

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 08.06.2015
Date of Reporting : 09.06.2015

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
43153	2734	45887	50.05	41867	1980	43847	50.11	1009.0	51.15

* 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	55.01	13.12		68.13	86.81	86.00	-0.81	154.13	0.00
Haryana	30.49	0.62		31.11	114.08	113.23	-0.85	144.34	0.00
Rajasthan	112.61	0.07	12.29	124.97	74.01	75.32	1.31	200.28	0.00
Delhi	19.21			19.21	89.77	90.02	0.26	109.24	0.25
UP	138.70	17.28		155.98	136.34	137.50	1.16	293.49	42.37
Uttarakhand		21.21		21.21	19.69	19.33	-0.36	40.55	0.20
HP		19.69		19.69	5.54	6.19	0.65	25.88	0.03
J & K		15.05	0.00	15.05	20.12	20.20	0.08	35.25	8.32
Chandigarh				0.00	5.71	5.84	0.27	5.84	0.00
Total	356.01	87.05	12.29	455.35	552.07	553.63	1.71	1008.98	51.15

* 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	7232	0	47	159	6318	0	-73	305	7232
Haryana	6610	0	-176	1045	6162	0	-186	1037	6991
Rajasthan	8093	0	-255	261	8088	0	5	383	9104
Delhi	4340	14	-105	532	4646	0	123	616	5303
UP	12189	2300	-6	1036	12692	1755	230	1057	12811
Uttarakhand	1863	40	89	162	1633	0	-14	194	1863
HP	1052	0	-63	-1079	851	0	-2	-1113	1225
J&K	1520	380	205	-348	1276	225	-95	-566	1811
Chandigarh	255	0	9	0	201	0	1	0	308
Total	43153	2734	-256	1768	41867	1980	-12	1913	44712

* 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)) Diversity is 1.04

III. Regional Entities :

Entity	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
				(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1717	1554	2025	41.82	1743	41.16	0.66
	Rihand I STPS (2*500)	1000	450	478	476	11.51	480	10.51	1.00
	Rihand II STPS (2*500)	1000	943	908	962	23.00	958	21.86	1.14
	Rihand III STPS (2*500)	1000	943	979	923	22.95	956	21.95	1.00
	Dadri I STPS (4*210)	840	815	620	590	16.21	675	15.51	0.70
	Dadri II STPS (2*490)	980	980	787	733	19.59	816	19.44	0.15
	Unchahar I TPS (2*210)	420	402	336	350	8.59	358	8.88	-0.29
	Unchahar II TPS (2*210)	420	401	301	337	8.13	339	8.19	-0.06
	Unchahar III TPS (1*220)	210	200	125	166	3.94	164	4.21	-0.27
	ISTPP (Jhajihar) (3*500)	1500	1000	788	627	16.33	681	16.56	-0.23
	Dadri GPS (4*130.19+2*154.51)	830	798	367	383	8.91	371	9.04	-0.13
	Anta GPS (3*88.71+1*153.2)	419	381	235	235	5.69	237	5.78	-0.09
	Auraiya GPS (4*111.19+2*109.30)	663	641	147	108	3.82	159	3.78	0.04
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.03
	Singrauli Solar	15	3	0	0	0.07	3	0.07	0.00
	KHEP	400	0	0	0	0.00	0	0.00	0.00
Sub Total (A)	11712	9677	7625	7915	191	7943	187	4	
B. NPC	NAPS (2*220)	440	377	415	429	9.10	379	9.05	0.05
	RAPS- B (2*220)	440	372	414	416	8.78	366	8.93	-0.15
	RAPS- C (2*220)	440	410	435	438	9.37	390	9.84	-0.48
	Sub Total (B)	1320	1159	1264	1283	27.24	1135	27.82	-0.58
C. NHPC	Chamera I HPS (3*180)	540	535	543	358	10.01	417	9.90	0.11
	Chamera II HPS (3*100)	300	285	212	316	7.04	293	6.81	0.23
	Chamera III HPS (3*77)	231	231	234	228	5.65	235	5.55	0.10
	Bairasuil HPS(3*60)	180	179	186	61	2.81	117	2.71	0.10
	Salal-HPS (6*115)	690	661	672	672	16.22	676	15.87	0.35
	Tanakpur-HPS (3*40)	94	46	43	60	1.19	50	1.10	0.10
	Uri-I HPS (4*120)	480	475	477	478	11.56	482	11.40	0.16
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	233	288	0	3.61	150	3.39	0.22
	Dulhasti-HPS (3*130)	390	386	395	393	9.34	389	9.26	0.07
	Sewa-II HPS (3*40)	120	98	128	0	1.90	79	1.80	0.10
	Parbati 3 (4*130)	520	390	398	0	2.37	99	2.25	0.12
	Sub Total (C)	4065	3521	3576	2565	72	2988	70	2
	D. SJVNL	NJPC (6*250)	1500	1605	1623	1618	38.66	1611	38.25
Rampur HEP (6*68.67)		412	442	446	448	10.72	447	10.61	0.11
Sub Total (D)		1912	2047	2069	2066	49.39	2058	48.86	0.52
E. THDC	Tehri HPS (4*250)	1000	429	429	424	9.82	409	9.80	0.02
	Koteshwar HPS (4*100)	400	213	282	102	4.54	189	4.50	0.04
	Sub Total (E)	1400	642	711	526	14.36	598	14.30	0.06
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	854	1293	633	20.36	848	20.50	-0.14
	Dehar HPS (6*165)	990	598	825	560	14.78	616	14.35	0.44
	Pong HPS (6*66)	396	15	132	0	0.37	15	0.37	0.00
	Sub Total (F)	2900	1467	2250	1193	35.51	1479	35.21	0.29
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	168	220	3.47	145	3.13	0.34
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1125	1125	26.33	1097	25.91	0.43
	Malana Stg-II HPS (2*50)	100	0	45	50	1.35	56	1.27	0.08
	Shree Cement TPS (2*150)	300	0	292	296	6.98	291	7.11	-0.13
	Budhil HPS(IPP) (2*35)	70	0	71	70	1.31	55	1.22	0.10
	Sub Total (G)	1662	0	1701	1761	39.46	1644	38.65	0.81
H. Total Regional Entities (A-G)	24972	18513	19196	17310	428.27	17845	421.91	6.36	

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	370	370	8.43	351
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	95	100	2.06	86
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	373	370	8.54	356
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1388	1377	30.67	1278
	Talwandi Saboo (1*660)	660	620	0	5.31	221
	Thermal (Total)	4680	2846	2217	55.01	2292
	Total Hydro	1148	523	523	13.12	547
	Total Punjab	5828	3369	2740	68.13	2839
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	251	0	4.07	170
Faridabad GPS (NTPC)		432	179	188	4.42	184
RGTTP (Khedar) (IPP) (2*600)		1200	0	0	0.00	0
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	812	1078	22.00	917
Thermal (Total)		4944	1242	1266	30.49	1270
Total Hydro		62	25	27	0.62	26
Total Haryana		5006	1267	1293	31.11	1296
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	688	692	17.31
	suratgarh TPS (6*250)	1500	789	744	20.08	837
	Chabra TPS (4*250)	1000	535	653	13.38	557
	Dholpur GPS (3*110)	330	99	105	2.48	103
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	56	57	1.36	57
	RAPS A (NPC) (1*100+1*200)	300	137	138	3.38	141
	Barsingar (NLC) (2*125)	250	0	63	0.71	30
	Giral LTPS (2*125)	250	58	60	1.23	51
	Rajwest LTPS (IPP) (8*135)	1080	721	721	17.24	718
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	881	912	20.97	874
	Kawai(Adani) (2*660)	1320	592	600	14.47	603
	Thermal (Total)	8276	4556	4745	113	4692
	Total Hydro	550	0	0	0.07	3
	Wind power	2798	840	678	12.10	504
	Biomass	99	8	8	0.19	8
	Solar	730	0	0	0.00	0
	Renewable/Others (Total)	3627	848	686	12.29	512
	Total Rajasthan	12453	5404	5431	124.97	5207
	UP	Anpara TPS (3*210+2*500)	1630	1317	1310	31.00
Obra TPS (2*50+2*94+5*200)		1194	338	362	8.00	333
Paricha TPS (2*110+2*220+2*250)		1140	383	683	16.60	692
Panki TPS (2*105)		210	68	63	1.50	63
Harduaganj TPS (1*60+1*105+2*250)		665	448	438	10.50	438
Tanda TPS (NTPC) (4*110)		440	370	360	9.00	375
Roza TPS (IPP) (4*300)		1200	1072	1058	24.40	1017
Anpara-C (IPP) (2*600)		1200	1031	1071	25.40	1058
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	404	324	9.40	392
Anpara-D		500	0	0	0.00	0
Thermal (Total)		8629	5431	5669	136	5658
Vishnuparyag HPS (IPP)(including Alakananada)		400	435	435	13.78	574
Other Hydro		527	149	153	3.50	146
Cogeneration		981	120	120	2.90	121
Total UP		10537	6135	6377	155.98	5925
Uttarakhand	Total Hydro	1398	948	771	21.21	884
	Total Uttarakhand	1398	948	771	21.21	884
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.02	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	69	37	1.14	47
	Pragati Gas Turbine (2x104+ 1x122)	330	264	262	6.40	267
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	271	278	6.57	274
	Badarpur TPS (NTPC) (3*95+2*210)	705	235	235	5.12	213
	Thermal (Total)	2917	839	812	19.21	800
	Total Delhi	2917	839	812	19.21	800
HP	Baspa HPS (IPP) (2*100)	300	331	321	7.17	299
	Malana HPS (IPP) (2*43)	86	41	51	1.21	50
	Other Hydro	728	484	472	11.32	472
	Total HP	1114	856	844	19.69	820
J & K	Baglihar HPS (IPP) (3*150)	450	450	450	10.50	438
	Other Hydro/IPP	436	187	191	4.55	190
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	637	641	15.05	627
	Total State Control Area Generation	40347	19455	18909	455.35	18399
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6270	6536	134.70	5613
Total Regional Availability(Gross)		65319	44921	42755	1018.32	41856

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9944	7745	202.11	8421
State Control Area Hydro	5684	3138	2959	87.05	3053
Total Regional Hydro	17654	13082	10704	289.16	11474

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 B/B	500		50		500	0	4.84	0.00	4.84
Gwalior-Agra (D/C)	2035		2221		2311	0	45.56	0.00	45.56
Zerda-Kankroli	-33		-109		0	198	0.00	2.03	-2.03
Zerda-Bhinmal	12		-94		145	129	0.00	0.23	-0.23
Malanpur-Auraiya	0		0		0	0	0.00	0.00	0.00
Badod-Kota/Morak	19		8		64	19	0.36	0.00	0.36
Mundra-Mohinderqarh(HVDC)	2203		2503		2505	0	58.35	0.00	58.35
Vindhychal - Rihand	480		484		499	0	11.04	0.00	11.04
Sub Total WR	5216		5063				120.15	2.26	117.88
Pusauli Bypass	400		400		0	0	0.00	8.99	-8.99
MZP- GKP (D/C)	-53		219		243	103	3.43	0.00	3.43
Patna-Balia(D/C)	216		103		346	0	4.47	0.00	4.47
B'Sharif-Balia (D/C)	-148		85		144	148	1.18	0.00	1.18
Pusauli-Balia	97		149		198	0	1.48	0.00	1.48
Gaya-Fatehpur (765 Kv)	235		138		342	0	6.02	0.00	6.02
Pusauli-Sahupuri	126		185		0	187	2.67	0.00	2.67
K'nasa-Sahupuri	0		0		0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36		-47		0	47	0.00	0.89	-0.89
Garhwa-Rihand	0		0		0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 Kv)	-119		-55		153	121	0.59	0.00	0.59
Barh -GKP (D/C)	336		296		384	0	6.87	0.00	6.87
Sub Total ER	1054		1473				26.70	9.88	16.82
Total IR Exch	6270		6536				146.84	12.14	134.70

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
39.47	1.53	41.01	22.42	3.54	-3.27	-0.01	0.44	-0.44

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
60.59	87.86	148.45	16.82	117.88	134.70	-43.77	30.02	-13.75

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		Import	Export	Import	Export	
132 KV Tanakpur - Mahendamaagar	-26		-26		0	35	0	1	-1.11

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	0.35	10.63	55.77	73.33	13.33	2.64	0.07	NA

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz			(Hz)	(Hz)
50.21	13.04	49.72	21.19	49.98	0.06	0.04	50.20	49.92

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	404	03:28	385	02:29	0.0	0.1	0.0	0.0
Gorakhpur	400	415	05:28	404	20:53	0.0	0.0	0.0	0.0
Bareilly	400	418	08:00	396	20:00	0.0	0.0	0.0	0.0
Kanpur	400	411	05:06	395	22:16	0.0	0.0	0.0	0.0
Dadri	400	412	05:31	394	15:12	0.0	0.0	0.0	0.0
Ballabgarh	400	419	05:28	398	14:57	0.0	0.0	0.0	0.0
Bawana	400	414	05:23	397	15:15	0.0	0.0	0.0	0.0
Bassi	400	418	18:05	397	09:07	0.0	0.0	0.0	0.0
Hissar	400	405	05:28	387	23:06	0.0	2.9	0.0	0.0
Moga	400	412	05:32	398	09:19	0.0	0.0	0.0	0.0
Abdullapur	400	412	05:10	396	09:42	0.0	4.2	0.0	0.0
Nalagarh	400	420	05:29	403	15:19	0.0	0.0	0.0	0.0
Kishenpur	400	416	18:01	403	21:05	0.0	0.0	0.0	0.0
Wagoora	400	413	18:00	387	21:01	0.0	2.5	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	779	18:31	745	22:16	0.0	0.0	0.0	0.0
Balia	765	769	18:07	741	22:15	0.0	0.6	0.0	0.0
Moga	765	788	05:31	762	09:22	0.0	0.0	0.0	0.0
Agra	765	784	18:19	752	15:12	0.0	0.0	0.0	0.0
Bhiwani	765	786	05:05	760	15:09	0.0	0.0	0.0	0.0
Unnao	765	0	00:00	9999	00:00	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	486.91	636.01	480.83	481.64	681.67	702.88
Pong	426.72	384.05	405.72	361.16	402.46	273.51	55.67	25.51
Tehri	829.79	740.04	747.10	34.50	742.15	10.09	165.71	334.00
Koteshwar	612.50	598.50	607.90	3.54	610.52	4.69	334.00	301.00
Chamera-I	760.00	748.75	754.38	0.00	0.00	0.00	258.29	271.48
Rihand	268.22	252.98	839.00	105.25	842.30	146.40	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	521.58	6.30	520.38	8.15	250.60	283.87

* 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	107	198	0	105	54	0	5.12	2.63	7.75
Delhi	744	-103	-25	532	0	0	14.15	1.70	15.85
Haryana	871	166	0	871	173	0	20.91	-0.17	20.75
HP	-840	-274	0	-688	-391	0	-17.73	-7.22	-24.95
J&K	-547	-20	0	-380	32	0	-10.39	-0.32	-10.72
CHD	0	0	0	0	0	0	0.24	0.04	0.28
Rajasthan	-242	623	2	-242	503	0	-5.83	20.36	14.54
UP	1057	0	0	1036	0	0	23.01	0.00	23.01
Uttarakhand	74	98	23	74	88	0	1.77	2.79	4.56
Total	1224	689	-1	1308	460	0	31.25	19.81	51.06

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	304	105	210	54	0	0
Delhi	822	399	453	-154	0	-25
Haryana	871	871	193	-373	0	0
HP	-688	-840	-198	-391	0	0
J&K	-344	-606	180	-121	0	0
CHD	30	0	30	0	0	0
Rajasthan	-242	-243	1606	497	22	0
UP	1110	854	0	0	0	0
Uttarakhand	74	74	177	39	23	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 08.06.2015 :**

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 :**