-Bableshwar D/C, 400 kV Bableshwar-Kudus D/C 400 kV Tiroda-Warora D/C, 400 kV Warora-Chandrapur D/C	765kV Akola-Aurangabad D/C is charged at 400 kV only due to non-commissioning of 765 kV level at Aurangabad (MSETCL). 400 kV Aurangabad-Bableshwar one circuit and Bableshwar-Kudus D/C		High loading of 400 kV Bableshwar-Padghe D/C	To control overloading of 400 kV Bableshwar-Padghe D/C, 400 kV Bableshwar - Kudus D/C is required to be commissioned and this line is expected in Sep'15.
2	APL, Mundra	4x330 (St-1), 2x660 (St-2), 3x660 (St-3)	4x330 (St-1), 2x660 (St-2), 3x660 (St-3)	4620	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 HVDC Mundra-Mahendragarh	400 kV APL Mundra-Zerda 2xD/C		Difficulty in evacuation from Adani power due to overloading of GETCO Transmission system and thereby restriction on the flow of WR-NR corridor. N-1 for such a large complex is satisfied only with SPS.	Revised target is April'15. Work In Progress /Severe RoW Issue.
B. Eastern Region										
3	Chuzachen HEP	2x55	2x55	110	Sikkim	132kV Chuzachen-Rangpo D/C	132 kV Chuzachen-Rangpo 2nd ckt			

Congestion experienced in Inter-regional corridors due to delay in Commissioning of Generating Stations								
S.No	Name of the Project	State	Ownership	Capacity (in MW)	Total Capacity (MW)	Original Schedule of commissioning as per information available at CEA/RPC websites	How it will Relieve the system	Latest Status as per information available at CEA/RPC websites
A. Eastern and North Eastern Region								
1	Barh Stg I & II	Bihar	NTPC	3X660 + 2X660	3300	Barh-I : March 2007 onwards Barh-II: 2012-13	Relieve loading of 400 kV Farakka-Malda D/C	U#4 of 660 MW: COD on 15.11.2014; U#5 of 660 MW: Commissioned in 03/15
2	Bongaigaon TPP expansion project	Assam	NTPC	3x250MW	750	Completion Schedule: 2011-12	Reduce the congestion in import of North-Eastern region corridor	Commissioning Schedule: U#1: 6/14, U#2: 4/15, U#3: 9/15
B. Southern Region								
3	Kudankulam(NPCIL)	Tamil Nadu	NPCIL	2*1000 MW	2000	Unit-I : Dec'09; Unit-II : Jun'10.	Help to relieve the congestion in S1-S2 Corridor i.e between (Andhra Pradesh and Karnataka considered in S1 and Tamil Nadu, Kerala and Pondicherry in S2.	U#1: COD in Jan-2015; U#2: Expected synchronization by July-2015
4	Neyveli Thermal station-II (Expansion) (NLC)	Tamil Nadu	NEYVELI LIGNITE CORPORATION	2*250 MW	500	11th Plan		U#1: Achieved FL on 04.02.2012, COD is yet to be achieved
5	NLC Tamilnadu Power limited (NTPL)	Tuticorin, Tamil Nadu	Joint venture between NLC and TNEB	2*500 MW	1000	Unit 1: Mar'12; Unit 2: Aug'12;		U#1 and U#2 of 500 MW: COD expected in 2015-16

Generation connected through interim Loop In Loop Out (LILO) arrangement									
S.No	Name of the Project	State	Ownership	Capacity (in MW)	Total Capacity (MW)	Associated Transmission Lines	Interim Arrangement	Remarks	Latest Status as per information available at CEA/RPC websites
1	Vandana Vidyut Ltd	Korba Distt., Chattisgarh	M/s Vandana Vidyut Ltd	540 MW	540	Permanent connectivity at Champa PS through dedicated lines by developer (Not yet completed)	LILO of Korba-Barsingpur ckt 2	Problem in evacuation of Power from Chattisgarh and adjoining areas	Unit-1 of 135 MW commissioned in 12/13
2	K S K Mahanadi Power Company Limited	Nariyara, dist. Janjgir-Champa, Chhattisgarh	K S K Mahanadi Power Company Limited	3600 MW(6x600 MW)	3600	Permaent connectivity at Champa PS through dedicated lines by developer (Not yet completed)	LILO of Raipur-Raigarh ckt 3&4		1st unit of 600 MW commissioned in 08/13 2nd unit of 600 MW commissioned in 08/14
3	Korba West Power Co.Ltd.	Raigarh (Chhattisgarh)	Avantha Power & Infrastructure Limited	2 X 600 MW	1200	Permaent connectivity at Kotra PS through dedicated lines by developer (Not yet completed)	LILO of Raipur-Raigarh ckt 1		Unit-1 commissioned
4	Balco	Chhattisgarh	Vedanta	4*67.5MW + 4*135 MW +4*300 MW	2010	Permaent connectivity at Daramjayagarh PS through dedicated lines by developer	LILO of Korba-Barsingpur ckt 1		4*300 MW units yet to be commissioned. Surplus power after meeting captive load injected to grid
5	Binjkote TPP (SKS Power Ltd)	Chhattisgarh	SKS Power Ltd	4*300MW	1200	Permanenet connectivity at 400kV Kotra PS (near Raigarh) through 400kV dedicated lines by developer.			
6	ESSAR Mahan MP Power Ltd	MP	ESSAR Power Ltd	2*600MW	1200	Permaent connectivity at Bilaspur Pooling station through (Not yet completed)	LILO of Vindhayachal-Korba ckt 1	Connectivity at Bilaspur pooling station, will lead to Problem in evacuation of Power from Chattisgarh area	1st unit commissioned: Feb'13
7	Coastal Energen	Tamilnadu	Coal and oil Group	2*600MW	1200	Permanent connectivity at Tuticorin Pooling staation	LILO of Madurai-Tuticorin		1st Unit commissioned: Dec'14
8	Rosa TPP Extn Ph-II	UP	Reliance	2*300 MW	600	permanent connectivity at Shahjahanpur and Dohna (Not Yet Completed)	LILO of Lucknow-Bareilly		
9	IEPL	Maharashtra	IEPL	2*270 MW	540	LILO of 400 kV Koradi-II-Wardha at IEPL	LILO of one circuit of 400 kV Mauda-Wardha (PG)	Over loading of 400 kV Wardha-Parli D/C and 400 kV Wardha-Akola-Aurangabad D/C	The progress of Koradi-Wardha line is slow. Forest clearance awaited. LILO of 400 kV Mauda-Wardha (PG) Commissioned in NOV'12
10	Uchpinda TPP	Chhattisgarh	RKMPL	4*360 MW	1440	400 kV Uchpinda-Raigarh (Kotra) D/C	LILO of Raigarh-Raipur at Uchpinda TPP		
11	IND Barath	Odisha	Ind Barath Power Energy (Utkal) Ltd.	2*350 MW	700	Permanent connectivity at Jharsuguda Pooling station through dedicated lines by developer (Not yet completed)	LILO of Rourkela-Raigarh.		
12	Sterlite	Odisha	Sterlite	4 * 600 MW	2400	Permanent connectivity at Jharsuguda Pooling station through dedicated lines by developer (Not yet completed)	LILO of 400 kV Rourkela-Raigarh	Outages on the LILO portion leads to outage of the inter-regional link	