

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 21.06.2015
Date of Reporting : 22.06.2015

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
42931	2146	45077	49.96	44908	2030	46938	50.11	1011.5	37.76

* 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	78.50	13.60		92.10	111.28	112.51	1.24	204.61	0.00
Haryana	37.26	0.78		38.04	108.57	102.13	-6.44	140.17	0.00
Rajasthan	106.50	0.27	7.91	114.68	79.05	82.55	3.50	197.23	0.00
Delhi	20.66			20.66	74.70	73.91	-0.79	94.56	0.04
UP	124.90	19.20		144.10	132.96	136.57	3.62	280.67	30.07
Uttarakhand		19.15		19.15	14.35	14.47	0.12	33.62	0.00
HP		21.16		21.16	2.10	2.18	0.09	23.35	0.00
J & K		15.08	0.00	15.08	18.55	17.20	-1.36	32.27	7.65
Chandigarh				0.00	5.35	4.98	0.27	4.98	0.00
Total	367.81	89.23	7.91	464.95	546.90	546.50	0.24	1011.46	37.76

* 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				# Max(hourly) Demand Met of Day (MW)
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	9009	0	-364	1193	8062	0	195	1194	9794
Haryana	6923	0	-165	1071	7190	0	119	1173	7408
Rajasthan	6852	0	-139	113	8321	0	421	134	8840
Delhi	3803	7	-142	484	4738	0	47	453	5145
UP	11903	1700	490	708	12715	1810	249	799	12715
Uttarakhand	1613	0	142	34	1500	0	-25	38	1675
HP	845	0	-48	-1169	913	0	-10	-1273	1116
J&K	1755	439	268	-279	1248	220	-106	-284	1790
Chandigarh	227	0	-24	0	220	0	-16	0	253
Total	42931	2146	18	2155	44908	2030	874	2234	45796

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

UI/OA/PX (OD/Import: (+ve), UD/Export: (-ve))

III. Regional Entities :

Entity	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI Net MU
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1390	1520	1547	33.96	1415	31.66	2.30
	Rihand I STPS (2*500)	1000	444	460	476	9.27	386	9.05	0.21
	Rihand II STPS (2*500)	1000	953	1017	1041	19.81	826	19.94	-0.13
	Rihand III STPS (2*500)	1000	953	976	878	19.30	804	19.33	-0.03
	Dadri I STPS (4*210)	840	810	414	560	12.59	524	11.96	0.62
	Dadri II STPS (2*490)	980	975	566	815	17.56	732	17.96	-0.40
	Unchahar I TPS (2*210)	420	402	315	351	7.20	300	8.12	-0.92
	Unchahar II TPS (2*210)	420	400	336	318	7.09	295	7.78	-0.69
	Unchahar III TPS (1*220)	210	200	146	169	3.49	145	3.79	-0.30
	ISTPP (Jhajihar) (3*500)	1500	950	655	626	14.12	588	14.38	-0.26
	Dadri GPS (4*130.19+2*154.51)	830	792	265	350	6.92	288	6.82	0.09
	Anta GPS (3*88.71+1*153.2)	419	372	235	215	5.23	218	5.18	0.05
	Auraiya GPS (4*111.19+2*109.30)	663	627	238	210	5.12	213	5.07	0.04
	Dadri Solar	5	1	0	0	0.02	1	0.02	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.03
	Singrauli Solar	15	3	0	0	0.05	2	0.07	-0.03
	KHEP	400	0	0	0	0.00	0	0.00	0.00
Sub Total (A)	11712	9273	7143	7556	162	6739	161	1	
B. NPC	NAPS (2*220)	440	367	418	421	9.04	377	8.80	0.24
	RAPS- B (2*220)	440	365	410	414	8.79	366	8.76	0.03
	RAPS- C (2*220)	440	405	425	433	9.26	386	9.72	-0.46
	Sub Total (B)	1320	1137	1253	1268	27.10	1129	27.28	-0.19
C. NHPC	Chamera I HPS (3*180)	540	539	551	547	11.28	470	11.35	-0.07
	Chamera II HPS (3*100)	300	300	310	312	7.36	307	7.20	0.16
	Chamera III HPS (3*77)	231	231	229	227	5.36	223	5.55	-0.18
	Bairasuil HPS(3*60)	180	179	184	123	3.43	143	3.38	0.05
	Salal-HPS (6*115)	690	670	668	670	16.12	672	16.07	0.04
	Tanakpur-HPS (3*40)	94	73	81	80	1.77	74	1.76	0.01
	Uri-I HPS (4*120)	480	365	231	473	8.45	352	8.82	-0.37
	Uri-II HPS (4*60)	240	120	122	122	2.89	120	2.88	0.01
	Dhauliganga-HPS (4*70)	280	280	289	286	6.71	280	6.68	0.03
	Dulhasti-HPS (3*130)	390	386	393	394	9.26	386	9.26	0.00
	Sewa-II HPS (3*40)	120	118	128	122	2.83	118	2.76	0.07
	Parbati 3 (4*130)	520	390	393	133	4.57	191	4.58	-0.01
	Sub Total (C)	4065	3651	3578	3490	80	3335	80	0
D. SJVNL	NJPC (6*250)	1500	1605	1630	1617	38.00	1583	37.88	0.12
	Rampur HEP (6*68.67)	412	413	448	375	10.05	419	9.92	0.12
	Sub Total (D)	1912	2018	2078	1992	48.04	2002	47.80	0.24
E. THDC	Tehri HPS (4*250)	1000	488	494	493	7.48	312	7.53	-0.05
	Koteshwar HPS (4*100)	400	300	301	101	3.96	165	4.13	-0.17
	Sub Total (E)	1400	788	795	594	11.44	477	11.66	-0.22
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	1149	1292	946	27.07	1128	27.57	-0.50
	Dehar HPS (6*165)	990	607	825	560	14.71	613	14.57	0.14
	Pong HPS (6*66)	396	151	318	66	3.52	147	3.63	-0.12
	Sub Total (F)	2900	1907	2435	1572	45.29	1887	45.77	-0.48
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	230	231	5.48	228	5.30	0.18
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	1200	28.39	1183	27.80	0.59
	Malana Stg-II HPS (2*50)	100	0	111	111	2.64	110	2.45	0.19
	Shree Cement TPS (2*150)	300	0	296	296	6.93	289	7.04	-0.11
	Budhil HPS(IPP) (2*35)	70	0	74	74	1.75	73	1.68	0.08
	Sub Total (G)	1662	0	1912	1912	45.19	1883	44.26	0.93
	H. Total Regional Entities (A-G)	24972	18775	19195	18384	418.83	17451	418.27	0.56

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	1045	990	22.55	940
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	430	360	8.84	368
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	760	754	17.87	745
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1255	719	21.65	902
	Talwandi Saboo (1*660)	660	350	316	7.59	316
	Thermal (Total)	4700	3840	3139	78.50	3271
	Total Hydro	1000	494	479	13.60	567
	Total Punjab	5700	4334	3618	92.10	3837
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	228	209	5.25
DCRTPP (Yamuna nagar) (2*300)		600	286	245	6.29	262
Faridabad GPS (NTPC)		432	190	177	4.32	180
RGTPP (Khedar) (IPP) (2*600)		1200	371	752	10.91	455
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	405	465	10.49	437
Thermal (Total)		4944	1480	1848	37.26	1552
Total Hydro		62	31	33	0.78	33
Total Haryana		5006	1511	1881	38.04	1585
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	788	835	19.21
	suratgarh TPS (6*250)	1500	761	858	19.47	811
	Chabra TPS (4*250)	1000	582	627	14.88	620
	Dholpur GPS (3*110)	330	77	77	1.90	79
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	198	157	4.43	184
	RAPS A (NPC) (1*100+1*200)	300	138	136	3.35	140
	Barsingar (NLC) (2*125)	250	94	96	2.16	90
	Giral LTPS (2*125)	250	94	91	1.88	78
	Rajwest LTPS (IPP) (8*135)	1080	386	727	15.44	643
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	468	451	11.34	472
	Kawai(Adani) (2*660)	1320	430	598	12.44	518
	Thermal (Total)	8276	4016	4653	106	4437
	Total Hydro	550	0	0	0.27	11
	Wind power	2798	80	56	4.76	198
	Biomass	99	26	26	0.62	26
	Solar	730	1	0	2.54	106
	Renewable/Others (Total)	3627	107	82	7.91	330
	Total Rajasthan	12453	4123	4735	114.68	4778
	UP	Anpara TPS (3*210+2*500)	1630	863	871	20.60
Obra TPS (2*50+2*94+5*200)		1194	412	411	9.30	388
Paricha TPS (2*110+2*220+2*250)		1140	705	724	17.60	733
Panki TPS (2*105)		210	126	135	2.90	121
Harduaganj TPS (1*60+1*105+2*250)		665	435	549	12.60	525
Tanda TPS (NTPC) (4*110)		440	370	360	8.60	358
Roza TPS (IPP) (4*300)		1200	802	810	17.90	746
Anpara-C (IPP) (2*600)		1200	1062	1080	25.00	1042
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	284	403	7.50	313
Anpara-D(1*500)		500	0	0	0.00	0
Lalitpur TPS(1*660)		660	0	0	0.00	0
Thermal (Total)		9289	5059	5343	122	5083
Vishnuparyag HPS (IPP)(including Alakanada)		730	665	704	16.60	692
Other Hydro		527	50	218	2.60	108
Cogeneration		981	120	120	2.90	121
Total UP		11527	5894	6385	144.10	5313
Uttarakhand	Total Hydro	1398	865	805	19.15	798
	Total Uttarakhand	1398	865	805	19.15	798
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	49	74	1.27	53
	Pragati Gas Turbine (2x104+ 1x122)	330	145	261	4.67	194
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	273	269	6.46	269
	Badarpur TPS (NTPC) (3*95+2*210)	705	390	395	8.25	344
	Thermal (Total)	2917	858	999	20.66	861
	Total Delhi	2917	858	999	20.66	861
HP	Baspa HPS (IPP) (2*100)	300	334	304	7.44	310
	Malana HPS (IPP) (2*43)	86	87	90	2.11	88
	Other Hydro	878	495	479	11.62	484
	Total HP	1264	916	873	21.16	882
J & K	Baqlihar HPS (IPP) (3*150)	450	440	440	10.56	440
	Other Hydro/IPP	560	196	193	4.52	188
	Gas/Diesel/Others	190	0	0	0.00	0
	Total J & K	1200	636	633	15.08	628
Total State Control Area Generation		41465	19137	19929	464.95	18681
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4384	4260	136.98	5708
Total Regional Availability(Gross)		66437	42715	42573	1020.76	41840

IV. Total Hydro Generation:

Regional Entities Hydro	11969	10428	9189	221.32	9222
State Control Area Hydro	5811	2992	3041	89.23	3026
Total Regional Hydro	17780	13420	12230	310.55	12248

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	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	100	50	500	150	1.93	1.55	0.38		
Gwalior-Agra (D/C)	1812	1924	2205	0	38.42	0.00	38.42		
Zerda-Kankroli	-16	-41	43	158	0.00	1.64	-1.64		
Zerda-Bhinmal	52	-7	115	198	0.00	0.39	-0.39		
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00		
Badod-Kota/Morak	-30	33	76	40	0.38	0.00	0.38		
Mundra-Mohindergarh(HVDC)	2300	2302	2507	0	56.42	0.00	56.42		
Vindhychal - Rihand	-435	-422	434	0	8.38	0.00	8.38		
Sub Total WR	3783	3839			105.52	3.57	101.95		
Pusauli Bypass	400	400	400	0	9.01	0.00	9.01		
MZP- GKP (D/C)	-116	-221	467	0	5.95	0.00	5.95		
Patna-Balia(D/C)	285	224	399	0	6.84	0.00	6.84		
B'Sharif-Balia (D/C)	87	63	265	0	2.96	0.00	2.96		
Pusauli-Balia	125	132	323	0	1.92	0.00	1.92		
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00		
Pusauli-Sahupuri	153	146	228	0	3.44	0.00	3.44		
K'nasa-Sahupuri	0	0	1	0	0.00	0.00	0.00		
Son Ngr-Rihand	-43	-40	0	46	0.00	0.94	-0.94		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	-74	-30	136	220	0.29	0.00	0.29		
Barh -GKP (D/C)	-216	-253	289	0	5.57	0.00	5.57		
Sub Total ER	601	421			35.97	0.94	35.03		
Total IR Exch	4384	4260			141.50	4.52	136.98		

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
35.87	2.11	37.98	15.16	6.69	0.00	3.97	0.68	-0.68
Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR incld Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
53.83	92.91	146.73	35.03	101.95	136.98	-18.80	9.04	-9.75

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	MW	MW	Import	Export	Import	Export	
132 KV Tanakpur - Mahendamaragar	-19	-27	0	35	0	1	-0.60		

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	0.22	2.97	21.53	43.61	23.08	20.13	10.32	NA

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.42	9.03	49.79	19.56	50.07	0.14	0.10	50.42	49.90

VII. Voltage profile 400 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV
Rihand	400	407	08:46	397	23:53	0.0	0.0	0.0	0.0
Gorakhpur	400	415	05:05	404	22:13	0.0	0.0	1.8	0.0
Bareilly	400	418	08:00	396	20:00	0.0	0.0	0.9	0.0
Kanpur	400	418	08:59	399	22:10	0.0	0.0	0.0	0.0
Dadri	400	424	08:32	401	22:09	0.0	0.0	8.5	0.0
Ballabhgarh	400	429	08:59	405	22:11	0.0	0.0	15.0	0.0
Bawana	400	426	09:01	355	00:43	0.1	0.1	16.5	0.0
Bassi	400	424	18:25	403	00:12	0.0	0.0	5.1	0.0
Hissar	400	417	09:00	393	19:43	0.0	0.0	0.0	0.0
Moga	400	413	08:59	400	19:43	0.0	0.0	0.0	0.0
Abdullapur	400	423	09:02	396	19:42	0.0	0.0	4.7	0.0
Nalagarh	400	421	09:00	408	00:04	0.0	0.0	0.4	0.0
Kishenpur	400	418	08:09	400	20:43	0.0	0.0	0.0	0.0
Wagoora	400	411	05:06	383	20:45	0.0	2.4	0.0	0.0

VIII. Voltage profile 765 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV
Fatehpur	765	777	09:01	738	20:37	0.0	2.1	0.0	0.0
Balia	765	781	08:45	742	22:49	0.0	0.0	0.0	0.0
Moga	765	799	09:00	766	22:08	0.0	0.0	0.0	0.0
Agra	765	795	09:01	757	00:14	0.0	0.0	0.0	0.0
Bhiwani	765	808	09:00	768	22:09	0.0	0.0	6.3	0.0
Unnao	765	774	09:02	741	22:11	0.0	0.4	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	487.69	661.49	485.71	610.73	1248.80	961.55
Pong	426.72	384.05	405.82	361.16	401.78	259.17	519.33	241.80
Tehri	829.79	740.04	742.35	9.50	745.40	24.00	279.50	265.00
Koteshwar	612.50	598.50	610.05	4.95	610.11	4.69	265.00	263.00
Chamera-I	760.00	748.75	756.20	0.00	0.00	0.00	541.48	305.74
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	522.27	5.05	521.46	7.47	312.41	304.14

* 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	1193	0	1	1192	0	1	30.31	0.29	30.60
Delhi	343	116	-5	272	217	-5	7.64	2.10	9.74
Haryana	1015	159	0	1015	57	0	24.94	-2.01	22.93
HP	-1034	-239	0	-882	-286	0	-22.39	-6.23	-28.61
J&K	-439	155	0	-434	155	0	-10.66	-0.71	-11.37
CHD	0	0	0	0	0	0	0.24	-0.12	0.12
Rajasthan	-384	516	2	-384	495	2	-8.47	24.32	15.85
UP	799	0	0	708	0	0	14.35	0.00	14.35
Uttarakhand	32	0	6	32	0	2	0.99	0.93	1.92
Total	1523	707	4	1517	638	0	36.95	18.57	55.51

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1507	1132	95	0	1	1
Delhi	443	200	649	-371	-5	-5
Haryana	1125	993	161	-601	0	0
HP	-882	-1034	-222	-440	0	0
J&K	-398	-498	253	-346	0	0
CHD	30	0	0	-40	0	0
Rajasthan	-243	-412	1985	238	2	0
UP	893	447	0	0	0	0
Uttarakhand	74	24	79	0	8	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 21.06.2015 :**

Normal

XIV. Synchronisation of new generating units :**XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :****XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**