

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पारशिष्ट की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 19.07.2016
Date of Reporting : 20.07.2016



I. Regional Availability/Demand:

Evening Peak (20:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Day Energy (Net MU)	
Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
46037	387	46424	50.05	41369	185	41553	50.03	1039.3	10.18

*Half hourly (two 15 minutes block—one block each before and after the designated time) average frequency

II. A. State's Load Details (At States periphery) in MUs:

State	State's Control Area Generation (Net MU)				Drawal Schedule (Net MU)	Actual Drawal (Net MU)	UI (Net MU)	Consumption (Net MU)	Shortages *
	Thermal	Hydro	Renewable/others \$	Total					
Punjab	63.32	13.51		76.83	127.17	126.83	-0.34	203.66	0.00
Haryana	20.67	0.90		21.57	149.00	147.84	-1.15	169.41	0.00
Rajasthan	72.87	0.00	29.00	101.88	73.42	77.27	3.85	179.15	0.00
Delhi	12.53			12.53	88.37	89.09	0.72	101.62	0.16
UP	115.23	20.28		135.52	146.61	147.04	0.43	282.56	2.99
Uttarakhand	21.19			21.19	15.89	16.55	0.66	37.73	0.00
HP	23.90			23.90	0.57	2.21	1.65	26.12	0.00
J & K	22.48		0.00	22.48	15.43	10.54	-4.90	33.01	7.03
Chandigarh				0.00	6.45	6.05	-0.40	6.05	0.00
Total	284.42	102.27	29.00	415.89	622.90	623.42	0.52	1039.31	10.18

* Shortage furnished by the respective constituent. \$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

State	Evening Peak (20:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Maximum Demand Met (MW) and Time(Hrs)	Shortage (MW)	
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction			
Punjab	9014	0	-180	1546	7230	0	-59	1863	9392	21:00	0
Haryana	7966	0	-152	2183	6823	0	-14	2236	8676	21:00	0
Rajasthan	7172	0	-197	311	7726	0	451	338	8335	24:00	0
Delhi	4599	1	-26	535	3684	0	24	141	5319	24:00	0
UP	12699	15	91	576	12612	0	-119	645	13240	23:00	650
Uttarakhand	1789	0	154	145	1435	0	5	50	1795	21:00	0
HP	1046	0	32	-1522	918	0	127	-1774	1222	13:00	0
J&K	1483	371	-30	-660	739	185	-264	-1023	1528	21:00	382
Chandigarh	270	0	-16	0	202	0	-21	0	306	16:00	0
Total	46037	387	-325	3114	41369	185	129	2475	48480	22:00	352

* STOA figures are at sellers boundary & PX figures are at regional boundary. # figures may not be at simultaneous hour.

Diversity is: 1.03

III. Regional Entities :

Station/ Constituent	Inst. Capacity	Declared	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
	(Effective) MW	Capacity(MW)	(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
A. NTPC								
Singrauli STPS (5*200+2*500)	2000	1890	2058	2058	44.28	1845	44.04	0.24
Rihand I STPS (2*500)	1000	933	1035	944	20.57	857	20.39	0.19
Rihand II STPS (2*500)	1000	945	1020	760	20.74	864	20.46	0.29
Rihand III STPS (2*500)	1000	945	1012	884	21.09	879	21.16	-0.07
Dadri I STPS (4*210)	840	805	406	310	7.23	301	7.42	-0.18
Dadri II STPS (2*490)	980	960	1004	682	17.17	715	17.90	-0.73
Unchahar I TPS (2*210)	420	350	332	253	6.21	259	6.63	-0.42
Unchahar II TPS (2*210)	420	400	434	263	6.76	282	7.57	-0.81
Unchahar III TPS (1*210)	210	200	213	144	3.38	141	3.76	-0.38
ISTPP (Jhajjar) (3*500)	1500	1286	819	317	10.62	443	11.19	-0.57
Dadri GPS (4*130.19+2*154.51)	830	791	381	268	6.55	273	6.83	-0.28
Anta GPS (3*88.71+1*153.2)	419	398	0	0	0.00	0	0.00	0.00
Auraiya GPS (4*111.19+2*109.30)	663	632	123	150	3.11	129	3.23	-0.13
Dadri Solar(5)	5	1	0	0	0.02	1	0.02	0.00
Unchahar Solar(10)	10	1	0	0	0.02	1	0.02	0.00
Singrauli Solar(15)	15	1	0	0	0.04	2	0.03	0.00
KHEP(4*200)	800	855	853	853	20.57	857	20.52	0.05
Sub Total (A)	12112	11393	9690	7886	188	7848	191	-2.81
B. NPC								
NAPS (2*220)	440	385	425	431	9.26	386	9.24	0.02
RAPS- B (2*220)	440	177	201	203	4.23	176	4.25	-0.02
RAPS- C (2*220)	440	410	434	440	9.36	390	9.84	-0.48
Sub Total (B)	1320	972	1060	1074	22.84	952	23.33	-0.48
C. NHPC								
Chamera I HPS (3*180)	540	540	547	542	13.01	542	12.96	0.05
Chamera II HPS (3*100)	300	301	308	301	7.26	303	7.22	0.05
Chamera III HPS (3*77)	231	231	233	231	5.14	214	5.16	-0.02
Bairasuli HPS(3*60)	180	180	124	0	1.55	65	1.50	0.06
Salal-HPS (6*115)	690	662	675	669	16.09	671	15.88	0.21
Tanakpur-HPS (3*31.4)	94	90	95	97	2.29	95	2.14	0.15
Uri-I HPS (4*120)	480	372	410	418	9.22	384	8.95	0.27
Uri-II HPS (4*60)	240	214	239	234	5.20	217	5.12	0.08
Dhauliganga-HPS (4*70)	280	146	278	0	3.57	149	3.44	0.13
Dulhasti-HPS (3*130)	390	381	394	391	9.20	383	9.13	0.07
Sewa-II HPS (3*40)	120	119	127	0	1.55	64	1.55	0.00
Parbati 3 (4*130)	520	260	262	256	4.23	176	4.17	0.06
Sub Total (C)	4065	3496	3693	3139	78	3263	77	1.09
D. SJVNL								
NJPC (6*250)	1500	1605	1618	1607	38.51	1605	38.52	-0.01
Rampur HEP (6*68.67)	412	442	446	448	10.77	449	10.61	0.16
Sub Total (D)	1912	2047	2064	2055	49.28	2053	49.13	0.15
E. THDC								
Tehri HPS (4*250)	1000	808	812	604	17.81	742	17.83	-0.02
Koteshwar HPS (4*100)	400	338	395	275	7.80	325	7.75	0.05
Sub Total (E)	1400	1146	1207	879	25.61	1067	25.58	0.03
F. BBMB								
Bhakra HPS (2*108+3*126+5*157)	1379	1018	1319	906	24.46	619	24.44	0.01
Dehar HPS (6*165)	990	610	660	580	14.80	617	14.64	0.16
Pong HPS (6*66)	396	73	165	0	1.71	71	1.76	-0.05
Sub Total (F)	2765	1702	2144	1486	40.97	1707	40.84	0.12
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	196	156	3.75	156	4.61	-0.86
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1100	1100	26.27	1094	26.08	0.19
Malana Stg-II HPS (2*50)	100	0	112	112	2.65	110	2.50	0.15
Shree Cement TPS (2*150)	300	0	277	241	5.93	247	6.05	-0.12
Budhil HPS(IPP) (2*35)	70	0	73	72	1.72	71	1.73	-0.01
Sub Total (G)	1662	0	1759	1681	40.31	1680	40.97	-0.65
H. Total Regional Entities (A-G)	25237	20754	21617	18200	445.70	18571	448.25	-2.55

I. State Entities	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(Sent out MW)
Punjab	Guru Gobind Singh TPS (Ropar) (6*210)	1260	330	160	5.17	215
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	100	90	2.20	92
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	205	204	4.76	198
	Goindwal(GVK) (2*270)	540	180	180	4.55	190
	Rajpura (2*700)	1400	1320	660	26.24	1093
	Talwandi Saboo (3*660)	1980	1228	616	20.39	850
	Thermal (Total)	6560	3363	1910	63.32	2638
	Total Hydro	1000	611	461	13.51	563
	Total Punjab	7560	3974	2371	76.83	3201
	Haryana	Panipat TPS (2*210+2*250)	920	211	0	1.33
DCRTPP (Yamuna nagar) (2*300)		600	527	460	11.55	481
Faridabad GPS (NTPC)(2*137.75+1*156)		432	353	309	7.79	325
RGTPP (khedar) (IPP) (2*600)		1200	0	0	0.00	0
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	0	0	0.00	0
Thermal (Total)		4497	1091	769	20.67	861
Total Hydro		62	39	36	0.90	38
Total Haryana		4559	1130	805	21.57	899
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	160	160	4.06
	suratgarh TPS (6*250)	1500	183	208	4.53	189
	Chabra TPS (4*250)	1000	677	311	10.97	457
	Dholpur GPS (3*110)	330	0	0	0.00	0
	Ramgarh GPS(1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	168	171	4.04	168
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingar (NLC) (2*125)	250	113	113	2.29	95
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	676	789	17.96	748
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	0	0	0.00	0
	Kawai(Adani) (2*660)	1320	1203	1204	29.04	1210
	Thermal (Total)	8876	3180	2956	73	3036
	Total Hydro	550	0	0	0.00	0
	Wind power	3214	1002	1330	26.10	1087
	Biomass	99	13	13	0.31	13
	Solar	730	1	0	2.60	108
	Renewable/Others (Total)	4043	1016	1343	29.00	1208
	Total Rajasthan	13469	4196	4299	101.88	4245
	UP	Anpara TPS (3*210+2*500)	1630	1317	1266	30.70
Obra TPS (2*50+2*94+5*200)		1194	356	365	8.40	350
Paricha TPS (2*110+2*220+2*250)		1160	787	801	16.60	692
Panki TPS (2*105)		210	0	0	0.10	4
Harduaganj TPS (1*60+1*105+2*250)		665	425	442	9.10	379
Tanda TPS (NTPC) (4*110)		440	282	285	5.63	235
Roza TPS (IPP) (4*300)		1200	252	279	5.90	246
Anpara-C (IPP) (2*600)		1200	1047	1062	22.10	921
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	0	0	0.00	0
Anpara-D(2*500)		1000	200	206	4.90	204
Lalitpur TPS(3*660)		1980	0	0	0.00	0
Bara(2*660)		1320	540	537	10.60	442
Thermal (Total)		12449	5206	5243	114	4751
Vishnuparyag HPS (IPP)(4*110)		440	435	435	10.40	433
Alaknanda(4*82.5)		330	340	340	8.10	338
Other Hydro		527	71	64	1.78	74
Cogeneration		981	50	50	1.20	50
Total UP		14727	6102	6132	136	5647
Uttarakhand	Total Hydro	1398	828	915	21.19	883
	Total Gas	225	0	0	0.00	0
	Total Uttarakhand	1623	828	915	21	883
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.01	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	65	72	1.65	69
	Pragati Gas Turbine (2x104+ 1x122)	330	261	150	4.64	193
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	-4	-4	-0.11	-4
	Badarpur TPS (NTPC) (3*95+2*210)	705	325	317	6.37	265
	Thermal (Total)	2917	647	535	12.53	522
	Total Delhi	2917	647	535	12.53	522
HP	Baspa HPS (IPP) (3*100)	300	323	215	6.69	279
	Malana HPS (IPP) (2*43)	86	104	98	2.39	100
	Other Hydro	878	613	611	14.82	618
	Total HP	1264	1040	924	23.90	996
J & K	Baglihar HPS (IPP) (3*150+2*150)	750	733	733	17.59	733
	Other Hydro/IPP	560	200	210	4.89	204
	Gas/Diesel/Others	190	0	0	0.00	0
	Total J & K	1500	933	943	22.48	937
Total State Control Area Generation		47619	18850	16924	415.89	17329
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			8774	7750	198.64	8277
Total Regional Availability(Gross)		72856	49241	42874	1060.23	44176

IV. Total Hydro Generation:						
Regional Entities Hydro		12234	11370	9780	247.42	10309
State Control Area Hydro		7106	4297	4118	102.27	4261
Total Regional Hydro		19340	15667	13898	349.68	14570

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal(HVDC B/B)	-250	-250	0	250	0.00	5.84	-5.84
765 KV Gwalior-Agra (D/C)	2736	1931	3003	0	52.75	0.00	52.75
400 KV Zerda-Kankroli	26	12	171	123	0.25	0.00	0.25
400 KV Zerda-Bhinmal	16	29	227	120	0.58	0.00	0.58
220 KV Auraiya-Malanpur	-24	-70	0	76	0.00	0.78	-0.78
220 KV Badod-Kota/Morak	127	210	249	96	4.30	0.00	4.30
Mundra-Mohindergarh(HVDC Bipole)	2503	1802	2508	0.00	51.70	0.00	51.70
400 KV Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	968	1014	1327	819	25.13	0.00	25.13
Sub Total WR	6102	4678			134.71	6.62	128.09
Pusauli Bypass/HVDC	400	400	400	0	9.14	0.00	9.14
400 KV MZP- GKP (D/C)	434	658	668	0	13.84	0.00	13.84
400 KV Patna-Balia(D/C) X 2	678	871	959	0	19.72	0.00	19.72
400 KV B'Sharif-Balia (D/C)	84	20	206	0	1.72	0.00	1.72
765 KV Gaya-Balia	233	216	273	0	2.52	0.00	2.52
765 KV Gaya-Varanasi (D/C)	542	469	645	0	12.13	0.00	12.13
220 KV Pusauli-Sahupuri	193	216	216	0	4.24	0.00	4.24
132 KV K'nasa-Sahupuri	-20	-34	0	34	0.00	0.54	-0.54
132 KV Son Ngr-Rihand	-30	-22	0	30	0.00	0.45	-0.45
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-160	-224	0	251	0.00	3.31	-3.31
400 KV Barh -GKP (D/C)	318	502	560	0	11.30	0.00	11.30
400 kV B'Sharif - Varanasi (D/C)	0	0	75	0	0.24	0.00	0.24
Sub Total ER	2672	3072			74.84	4.29	70.55
+/- 800 KV BiswanathCharialli-Agra	0	0	0	0.00	0.00	0.00	0.00
Sub Total NER	0	0			0.00	0.00	0.00
Total IR Exch	8774	7750			209.55	10.91	198.64

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
41.98	4.08	46.06	10.60	21.60	6.47	4.02	0.00	0.00

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER(including NER)	Through WR	Total	Through ER (including NER)	Through WR	Total
63.13	135.18	198.30	70.55	128.09	198.64	7.42	-7.09	0.33

V(C). Inter National Exchange with Nepal [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	-26	-10	0	27	0	0	-0.50

VI. Frequency Profile <----- % of Time Frequency ----->

<49.2	<49.7	<49.8	<49.9	<50.0	49.9-50.05	50.05-50.10	50.10-50.20	>50.20	>50.50
0.00	0.00	0.13	1.83	44.39	83.36	13.09	1.76	0.02	0.00

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation	Std. Dev.	Frequency in 15 Min Block		Freq Dev Index (% of Time)
Maximum		Minimum					MAX	MIN	
Freq	Time	Freq	Time	Hz	Index	(Hz)	(Hz)		
50.21	13.02	49.78	22.07	50.00	0.023	0.048	50.20	49.95	16.64

VII. Voltage profile 400 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviat
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV	
Rihand	400	411	5:42	401	23:52	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	422	6:01	400	22:07	0.0	0.0	1.5	0.0	1.5
Bareilly(PG)400kV	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Kanpur	400	420	6:01	394	19:54	0.0	0.0	0.0	0.0	0.0
Dadri	400	416	5:59	391	14:35	0.0	0.0	0.0	0.0	0.0
Ballabgarh	400	424	5:59	394	14:35	0.0	0.0	13.7	0.0	13.7
Bawana	400	419	6:01	392	19:53	0.0	0.0	0.0	0.0	0.0
Bassi	400	424	4:00	395	22:08	0.0	0.0	8.9	0.0	8.9
Hissar	400	415	6:00	386	19:53	0.0	5.1	0.0	0.0	0.0
Moga	400	412	4:04	389	19:52	0.0	0.3	0.0	0.0	0.0
Abdullapur	400	412	6:00	389	14:36	0.0	0.5	0.0	0.0	0.0
Nalagarh	400	415	4:02	389	14:36	0.0	0.5	0.0	0.0	0.0
Kishenpur	400	409	4:00	396	14:40	0.0	0.0	0.0	0.0	0.0
Wagoora	400	408	4:01	389	20:22	0.0	2.5	0.0	0.0	0.0
Amritsar	400	416	5:01	395	19:48	0.0	0.0	0.0	0.0	0.0
Kashipur	400	418	4:28	408	13:43	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	412	6:03	392	19:54	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	411	4:11	387	14:20	0.0	4.2	0.0	0.0	0.0

VIII. Voltage profile 765 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviat
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	
Fatehpur	765	791	6:01	743	19:53	0.0	0.0	0.0	0.0	0.0
Balia	765	799	6:02	760	19:54	0.0	0.0	0.0	0.0	0.0
Moga	765	793	6:01	747	19:53	0.0	0.0	0.0	0.0	0.0
Agra	765	781	18:05	745	22:09	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	799	6:01	751	19:53	0.0	0.0	0.0	0.0	0.0
Unnao	765	782	6:01	725	19:55	1.1	19.3	0.0	0.0	1.1
Lucknow	765	801	6:02	761	14:19	0.0	0.0	0.1	0.0	0.1
Meerut	765	801	6:01	751	19:55	0.0	0.0	0.1	0.0	0.1
Jhatikara	765	770	0:00	770	0:00	0.0	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	790	6:01	754	12:41	0.0	0.0	0.0	0.0	0.0
Anta	765	790	4:02	757	19:47	0.0	0.0	0.0	0.0	0.0
Phagi	765	797	4:01	752	19:53	0.0	0.0	0.0	0.0	0.0

IX. Reservoir Parameters:

Name of Reservoir	Parameters		Present Parameters		Last Year		Last day	
	FRL (m)	MDDL (m)	Level (m)	Energy (MU)	Level (m)	Energy (MU)	Inflow (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	483.99	560.76	498.17	1018.16	1679.81	877.59
Pong	426.72	384.05	398.24	185.67	411.52	544.90	460.15	126.29
Tehri	829.79	740.04	780.50	326.74	774.20	254.00	658.96	517.00
Koteswar	612.50	598.50	609.45	4.34	610.00	4.44	517.00	514.52
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	319.90	355.97
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	0.00	0.00
RPS	352.80	343.81	0.00	0.00	0.00	0.00	0.00	0.00
Jawahar Sagar	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	506.46	6.14	523.31	10.77	262.73	188.38

* NA: Not Available

X(A). Short-Term Open Access Details:

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (20:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	1434	429	0	1282	264	0	31.50	9.78	41.28
Delhi	557	-416	0	853	-319	0	18.93	-8.38	10.55
Haryana	1867	369	0	1818	365	0	40.80	8.49	49.29
HP	-1493	-281	0	-1219	-303	0	-31.43	-6.64	-38.07
J&K	-721	-302	0	-645	-15	0	-17.22	-1.97	-19.19
CHD	0	0	0	0	0	0	0.35	0.00	0.35
Rajasthan	-194	532	0	-194	505	0	-4.66	13.59	8.94
UP	645	0	0	576	0	0	13.45	0.00	13.45
Uttarakhand	-347	396	0	-346	491	0	-8.32	10.38	2.06
Total	1748	727	0	2125	989	0	43.41	25.25	68.66

X(B). Short-Term Open Access Details:

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1434	1235	462	262	0	0
Delhi	977	556	9	-658	0	0
Haryana	1903	1506	402	117	0	0
HP	-1217	-1493	-162	-405	0	0
J&K	-620	-872	0	-302	0	0
CHD	44	0	0	0	0	0
Rajasthan	-194	-194	816	505	0	0
UP	671	482	0	0	0	0
Uttarakhand	-346	-347	498	384	0	0

XI. System Reliability Indices(Violation of TTC and ATC):

(i)%age of times N-1 Criteria was violated in the inter - regional corridors

WR	0.35%
ER	0.00%
Simultaneous	0.69%

(ii)%age of times ATC violated on the inter-regional corridors

WR	10.42%
ER	0.00%
Simultaneous	7.64%

(iii)%age of times Angular Difference on Important Buses was beyond permissible limits(40 deg.)

Rihand - Dadri	0.00%
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XII. System Constraints:

XIII. Grid Disturbance / Any Other Significant Event:

0.00

XIV. Weather Conditions For 19.07.2016 :

XV. Synchronisation of new generating units :

XVI. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / substation :

XVII. Tripping of lines in pooling stations :

XVIII. Complete generation loss in a generating station :

Note: Data(regarding drawal,generation, shortage , inter-regional flows and reservoir levels)of the constituents filled in the report are as per last furnished data by the respective state/constituent to NRLDC.