

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पारदर्शिता की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 22.07.2016
Date of Reporting : 23.07.2016



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
49737	747	50484	50.05	48612	304	48915	50.03	1166.8	6.43

*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 * (MU)
	Thermal	Hydro	Renewable/others \$	Total					
Punjab	98.78	14.46		113.24	132.97	134.25	1.28	247.49	0.00
Haryana	38.56	0.77		39.33	152.76	152.83	0.06	192.16	0.00
Rajasthan	94.75	0.00	39.04	133.78	70.02	71.70	1.68	205.49	0.00
Delhi	22.39			22.39	97.54	98.97	1.43	121.36	0.17
UP	132.74	20.47		153.21	147.57	149.09	1.52	302.30	0.00
Uttarakhand		17.72		17.75	18.08	17.78	-0.30	35.53	0.09
HP		24.23		24.23	0.73	2.17	1.44	26.40	0.00
J & K		22.48	0.00	22.48	14.71	7.06	-7.65	29.54	6.16
Chandigarh				0.00	6.74	6.58	-0.16	6.58	0.00
Total	387.22	100.13	39.04	526.41	641.11	640.42	-0.69	1166.83	6.43

* 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	10624	0	19	1474	9662	0	55	1871	10672	21:00	0
Haryana	8504	0	-215	1805	8307	0	137	2272	9219	21:00	0
Rajasthan	7965	0	141	306	8804	0	216	351	9394	24:00	58
Delhi	4976	33	-98	618	5090	0	302	416	5816	24:00	12
UP	13253	310	279	581	13591	105	-31	1009	13837	1:00	0
Uttarakhand	1712	75	64	-93	1235	0	-138	-55	1712	20:00	75
HP	1095	0	21	-1552	889	0	8	-1730	1247	11:00	0
J&K	1316	329	-190	-519	795	199	-295	-1031	1316	20:00	329
Chandigarh	291	0	-6	0	239	0	-11	0	345	15:00	0
Total	49737	747	16	2619	48612	304	243	3102	51619	23:00	910

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

Diversity is: 1.04

III. Regional Entities :

Station/ Constituent	Inst. Capacity	Declared Capacity(MW)	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
	(Effective) MW		(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
A. NTPC								
Singrauli STPS (5*200+2*500)	2000	1869	2030	1918	44.31	1846	43.99	0.32
Rihand I STPS (2*500)	1000	464	492	479	10.78	449	10.91	-0.14
Rihand II STPS (2*500)	1000	943	976	960	21.65	902	21.21	0.44
Rihand III STPS (2*500)	1000	943	983	1002	21.73	906	21.86	-0.13
Dadri I STPS (4*210)	840	805	649	607	11.70	488	11.80	-0.10
Dadri II STPS (2*490)	980	960	994	712	18.21	759	18.85	-0.64
Unchahar I TPS (2*210)	420	350	330	262	6.40	267	6.92	-0.52
Unchahar II TPS (2*210)	420	400	406	268	7.13	297	7.89	-0.76
Unchahar III TPS (1*210)	210	200	211	134	3.50	146	3.90	-0.40
ISTPP (Jhajjar) (3*500)	1500	1425	1237	990	23.53	980	23.91	-0.39
Dadri GPS (4*130.19+2*154.51)	830	777	384	308	7.62	318	7.98	-0.36
Anta GPS (3*88.71+1*153.2)	419	400	0	0	0.00	0	0.00	0.00
Auraiya GPS (4*111.19+2*109.30)	663	632	138	145	3.33	139	3.61	-0.29
Dadri Solar(5)	5	1	0	0	0.02	1	0.02	0.00
Unchahar Solar(10)	10	2	0	0	0.04	2	0.04	0.00
Singrauli Solar(15)	15	3	0	0	0.00	0	0.06	-0.06
KHEP(4*200)	800	855	853	852	20.53	855	20.52	0.01
Sub Total (A)	12112	11028	9683	8637	200	8353	203	-3.00
B. NPC								
NAPS (2*220)	440	385	422	429	9.28	387	9.24	0.04
RAPS- B (2*220)	440	182	182	182	4.36	182	4.37	-0.01
RAPS- C (2*220)	440	410	436	441	9.40	392	9.84	-0.44
Sub Total (B)	1320	977	1040	1052	23.04	960	23.45	-0.41
C. NHPC								
Chamera I HPS (3*180)	540	540	545	541	12.96	540	12.96	0.00
Chamera II HPS (3*100)	300	301	310	303	7.27	303	7.22	0.06
Chamera III HPS (3*77)	231	229	231	232	5.13	214	5.15	-0.02
Bairasuli HPS(3*60)	180	180	184	0	1.94	81	1.91	0.03
Salal-HPS (6*115)	690	227	0	669	5.56	231	5.44	0.11
Tanakpur-HPS (3*31.4)	94	87	96	95	2.28	95	2.07	0.21
Uri-I HPS (4*120)	480	374	328	410	9.19	383	9.01	0.19
Uri-II HPS (4*60)	240	208	231	237	5.10	212	4.98	0.12
Dhauliganga-HPS (4*70)	280	280	281	282	6.68	278	6.72	-0.04
Dulhasti-HPS (3*130)	390	381	385	393	9.23	385	9.14	0.09
Sewa-II HPS (3*40)	120	119	126	0	0.62	26	0.60	0.02
Parbati 3 (4*130)	520	390	389	0	3.13	130	3.09	0.04
Sub Total (C)	4065	3317	3106	3161	69	2879	68	0.81
D. SJVNL								
NJPC (6*250)	1500	1605	1620	1616	38.45	1602	38.52	-0.07
Rampur HEP (6*68.67)	412	442	451	451	10.78	449	10.61	0.18
Sub Total (D)	1912	2047	2071	2067	49.23	2051	49.13	0.10
E. THDC								
Tehri HPS (4*250)	1000	812	815	809	19.40	808	19.40	0.00
Koteshwar HPS (4*100)	400	325	404	181	7.84	327	7.80	0.04
Sub Total (E)	1400	1137	1219	990	27.24	1135	27.20	0.04
F. BBMB								
Bhakra HPS (2*108+3*126+5*157)	1379	1084	1326	915	26.09	1087	26.03	0.06
Dehar HPS (6*165)	990	606	825	560	14.68	611	14.55	0.13
Pong HPS (6*66)	396	66	171	0	1.57	66	1.58	-0.01
Sub Total (F)	2765	1757	2322	1475	42.33	1764	42.16	0.18
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	195	125	3.58	149	3.46	0.12
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1100	1100	26.21	1092	26.08	0.13
Malana Stg-II HPS (2*50)	100	0	111	112	2.59	108	2.43	0.16
Shree Cement TPS (2*150)	300	0	147	145	3.48	145	4.61	-1.13
Budhil HPS(IPP) (2*35)	70	0	71	73	1.66	69	1.73	-0.07
Sub Total (G)	1662	0	1624	1556	37.52	1563	38.31	-0.79
H. Total Regional Entities (A-G)	25237	20262	21065	18938	448.92	18705	452.00	-3.07

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	1240	708	21.61	901	
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	142	95	1.52	63	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	703	404	11.96	498	
	Goindwal(GVK) (2*270)	540	246	246	5.64	235	
	Rajpura (2*700)	1400	1320	1320	31.55	1315	
	Talwandi Saboo (3*660)	1980	1160	1160	26.50	1104	
	Thermal (Total)	6560	4811	3933	98.78	4116	
	Total Hydro	1000	611	620	14.46	602	
	Total Punjab	7560	5422	4553	113.24	4718	
	Haryana	Panipat TPS (2*210+2*250)	920	407	406	9.82	409
DCRTPP (Yamuna nagar) (2*300)		600	459	461	11.52	480	
Faridabad GPS (NTPC)(2*137.75+1*156)		432	308	310	7.56	315	
RGTPP (khedar) (IPP) (2*600)		1200	390	373	9.66	402	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP) (2*660)		1320	0	0	0.00	0	
Thermal (Total)		4497	1564	1550	38.56	1607	
Total Hydro		62	42	33	0.77	32	
Total Haryana		4559	1606	1583	39.33	1639	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	491	486	11.66	486
	suratgarh TPS (6*250)	1500	181	182	4.78	199	
	Chabra TPS (4*250)	1000	789	748	18.82	784	
	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	133	149	3.51	146	
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0	
	Barsingar (NLC) (2*125)	250	113	113	2.62	109	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	533	675	14.66	611	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	411	454	10.84	452	
	Kawai(Adani) (2*660)	1320	958	1206	27.87	1161	
	Thermal (Total)	8876	3609	4013	95	3948	
	Total Hydro	550	0	0	0.00	0	
	Wind power	3214	1130	1557	35.65	1486	
	Biomass	99	20	20	0.48	20	
	Solar	730	1	0	2.90	121	
	Renewable/Others (Total)	4043	1151	1577	39.04	1626	
	Total Rajasthan	13469	4760	5590	133.78	5574	
	UP	Anpara TPS (3*210+2*500)	1630	1364	1339	31.89	1329
Obra TPS (2*50+2*94+5*200)		1194	365	366	8.67	361	
Paricha TPS (2*110+2*220+2*250)		1160	615	597	12.20	508	
Panki TPS (2*105)		210	131	126	3.05	127	
Harduaganj TPS (1*60+1*105+2*250)		665	447	446	9.29	387	
Tanda TPS (NTPC) (4*110)		440	265	280	6.15	256	
Roza TPS (IPP) (4*300)		1200	842	824	17.77	740	
Anpara-C (IPP) (2*600)		1200	1079	1080	25.64	1068	
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	0	0	0.00	0	
Anpara-D(2*500)		1000	218	199	4.99	208	
Lalitpur TPS(3*660)		1980	0	0	0.00	0	
Bara(2*660)		1320	540	538	11.90	496	
Thermal (Total)		12449	5866	5795	132	5481	
Vishnuparyag HPS (IPP)(4*110)		440	435	435	10.48	437	
Alaknanda(4*82.5)		330	341	343	8.16	340	
Other Hydro		527	57	76	1.84	77	
Cogeneration		981	50	50	1.20	50	
Total UP		14727	6749	6699	153	6384	
Uttarakhand		Total Hydro	1398	785	832	17.72	738
		Total Gas	225	0	0	0.03	1
	Total Uttarakhand	1623	785	832	18	740	
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	131	115	2.85	119	
	Pragati Gas Turbine (2x104+ 1x122)	330	263	261	6.54	272	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	253	253	6.13	255	
	Badarpur TPS (NTPC) (3*95+2*210)	705	313	326	6.88	287	
	Thermal (Total)	2917	960	956	22.39	933	
	Total Delhi	2917	960	956	22.39	933	
HP	Baspa HPS (IPP) (3*100)	300	329	329	7.87	328	
	Malana HPS (IPP) (2*43)	86	96	96	2.27	95	
	Other Hydro	878	587	588	14.09	587	
	Total HP	1264	1012	1013	24.23	1010	
J & K	Baglihar HPS (IPP) (3*150+2*150)	750	733	733	17.59	733	
	Other Hydro/IPP	560	207	210	4.89	204	
	Gas/Diesel/Others	190	0	0	0.00	0	
	Total J & K	1500	940	943	22.48	937	
Total State Control Area Generation		47619	22234	22169	526.41	21934	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			8669	9170	217.99	9083	
Total Regional Availability(Gross)		72856	51968	50276	1193.32	49722	

IV. Total Hydro Generation:						
Regional Entities Hydro		12234	10977	9882	240.81	10034
State Control Area Hydro		7106	4223	4295	100.15	4173
Total Regional Hydro		19340	15200	14177	340.96	14207

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	
Vindhyachal(HVDC B/B)	-50	100	250	150	2.20	0.54	1.66
765 KV Gwalior-Agra (D/C)	2967	2544	2967	0	59.89	0.00	59.89
400 KV Zerda-Kankroli	109	10	109	186	0.00	0.83	-0.83
400 KV Zerda-Bhinmal	124	14	124	149	0.00	0.37	-0.37
220 KV Auraiya-Malanpur	-25	-51	0	73	0.00	0.95	-0.95
220 KV Badod-Kota/Morak	106	167	179	39	3.06	0.00	3.06
Mundra-Mohindergarh(HVDC Bipole)	2499	2502	2507	0.00	60.45	0.00	60.45
400 KV Vindhyachal - Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1009	940	1139	424	22.09	0.00	22.09
Sub Total WR	6739	6226			147.69	2.69	145.00
Pusauli Bypass/HVDC	-204	400	400	222	4.63	2.23	2.40
400 KV MZP- GKP (D/C)	252	416	482	0	8.41	0.00	8.41
400 KV Patna-Balia(D/C) X 2	764	767	872	0	18.84	0.00	18.84
400 KV B'Sharif-Balia (D/C)	164	91	248	0	3.33	0.00	3.33
765 KV Gaya-Balia	333	232	333	0	3.07	0.00	3.07
765 KV Gaya-Varanasi (D/C)	-619	0	641	0	11.01	0.00	11.01
220 KV Pusauli-Sahupuri	181	238	235	0	5.03	0.00	5.03
132 KV K'nasa-Sahupuri	-20	-34	0	36	0.00	0.64	-0.64
132 KV Son Ngr-Rihand	-28	-30	0	30	0.00	0.58	-0.58
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	46	-234	104	272	0.00	1.81	-1.81
400 KV Barh -GKP (D/C)	548	540	554	0	11.34	0.00	11.34
400 kV B'Sharif - Varanasi (D/C)	13	58	143	0	1.11	0.00	1.11
Sub Total ER	1430	2444			66.75	5.25	61.50
+/- 800 KV BiswanathCharialli-Agra	500	500	500	0.00	11.49	0.00	11.49
Sub Total NER	500	500			11.49	0.00	11.49
Total IR Exch	8669	9170			225.93	7.94	217.99

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
43.96	3.64	47.60	10.72	15.92	16.36	2.70	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
74.67	144.12	218.79	72.99	145.00	217.99	-1.68	0.88	-0.80

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	-29	-11	0	34	0	0	-0.49

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	0.00	1.28	44.80	78.83	17.35	2.60	0.00	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)		
50.19	13.04	49.86	5.53	50.01	0.022	0.046	50.23	50.02	21.17

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	410	6:02	401	13:40	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	424	6:04	401	1:04	0.0	0.0	7.3	0.0	7.3
Bareilly(PG)400kV	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Kanpur	400	417	7:57	397	0:37	0.0	0.0	0.0	0.0	0.0
Dadri	400	415	6:04	393	14:45	0.0	0.0	0.0	0.0	0.0
Ballabgarh	400	421	6:04	395	14:38	0.0	0.0	0.1	0.0	0.1
Bawana	400	409	10:01	395	14:47	0.0	0.0	0.0	0.0	0.0
Bassi	400	415	6:02	390	22:06	0.0	0.0	0.0	0.0	0.0
Hissar	400	413	6:03	391	14:38	0.0	0.0	0.0	0.0	0.0
Moga	400	408	7:30	392	14:28	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	411	6:00	394	14:33	0.0	0.0	0.0	0.0	0.0
Nalagarh	400	415	7:02	396	14:33	0.0	0.0	0.0	0.0	0.0
Kishenpur	400	406	7:07	390	14:47	0.0	0.0	0.0	0.0	0.0
Wagoora	400	404	3:15	388	11:03	0.0	6.5	0.0	0.0	0.0
Amritsar	400	411	7:35	395	14:37	0.0	0.0	0.0	0.0	0.0
Kashipur	400	421	6:02	410	14:13	0.0	0.0	1.6	0.0	1.6
Hamirpur	400	412	7:34	394	14:31	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	417	5:06	392	11:25	0.0	0.0	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	781	6:04	743	0:37	0.0	0.0	0.0	0.0	0.0
Balia	765	800	6:04	761	22:05	0.0	0.0	0.0	0.0	0.0
Moga	765	795	8:01	759	19:59	0.0	0.0	0.0	0.0	0.0
Agra	765	791	8:01	744	19:57	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	798	5:59	761	19:55	0.0	0.0	0.0	0.0	0.0
Unnao	765	767	18:33	740	0:32	0.0	1.6	0.0	0.0	0.0
Lucknow	765	805	6:04	762	0:32	0.0	0.0	5.5	0.0	5.5
Meerut	765	806	6:03	763	19:54	0.0	0.0	7.8	0.0	7.8
Jhatikara	765	770	0:00	770	0:00	0.0	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	797	6:04	755	0:19	0.0	0.0	0.0	0.0	0.0
Anta	765	783	18:33	757	19:56	0.0	0.0	0.0	0.0	0.0
Phagi	765	788	6:04	750	19:54	0.0	0.0	0.0	0.0	0.0

Note : '0' in Max / Min Col -> Telemetry Outage

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	484.70	577.33	499.70	1076.64	1105.12	931.96
Pong	426.72	384.05	398.98	197.21	412.62	588.94	585.25	112.96
Tehri	829.79	740.04	781.50	338.00	779.45	312.00	739.63	528.00
Koteswar	612.50	598.50	609.58	4.36	609.80	4.95	528.00	519.51
Chamera-I	760.00	748.75	752.04	0.00	0.00	0.00	244.53	355.36
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	7.01	523.06	9.57	317.89	304.26

* 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	437	0	1047	427	0	28.75	13.27	42.03
Delhi	496	-80	0	659	-41	0	16.71	-1.33	15.38
Haryana	1882	390	0	1445	360	0	37.50	6.01	43.52
HP	-1492	-239	0	-1217	-335	0	-31.40	-6.70	-38.10
J&K	-930	-101	0	-653	134	0	-17.88	1.20	-16.68
CHD	0	0	0	0	0	0	0.35	0.00	0.35
Rajasthan	-194	545	0	-194	500	0	-4.66	12.71	8.05
UP	1009	0	0	581	0	0	15.39	0.00	15.39
Uttarakhand	-348	293	0	-349	256	0	-8.39	7.43	-0.95
Total	1857	1245	0	1318	1301	0	36.39	32.60	68.99

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1434	998	720	427	0	0
Delhi	868	496	433	-418	0	0
Haryana	1882	1164	398	-232	0	0
HP	-1215	-1492	-190	-414	0	0
J&K	-628	-981	149	-252	0	0
CHD	44	0	0	0	0	0
Rajasthan	-194	-194	549	415	0	0
UP	1024	498	0	0	0	0
Uttarakhand	-347	-353	358	237	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	0.69%
ER	0.00%
Simultaneous	3.47%

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

WR	36.81%
ER	0.00%
Simultaneous	26.74%

(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 22.07.2016 :

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.