

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 14.06.2015
Date of Reporting : 15.06.2015

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
38632	2005	40637	49.98	37579	1206	38785	50.10	890.8	33.50

* 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	41.96	14.92		56.88	107.94	107.58	-0.36	164.46	0.00
Haryana	15.64	0.65		16.29	92.02	85.20	-6.82	101.49	0.00
Rajasthan	93.54	0.61	25.94	120.09	54.72	54.18	-0.54	174.27	0.00
Delhi	10.94			10.94	70.86	69.93	-0.93	80.87	0.05
UP	124.60	15.57		140.17	130.39	129.66	-0.74	269.83	25.20
Uttarakhand		18.37		18.37	18.35	17.77	-0.58	36.14	0.07
HP		20.45		20.45	3.16	3.87	0.71	24.32	0.00
J & K		15.53	0.00	15.53	21.14	19.24	-1.91	34.77	8.18
Chandigarh				0.00	5.12	4.69	0.27	4.69	0.00
Total	286.67	86.12	25.94	398.72	503.70	492.12	-10.89	890.84	33.50

* 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	7532	0	-153	1216	5906	0	67	1278	8119
Haryana	4970	0	-234	876	4048	0	-416	951	5593
Rajasthan	6522	0	-220	-232	7557	0	92	-52	7643
Delhi	3428	0	10	334	4125	0	379	588	4447
UP	11651	1610	65	707	12114	970	83	884	12205
Uttarakhand	1851	0	85	169	1363	0	-67	105	1877
HP	884	0	-102	-1189	930	0	-9	-1258	1150
J&K	1581	395	190	-148	1338	236	-124	-572	1776
Chandigarh	213	0	-21	0	199	0	-6	0	247
Total	38632	2005	-380	1733	37579	1206	-2	1924	41269

* 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 [OG:(+ve), UG: (-ve)]	
									Net MU	Net MU
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1874	1979	1766	41.08	1712	37.96	3.12	
	Rihand I STPS (2*500)	1000	450	459	348	8.61	359	7.92	0.68	
	Rihand II STPS (2*500)	1000	962	827	728	17.60	734	16.54	1.07	
	Rihand III STPS (2*500)	1000	962	753	684	17.33	722	16.37	0.96	
	Dadri I STPS (4*210)	840	815	421	539	11.15	465	10.78	0.37	
	Dadri II STPS (2*490)	980	980	684	636	16.49	687	16.48	0.01	
	Unchahar I TPS (2*210)	420	403	317	267	6.67	278	6.76	-0.09	
	Unchahar II TPS (2*210)	420	401	286	248	6.09	254	6.47	-0.37	
	Unchahar III TPS (1*220)	210	200	143	136	3.14	131	3.23	-0.08	
	ISTPP (Jhajihar) (3*500)	1500	1000	628	636	14.08	587	14.40	-0.32	
	Dadri GPS (4*130.19+2*154.51)	830	801	385	394	7.99	333	7.97	0.02	
	Anta GPS (3*88.71+1*153.2)	419	382	235	233	5.14	214	5.28	-0.14	
	Auraiya GPS (4*111.19+2*109.30)	663	627	245	309	6.12	255	6.08	0.04	
	Dadri Solar	5	1	0	0	0.01	0	0.02	-0.01	
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.03	
	Singrauli Solar	15	3	0	0	0.05	2	0.07	-0.02	
KHEP	400	0	0	0	0.00	0	0.00	0.00		
Sub Total (A)	11712	9864	7362	6924	162	6733	156	5		
B. NPC	NAPS (2*220)	440	383	425	433	9.35	389	9.19	0.15	
	RAPS- B (2*220)	440	367	413	421	8.92	372	8.81	0.11	
	RAPS- C (2*220)	440	405	439	436	9.42	392	9.72	-0.30	
	Sub Total (B)	1320	1155	1277	1290	27.68	1154	27.72	-0.04	
C. NHPC	Chamera I HPS (3*180)	540	537	550	542	12.93	539	12.89	0.04	
	Chamera II HPS (3*100)	300	300	311	312	7.14	297	7.20	-0.06	
	Chamera III HPS (3*77)	231	231	237	233	5.59	233	5.55	0.04	
	Bairasuil HPS(3*60)	180	179	182	61	2.54	106	2.55	-0.01	
	Salal-HPS (6*115)	690	250	0	672	6.43	268	6.01	0.42	
	Tanakpur-HPS (3*40)	94	75	83	68	1.81	76	1.78	0.04	
	Uri-I HPS (4*120)	480	475	478	476	11.59	483	11.40	0.19	
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00	
	Dhauliganga-HPS (4*70)	280	280	283	209	5.33	222	5.18	0.15	
	Dulhasti-HPS (3*130)	390	386	396	393	9.31	388	9.26	0.05	
	Sewa-II HPS (3*40)	120	119	130	110	2.20	92	2.22	-0.01	
	Parbati 3 (4*130)	520	390	400	0	2.77	115	2.73	0.04	
	Sub Total (C)	4065	3223	3050	3076	68	2818	67	1	
	D. SJVNL	NJPC (6*250)	1500	1605	1628	1619	38.51	1605	38.52	-0.01
Rampur HEP (6*68.67)		412	442	448	447	10.70	446	10.61	0.10	
Sub Total (D)		1912	2047	2076	2066	49.21	2051	49.13	0.09	
E. THDC	Tehri HPS (4*250)	1000	500	504	264	8.45	352	8.36	0.09	
	Koteshwar HPS (4*100)	400	200	298	202	4.53	189	4.68	-0.15	
	Sub Total (E)	1400	700	802	466	12.98	541	13.04	-0.06	
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	1102	1315	790	26.44	1102	26.45	-0.01	
	Dehar HPS (6*165)	990	604	825	560	14.72	613	14.49	0.23	
	Pong HPS (6*66)	396	72	258	0	1.75	73	1.72	0.03	
	Sub Total (F)	2900	1777	2398	1350	42.91	1788	42.66	0.26	
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	165	131	3.35	139	3.88	-0.54	
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	1200	28.51	1188	28.54	-0.02	
	Malana Stg-II HPS (2*50)	100	0	60	50	1.35	56	1.27	0.08	
	Shree Cement TPS (2*150)	300	0	297	295	6.38	266	6.62	-0.24	
	Budhil HPS(IPP) (2*35)	70	0	0	0	0.00	0	1.41	-1.41	
	Sub Total (G)	1662	0	1722	1676	39.59	1650	41.72	-2.13	
H. Total Regional Entities (A-G)	24972	18766	18687	16847	401.60	16733	397.41	4.20		

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	390	420	8.40	350
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	90	110	1.99	83
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	205	204	4.17	174
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	888	675	20.10	837
	Talwandi Saboo (1*660)	660	340	327	7.31	304
	Thermal (Total)	4680	1913	1736	41.96	1748
	Total Hydro	1148	693	577	14.92	622
	Total Punjab	5828	2606	2313	56.88	2370
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00	0
	DCRTPP (Yamuna nagar) (2*300)	600	244	506	6.38	266
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	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	374	373	9.26	386
	Thermal (Total)	4944	618	879	15.64	652
	Total Hydro	62	21	29	0.65	27
	Total Haryana	5006	639	908	16.29	679
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	931	932	22.39
suratgarh TPS (6*250)		1500	743	917	19.80	825
Chabra TPS (4*250)		1000	380	379	8.74	364
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	54	56	1.34	56
RAPS A (NPC) (1*100+1*200)		300	137	138	3.40	142
Barsingar (NLC) (2*125)		250	0	0	0.00	0
Giral LTPS (2*125)		250	93	89	1.83	76
Rajwest LTPS (IPP) (8*135)		1080	711	832	14.80	616
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	450	482	10.79	449
Kawai(Adani) (2*660)		1320	431	435	10.46	436
Thermal (Total)		8276	3930	4260	94	3897
Total Hydro		550	31	0	0.61	25
Wind power		2798	910	1003	22.47	936
Biomass		99	25	25	0.61	25
Solar		730	2	0	2.87	120
Renewable/Others (Total)		3627	937	1028	25.94	1081
Total Rajasthan		12453	4898	5288	120.09	5004
UP		Anpara TPS (3*210+2*500)	1630	1138	1143	27.50
	Obra TPS (2*50+2*94+5*200)	1194	323	299	7.40	308
	Paricha TPS (2*110+2*220+2*250)	1140	739	756	17.40	725
	Panki TPS (2*105)	210	131	68	2.90	121
	Harduaganj TPS (1*60+1*105+2*250)	665	456	414	9.20	383
	Tanda TPS (NTPC) (4*110)	440	295	359	7.90	329
	Roza TPS (IPP) (4*300)	1200	756	1062	20.80	867
	Anpara-C (IPP) (2*600)	1200	1071	1049	22.20	925
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	229	282	6.40	267
	Anpara-D(1*500)	500	0	0	0.00	0
	Lalitpur TPS(1*660)	660	0	0	0.00	0
	Thermal (Total)	9289	5138	5432	122	5071
	Vishnuparyag HPS (IPP)(including Alakanada)	400	598	596	14.37	599
	Other Hydro	527	34	69	1.20	50
	Cogeneration	981	120	120	2.90	121
	Total UP	11197	5890	6217	140.17	5242
	Uttarakhand	Total Hydro	1398	774	883	18.37
Total Uttarakhand		1398	774	883	18.37	765
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.24	10
	Delhi Gas Turbine (6x30 + 3x34)	282	84	111	1.84	77
	Pragati Gas Turbine (2x104+ 1x122)	330	158	256	3.63	151
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	0	281	0.19	8
	Badarpur TPS (NTPC) (3*95+2*210)	705	330	388	5.04	210
	Thermal (Total)	2917	572	1036	10.94	456
	Total Delhi	2917	572	1036	10.94	456
HP	Baspa HPS (IPP) (2*100)	300	302	332	7.60	317
	Malana HPS (IPP) (2*43)	86	61	58	1.24	52
	Other Hydro	728	486	506	11.61	484
	Total HP	1114	849	896	20.45	852
J & K	Baglihar HPS (IPP) (3*150)	450	450	450	10.80	450
	Other Hydro/IPP	436	204	203	4.73	197
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	654	653	15.53	647
Total State Control Area Generation		41007	16882	18194	398.72	16015
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5722	4030	124.02	5167
Total Regional Availability(Gross)		65979	41291	39071	924.34	37915

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9751	8338	205.95	8581
State Control Area Hydro	5684	3056	3107	86.12	2989
Total Regional Hydro	17654	12807	11445	292.07	11571

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	200	250	300	0.56	5.28	-4.71	
Gwalior-Agra (D/C)	2424	1189	2424	0	40.98	0.00	40.98		
Zerda-Kankroli	-124	-269	0	309	0.00	5.21	-5.21		
Zerda-Bhinmal	-94	-213	0	290	0.00	4.13	-4.13		
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00		
Badod-Kota/Morak	-81	-111	40	156	0.00	0.13	-0.13		
Mundra-Mohinderqarh(HVDC)	2502	2497	2505	0	56.30	0.00	56.30		
Vindhychal - Rihand	448	371	486	0	8.36	0.00	8.36		
Sub Total WR	5175	3664			106.20	14.74	91.46		
Pusauli Bypass	400	400	400	0	9.25	0.00	9.25		
MZP- GKP (D/C)	-85	-119	357	19	4.15	0.00	4.15		
Patna-Balia(D/C)	300	281	380	0	7.27	0.00	7.27		
B'Sharif-Balia (D/C)	12	44	141	58	1.52	0.00	1.52		
Pusauli-Balia	313	81	341	15	2.41	0.00	2.41		
Gaya-Fatehpur (765 Kv)	-1	0	0	4	0.00	0.04	-0.04		
Pusauli-Sahupuri	162	158	176	0	3.46	0.00	3.46		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	-26	-30	0	42	0.00	0.71	-0.71		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 Kv)	-186	-215	0	323	0.00	4.00	-4.00		
Barh -GKP (D/C)	-342	-234	342	0	9.25	0.00	9.25		
Sub Total ER	547	366			37.30	4.75	32.55		
Total IR Exch	5722	4030			143.51	19.49	124.02		

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
28.55	3.41	31.96	17.16	0.68	-1.33	-0.11	0.70	-0.70

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
48.49	74.71	123.20	32.55	91.46	124.02	-15.94	16.75	0.81

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 - Mahendamaagar	-24	-29	0	35	0	1	-0.54	

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	0.17	5.12	33.56	57.64	22.88	12.91	1.56	NA

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.24	7.30	49.79	19.53	50.03	0.06	0.08	50.29	49.91

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	403	21:04	396	20:05	0.0	0.0	0.0	0.0
Gorakhpur	400	415	07:31	400	19:32	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	418	08:04	399	22:12	0.0	0.0	0.0	0.0
Dadri	400	419	04:07	399	22:44	0.0	0.0	0.0	0.0
Ballabgarh	400	426	04:06	402	22:45	0.0	0.0	28.1	0.0
Bawana	400	422	04:06	400	22:45	0.0	0.0	1.9	0.0
Bassi	400	423	04:03	403	23:04	0.0	0.0	5.8	0.0
Hissar	400	410	02:27	396	00:00	0.0	0.0	0.0	0.0
Moga	400	417	04:05	396	22:15	0.0	0.0	0.0	0.0
Abdullapur	400	421	04:06	396	22:44	0.0	0.0	0.3	0.0
Nalagarh	400	415	04:06	397	22:30	0.0	0.0	0.0	0.0
Kishenpur	400	418	04:04	397	21:14	0.0	0.0	0.0	0.0
Wagoora	400	411	03:16	380	21:31	0.0	10.2	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	794	02:28	746	20:07	0.0	0.0	0.0	0.0
Balia	765	773	17:03	742	19:31	0.0	0.0	0.0	0.0
Moga	765	800	04:06	758	22:32	0.0	0.0	0.0	0.0
Agra	765	790	04:05	749	22:13	0.0	0.0	0.0	0.0
Bhiwani	765	802	04:04	762	22:32	0.0	0.0	4.5	0.0
Unnao	765	751	00:00	751	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	487.21	644.48	482.08	511.55	947.48	929.81
Pong	426.72	384.05	405.87	370.28	401.72	259.17	107.66	119.72
Tehri	829.79	740.04	743.10	14.66	742.20	10.33	237.79	297.00
Koteshwar	612.50	598.50	609.15	4.21	609.83	4.21	297.00	300.00
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	284.94	350.03
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	521.96	6.38	520.71	8.48	312.41	247.07

* 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	1065	212	1	958	256	1	25.95	6.54	32.48
Delhi	670	-62	-20	381	-26	-20	11.46	-0.59	10.87
Haryana	754	197	0	733	144	0	18.06	0.27	18.33
HP	-1097	-161	0	-946	-244	0	-23.91	-4.66	-28.57
J&K	-549	-22	0	-281	133	0	-8.51	1.41	-7.10
CHD	0	0	0	0	0	0	0.24	-0.01	0.22
Rajasthan	-370	316	2	-417	184	2	-8.80	8.42	-0.38
UP	884	0	0	707	0	0	17.52	0.00	17.52
Uttarakhand	37	39	29	23	118	28	0.86	2.95	3.81
Total	1392	519	12	1158	564	11	32.85	14.33	47.18

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1503	942	349	180	1	1
Delhi	735	325	301	-291	-10	-20
Haryana	787	729	198	-350	0	0
HP	-946	-1097	-161	-244	0	0
J&K	-246	-608	323	-101	0	0
CHD	30	0	25	-25	0	0
Rajasthan	-246	-425	600	-490	2	2
UP	939	540	0	0	0	0
Uttarakhand	58	20	196	0	29	8

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:**

XIII. Weather Conditions For 14.06.2015 :
Thunderstorm and rain in most part of NR region.

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 :**