

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 16.06.2015
Date of Reporting : 17.06.2015

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
43303	2554	45857	49.95	42739	1822	44562	50.12	1015.9	48.83

* 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	75.62	16.12		91.74	111.68	110.77	-0.91	202.50	0.00
Haryana	26.65	0.65		27.30	118.66	116.02	-2.64	143.32	0.01
Rajasthan	102.47	0.19	8.59	111.25	62.53	63.40	0.87	174.65	0.00
Delhi	15.10			15.10	84.16	85.75	1.59	100.85	0.16
UP	138.45	15.95		154.40	133.38	131.78	-1.60	286.18	47.76
Uttarakhand		18.98		18.98	19.55	21.46	1.91	40.45	0.74
HP		19.52		19.52	4.94	6.63	1.69	26.15	0.16
J & K		14.32	0.00	14.32	20.77	21.61	0.84	35.93	0.00
Chandigarh				0.00	5.56	5.86	0.27	5.86	0.00
Total	358.29	85.74	8.59	452.62	561.21	563.26	2.03	1015.89	48.83

* 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	8916	0	23	975	8340	0	-155	1200	9282
Haryana	6903	0	-104	1176	6138	0	97	1206	7119
Rajasthan	6950	0	-16	-135	7765	0	113	-121	8072
Delhi	4219	0	-114	530	4134	7	218	458	4846
UP	11508	2080	-179	616	12418	1600	-36	888	12739
Uttarakhand	1779	40	-22	142	1596	0	107	98	1874
HP	1040	0	24	-1143	920	0	64	-1268	1242
J&K	1736	434	151	-476	1219	215	-164	-585	1876
Chandigarh	253	0	8	-10	209	0	16	0	302
Total	43303	2554	-229	1676	42739	1822	259	1876	45246

* 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 Net MU
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1854	2005	2037	48.34	2014	44.48	3.85
	Rihand I STPS (2*500)	1000	441	480	486	11.53	480	10.51	1.01
	Rihand II STPS (2*500)	1000	943	1017	1015	24.76	1032	22.38	2.39
	Rihand III STPS (2*500)	1000	943	1010	981	23.77	990	22.46	1.31
	Dadri I STPS (4*210)	840	815	647	623	14.33	597	13.75	0.57
	Dadri II STPS (2*490)	980	980	726	736	19.92	830	19.94	-0.02
	Unchahar I TPS (2*210)	420	403	439	405	9.82	409	9.12	0.70
	Unchahar II TPS (2*210)	420	401	427	440	9.53	397	8.71	0.82
	Unchahar III TPS (1*220)	210	200	201	212	4.70	196	4.32	0.38
	ISTPP (Jhajihar) (3*500)	1500	1000	865	626	15.06	628	15.37	-0.31
	Dadri GPS (4*130.19+2*154.51)	830	807	371	271	7.85	327	7.69	0.16
	Anta GPS (3*88.71+1*153.2)	419	382	251	207	5.59	233	5.37	0.22
	Auraiya GPS (4*111.19+2*109.30)	663	636	290	189	5.95	248	5.89	0.06
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.04
	Singrauli Solar	15	3	0	0	0.00	0	0.07	-0.07
	KHEP	400	0	0	0	0.00	0	0.00	0.00
Sub Total (A)	11712	9811	8729	8228	201	8382	190	11	
B. NPC	NAPS (2*220)	440	385	421	434	9.24	385	9.24	0.00
	RAPS- B (2*220)	440	372	410	415	8.82	368	8.93	-0.10
	RAPS- C (2*220)	440	405	405	405	9.72	405	9.72	0.00
	Sub Total (B)	1320	1162	1236	1254	27.78	1158	27.89	-0.10
C. NHPC	Chamera I HPS (3*180)	540	534	557	543	13.06	544	12.81	0.24
	Chamera II HPS (3*100)	300	300	313	310	7.42	309	7.20	0.23
	Chamera III HPS (3*77)	231	231	239	236	5.66	236	5.55	0.11
	Bairasuil HPS(3*60)	180	179	184	63	2.39	99	2.35	0.03
	Salal-HPS (6*115)	690	661	673	673	16.23	676	15.92	0.31
	Tanakpur-HPS (3*40)	94	55	88	66	1.39	58	1.34	0.05
	Uri-I HPS (4*120)	480	475	477	475	11.62	484	11.40	0.22
	Uri-II HPS (4*60)	240	56	0	0	0.00	0	1.34	-1.34
	Dhauliganga-HPS (4*70)	280	280	280	70	4.49	187	4.26	0.23
	Dulhasti-HPS (3*130)	390	386	393	396	9.31	388	9.26	0.05
	Sewa-II HPS (3*40)	120	119	130	39	1.84	77	1.72	0.12
	Parbati 3 (4*130)	520	390	392	0	2.04	85	1.98	0.06
	Sub Total (C)	4065	3666	3726	2871	75	3144	75	0
	D. SJVNL	NJPC (6*250)	1500	1605	1635	1622	38.80	1617	38.52
Rampur HEP (6*68.67)		412	373	375	374	8.92	372	8.93	-0.01
Sub Total (D)		1912	1978	2010	1996	47.72	1988	47.44	0.27
E. THDC	Tehri HPS (4*250)	1000	375	380	378	8.07	336	8.00	0.07
	Koteshwar HPS (4*100)	400	175	302	101	4.24	177	4.20	0.04
	Sub Total (E)	1400	550	682	479	12.31	513	12.20	0.11
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	1139	1314	946	27.27	1136	27.33	-0.06
	Dehar HPS (6*165)	990	608	825	560	14.67	611	14.59	0.08
	Pong HPS (6*66)	396	183	318	198	4.59	191	4.40	0.19
	Sub Total (F)	2900	1930	2457	1704	46.52	1938	46.32	0.21
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	151	121	2.81	117	3.59	-0.78
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1125	1200	26.59	1108	26.85	-0.26
	Malana Stg-II HPS (2*50)	100	0	50	40	1.22	51	1.15	0.07
	Shree Cement TPS (2*150)	300	0	299	296	7.04	293	7.04	0.00
	Budhil HPS(IPP) (2*35)	70	0	70	36	1.21	51	1.32	-0.11
	Sub Total (G)	1662	0	1695	1694	38.88	1620	39.95	-1.08
H. Total Regional Entities (A-G)	24972	19097	20534	18226	449.83	18743	439.08	10.74	

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	950	715	17.98	749
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	230	175	4.36	182
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	674	582	14.19	591
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1224	1168	28.73	1197
	Talwandi Saboo (1*660)	660	393	338	10.35	431
	Thermal (Total)	4680	3471	2978	75.62	3151
	Total Hydro	1148	643	725	16.12	672
	Total Punjab	5828	4114	3703	91.74	3822
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	290	238	5.77	240
Faridabad GPS (NTPC)		432	181	194	4.51	188
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	1116	424	16.36	682
Thermal (Total)		4944	1587	856	26.65	1110
Total Hydro		62	27	28	0.65	27
Total Haryana		5006	1614	884	27.30	1137
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	950	946	23.47
	suratgarh TPS (6*250)	1500	616	740	17.28	720
	Chabra TPS (4*250)	1000	386	388	9.94	414
	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	53	55	1.33	55
	RAPS A (NPC) (1*100+1*200)	300	139	139	3.39	141
	Barsingar (NLC) (2*125)	250	94	88	2.05	85
	Giral LTPS (2*125)	250	92	90	1.84	77
	Rajwest LTPS (IPP) (8*135)	1080	841	841	18.57	774
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	465	500	11.21	467
	Kawai(Adani) (2*660)	1320	580	600	13.40	558
	Thermal (Total)	8276	4216	4387	102	4270
	Total Hydro	550	0	0	0.19	8
	Wind power	2798	17	836	8.03	335
	Biomass	99	18	18	0.43	18
	Solar	730	0	0	0.13	5
	Renewable/Others (Total)	3627	35	854	8.59	358
	Total Rajasthan	12453	4251	5241	111.25	4636
UP	Anpara TPS (3*210+2*500)	1630	1353	1358	31.90	1329
	Obra TPS (2*50+2*94+5*200)	1194	326	447	9.40	392
	Paricha TPS (2*110+2*220+2*250)	1140	658	572	14.90	621
	Panki TPS (2*105)	210	140	144	3.50	146
	Harduaganj TPS (1*60+1*105+2*250)	665	445	448	10.60	442
	Tanda TPS (NTPC) (4*110)	440	330	390	8.63	360
	Roza TPS (IPP) (4*300)	1200	891	1076	23.51	980
	Anpara-C (IPP) (2*600)	1200	1061	1044	25.23	1051
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	283	403	7.88	328
	Anpara-D(1*500)	500	0	0	0.00	0
	Lalitpur TPS(1*660)	660	0	0	0.00	0
	Thermal (Total)	9289	5487	5882	136	5648
	Vishnuparyag HPS (IPP)(including Alakanada)	400	610	597	14.54	606
	Other Hydro	527	48	44	1.42	59
	Cogeneration	981	120	120	2.90	121
	Total UP	11197	6265	6643	154.40	5828
Uttarakhand	Total Hydro	1398	817	737	18.98	791
	Total Uttarakhand	1398	817	737	18.98	791
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.01	0
	Delhi Gas Turbine (6x30 + 3x34)	282	76	79	1.74	73
	Pragati Gas Turbine (2x104+ 1x122)	330	264	147	5.11	213
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	28	-4	0.60	25
	Badarpur TPS (NTPC) (3*95+2*210)	705	379	346	7.66	319
	Thermal (Total)	2917	747	568	15.10	629
	Total Delhi	2917	747	568	15.10	629
HP	Baspa HPS (IPP) (2*100)	300	328	328	7.26	302
	Malana HPS (IPP) (2*43)	86	54	40	1.20	50
	Other Hydro	728	452	467	11.06	461
	Total HP	1114	834	835	19.52	814
J & K	Baglihar HPS (IPP) (3*150)	450	440	440	10.55	440
	Other Hydro/IPP	436	163	145	3.77	157
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	603	585	14.32	597
Total State Control Area Generation		41007	19245	19196	452.62	18254
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5826	5785	126.72	5280
Total Regional Availability(Gross)		65979	45605	43207	1029.17	42276

IV. Total Hydro Generation:

Regional Entities Hydro	11969	10201	8411	212.61	8859
State Control Area Hydro	5684	2972	2954	85.74	2967
Total Regional Hydro	17654	13173	11365	298.35	11826

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	250	200	350	0	5.40	0.00	5.40	
Gwalior-Agra (D/C)	2443	2222	2507	0	52.64	0.00	52.64		
Zerda-Kankroli	-46	-155	0	264	0.00	3.66	-3.66		
Zerda-Bhinmal	7	-122	40	211	0.00	2.12	-2.12		
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00		
Badod-Kota/Morak	-35	-9	20	44	0.00	0.39	-0.39		
Mundra-Mohinderqarh(HVDC)	2503	2497	2530	0	59.90	0.00	59.90		
Vindhychal - Rihand	474	385	498	0	0.00	0.00	0.00		
Sub Total WR	5596	5018			117.95	6.17	111.78		
Pusauli Bypass	400	400	400	0	7.72	0.00	7.72		
MZP- GKP (D/C)	12	149	269	37	3.25	0.00	3.25		
Patna-Balia(D/C)	-77	73	144	77	1.00	0.00	1.00		
B'Sharif-Balia (D/C)	-58	75	154	58	0.70	0.00	0.70		
Pusauli-Balia	26	96	144	0	1.02	0.00	1.02		
Gaya-Fatehpur (765 Kv)	0	-2	0	3	0.00	0.04	-0.04		
Pusauli-Sahupuri	129	134	198	0	3.67	0.00	3.67		
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48		
Son Ngr-Rihand	-38	-40	0	-46	0.00	0.93	-0.93		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	-164	-118	161	293	0.00	1.93	-1.93		
Barh -GKP (D/C)	0	0	0	0	0.00	0.00	0.00		
Sub Total ER	230	767			17.84	2.90	14.94		
Total IR Exch	5826	5785			135.79	9.07	126.72		

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
30.95	3.08	34.03	11.53	1.05	-0.12	0.00	0.69	-0.69

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
46.12	94.62	140.75	14.94	111.78	126.72	-31.19	17.16	-14.03

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	-31	0	32	0	1	-0.59	

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	0.24	2.79	18.84	34.89	67.35	12.25	1.59	0.00	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					
50.15	3.02	49.63	19.28	49.97	0.07	0.08	50.14	49.90

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	03:04	396	10:14	0.0	0.0	0.0
Gorakhpur	400	08:45	403	18:43	0.0	0.0	0.0	0.0	
Bareilly	400	08:00	396	20:00	0.0	0.0	0.0	0.0	
Kanpur	400	18:00	398	11:12	0.0	0.0	0.0	0.0	
Dadri	400	05:28	394	11:12	0.0	0.0	0.0	0.0	
Ballabgarh	400	05:34	153	21:30	0.8	0.8	0.0	0.0	
Bawana	400	05:35	398	10:26	0.0	0.0	0.0	0.0	
Bassi	400	17:59	402	11:12	0.0	0.0	0.0	0.0	
Hissar	400	18:00	384	19:53	0.0	31.0	0.0	0.0	
Moga	400	18:00	393	13:43	0.0	0.0	0.0	0.0	
Abdullapur	400	05:35	396	19:51	0.0	0.0	0.0	0.0	
Nalagarh	400	05:34	390	14:27	0.0	0.0	0.0	0.0	
Kishenpur	400	03:29	400	22:09	0.0	0.0	0.0	0.0	
Wagoora	400	03:03	385	22:10	0.0	9.6	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	03:31	734	19:53	0.0	20.1	0.0
Balia	765	08:15	746	00:08	0.0	0.0	0.0	0.0	
Moga	765	07:00	754	11:12	0.0	0.0	0.0	0.0	
Agra	765	18:02	745	11:14	0.0	0.0	0.0	0.0	
Bhiwani	765	05:31	756	14:33	0.0	0.0	0.0	0.0	
Unnao	765	08:04	732	00:08	0.0	65.6	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	487.13	644.48	482.57	519.70	866.30	965.24
Pong	426.72	384.05	405.74	361.16	401.55	252.05	136.66	335.75
Tehri	829.79	740.04	741.90	9.00	742.50	11.50	187.44	286.00
Koteshwar	612.50	598.50	609.80	4.44	610.02	4.55	286.00	281.00
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	218.26	353.72
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	522.15	5.86	520.73	9.47	312.41	256.03

* 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	1012	188	0	919	56	0	23.54	2.83	26.37
Delhi	469	0	-10	281	260	-10	8.56	3.90	12.46
Haryana	1016	190	0	987	189	0	24.38	2.85	27.22
HP	-1143	-125	0	-890	-253	0	-23.09	-4.88	-27.97
J&K	-565	-20	0	-434	-42	0	-11.40	-0.22	-11.62
CHD	0	0	0	0	-10	0	0.24	-0.02	0.21
Rajasthan	-370	247	2	-411	275	2	-9.56	9.04	-0.52
UP	888	0	0	616	0	0	14.76	0.00	14.76
Uttarakhand	36	39	23	24	105	13	0.86	2.18	3.04
Total	1342	520	14	1091	580	5	28.29	15.66	43.96

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1240	831	196	56	0	0
Delhi	537	223	559	-167	0	-10
Haryana	1086	981	216	-122	0	0
HP	-890	-1143	-125	-380	0	0
J&K	-398	-624	180	-42	0	0
CHD	30	0	0	-10	0	0
Rajasthan	-243	-492	607	23	2	2
UP	905	471	0	0	0	0
Uttarakhand	60	23	157	0	29	12

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 16.06.2015 :****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 :**