

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पारसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 09.06.2015

Date of Reporting : 10.06.2015

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
42597	1960	44557	50.07	43422	2390	45812	50.06	1013.3	54.54

* 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	57.83	13.50		71.33	86.02	84.33	-1.68	155.67	0.00
Haryana	32.78	0.63		33.40	116.67	115.72	-0.95	149.12	0.00
Rajasthan	111.18	0.12	14.60	125.90	75.92	75.74	-0.18	201.64	0.00
Delhi	18.54			18.54	90.61	88.35	-2.26	106.88	0.05
UP	139.04	17.31		156.36	136.69	133.94	-2.75	290.30	45.79
Uttarakhand		22.19		22.19	18.77	18.75	-0.02	40.94	0.23
HP		20.36		20.36	5.79	6.45	0.66	26.80	0.00
J & K		15.21	0.00	15.21	21.30	20.64	-0.66	35.85	8.47
Chandigarh				0.00	6.01	6.08	0.27	6.08	0.00
Total	359.37	89.31	14.60	463.28	557.78	550.00	-7.58	1013.28	54.54

* 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	6809	0	-94	330	6475	0	123	283	7383
Haryana	6648	0	-105	1065	6847	0	102	1077	7415
Rajasthan	7919	0	-97	464	8484	0	149	675	8917
Delhi	4414	8	-134	513	4866	0	64	708	5362
UP	12017	1500	-558	1035	12597	2160	310	999	12814
Uttarakhand	1860	40	135	211	1671	0	12	209	1917
HP	1034	0	-32	-1144	958	0	30	-1219	1253
J&K	1649	412	17	-348	1303	230	-56	-566	1824
Chandigarh	247	0	-11	0	222	0	16	0	313
Total	42597	1960	-880	2126	43422	2390	749	2166	45081

* 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 1.05

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	1525	1987	1520	36.71	1530	36.52	0.18	
	Rihand I STPS (2*500)	1000	367	443	489	8.73	364	8.52	0.21	
	Rihand II STPS (2*500)	1000	943	976	1028	23.45	977	21.57	1.88	
	Rihand III STPS (2*500)	1000	943	892	1015	23.04	960	21.64	1.40	
	Dadri I STPS (4*210)	840	815	622	652	15.38	641	14.42	0.95	
	Dadri II STPS (2*490)	980	980	815	812	19.39	808	19.58	-0.19	
	Unchahar I TPS (2*210)	420	402	342	400	8.55	356	8.58	-0.03	
	Unchahar II TPS (2*210)	420	401	360	423	8.35	348	8.15	0.21	
	Unchahar III TPS (1*220)	210	200	131	192	3.88	162	3.99	-0.11	
	ISTPP (Jhajihar) (3*500)	1500	1000	640	990	16.72	697	17.02	-0.30	
	Dadri GPS (4*130.19+2*154.51)	830	797	368	379	8.82	368	8.81	0.01	
	Anta GPS (3*88.71+1*153.2)	419	381	217	249	5.83	243	5.69	0.14	
	Auraiya GPS (4*111.19+2*109.30)	663	635	269	309	6.94	289	6.91	0.03	
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01	
	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	9395	8062	8458	186	7746	182	4		
B. NPC	NAPS (2*220)	440	386	423	419	9.11	379	9.26	-0.16	
	RAPS- B (2*220)	440	371	411	410	8.79	366	8.90	-0.12	
	RAPS- C (2*220)	440	410	436	438	9.37	390	9.84	-0.48	
	Sub Total (B)	1320	1167	1270	1267	27.26	1136	28.01	-0.75	
C. NHPC	Chamera I HPS (3*180)	540	535	549	365	12.38	516	12.27	0.11	
	Chamera II HPS (3*100)	300	267	300	215	7.20	300	6.54	0.66	
	Chamera III HPS (3*77)	231	231	237	237	5.65	235	5.55	0.10	
	Bairasuil HPS(3*60)	180	179	182	62	2.83	118	2.70	0.13	
	Salal-HPS (6*115)	690	661	672	672	16.22	676	15.87	0.35	
	Tanakpur-HPS (3*40)	94	50	54	63	1.31	54	1.19	0.11	
	Uri-I HPS (4*120)	480	475	479	477	11.64	485	11.40	0.24	
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00	
	Dhauliganga-HPS (4*70)	280	280	282	216	5.13	214	4.85	0.28	
	Dulhasti-HPS (3*130)	390	386	396	392	9.32	388	9.26	0.06	
	Sewa-II HPS (3*40)	120	119	122	28	2.23	93	2.23	0.00	
	Parbati 3 (4*130)	520	390	390	0	2.48	103	2.48	0.00	
	Sub Total (C)	4065	3574	3664	2727	76	3182	74	2	
D. SJVNL	NJPC (6*250)	1500	1605	1623	1573	38.51	1605	38.52	-0.01	
	Rampur HEP (6*68.67)	412	442	447	448	10.68	445	10.61	0.07	
	Sub Total (D)	1912	2047	2070	2021	49.19	2049	49.13	0.06	
E. THDC	Tehri HPS (4*250)	1000	547	552	276	10.74	447	10.80	-0.06	
	Koteshwar HPS (4*100)	400	191	286	100	5.12	213	5.10	0.02	
	Sub Total (E)	1400	737	838	376	15.86	661	15.90	-0.04	
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	874	1294	606	20.91	871	20.98	-0.07	
	Dehar HPS (6*165)	990	605	825	600	14.89	620	14.53	0.37	
	Pong HPS (6*66)	396	15	132	0	0.37	15	0.37	0.00	
	Sub Total (F)	2900	1495	2251	1206	36.17	1507	35.87	0.30	
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	144	208	3.80	158	3.80	0.00	
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	1200	28.61	1192	28.51	0.10	
	Malana Stg-II HPS (2*50)	100	0	60	70	1.64	68	1.59	0.05	
	Shree Cement TPS (2*150)	300	0	295	298	7.03	293	6.98	0.05	
	Budhil HPS(IPP) (2*35)	70	0	69	36	1.38	57	1.44	-0.07	
	Sub Total (G)	1662	0	1769	1812	42.45	1769	42.32	0.13	
H. Total Regional Entities (A-G)	24972	18415	19924	17868	433.21	18050	427.14	6.07		

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	565	400	9.60	400	
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	96	92	2.19	91	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	554	421	9.81	409	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura (2*700)	1400	766	1118	26.46	1102	
	Talwandi Saboo (1*660)	660	334	341	9.78	407	
	Thermal (Total)	4680	2315	2372	57.83	2410	
	Total Hydro	1148	587	583	13.50	563	
Total Punjab	5828	2902	2955	71.33	2972		
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00	0	
	DCRTPP (Yamuna nagar) (2*300)	600	523	288	11.26	469	
	Faridabad GPS (NTPC)	432	181	188	4.53	189	
	RGTPP (Khedar) (IPP) (2*600)	1200	0	0	0.00	0	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP) (2*660)	1320	854	975	16.98	708	
	Thermal (Total)	4944	1558	1451	32.78	1366	
	Total Hydro	62	29	26	0.63	26	
Total Haryana	5006	1587	1477	33.40	1392		
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	907	817	20.16	840	
	suratgarh TPS (6*250)	1500	839	850	19.93	830	
	Chabra TPS (4*250)	1000	401	400	9.62	401	
	Dholpur GPS (3*110)	330	103	101	2.53	105	
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	56	58	1.35	56	
	RAPS A (NPC) (1*100+1*200)	300	136	139	3.36	140	
	Barsingar (NLC) (2*125)	250	0	41	0.00	0	
	Giral LTPS (2*125)	250	53	58	1.49	62	
	Rajwest LTPS (IPP) (8*135)	1080	830	703	18.67	778	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(1*600)	600	881	881	20.45	852	
	Kawai(Adani) (2*660)	1320	556	565	13.63	568	
	Thermal (Total)	8276	4762	4613	111	4632	
	Total Hydro	550	0	0	0.12	5	
	Wind power	2798	259	805	14.13	589	
	Biomass	99	20	20	0.48	20	
	Solar	730	1	0	0.00	0	
	Renewable/Others (Total)	3627	280	825	14.60	608	
	Total Rajasthan	12453	5042	5438	125.90	5246	
	UP	Anpara TPS (3*210+2*500)	1630	1303	1324	31.03	1293
		Obra TPS (2*50+2*94+5*200)	1194	336	329	8.00	334
		Paricha TPS (2*110+2*220+2*250)	1140	769	678	16.65	694
		Panki TPS (2*105)	210	72	41	1.51	63
Harduaqanj TPS (1*60+1*105+2*250)		665	452	441	10.60	441	
Tanda TPS (NTPC) (4*110)		440	375	368	9.02	376	
Roza TPS (IPP) (4*300)		1200	1062	1059	24.44	1018	
Anpara-C (IPP) (2*600)		1200	1089	1086	25.46	1061	
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	404	403	9.46	394	
Anpara-D		500	0	0	0.00	0	
Thermal (Total)		8629	5862	5729	136	5673	
Vishnuparyag HPS (IPP)(including Alaknanda)		400	596	581	13.78	574	
Other Hydro		527	117	160	3.53	147	
Cogeneration		981	120	120	2.88	120	
Total UP		10537	6695	6590	156.36	5940	
Uttarakhand	Total Hydro	1398	894	860	22.19	925	
	Total Uttarakhand	1398	894	860	22.19	925	
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.18	7	
	Delhi Gas Turbine (6x30 + 3x34)	282	68	35	1.63	68	
	Pragati Gas Turbine (2x104+ 1x122)	330	263	262	6.40	267	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (6*250)	1370	271	275	6.60	275	
	Badarpur TPS (NTPC) (3*95+2*210)	705	234	234	3.73	155	
	Thermal (Total)	2917	836	806	18.54	772	
	Total Delhi	2917	836	806	18.54	772	
HP	Baspa HPS (IPP) (2*100)	300	306	327	7.69	320	
	Malana HPS (IPP) (2*43)	86	61	56	1.22	51	
	Other Hydro	728	479	470	11.45	477	
	Total HP	1114	846	853	20.36	848	
J & K	Baglihar HPS (IPP) (3*150)	450	450	450	10.80	450	
	Other Hydro/IPP	436	198	192	4.41	184	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	648	642	15.21	634	
Total State Control Area Generation		40347	19450	19621	463.28	18729	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6683	6739	154.31	6429	
Total Regional Availability(Gross)		65319	46057	44228	1050.80	43209	

IV. Total Hydro Generation:

Regional Entities Hydro	11969	10227	7809	211.64	8818
State Control Area Hydro	5684	3121	3124	89.31	3147
Total Regional Hydro	17654	13348	10933	300.95	11965

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	300	400	500	0	11.10	0.00	11.10		
Gwalior-Agra (D/C)	2008	1989	2162	0	39.05	0.00	39.05		
Zerda-Kankroli	11	-11	39	153	0.00	1.91	-1.91		
Zerda-Bhinmal	68	33	116	135	0.00	0.75	-0.75		
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00		
Badod-Kota/Morak	-11	11	34	23	0.00	0.16	-0.16		
Mundra-Mohinderqarh(HVDC)	2503	2496	2506	0	60.45	0.00	60.45		
Vindhychal - Rihand	318	409	485	0	9.55	0.00	9.55		
Sub Total WR	5197	5327			120.15	2.81	117.34		
Pusauli Bypass	300	300	300	0	7.09	0.00	7.09		
MZP- GKP (D/C)	57	134	269	0	3.88	0.00	3.88		
Patna-Balia(D/C)	321	308	519	0	8.24	0.00	8.24		
B'Sharif-Balia (D/C)	-81	-56	9	108	0.00	0.89	-0.89		
Pusauli-Balia	-2	99	244	0	1.41	0.00	1.41		
Gaya-Fatehpur (765 Kv)	440	230	495	0	7.60	0.00	7.60		
Pusauli-Sahupuri	160	167	184	0	3.67	0.00	3.67		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	0	0	0	0	0.00	0.00	0.00		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	-63	-61	84	757	0.00	1.54	-1.54		
Barh -GKP (D/C)	354	291	407	0	7.50	0.00	7.50		
Sub Total ER	1486	1412			39.40	2.43	36.96		
Total IR Exch	6683	6739			159.55	5.25	154.31		

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
38.44	1.40	39.84	22.47	2.74	-2.00	0.00	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
60.74	88.44	149.18	36.96	117.34	154.31	-23.78	28.90	5.13

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 - Mahendarnagar	-23	-29	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	1.17	14.16	36.00	71.40	10.22	3.82	0.45	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					
50.26	18.04	49.71	14.24	49.97	0.06	0.07	50.24	49.87

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	20:52	397	17:20	0.0	0.0	0.0	0.0
Gorakhpur	400	415	05:22	402	23:09	0.0	0.0	0.2	0.0
Bareilly	400	418	08:00	396	20:00	0.0	0.0	0.0	0.0
Kanpur	400	414	16:41	391	23:13	0.0	0.0	0.0	0.0
Dadri	400	407	18:06	392	00:35	0.0	0.0	0.0	0.0
Ballabgarh	400	415	05:02	394	23:09	0.0	0.0	0.0	0.0
Bawana	400	413	18:08	394	23:07	0.0	0.0	0.0	0.0
Bassi	400	422	17:03	396	23:09	0.0	0.0	1.0	0.0
Hissar	400	404	16:44	381	23:09	0.0	14.4	0.0	0.0
Moga	400	413	16:39	396	23:09	0.0	0.0	0.0	0.0
Abdullapur	400	410	03:36	396	23:08	0.0	0.0	0.0	0.0
Nalagarh	400	416	05:02	400	10:51	0.0	0.0	0.0	0.0
Kishenpur	400	415	03:28	398	17:44	0.0	0.0	0.0	0.0
Wagoora	400	410	03:25	388	21:15	0.0	0.7	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	783	16:39	741	00:24	0.0	0.3	0.0	0.0
Balia	765	767	08:08	745	11:20	0.0	0.0	0.0	0.0
Moga	765	786	05:03	755	23:12	0.0	0.0	0.0	0.0
Agra	765	796	16:55	745	23:09	0.0	0.0	0.0	0.0
Bhiwani	765	784	05:02	751	23:09	0.0	0.0	0.0	0.0
Unnao	765	757	14:46	757	14:46	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	486.97	644.48	481.16	488.47	820.59	746.37
Pong	426.72	384.05	405.74	361.16	402.37	273.51	61.70	25.51
Tehri	829.79	740.04	746.05	29.00	742.35	9.37	175.15	368.00
Koteshwar	612.50	598.50	608.45	3.76	610.24	4.44	368.00	340.00
Chamera-I	760.00	748.75	754.15	0.00	0.00	0.00	315.03	335.26
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	521.56	6.67	520.39	7.33	225.88	252.37

* 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	113	170	0	302	28	0	4.41	2.04	6.45
Delhi	744	-16	-20	532	-19	0	14.13	2.12	16.25
Haryana	871	206	0	871	194	0	20.91	0.98	21.90
HP	-840	-379	0	-688	-456	0	-17.73	-8.98	-26.71
J&K	-547	-20	0	-380	32	0	-10.37	-0.46	-10.83
CHD	0	0	0	0	0	0	0.24	0.09	0.33
Rajasthan	-242	915	2	-242	706	0	-5.83	24.52	18.69
UP	999	0	0	1035	0	0	23.05	0.00	23.05
Uttarakhand	74	118	17	74	138	0	1.77	3.25	5.02
Total	1172	994	-1	1504	622	0	30.58	23.56	54.14

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	310	109	183	28	0	0
Delhi	822	399	552	-163	0	-20
Haryana	871	871	211	-440	0	0
HP	-688	-840	-278	-575	0	0
J&K	-344	-606	180	-121	0	0
CHD	30	0	40	0	0	0
Rajasthan	-242	-243	1624	550	2	0
UP	1125	869	0	0	0	0
Uttarakhand	74	74	157	59	17	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 09.06.2015 :**

Normal

XIV. Synchronisation of new generating units :

LPGCL (lalitpur,UP,Bajaj group) unit -1(660MW) first time synchronized at 16.52hr and tripped at 19.04hr on 09.06.15.

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 :**