Issue Date: 18th Mar 2019 Issue Time: 1330 hrs Revision No. 8

Corridor	Date	Time Period (hrs)	Total Transfer Capability (TTC)	Reliability Margin	Available Transfer Capability (ATC)	Long Term Access (LTA)/ Medium Term Open Access (MTOA) #	Margin Available for Short Term Open Access (STOA)	Changes in TTC w.r.t. Last Revision	Comments
	1st March 2010	00-06				195	1805		
NR-WR*	1st March 2019 to 31st March	06-18	2500	500	2000	250	1750		
	2019	18-24				195	1805		
	1st March 2019		13250		12750	9383	3367		
	to 7th March 2019	00-24	12300**	500	11800**	8433**	3367**		
			13250		12750	9433	3317		
	8th March 2019	00-24	12300**	500	11800**	8483**	3317**		
		00-08'	13250	500	12750	9433	3317		
	9th March 2019	00-08	12300**	300	11800**	8483**	3317**		
WR-NR*	7th March 2017	08-24'	10750	500	10250	9433	817		
			9800**		9300**	8483**	817**		
	10th March 2019 to 18th	00-24	10750	500	10250	9433	817		
	March 2019  19th March 2019		9800**		9300**	8483**	817**		
		00-24	10750	500	10250	9433	817	-2500	Testing of HVDC Champa- Kurukshetra Pole-1, 2 and 3 for
	20th March		9800** 13250		9300** 12750	8483** 9433	817** 3317		comissoining of Pole-3.
	2019 to 31st March 2019	00-24	12300**	500	11800**	8483**	3317**		
	1 . 34 . 1 2010	00.06	2000		1000	102	1,007	<u>'</u>	
NR-ER*	1st March 2019 to 31st March	00-06 06-18	2000 2000 2000	200	1800 1800	193 303	1607 1497		
1 12 221	2019	18-24 2000 18-24 2000		200	1800	193	1607		
ER-NR*	1st March 2019 to 7th March 2019	00-24	5250	300	4950	3892	1058		
EW-IVK	8th March 2019 to 31st March 2019	00-24	5250	300	4950	3979	971		
W3-ER	1st March 2019 to 31st March 2019	00-24				No limit i	s being specified.		
ER-W3	1st March 2019 to 31st March 2019	00-24	No limit is being specified.						
		22.25			<b>7</b> 0.70				
	1st March 2019	00-05	5550		5050		615		
WR-SR	to 31st March 2019	05-22	5550	500	5050	4435	615		
		22-24	5550		5050		615		
SR-WR *	1st March 2019 to 31st March 2019	00-24				No limit is	s being Specified.		

Issue Date: 18th Mar 2019 Issue Time: 1330 hrs Revision No. 8

Corridor	Date	Time Period (hrs)	Total Transfer Capability (TTC)	Reliability Margin	Available Transfer Capability (ATC)	Long Term Access (LTA)/ Medium Term Open Access (MTOA) #	Margin Available for Short Term Open Access (STOA)	Changes in TTC w.r.t. Last Revision	Comments
		00-06				2762	1938		
ER-SR	1st March 2019 to 31st March 2019	06-18	4950	250	4700	2847	1853		
	2017	18-24				2762	1938		
SR-ER *	1st March 2019 to 31st March 2019	00-24				No limit i	s being Specified.		
	1 . 1 2010	00-17	900		855		630		
	1st March 2019 to 09th March	17-23	1090	45	1045	225	820		
	2019	23-24	900	.0	855		630		
		00-17	900		855		630		
	10th March 2019 to 14th		1090	45	1045	225	820		
	March 2019	17-23		43		225			
		23-24	900		855		630		
	15th March	00-17	1380		1335		1110		
	2019	17-23	1340	45	1295	225	1070		
ER-NER		23-24	1380		1335		1110		
	16th March 2019 to 18th March 2019	00-17	900		855	225	630		
		17-23	1090	45	1045		820		
		23-24	900		855		630		
	19th March	00-17	900	45	855		630	-480	
	2019 to 25th	17-23	1090		1045	225	820	-250	Revised due to Extended shutdown of 400/220kV ICT-1 at Misa
	March 2019	23-24	900		855		630	-480	01 400/220K v 1C1-1 at iviisa
	26th March	00-17	1380		1335		1110		
	2019 to 31st	17-23	1340	45	1295	225	1070		
	March 2019	23-24 00-17	1380 2010		1335 1965		1110 1965		
	1st March 2019 to 09th March	17-23	2070	45	2025	0	2025		
	2019	23-24	2010		1965		1965		
	10th March	00-17	2010		1965		1965		
	2019 to 14th	17-23	2070	45	2025	0	2025		
	March 2019	23-24	2010		1965		1965		
		00-17	2270		2225		2225		
	15th March	17-23	2380	45	2335	0	2335		
	2019	23-24	2270	73	2225		2225		
NER-ER									
	16th March	00-17	2010	4.5	1965	0	1965		
	2019 to 18th March 2019	17-23	2070	45	2025	0	2025		
	March 2019	23-24	2010		1965		1965		
	19th March 2019 to 25th March 2019	00-17	2010		1965		1965	-260	Revised due to Extended shutdown
		17-23	2070	45	2025	0	2025	-310	of 400/220kV ICT-1 at Misa
		23-24	2010		1965		1965	-260	
	26th March	00-17	2270		2225		2225		
	2019 to 31st	17-23	2380	45	2335	0	2335		
	March 2019	23-24	2270		2225		2225		

Issue Date: 18th Mar 2019 Issue Time: 1330 hrs Revision No. 8

Corridor	Date	Time Period (hrs)	Total Transfer Capability (TTC)	Reliability Margin	Available Transfer Capability (ATC)	Long Term Access (LTA)/ Medium Term Open Access (MTOA) #	Margin Available for Short Term Open Access (STOA)	Changes in TTC w.r.t. Last Revision	Comments
W3 zone Injection	1st March 2019 to 31st March 2019	00-24	No limit is b accordingly)	No limit is being specified (In case of any constraints appearing in the system, W3 zone export would be revised					

Note: TTC/ATC of S1-(S2&S3) corridor, Import of S3(Kerala), Import of Punjab and Import of DD & DNH is uploaded on NLDC website under Intra-Regional Section in Monthly ATC.

\* Fifty Percent (50 % ) Counter flow benefit on account of LTA/MTOA transactions in the reverse direction would be considered for advanced transactions (Bilateral & First Come First Serve).

\*\*Considering 400 kV Rihand stage-III - Vindhyachal PS D/C line as inter-regional line for the purpose of scheduling, metering and accounting and 950 MW ex-bus generation in Rihand stage-III. Rihand Stage-III generation is considered as NR regional entity.

- 1) S1 comprises of Telangana, AP and Karnataka; S2 comprises of Tamil Nadu and Puducherry; S3 comprises Kerala
- 2) W3 comprises of the following regional entities:
- a) Chattisgarh Sell transaction, b) Jindal Power Limited (JPL) Stage-I & Stage-II, c) Jindal Steel and Power Limited (JSPL), d) ACBL, e) LANCO Amarkantak
- f) BALCO, g) Sterlite (#1,3,4), h) NSPCL, i) Korba, j) Sipat, k) KSK Mahanadi, L)DB Power, m) KWPCL, n)Vandana Vidyut o)RKM, p)GMR Raikheda, q)Ind Barath and any other regional entity generator in Chhattisgarh

# The figure is based on LTA/MTOA approved by CTU and Allocation figures as per RPCs RTA/REA. In actual Operation, due to Units being on Maintenance/Fuel shortage/New units being commissionned the LTA/MTOA utilized would vary. RLDC/NLDC would factor this situation on day-ahead basis. In the eventuality that net schedules exceed ATC, real time curtailments might be effected by RLDCs/NLDC.

In case of TTC Revision due to any shutdown:

- 1) The TTC value will be revised to normal values after restoration of shutdown.
- 2) The TTC value will be revised to normal values if the shutdown is not being availed in real time.

### **Simultaneous Import Capability**

Corridor	Date	Time Period (hrs)	Total Transfer Capability (TTC)	Reliability Margin	Available Transfer Capability (ATC)	Long Term Access (LTA)/ Medium Term Open Access (MTOA)	Margin Available for Short Term Open Access (STOA)	Changes in TTC w.r.t. Last Revision	Comments
ER									
		00-06	17650 16700**		16850 15900**	13275 12325**	3575 3575**		
	1 at March 2010	06-17	18900		18100 17150**		4825**		
	1st March 2019 to 07th March 2019	17-18	17000	800	16200 15250**		2925		
		18-23	17000 16050**		16200 15250**		2925 2925**		
		23-24	17000 16050**		16200 15250**		2925 2925**		
		00-06	17650 16700**	800	16850 15900**		3438 3438**		
N.D.		06-17	18900 17950**		18100 17150**		4688 4688**		
NR	8th March 2019	17-18	17000 16050**		16200 15250**	13412 12462**	2788 2788**		
		18-23	17000 16050**		16200 15250**		2788 2788**		
		23-24	17000 16050**		16200 15250**		2788 2788**		
		00-06	17650 16700**		16850 15900**		3438 3438**		
		06-08	18900 17950**		18100 17150**	13412	4688**		
	9th March 2019	08-17	15350 14400**	800	14550 13600**	12462**	1138		
		17-24	13800 12850**		13000 13000 12050**		0		

	14350	Ī	13550		138		
00-0			1260044		12044		
10th March	13400**	1	12600** 14550	13412	138**		-
2019 to 18th 06-1	7	800					
March 2019	14400**		13600**	12462**	1138**		_
17-2			13000		U		
	12850**		12050**		0**		
00-0	14350		13550		138	-3300	
00-0	13400**		12600**		138**	-3300	
19th March	15350	000	14550	13412	1138	2500	Testing of HVDC Champa-
NR 2019 06-1	14400**	800	13600**	12462**	1138**	-3500	Kurukshetra Pole-1, 2 and 3 for comissoining of Pole-3.
	13800	1	13000	1	0		<b>3</b>
17-2	12850**		12050**		0**	-3200	
	17650		16850		3438		
00-0							
20th March	16700** 18900	-	15900** 18100	13412	3438** 4688		-
2019 to 31st 06-1		800	18100	15412	4000		
March 2019	17950**		17150**	12462**	4688**		
17-2	17000		16200		2788		
	16050**		15250**		2788**		
1st March 2019 00-1	7 900		855		630		
to 09th March 17-2	3 1090	45	1045	225	820		
2019	900		855		630		
10th March 00-1	7 900		855		630		
2019 to 14th 17-2	3 1090	45	1045	225	820		
March 2019 23-2	900		855		630		
00-1	7 1380		1335		1110		
15th March 2019 17-2	3 1340	45	1295	225	1070		
NER 23-2	1380		1335		1110		
16th March 00-1	7 900		855		630		
2019 to 18th 17-2	1090	45	1045	225	820		
March 2019 23-2	900		855		630		
19th March 00-1	7 900		855		630	-480	Revised due to Extended
2019 to 25th 17-2	3 1090	45	1045	225	820	-250	shutdown of 400/220kV ICT-1
March 2019 23-2	900		855		630	-480	at Misa
26th March 00-1	7 1380		1335		1110		
2019 to 31st 17-2	3 1340	45	1295	225	1070		
March 2019 23-2	1380		1335		1110		

WR								
VVIX								
	1st March 2019	00-06	10500		9750	7197	2553	
SR	to 31st March	06-18	10500	750	9750	7282	2468	
	2019	18-24	10500		9750	7197	2553	

<sup>\*</sup> Fifty Percent (50 % ) Counter flow benefit on account of LTA/MTOA transactions in the reverse direction would be considered for advanced transactions (Bilateral & First Come First Serve).

\*\*Considering 400 kV Rihand stage-III - Vindhyachal PS D/C line as inter-regional line for the purpose of scheduling, metering and accounting and 950 MW ex-bus generation in Rihand stage-III. Rihand Stage-III generation is considered as NR regional entity.

Margin in Simultaneous import of NR = A

WR-NR ATC =B

ER-NRATC = C

Margin for WR-NR applicants = A \* B/(B+C)

Margin for ER-NR Applicants = A \* C/(B+C)

<sup>\*</sup> For approving STOA Bilateral transactions, margin available in Simultaneous Import of NR would be apportioned on WR-NR Corridor & ER-NR Corridor in the following ratio:

#### **Simultaneous Export Capability**

Corrido r	Date	Time Period (hrs)	Total Transfer Capability (TTC)	Reliability Margin	Available Transfer Capability (ATC)	Long Term Access (LTA)/ Medium Term Open Access (MTOA)	Margin Available for Short Term Open Access (STOA)	Changes in TTC w.r.t. Last Revision	Comments	
	1st March 2019	00-06	4500		3800	388	3412			
NR*	to 31st March	06-18	4300	700	3800	553	3247			
	2019	18-24	4500		3800	388	3412			
	1st March 2019	00-17	2010		1965		1965			
	to 9th March 2019	17-23	2070	45	2025	0	2025			
		23-24	2010		1965		1965			
	10th March 2019 to 14th March 2019	00-17	2010		1965		1965			
		17-23	2070	45	2025	0	2025			
		23-24	2010		1965		1965			
	15th March	00-17	2270	45	2225		2225			
NER	2019	17-23	2380		2335	0	2335			
	2017	23-24	2270		2225		2225			
	16th March	00-17	2010		1965		1965			
	2019 to 18th	17-23	2070	45	2025	0	2025			
	March 2019	23-24	2010		1965		1965			
	19th March	00-17	2010		1965		1965		Revised due to Extended	
	2019 to 25th	17-23	2070	45	2025	0	2025	-310	shutdown of 400/220kV	
	March 2019	23-24	2010		1965		1965	-260	ICT-1 at Misa	
	26th March	00-17	2270		2225		2225			
	2019 to 31st	17-23	2380	45	2335	0	2335			
	March 2019	23-24	2270		2225		2225			
WR										
,,,,,										
SR *	1st March 2019 to 31st March 2019	00-24		No limit is being Specified.						

<sup>\*</sup> Fifty Percent (50 % ) Counter flow benefit on account of LTA/MTOA transactions in the reverse direction would be considered for advanced transactions (Bilateral & First Come First Serve).

## **Limiting Constraints (Corridor wise)**

		<b>Applicable Revisions</b>
Corridor	Constraint	
NR-WR	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak	Rev-0 to 8
	(n-1) Contingnecy of 765kV Aligarh-Jhatikara leads to 2500 MW loading on 765kV Aligarh-Greater Noida.	Rev-0 to 1
	Frequent tripping of HVDC Champa - Kurukshetra poles	Rev-0
WR-NR	RVO operation of HVDC Champa Kurukshetra Poles Reversal of BNC-Agra pole towards BNC & blocking of APD-Agra pole due to lean hydro period in NER	Rev-1
	n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Agra (PG) will lead to overloading of the second ICT	Rev-2 to 8
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli	Rev-0 to 8
ER-NR	<ol> <li>N-1 contingencies of 400 kv Mejia-Maithon A S/c</li> <li>N-1 contingencies of 400 kv Kahalgaon-Banka S/c</li> <li>N-1 contingencies of 400kV MPL- Maithon S/C</li> </ol>	Rev-0 to 8
WR-SR	n-1 contingency of 2x315 MVA, 400/220 kV ICTs at Mardam will lead to overloading of the second ICT	Rev-0 to 8
and ER-	n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT	Rev-0 to 8
SR	Low Voltage at Gazuwaka (East) Bus.	Rev-0 to 8
ER-NER	a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa b. High loading of 220 kV Balipara-Sonabil line(200 MW)	Rev-0 to 8
NER-ER	a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa b. High loading of 220 kV Balipara-Sonabil line(200 MW)	Rev-0 to 8
W3 zone Injection		Rev-0 to 8

## **Limiting Constraints (Simultaneous)**

			<b>Applicable Revisions</b>			
		<ol> <li>N-1 contingencies of 400 kv Mejia-Maithon A S/c</li> <li>N-1 contingencies of 400 kv Kahalgaon-Banka S/c</li> <li>N-1 contingencies of 400kV MPL- Maithon S/c</li> </ol>	Rev-0 to 8			
	Import	n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Agra (PG) will lead to overloading of the second ICT				
NR		(n-1) Contingnecy of 765kV Aligarh-Jhatikara leads to 2500 MW loading on 765kV Aligarh-Greater Noida.	Rev-0 to 1			
111	Frequent tripping of HVDC Champa - Kurukshetra poles					
		RVO operation of HVDC Champa Kurukshetra Poles	Rev-1			
		Reversal of BNC-Agra pole towards BNC & blocking of APD-Agra pole due to lean hydro period in NER	Kev-1			
	Evnont	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.	Rev-0 to 8			
	Export	(n-1) contingency of 400 kV Saranath-Pusauli	Kev-0 to 8			
	Import	<ul><li>a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa</li><li>b. High loading of 220 kV Balipara-Sonabil line(200 MW)</li></ul>	Rev-0 to 8			
NER	Export	a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa b. High loading of 220 kV Balipara-Sonabil line(200 MW)	Rev-0 to 8			
		n-1 contingency of 2x315 MVA, 400/220 kV ICTs at Mardam will lead to overloading of the second ICT	Rev-0 to 8			
SR	Import	n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT	Rev-0 to 8			
		Low Voltage at Gazuwaka (East) Bus.	Rev-0 to 8			

Revision No	Date of Revision	Period of Revision	Reason for Revision/Comment	Corridor Affected
			Revised STOA margins due to: (i) Additional 20 MW LTA to Delhi from Ostro Kutch Wind Power Ltd (OKWPL) (ii) Operationalization of 108 MW MTOA from SKS Power Gen Ltd to Noida Power Company	WR-NR/Import of NR
1	1 4th Jan 2019		Revised TTC due to: (i) Change in load generation balance (ii) Commissioning of circuit 3 & 4 of 765 kV Angul Jharsuguda (iii) Prevailing pattern of load in downstream of 400/220 kV Maradam ICTs	ER-SR/WR- SR/Import of SR
			Revised TTC due to normalization of Champa Kurukshetra bipole	WR-NR/Import of NR
2	28th Jan 2019	Whole Month	Change in pattern of inter-regional flow towards NR Revised STOA margin due to termination of 100 MW MTOA from LANCO Anpara power limited to TANGEDCO	Import of NR WR-SR/Import of SR
3	27th Feb 2019	01st Mar 2019 to 09th Mar 2019	Shutdown of 400/220 KV ICT-I at Misa for augmentation of existing ICT	ER-NER/NER-ER (Import/Export of NER)
3	27111160 2019	10th Mar 2019 to 31st Mar 2019	Change in load - generation balance in NER	ER-NER (Import of NER)
4	07th Mar 2019	08th Mar 2019 to 31st Mar	Operationalization of 87 MW LTA from Teesta - III HEP to Rajasthan	ER-NR/Import of NR
4	O7th Wai 2019	2019	Operationalization of 50 MW LTA from Orange Sirong Wind Power Limited (OSWPPL) to Haryana	WR-NR/Import of NR
5	08th Mar 2019	09th Mar 2019 to 18th Mar 2019	Simultaneous shutdown of HVDC Champa-Kurukshetra Pole- 1 and 2	WR-NR/Import of NR
6	09th Mar 2019	10th Mar 2019 to 14th Mar 2019	Revised due to Extended shutdown of 400/220kV ICT-1 at Misa	ER-NER/NER-ER (Import/Export of NER)
7	15th Mar 2019	16th Mar 2019 to 18th Mar 2019	Revised due to Extended shutdown of 400/220kV ICT-1 at Misa	ER-NER/NER-ER (Import/Export of NER)
0	10th Mar 2010	19th Mar 2019 to 24th Mar 2019	Revised due to Extended shutdown of 400/220kV ICT-1 at Misa	ER-NER/NER-ER (Import/Export of NER)
8	18th Mar 2019	19th Mar 2019	Testing of HVDC Champa-Kurukshetra Pole-1, 2 and 3 for comissoining of Pole-3.	WR-NR/Import of NR

ASSUN	MPTIONS IN BASECASE				
				Month : March'19	
S.No.	Name of State/Area	Load		Generation	
		Peak Load (MW)	Off Peak Load (M\	W) Peak (MW)	Off Peak (MW)
I	NORTHERN REGION				
1	Punjab	7631	5304	3251	3411
2	Haryana	7632	6427	2416	2583
3	Rajasthan	10162	10300	5870	5563
4	Delhi	4284	2991	541	541
5	Uttar Pradesh	13764	11993	6360	6181
6	Uttarakhand	1805	1129	722	273
7	Himachal Pradesh	1447	1176	204	87
8	Jammu & Kashmir	2034	1487	292	258
9	Chandigarh	241	124	0	0
10	ISGS/IPPs	30	29	18516	11014
	Total NR	49030	40961	38172	29911
Ш	EASTERN REGION				
1	Bihar	3735	2424	351	207
2	Jharkhand	970	764	360	223
3	Damodar Valley Corporation	2950	2716	5233	4381
4	Orissa	3969	3052	2364	1707
5	West Bengal	6784	4769	5378	4065
6	Sikkim	104	103	0	0
7	Bhutan	207	205	643	336
8	ISGS/IPPs	1120	622	12272	9067
	Total ER	19839	14656	26600	19986
Ш	WESTERN REGION				
1	Maharashtra	17960	14784	12516	11172
2	Gujarat	13475	11383	8764	8663
3	Madhya Pradesh	10868	7296	5106	4320
4	Chattisgarh	3606	2974	2248	2297
5	Daman and Diu	324	247	0	0
6	Dadra and Nagar Haveli	793	626	0	0
7	Goa-WR	522	334	0	0
8	ISGS/IPPs	4337	3788	37969	27558
	Total WR	51885	41432	66603	54011
	-				

S.No.	Name of State/Area	Load		Generation	
		Peak Load (MW)	Off Peak Load (MV	W) Peak (MW)	Off Peak (MW)
IV	SOUTHERN REGION				
1	Andhra Pradesh	8132	7075	6103	4712
2	Telangana	9743	7879	4823	4423
3	Karnataka	10431	6863	7633	5219
4	Tamil Nadu	14513	10701	6958	5513
5	Kerala	3871	2392	1678	402
6	Pondy	329	337	0	0
7	Goa-SR	74	76	0	0
8	ISGS/IPPs	0	0	14302	12280
	Total SR	47093	35324	41497	32550
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	133	72	0	0
2	Assam	1233	1035	185	142
3	Manipur	162	92	0	0
4	Meghalaya	301	216	197	105
5	Mizoram	90	67	8	14
6	Nagaland	115	76	12	6
7	Tripura	198	142	72	75
8	ISGS/IPPs	116	76	1902	1404
	Total NER	2348	1776	2376	1746
	Total All India	170195	134586	175247	138576