

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 23.06.2015
Date of Reporting : 24.06.2015

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
41168	2501	43669	50.05	46264	2176	48440	50.07	1035.9	50.75

* 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	74.06	15.67		89.73	107.95	105.29	-2.66	195.02	0.00
Haryana	43.28	0.81		44.09	113.47	108.50	-4.97	152.59	0.02
Rajasthan	101.70	0.00	10.49	112.19	71.61	72.02	0.41	184.20	0.00
Delhi	22.29			22.29	84.48	84.35	-0.12	106.65	0.07
UP	127.50	20.30		147.80	137.91	142.33	4.42	290.13	41.90
Uttarakhand		20.74		20.74	18.52	19.09	0.58	39.83	0.22
HP		20.70		20.70	3.55	4.50	0.96	25.20	0.01
J & K		15.09	0.00	15.09	21.14	21.20	0.07	36.30	8.54
Chandigarh				0.00	6.23	6.00	0.27	6.00	0.00
Total	368.83	93.31	10.49	472.63	564.84	563.28	-1.05	1035.91	50.75

* 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	7598	0	-256	906	9547	0	31	1019	9795
Haryana	6360	0	-206	1158	7314	0	40	1224	7547
Rajasthan	6487	0	-165	160	7737	0	28	356	8220
Delhi	4245	0	-21	257	4533	4	161	89	5419
UP	11686	1990	126	744	12721	1870	450	822	12749
Uttarakhand	1754	40	41	129	1557	0	4	36	1836
HP	904	0	-156	-1233	926	0	63	-1337	1202
J&K	1884	471	112	-279	1710	302	138	-276	1884
Chandigarh	250	0	1	0	219	0	-24	0	305
Total	41168	2501	-523	1842	46264	2176	891	1934	47276

* 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))

III. Regional Entities :

Entity	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
				(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1861	1831	2037	45.79	1908	42.33	3.45
	Rihand I STPS (2*500)	1000	450	410	488	10.70	446	10.03	0.67
	Rihand II STPS (2*500)	1000	943	933	1047	20.15	840	20.14	0.01
	Rihand III STPS (2*500)	1000	943	934	1017	21.26	886	20.68	0.57
	Dadri I STPS (4*210)	840	810	536	552	14.18	591	13.78	0.40
	Dadri II STPS (2*490)	980	975	648	693	17.72	738	18.16	-0.44
	Unchahar I TPS (2*210)	420	402	314	353	8.03	335	8.83	-0.80
	Unchahar II TPS (2*210)	420	400	301	331	7.61	317	8.23	-0.62
	Unchahar III TPS (1*220)	210	200	151	131	3.65	152	4.03	-0.38
	ISTPP (Jhajihar) (3*500)	1500	986	657	615	13.69	571	14.20	-0.51
	Dadri GPS (4*130.19+2*154.51)	830	792	282	238	6.75	281	6.66	0.09
	Anta GPS (3*88.71+1*153.2)	419	378	206	198	5.09	212	4.99	0.10
	Auraiya GPS (4*111.19+2*109.30)	663	627	230	196	5.33	222	5.21	0.13
	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	0.00	0	0.07	-0.07
	KHEP	400	0	0	0	0.00	0	0.00	0.00
Sub Total (A)	11712	9774	7433	7896	180	7500	177	3	
B. NPC	NAPS (2*220)	440	374	404	416	8.88	370	8.98	-0.10
	RAPS- B (2*220)	440	366	409	414	8.80	367	8.78	0.02
	RAPS- C (2*220)	440	405	432	432	9.29	387	9.72	-0.43
	Sub Total (B)	1320	1145	1245	1262	26.96	1124	27.48	-0.52
C. NHPC	Chamera I HPS (3*180)	540	537	551	550	12.81	534	12.60	0.20
	Chamera II HPS (3*100)	300	300	311	311	7.38	308	7.20	0.18
	Chamera III HPS (3*77)	231	229	232	230	5.48	228	5.50	-0.02
	Bairasuil HPS(3*60)	180	179	186	126	3.04	127	2.99	0.05
	Salal-HPS (6*115)	690	661	670	670	16.12	672	15.87	0.25
	Tanakpur-HPS (3*40)	94	76	83	72	1.87	78	1.81	0.06
	Uri-I HPS (4*120)	480	475	471	478	11.52	480	11.40	0.12
	Uri-II HPS (4*60)	240	120	120	120	2.88	120	2.88	0.00
	Dhauliganga-HPS (4*70)	280	280	282	292	6.88	287	6.72	0.16
	Dulhasti-HPS (3*130)	390	386	394	396	9.30	388	9.26	0.04
	Sewa-II HPS (3*40)	120	120	130	47	2.42	101	2.40	0.02
	Parbati 3 (4*130)	520	390	394	134	4.03	168	3.93	0.10
	Sub Total (C)	4065	3753	3822	3426	84	3489	83	1
D. SJVNL	NJPC (6*250)	1500	1605	1621	1624	38.64	1610	38.45	0.19
	Rampur HEP (6*68.67)	412	442	448	447	10.72	447	10.61	0.11
	Sub Total (D)	1912	2047	2069	2071	49.36	2057	49.06	0.31
E. THDC	Tehri HPS (4*250)	1000	488	489	373	8.22	343	8.19	0.03
	Koteshwar HPS (4*100)	400	200	202	204	4.79	200	4.80	-0.01
	Sub Total (E)	1400	688	691	577	13.02	542	12.99	0.03
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	1144	1301	947	27.35	1140	27.46	-0.12
	Dehar HPS (6*165)	990	602	825	560	14.59	608	14.45	0.14
	Pong HPS (6*66)	396	228	318	198	5.25	219	5.48	-0.22
	Sub Total (F)	2900	1975	2444	1705	47.19	1966	47.39	-0.20
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	231	227	4.75	198	5.35	-0.60
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	1200	28.62	1192	28.51	0.11
	Malana Stg-II HPS (2*50)	100	0	71	90	1.99	83	1.87	0.12
	Shree Cement TPS (2*150)	300	0	187	296	5.81	242	6.63	-0.82
	Budhil HPS(IPP) (2*35)	70	0	74	74	1.76	73	1.68	0.08
	Sub Total (G)	1662	0	1763	1888	42.93	1789	44.04	-1.12
H. Total Regional Entities (A-G)	24972	19381	19467	18825	443.20	18467	440.95	2.25	

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	670	1010	20.24	844
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	375	360	7.88	328
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	398	768	14.18	591
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	918	1382	23.12	964
	Talwandi Saboo (1*660)	660	337	650	8.64	360
	Thermal (Total)	4700	2698	4170	74.06	3086
	Total Hydro	1000	552	451	15.67	653
	Total Punjab	5700	3250	4621	89.73	3739
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	211	218	4.96
DCRTPP (Yamuna nagar) (2*300)		600	244	246	5.73	239
Faridabad GPS (NTPC)		432	164	193	4.37	182
RGTTP (Khedar) (IPP) (2*600)		1200	0	372	6.01	250
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	740	1010	22.22	926
Thermal (Total)		4944	1359	2039	43.28	1803
Total Hydro		62	33	32	0.81	34
Total Haryana		5006	1392	2071	44.09	1837
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	951	936	22.47
	suratgarh TPS (6*250)	1500	761	768	18.29	762
	Chabra TPS (4*250)	1000	372	384	9.43	393
	Dholpur GPS (3*110)	330	78	76	1.79	74
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	205	199	4.82	201
	RAPS A (NPC) (1*100+1*200)	300	138	139	3.38	141
	Barsingar (NLC) (2*125)	250	96	96	2.16	90
	Giral LTPS (2*125)	250	85	94	1.50	62
	Rajwest LTPS (IPP) (8*135)	1080	441	568	15.06	628
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	475	462	11.16	465
	Kawai(Adani) (2*660)	1320	430	443	11.65	486
	Thermal (Total)	8276	4032	4165	102	4237
	Total Hydro	550	0	0	0.00	0
	Wind power	2798	411	721	9.61	401
	Biomass	99	25	25	0.61	25
	Solar	730	1	0	0.27	11
	Renewable/Others (Total)	3627	437	746	10.49	437
	Total Rajasthan	12453	4469	4911	112.19	4674
	UP	Anpara TPS (3*210+2*500)	1630	909	850	21.10
Obra TPS (2*50+2*94+5*200)		1194	418	410	9.80	408
Paricha TPS (2*110+2*220+2*250)		1140	798	761	18.60	775
Panki TPS (2*105)		210	145	117	2.90	121
Harduaganj TPS (1*60+1*105+2*250)		665	437	437	10.60	442
Tanda TPS (NTPC) (4*110)		440	210	370	8.30	346
Roza TPS (IPP) (4*300)		1200	617	802	18.80	783
Anpara-C (IPP) (2*600)		1200	210	1080	25.60	1067
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	283	403	8.90	371
Anpara-D(1*500)		500	0	0	0.00	0
Lalitpur TPS(1*660)		660	0	0	0.00	0
Thermal (Total)		9289	4027	5230	125	5192
Vishnuparyag HPS (IPP)(including Alakanada)		730	697	673	16.30	679
Other Hydro		527	101	305	4.00	167
Cogeneration		981	120	120	2.90	121
Total UP		11527	4945	6328	147.80	5479
Uttarakhand	Total Hydro	1398	896	817	20.74	864
	Total Uttarakhand	1398	896	817	20.74	864
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.01	0
	Delhi Gas Turbine (6x30 + 3x34)	282	73	64	1.70	71
	Pragati Gas Turbine (2x104+ 1x122)	330	264	263	6.39	266
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	270	273	5.94	247
	Badarpur TPS (NTPC) (3*95+2*210)	705	386	391	8.28	345
	Thermal (Total)	2917	994	991	22.29	929
	Total Delhi	2917	994	991	22.29	929
HP	Baspa HPS (IPP) (2*100)	300	332	332	7.75	323
	Malana HPS (IPP) (2*43)	86	60	81	1.85	77
	Other Hydro	878	466	455	11.11	463
	Total HP	1264	858	868	20.70	863
J & K	Baqilhar HPS (IPP) (3*150)	450	440	442	10.58	441
	Other Hydro/IPP	560	196	193	4.52	188
	Gas/Diesel/Others	190	0	0	0.00	0
	Total J & K	1200	636	635	15.09	629
Total State Control Area Generation		41465	17440	21242	472.63	19014
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			7047.55	6701.95	141.87	5911
Total Regional Availability(Gross)		66437	43954	46769	1057.70	43392

IV. Total Hydro Generation:

Regional Entities Hydro	11969	10527	9296	228.65	9527
State Control Area Hydro	5811	3076	3108	93.31	3209
Total Regional Hydro	17780	13603	12404	321.97	12736

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	300		50		300	300	1.45	0.92	0.53
Gwalior-Agra (D/C)	2280		2126		2329	0	40.68	0.00	40.68
Zerda-Kankroli	-2		-145		0	282	0.00	3.24	-3.24
Zerda-Bhinmal	18		-135		73	279	0.00	2.65	-2.65
Malanpur-Auraiya	0		0		0	0	0.00	0.00	0.00
Badod-Kota/Morak	-46		-19		13	59	0.00	0.49	-0.49
Mundra-Mohindergarh(HVDC)	2301		2502		2507	0	54.08	0.00	54.08
Vindhychal - Rihand	355		297		450	0	7.43	0.00	7.43
Sub Total WR	5206		4676				103.64	7.30	96.34
Pusauli Bypass	100		400		400	0	7.52	0.00	7.52
MZP- GKP (D/C)	442		421		608	0	10.97	0.00	10.97
Patna-Balia(D/C)	294		357		452	0	8.46	0.00	8.46
B'Sharif-Balia (D/C)	183		231		314	0	5.54	0.00	5.54
Pusauli-Balia	268		221		295	0	2.69	0.00	2.69
Gaya-Fatehpur (765 Kv)	0		0		0	0	0.00	0.00	0.00
Pusauli-Sahupuri	170		140		175	0	3.37	0.00	3.37
K'nasa-Sahupuri	0		0		0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40		-40		0	43	0.00	0.97	-0.97
Garhwa-Rihand	0		0		0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	122		75		188	41	2.55	0.00	2.55
Barh -GKP (D/C)	303		221		303	0	5.39	0.00	5.39
Sub Total ER	1842		2026				46.49	0.97	45.53
Total IR Exch	7048		6702				150.13	8.26	141.87

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
39.94	1.91	41.85	16.03	1.98	-0.17	-0.03	0.73	-0.73
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
58.45	83.82	142.27	45.53	96.34	141.87	-12.92	12.52	-0.40

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	23		29		0	37	0	1	-0.63

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	2.59	40.58	65.59	20.02	10.68	1.18	NA

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz			(Hz)	(Hz)
50.24	15:31	49.80	19:50	50.02	0.05	0.07	50.27	50.01

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	405	18:02	397	14:31	0.0	0.0	0.0	0.0
Gorakhpur	400	415	07:05	398	11:15	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	410	05:03	395	22:12	0.0	0.0	0.0	0.0
Dadri	400	411	05:03	163	16:00	11.8	11.8	0.0	0.0
Ballabgarh	400	421	16:21	400	11:05	0.0	0.0	0.5	0.0
Bawana	400	418	16:12	399	00:09	0.0	0.0	0.0	0.0
Bassi	400	422	18:46	399	11:16	0.0	0.0	2.8	0.0
Hissar	400	404	06:01	390	00:06	NA	NA	0.0	0.0
Moga	400	413	16:03	397	00:05	0.0	0.0	0.0	0.0
Abdullapur	400	414	16:03	396	13:45	0.0	0.0	0.0	0.0
Nalagarh	400	414	16:03	402	10:42	0.0	0.0	0.0	0.0
Kishenpur	400	414	16:03	403	19:48	0.0	0.0	0.0	0.0
Wagoora	400	408	05:42	385	20:48	0.0	9.4	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	776	05:05	732	20:15	0.0	15.4	0.0	0.0
Balia	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Moga	765	794	16:12	760	00:06	0.0	0.0	0.0	0.0
Agra	765	785	16:15	739	20:17	0.0	0.9	0.0	0.0
Bhiwani	765	804	16:07	762	00:17	0.0	0.0	3.6	0.0
Unnao	765	761	18:06	733	11:15	0.0	29.6	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	487.91	671.08	486.55	627.57	1003.12	962.77
Pong	426.72	384.05	405.88	370.28	401.64	259.17	450.55	360.05
Tehri	829.79	740.04	742.30	10.81	747.55	36.94	312.61	291.00
Koteshwar	612.50	598.50	609.81	4.44	610.54	4.84	291.00	318.00
Chamera-I	760.00	748.75	757.93	0.00	0.00	0.00	415.47	346.87
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	522.39	5.61	521.31	8.72	284.40	338.20

* 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	944	75	0	903	3	0	24.06	1.40	25.45
Delhi	345	-254	-2	269	9	-20	7.74	-0.24	7.50
Haryana	1025	199	0	1011	147	0	25.09	1.57	26.66
HP	-991	-346	0	-839	-393	0	-21.36	-7.51	-28.87
J&K	-439	162	0	-434	155	0	-10.66	-1.18	-11.84
CHD	0	0	0	0	0	0	0.24	0.26	0.50
Rajasthan	-371	725	2	-390	549	0	-8.28	19.83	11.55
UP	822	0	0	744	0	0	15.12	0.00	15.12
Uttarakhand	36	0	0	30	79	20	1.04	0.94	1.99
Total	1371	562	0	1294	549	-1	32.98	15.08	48.06

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1229	903	146	3	0	0
Delhi	442	203	397	-436	0	-20
Haryana	1125	1011	214	-255	0	0
HP	-839	-991	-222	-443	0	0
J&K	-398	-498	254	-338	0	0
CHD	30	0	49	0	0	0
Rajasthan	-242	-390	1366	369	2	0
UP	922	457	0	0	0	0
Uttarakhand	74	30	79	0	20	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 23.06.2015 :**

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 :**