

पॉवर 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 07.06.2015
Date of Reporting : 08.06.2015

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
40202	1535	41737	50.04	41954	2122	44076	50.10	971.6	47.22

* 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	41.67	13.90		55.57	88.91	88.08	-0.83	143.65	0.00
Haryana	25.88	0.60		26.48	111.03	109.68	-1.35	136.15	0.00
Rajasthan	117.18	0.00	12.23	129.42	69.44	70.40	0.96	199.81	0.00
Delhi	18.59			18.59	78.42	77.35	-1.07	95.94	0.05
UP	139.20	15.98		155.18	135.84	136.68	0.84	291.87	38.54
Uttarakhand		19.43		19.43	19.61	19.79	0.18	39.23	0.14
HP		18.33		18.33	6.38	6.00	-0.38	24.33	0.04
J & K		14.89	0.00	14.89	20.49	21.06	0.57	35.95	8.46
Chandigarh				0.00	5.10	4.66	0.27	4.66	0.00
Total	342.52	83.13	12.23	437.88	535.20	533.70	-0.79	971.58	47.22

* 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	6294	0	98	322	5917	0	-106	409	6435
Haryana	5757	0	-272	1023	6284	0	26	1078	6645
Rajasthan	7754	0	-126	143	8409	0	-41	159	8962
Delhi	3909	0	-134	524	4348	0	87	360	4995
UP	11966	1080	-56	1005	12917	1880	164	1251	12917
Uttarakhand	1741	40	67	170	1637	0	-34	229	1741
HP	905	0	-133	-1024	879	0	-62	-1081	1178
J&K	1660	415	66	-358	1372	242	81	-635	1880
Chandigarh	216	0	-19	0	191	0	-21	0	239
Total	40202	1535	-509	1806	41954	2122	96	1770	43394

* 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 (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	1874	2010	2006	48.15	2006	44.80	3.35
	Rihand I STPS (2*500)	1000	450	470	483	11.09	462	10.57	0.51
	Rihand II STPS (2*500)	1000	956	947	1040	23.62	984	22.41	1.22
	Rihand III STPS (2*500)	1000	956	988	933	22.53	939	22.13	0.40
	Dadri I STPS (4*210)	840	744	468	452	11.48	478	10.59	0.89
	Dadri II STPS (2*490)	980	980	704	827	18.21	759	17.79	0.42
	Unchahar I TPS (2*210)	420	400	302	391	8.06	336	8.71	-0.65
	Unchahar II TPS (2*210)	420	401	280	390	7.66	319	7.96	-0.30
	Unchahar III TPS (1*220)	210	200	128	190	3.73	155	4.05	-0.32
	ISTPP (Jhajhar) (3*500)	1500	1000	641	637	14.67	611	14.80	-0.14
	Dadri GPS (4*130.19+2*154.51)	830	797	271	296	7.19	300	7.05	0.14
	Anta GPS (3*88.71+1*153.2)	419	381	238	201	5.53	230	5.59	-0.06
	Auraiya GPS (4*111.19+2*109.30)	663	640	152	148	3.58	149	3.52	0.05
	Dadri Solar	5	1	0	0	0.03	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.03
	Singrauli Solar	15	3	0	0	0.06	2	0.07	-0.01
	KHEP	400	0	0	0	0.00	0	0.00	0.00
Sub Total (A)	11712	9786	7599	7994	186	7733	180	5	
B. NPC	NAPS (2*220)	440	386	416	431	9.27	386	9.26	0.01
	RAPS- B (2*220)	440	372	410	414	8.86	369	8.93	-0.07
	RAPS- C (2*220)	440	409	436	437	9.46	394	9.81	-0.35
	Sub Total (B)	1320	1167	1262	1282	27.59	1149	28.00	-0.42
C. NHPC	Chamera I HPS (3*180)	540	536	545	176	9.80	408	9.75	0.05
	Chamera II HPS (3*100)	300	300	313	313	7.38	308	7.20	0.18
	Chamera III HPS (3*77)	231	231	235	232	5.54	231	5.55	-0.01
	Bairasuil HPS(3*60)	180	179	186	62	2.77	115	2.73	0.04
	Salal-HPS (6*115)	690	661	672	672	16.20	675	15.87	0.33
	Tanakpur-HPS (3*40)	94	49	62	59	1.21	50	1.14	0.06
	Uri-I HPS (4*120)	480	475	479	478	11.65	485	11.40	0.25
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	82	0	216	1.54	64	1.51	0.02
	Dulhasti-HPS (3*130)	390	386	395	395	9.31	388	9.26	0.04
	Sewa-II HPS (3*40)	120	119	127	0	1.87	78	1.82	0.06
	Parbati 3 (4*130)	520	390	400	0	2.17	91	2.08	0.10
	Sub Total (C)	4065	3408	3414	2603	69	2893	68	1
	D. SJVNL	NJPC (6*250)	1500	1605	1612	1599	36.02	1501	35.91
Rampur HEP (6*68.67)		412	442	448	448	10.20	425	9.99	0.20
Sub Total (D)	1912	2047	2060	2047	46.22	1926	45.90	0.32	
E. THDC	Tehri HPS (4*250)	1000	429	428	434	9.66	403	9.65	0.01
	Koteswar HPS (4*100)	400	213	284	281	4.76	198	4.80	-0.04
Sub Total (E)	1400	642	712	715	14.42	601	14.45	-0.03	
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	859	1322	633	20.86	869	20.62	0.24
	Dehar HPS (6*165)	990	588	825	560	14.16	590	14.11	0.05
	Pong HPS (6*66)	396	18	192	0	0.41	17	0.43	-0.02
	Sub Total (F)	2900	1465	2339	1193	35.43	1476	35.16	0.27
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	130	115	2.76	115	2.52	0.25
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1000	900	21.67	903	21.53	0.13
	Malana Stg-II HPS (2*50)	100	0	45	40	1.19	49	1.12	0.07
	Shree Cement TPS (2*150)	300	0	290	296	6.70	279	6.80	-0.10
	Budhil HPS(IPP) (2*35)	70	0	71	36	1.07	45	1.06	0.01
	Sub Total (G)	1662	0	1536	1388	33.38	1391	33.02	0.36
H. Total Regional Entities (A-G)	24972	18514	18923	17222	412.07	17169	404.98	7.09	

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	243	7.18	299
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	95	2.11	88
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	358	361	7.95	331
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	844	1062	24.67	1028
	Talwandi Saboo (1*660)	660	0	0	-0.25	-10
	Thermal (Total)	4680	1672	1761	41.67	1736
	Total Hydro	1148	583	643	13.90	579
	Total Punjab	5828	2255	2404	55.57	2315
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	0	0	0.00	0
Faridabad GPS (NTPC)		432	166	168	4.37	182
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	744	1108	21.51	896
Thermal (Total)		4944	910	1276	25.88	1078
Total Hydro		62	23	27	0.60	25
Total Haryana		5006	933	1303	26.48	1103
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	726	750	17.67
	suratgarh TPS (6*250)	1500	665	891	19.61	817
	Chabra TPS (4*250)	1000	668	646	15.85	660
	Dholpur GPS (3*110)	330	104	116	2.36	98
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	55	154	2.41	100
	RAPS A (NPC) (1*100+1*200)	300	137	136	3.39	141
	Barsingar (NLC) (2*125)	250	93	93	2.36	98
	Giral LTPS (2*125)	250	60	60	1.34	56
	Rajwest LTPS (IPP) (8*135)	1080	721	721	17.17	716
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	912	884	21.39	891
	Kawai(Adani) (2*660)	1320	590	550	13.64	568
	Thermal (Total)	8276	4731	5001	117	4883
	Total Hydro	550	0	0	0.00	0
	Wind power	2798	156	748	9.19	383
	Biomass	99	12	12	0.29	12
	Solar	730	0	0	2.75	115
	Renewable/Others (Total)	3627	168	760	12.23	510
	Total Rajasthan	12453	4899	5761	129.42	5392
	UP	Anpara TPS (3*210+2*500)	1630	1274	1329	31.50
Obra TPS (2*50+2*94+5*200)		1194	367	469	9.80	408
Paricha TPS (2*110+2*220+2*250)		1140	768	657	16.40	683
Panki TPS (2*105)		210	63	59	1.40	58
Harduaganj TPS (1*60+1*105+2*250)		665	433	440	9.20	383
Tanda TPS (NTPC) (4*110)		440	370	367	8.80	367
Roza TPS (IPP) (4*300)		1200	770	990	21.40	892
Anpara-C (IPP) (2*600)		1200	1072	1089	25.70	1071
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	282	403	7.80	325
Anpara-D		500	0	233	4.30	179
Thermal (Total)		8629	5399	6036	136	5679
Vishnuparyag HPS (IPP)(including Alakananada)		400	596	475	13.78	574
Other Hydro		527	170	232	2.20	92
Cogeneration		981	120	10	2.90	121
Total UP		10537	6285	6753	155.18	5892
Uttarakhand	Total Hydro	1398	847	776	19.43	810
	Total Uttarakhand	1398	847	776	19.43	810
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.14	-6
	Delhi Gas Turbine (6x30 + 3x34)	282	36	38	0.80	33
	Pragati Gas Turbine (2x104+ 1x122)	330	261	266	6.39	266
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	271	307	6.74	281
	Badarpur TPS (NTPC) (3*95+2*210)	705	235	242	4.81	200
	Thermal (Total)	2917	803	854	18.59	775
	Total Delhi	2917	803	854	18.59	775
HP	Baspa HPS (IPP) (2*100)	300	291	291	6.09	254
	Malana HPS (IPP) (2*43)	86	33	31	1.03	43
	Other Hydro	728	501	489	11.21	467
	Total HP	1114	825	811	18.33	764
J & K	Baglihar HPS (IPP) (3*150)	450	440	440	10.56	440
	Other Hydro/IPP	436	179	183	4.33	180
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	619	623	14.89	620
Total State Control Area Generation		40347	17466	19285	437.88	17671
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6028	6648	115.90	4829
Total Regional Availability(Gross)		65319	42417	43155	965.85	39669

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9701	7613	191.12	7963
State Control Area Hydro	5684	3067	3112	83.13	2889
Total Regional Hydro	17654	12768	10725	274.24	10852

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	Import	Export	
	Vindhychal B/B	200	200	400	200	3.14	0.96	2.18	
Gwalior-Agra (D/C)	1891	2099	2294	0	44.38	0.00	44.38		
Zerda-Kankroli	-43	-100	0	229	0.00	2.63	-2.63		
Zerda-Bhinmal	-12	-48	47	164	0.00	1.09	-1.09		
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00		
Badod-Kota/Morak	-28	-27	26	49	0.00	0.42	-0.42		
Mundra-Mohinderqarh(HVDC)	2503	2496	2507	0	60.45	0.00	60.45		
Vindhychal - Rihand	247	504	504	0	0.00	0.00	0.00		
Sub Total WR	4758	5124			107.97	5.10	102.87		
Pusauli Bypass	400	400	0	400	0.00	9.19	-9.19		
MZP- GKP (D/C)	65	133	297	0	4.05	0.00	4.05		
Patna-Balia(D/C)	131	169	347	0	4.67	0.00	4.67		
B'Sharif-Balia (D/C)	7	56	195	0	2.03	0.00	2.03		
Pusauli-Balia	121	96	178	0	1.52	0.00	1.52		
Gaya-Fatehpur (765 Kv)	172	225	318	0	5.62	0.00	5.62		
Pusauli-Sahupuri	173	182	0	203	0.00	2.95	-2.95		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	-42	-43	0	45	0.00	0.95	-0.95		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 Kv)	-55	25	113	126	0.99	0.00	0.99		
Barh -GKP (D/C)	298	281	416	0	7.23	0.00	7.23		
Sub Total ER	1270	1524			26.12	13.09	13.03		
Total IR Exch	6028	6648			134.09	18.19	115.90		

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
37.28	1.41	38.69	16.45	0.96	-0.50	-0.39	0.43	-0.43
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
55.06	92.07	147.13	13.03	102.87	115.90	-42.04	10.80	-31.23

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	Import	Export	
	132 KV Tanakpur - Mahendamaagar	-32	-27	0	34	0	1	-0.65	

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	6.27	41.72	66.08	17.48	8.38	1.84	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					
50.30	17.05	49.80	0.10	50.01	0.06	0.08	50.32	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	06:01	397	13:54	0.0	0.0
Gorakhpur	400	415	06:55	402	00:33	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	416	18:02	396	00:04	0.0	0.0	0.0	0.0
Dadri	400	414	06:02	399	22:33	0.0	0.0	0.0	0.0
Ballabgarh	400	421	18:03	400	00:05	0.0	0.0	0.3	0.0
Bawana	400	416	06:02	400	23:01	0.0	0.0	0.0	0.0
Bassi	400	422	19:00	398	00:07	0.0	0.0	0.7	0.0
Hissar	400	408	19:02	389	23:05	0.0	0.7	0.0	0.0
Moga	400	414	06:01	400	23:07	0.0	0.0	0.0	0.0
Abdullapur	400	417	06:01	396	23:07	0.0	0.0	0.0	0.0
Nalagarh	400	425	06:02	410	23:03	0.0	0.0	11.3	0.0
Kishenpur	400	414	03:11	405	20:11	0.0	0.0	0.0	0.0
Wagoora	400	408	03:04	375	13:20	0.0	1.6	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	784	18:02	747	00:08	0.0	0.0
Balia	765	774	08:07	746	00:08	0.0	0.0	0.0	0.0
Moga	765	793	18:02	765	23:05	0.0	0.0	0.0	0.0
Agra	765	792	18:03	753	00:07	0.0	0.0	0.0	0.0
Bhiwani	765	792	06:02	765	00:00	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 (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	486.92	644.48	480.46	468.02	615.24	703.59
Pong	426.72	384.05	405.71	316.16	402.42	273.51	64.87	28.66
Tehri	829.79	740.04	748.00	39.27	741.90	8.50	155.28	327.00
Koteshwar	612.50	598.50	607.30	3.32	610.52	4.69	327.00	316.00
Chamera-I	760.00	748.75	754.53	0.00	0.00	0.00	277.97	265.65
Rihand	268.22	252.98	839.10	106.48	842.40	147.70	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	7.05	520.42	9.13	254.72	338.45

* 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	301	1	105	216	1	2.56	6.41	8.97
Delhi	654	-284	-10	562	-28	-10	14.51	-2.84	11.67
Haryana	872	206	0	872	151	0	20.93	-1.19	19.74
HP	-839	-242	0	-688	-336	0	-17.72	-6.30	-24.02
J&K	-627	-7	0	-410	52	0	-11.29	-0.28	-11.57
CHD	0	0	0	0	0	0	0.24	0.00	0.24
Rajasthan	-492	649	2	-492	633	2	-11.82	20.15	8.33
UP	1251	0	0	1005	0	0	23.03	0.00	23.03
Uttarakhand	74	138	18	74	79	18	1.77	2.52	4.29
Total	999	760	11	1028	767	11	22.21	18.46	40.67

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	107	105	376	171	1	1
Delhi	809	429	279	-475	-10	-10
Haryana	872	872	207	-634	0	0
HP	-688	-839	-151	-380	0	0
J&K	-374	-686	200	-152	0	0
CHD	30	0	0	0	0	0
Rajasthan	-492	-492	1400	388	2	2
UP	1255	839	0	0	0	0
Uttarakhand	74	74	138	0	18	18

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 07.06.2015 :**

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 :**