

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 25.06.2015
Date of Reporting : 26.06.2015

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
40824	2365	43189	49.92	35565	251	35816	50.17	895.2	24.81

* 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	59.47	18.39		77.86	108.51	106.35	-2.16	184.21	0.00
Haryana	30.36	0.51		30.87	109.68	107.64	-2.04	138.50	0.14
Rajasthan	89.65	0.00	6.47	96.12	57.76	56.75	-1.01	152.87	0.00
Delhi	20.11			20.11	72.19	71.06	-1.13	91.17	0.07
UP	111.90	12.70		124.60	112.26	108.65	-3.62	233.25	16.04
Uttarakhand		18.33		18.33	14.10	13.04	-1.05	31.37	0.37
HP		20.89		20.89	2.91	3.10	0.19	23.99	0.05
J & K		15.62	0.00	15.62	19.18	18.78	-0.40	34.41	8.13
Chandigarh				0.00	5.87	5.48	0.27	5.48	0.00
Total	311.49	86.44	6.47	404.40	502.45	490.84	-10.95	895.24	24.81

* 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	8565	0	-187	1089	6608	0	-219	1305	8656
Haryana	7181	0	9	1215	4919	0	-406	1254	7561
Rajasthan	6490	0	6	173	6428	0	-54	95	7168
Delhi	3924	0	-69	105	3868	0	78	92	4292
UP	10165	1820	164	649	9990	0	-246	721	10793
Uttarakhand	1413	75	169	34	1284	0	-94	40	1419
HP	970	0	13	-1204	832	0	-7	-1354	1150
J&K	1878	470	79	-256	1420	251	-185	-262	1911
Chandigarh	237	0	-35	0	216	0	2	0	265
Total	40824	2365	150	1804	35565	251	-1131	1891	42162

* 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 1.02

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	1849	1868	1392	40.12	1672	36.73	3.39
	Rihand I STPS (2*500)	1000	446	422	458	8.56	357	7.98	0.58
	Rihand II STPS (2*500)	1000	960	893	643	17.42	726	16.84	0.57
	Rihand III STPS (2*500)	1000	960	938	646	17.31	721	16.61	0.70
	Dadri I STPS (4*210)	840	810	482	574	12.62	526	11.67	0.94
	Dadri II STPS (2*490)	980	975	711	660	16.08	670	15.52	0.56
	Unchahar I TPS (2*210)	420	402	309	255	6.62	276	6.63	0.00
	Unchahar II TPS (2*210)	420	400	271	243	6.16	257	6.57	-0.41
	Unchahar III TPS (1*220)	210	200	152	120	3.17	132	3.33	-0.16
	ISTPP (Jhajihar) (3*500)	1500	1000	932	643	14.93	622	15.38	-0.44
	Dadri GPS (4*130.19+2*154.51)	830	798	189	244	4.25	177	4.19	0.06
	Anta GPS (3*88.71+1*153.2)	419	378	226	180	4.34	181	4.38	-0.04
	Auraiya GPS (4*111.19+2*109.30)	663	627	137	178	3.42	143	3.30	0.12
	Dadri Solar	5	1	0	0	0.01	0	0.02	-0.01
	Unchahar Solar	10	3	0	0	0.02	1	0.06	-0.04
	Singrauli Solar	15	3	0	0	0.07	3	0.07	0.00
	KHEP	800	0	0	0	0.00	0	0.00	0.00
Sub Total (A)	12112	9812	7530	6236	155	6463	149	6	
B. NPC	NAPS (2*220)	440	370	370	370	8.88	370	8.88	0.00
	RAPS- B (2*220)	440	367	415	416	8.86	369	8.81	0.05
	RAPS- C (2*220)	440	405	433	434	9.33	389	9.72	-0.39
	Sub Total (B)	1320	1142	1218	1220	27.07	1128	27.41	-0.34
C. NHPC	Chamera I HPS (3*180)	540	537	552	530	12.93	539	12.89	0.04
	Chamera II HPS (3*100)	300	300	312	310	7.36	307	7.20	0.16
	Chamera III HPS (3*77)	231	229	232	232	5.50	229	5.50	0.00
	Bairasuil HPS(3*60)	180	179	183	120	3.74	156	3.73	0.00
	Salal-HPS (6*115)	690	332	671	630	7.93	330	8.01	-0.08
	Tanakpur-HPS (3*40)	94	93	94	95	2.22	93	2.21	0.01
	Uri-I HPS (4*120)	480	475	477	472	11.57	482	11.40	0.17
	Uri-II HPS (4*60)	240	120	0	0	0.00	0	2.88	-2.88
	Dhauliganga-HPS (4*70)	280	280	290	275	6.71	280	6.72	-0.01
	Dulhasti-HPS (3*130)	390	386	397	394	9.29	387	9.26	0.03
	Sewa-II HPS (3*40)	120	121	129	118	2.94	122	2.88	0.06
	Parbati 3 (4*130)	520	390	266	132	5.52	230	5.56	-0.03
	Sub Total (C)	4065	3442	3604	3307	76	3154	78	-3
	D. SJVNL	NJPC (6*250)	1500	1605	1634	1596	38.40	1600	38.52
Rampur HEP (6*68.67)		412	412	374	449	9.83	410	9.89	-0.06
Sub Total (D)		1912	2017	2008	2045	48.24	2010	48.41	-0.17
E. THDC	Tehri HPS (4*250)	1000	496	515	0	5.99	250	5.91	0.08
	Koteshwar HPS (4*100)	400	200	203	99	2.45	102	2.50	-0.05
	Sub Total (E)	1400	696	718	99	8.44	352	8.41	0.03
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	1141	1302	923	27.01	1126	27.40	-0.38
	Dehar HPS (6*165)	990	596	825	560	14.65	611	14.30	0.35
	Pong HPS (6*66)	396	127	258	66	2.90	121	3.06	-0.16
	Sub Total (F)	2900	1865	2385	1549	44.56	1857	44.75	-0.19
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	204	230	5.34	222	5.07	0.27
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1188	1180	28.51	1188	28.51	0.00
	Malana Stg-II HPS (2*50)	100	0	111	111	2.63	110	2.48	0.15
	Shree Cement TPS (2*150)	300	0	251	296	6.12	255	6.46	-0.34
	Budhil HPS(IPP) (2*35)	70	0	73	73	1.76	73	1.68	0.08
	Sub Total (G)	1662	0	1826	1890	44.36	1848	44.20	0.16
	H. Total Regional Entities (A-G)	25372	18973	19290	16346	403.48	16812	400.69	2.79

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	660	640	15.13	630
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	280	250	6.24	260
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	430	583	12.09	504
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1145	700	18.97	791
	Talwandi Saboo (1*660)	660	360	325	7.04	293
	Thermal (Total)	4700	2875	2498	59.47	2478
	Total Hydro	1000	816	715	18.39	766
	Total Punjab	5700	3691	3213	77.86	3244
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	154	0.46
DCRTPP (Yamuna nagar) (2*300)		600	260	218	5.50	229
Faridabad GPS (NTPC)		432	188	165	4.29	179
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	1083	741	20.11	838
Thermal (Total)		4944	1531	1278	30.36	1265
Total Hydro		62	21	34	0.51	21
Total Haryana		5006	1552	1312	30.87	1286
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	602	916	17.42
	suratgarh TPS (6*250)	1500	372	373	9.07	378
	Chabra TPS (4*250)	1000	572	581	13.85	577
	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	204	201	5.07	211
	RAPS A (NPC) (1*100+1*200)	300	136	139	3.38	141
	Barsingar (NLC) (2*125)	250	95	96	2.22	92
	Giral LTPS (2*125)	250	93	88	1.59	66
	Rajwest LTPS (IPP) (8*135)	1080	297	435	9.67	403
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	865	675	16.55	689
	Kawai(Adani) (2*660)	1320	433	435	10.86	452
	Thermal (Total)	8276	3669	3939	90	3735
	Total Hydro	550	0	0	0.00	0
	Wind power	3214	318	291	5.81	242
	Biomass	99	24	24	0.58	24
	Solar	730	0	0	0.08	3
	Renewable/Others (Total)	4043	342	315	6.47	270
	Total Rajasthan	12869	4011	4254	96.12	4005
	UP	Anpara TPS (3*210+2*500)	1630	1271	1093	27.60
Obra TPS (2*50+2*94+5*200)		1194	392	421	9.40	392
Paricha TPS (2*110+2*220+2*250)		1140	723	731	17.40	725
Panki TPS (2*105)		210	131	126	3.00	125
Harduaganj TPS (1*60+1*105+2*250)		665	398	350	9.70	404
Tanda TPS (NTPC) (4*110)		440	204	275	5.60	233
Roza TPS (IPP) (4*300)		1200	572	567	13.70	571
Anpara-C (IPP) (2*600)		1200	648	639	16.80	700
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	224	281	5.80	242
Anpara-D(1*500)		500	0	0	0.00	0
Lalitpur TPS(1*660)		660	0	0	0.00	0
Thermal (Total)		9289	4563	4483	109	4542
Vishnuparyag HPS (IPP)(including Alakanada)		730	235	723	11.30	471
Other Hydro		527	71	59	1.40	58
Cogeneration		981	120	120	2.90	121
Total UP		11527	4989	5385	124.60	4721
Uttarakhand	Total Hydro	1398	511	890	18.33	764
	Total Uttarakhand	1398	511	890	18.33	764
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.02	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	48	75	1.16	48
	Pragati Gas Turbine (2x104+ 1x122)	330	147	263	4.39	183
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	480	269	6.46	269
	Badarpur TPS (NTPC) (3*95+2*210)	705	319	386	8.12	339
	Thermal (Total)	2917	994	993	20.11	838
	Total Delhi	2917	994	993	20.11	838
HP	Baspa HPS (IPP) (2*100)	300	330	300	7.23	301
	Malana HPS (IPP) (2*43)	86	89	94	2.26	94
	Other Hydro	878	464	469	11.41	475
	Total HP	1264	883	863	20.89	871
J & K	Baglihar HPS (IPP) (3*150)	450	450	450	10.80	450
	Other Hydro/IPP	560	202	202	4.82	201
	Gas/Diesel/Others	190	0	0	0.00	0
	Total J & K	1200	652	652	15.62	651
Total State Control Area Generation		41881	17283	17562	404.40	16379
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6055	2083	100.89	4204
Total Regional Availability(Gross)		67253	42628	35991	908.77	37395

IV. Total Hydro Generation:

Regional Entities Hydro	12369	10218	8521	213.42	8893
State Control Area Hydro	5811	2954	3213	86.44	3131
Total Regional Hydro	18180	13172	11734	299.86	12023

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	-50	-500	100	500	0.90	4.88	-3.99	
Gwalior-Agra (D/C)	1867	509	2032	0	28.69	0.00	28.69		
Zerda-Kankroli	167	-181	167	236	0.00	1.76	-1.76		
Zerda-Bhinmal	200	-132	201	198	0.00	0.93	-0.93		
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00		
Badod-Kota/Morak	29	-121	55	70	0.00	0.30	-0.30		
Mundra-Mohinderqarh(HVDC)	1801	1498	2305	0	40.71	0.00	40.71		
Vindhychal - Rihand	441	193	499	0	5.96	0.00	5.96		
Sub Total WR	4455	1266			76.26	7.88	68.38		
Pusauli Bypass	300	300	300	0	7.14	0.00	7.14		
MZP- GKP (D/C)	326	168	556	0	8.18	0.00	8.18		
Patna-Balia(D/C)	225	205	315	0	5.20	0.00	5.20		
B'Sharif-Balia (D/C)	142	54	194	33	2.40	0.00	2.40		
Pusauli-Balia	189	-2	193	91	1.08	0.00	1.08		
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00		
Pusauli-Sahupuri	144	139	164	0	3.56	0.00	3.56		
K'nasa-Sahupuri	0	0	1	0	0.00	0.00	0.00		
Son Ngr-Rihand	-33	-42	0	44	0.00	0.87	-0.87		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	83	-116	143	116	1.14	0.00	1.14		
Barh -GKP (D/C)	224	111	276	0	4.67	0.00	4.67		
Sub Total ER	1600	817			33.38	0.87	32.51		
Total IR Exch	6055	2083			109.63	8.74	100.89		

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
32.92	3.74	36.66	16.12	1.90	-0.22	0.00	0.69	-0.69
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
53.24	65.20	118.44	32.51	68.38	100.89	-20.73	3.17	-17.55

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	-24	-18	0	24	0	0	0	

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	0.41	1.15	4.82	25.01	39.95	22.12	25.50	7.64	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					
50.32	6.02	49.65	19.43	50.06	0.13	0.10	50.33	49.86

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	00:49	397	19:38	0.0	0.0	0.0	0.0
Gorakhpur	400	415	05:09	400	19:38	0.0	0.0	28.0	0.0
Bareilly	400	418	08:00	396	20:00	0.0	0.0	32.6	0.0
Kanpur	400	421	04:38	396	19:41	0.0	0.0	0.2	0.0
Dadri	400	421	04:10	401	19:40	0.0	0.0	2.3	0.0
Ballabhgarh	400	427	04:31	403	19:43	0.0	0.0	31.8	0.0
Bawana	400	422	03:33	402	19:43	0.0	0.0	12.0	0.0
Bassi	400	427	02:59	402	19:44	0.0	0.0	29.2	0.0
Hissar	400	408	12:59	279	11:34	48.2	49.6	0.0	0.0
Moga	400	419	04:05	400	12:12	0.0	0.0	0.0	0.0
Abdullapur	400	418	03:25	396	19:38	0.0	0.0	0.0	0.0
Nalagarh	400	422	04:06	406	19:58	0.0	0.0	9.5	0.0
Kishenpur	400	421	04:31	402	20:39	0.0	0.0	0.6	0.0
Wagoora	400	416	01:12	386	20:38	0.0	8.6	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	782	04:41	722	19:39	3.1	21.4	0.0	0.0
Balia	765	790	05:06	732	19:39	0.0	10.3	0.0	0.0
Moga	765	802	04:03	765	11:29	0.0	0.0	9.6	0.0
Agra	765	790	04:38	734	19:45	0.0	4.2	0.0	0.0
Bhiwani	765	806	04:03	767	19:43	0.0	0.0	17.7	0.0
Unnao	765	780	04:32	721	19:39	0.5	37.6	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	488.27	680.71	486.83	636.01	1219.95	970.13
Pong	426.72	384.05	406.02	370.28	401.33	252.05	506.70	199.01
Tehri	829.79	740.04	744.40	21.00	748.15	40.00	400.94	209.00
Koteshwar	612.50	598.50	611.15	4.95	610.66	4.95	209.00	162.00
Chamera-I	760.00	748.75	754.34	0.00	0.00	0.00	488.06	350.28
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	523.08	9.54	521.06	10.34	347.83	321.25

* 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	1022	283	0	983	106	0	26.04	5.66	31.70
Delhi	348	-254	-2	277	-170	-2	7.77	-1.57	6.21
Haryana	1021	233	0	1009	205	0	24.79	5.00	29.79
HP	-1042	-313	0	-890	-314	0	-22.57	-6.49	-29.07
J&K	-439	177	0	-434	177	0	-10.66	-1.29	-11.95
CHD	0	0	0	0	0	0	0.24	0.40	0.63
Rajasthan	-358	452	2	-376	547	2	-8.19	13.21	5.02
UP	721	0	0	649	0	0	14.29	0.00	14.29
Uttarakhand	40	0	0	34	0	0	1.07	0.00	1.07
Total	1313	579	0	1253	551	0	32.77	14.91	47.68

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1575	970	323	106	0	0
Delhi	456	205	274	-319	0	-3
Haryana	1099	1005	249	12	0	0
HP	-890	-1042	-209	-431	0	0
J&K	-398	-498	204	-323	0	0
CHD	30	0	54	0	0	0
Rajasthan	-242	-382	624	341	2	0
UP	923	457	0	0	0	0
Uttarakhand	74	33	0	0	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 25.06.2015 :**
Cloudy Weather**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 :**