

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 22.06.2015
Date of Reporting : 23.06.2015

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
45672	2810	48481	50.05	44039	2179	46218	50.07	1062.2	51.63

* 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	90.51	18.44		108.94	114.85	114.92	0.06	223.86	0.00
Haryana	43.06	0.79		43.85	116.67	113.62	-3.05	157.47	0.43
Rajasthan	101.84	0.00	6.42	108.26	75.03	78.04	3.01	186.29	0.00
Delhi	20.98			20.98	81.54	84.71	3.17	105.69	0.27
UP	128.10	19.30		147.40	135.17	138.85	3.68	286.25	41.35
Uttarakhand		20.12		20.12	15.43	16.20	0.77	36.31	0.30
HP		21.38		21.38	2.79	2.48	-0.32	23.86	0.70
J & K		15.10	0.00	15.10	21.74	21.43	-0.32	36.52	8.58
Chandigarh				0.00	6.18	5.90	0.27	5.90	0.00
Total	384.49	95.13	6.42	486.03	569.40	576.13	7.28	1062.16	51.63

* 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	9879	0	-165	881	8634	0	67	1204	10440
Haryana	7554	11	-147	1079	6543	0	-124	1215	7973
Rajasthan	7060	0	-254	360	7603	0	-217	550	8426
Delhi	4331	0	-18	-32	4418	0	321	90	5139
UP	12081	2270	307	643	12556	1870	342	916	12556
Uttarakhand	1759	40	109	171	1412	0	0	61	1768
HP	944	35	-61	-1208	917	0	80	-1326	1126
J&K	1814	454	56	-279	1752	309	138	-276	1814
Chandigarh	250	0	-21	0	204	0	-17	0	311
Total	45672	2810	-193	1615	44039	2179	589	2433	47905

* 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	1571	1993	1536	40.38	1682	36.78	3.59
	Rihand I STPS (2*500)	1000	445	466	430	10.34	431	9.85	0.49
	Rihand II STPS (2*500)	1000	951	1022	1046	21.74	906	21.01	0.73
	Rihand III STPS (2*500)	1000	951	1029	906	21.06	878	20.11	0.95
	Dadri I STPS (4*210)	840	810	518	581	13.70	571	13.85	-0.15
	Dadri II STPS (2*490)	980	975	795	785	19.22	801	19.91	-0.69
	Unchahar I TPS (2*210)	420	402	409	277	8.26	344	8.58	-0.32
	Unchahar II TPS (2*210)	420	400	395	262	7.70	321	8.08	-0.39
	Unchahar III TPS (1*220)	210	200	216	128	3.73	156	3.91	-0.18
	ISTPP (Jhajihar) (3*500)	1500	950	615	618	13.83	576	13.94	-0.11
	Dadri GPS (4*130.19+2*154.51)	830	792	381	237	8.25	344	8.18	0.07
	Anta GPS (3*88.71+1*153.2)	419	372	205	194	5.12	213	4.99	0.13
	Auraiya GPS (4*111.19+2*109.30)	663	627	279	195	5.98	249	5.94	0.05
	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	9451	8323	7195	179	7473	175	4	
B. NPC	NAPS (2*220)	440	374	407	417	8.90	371	8.98	-0.08
	RAPS- B (2*220)	440	367	413	414	8.82	368	8.81	0.01
	RAPS- C (2*220)	440	405	428	431	9.19	383	9.72	-0.54
	Sub Total (B)	1320	1146	1248	1262	26.90	1121	27.50	-0.60
C. NHPC	Chamera I HPS (3*180)	540	539	547	550	13.15	548	12.93	0.21
	Chamera II HPS (3*100)	300	300	313	312	7.42	309	7.20	0.22
	Chamera III HPS (3*77)	231	231	229	230	5.48	228	5.54	-0.07
	Bairasuil HPS(3*60)	180	179	187	125	3.22	134	3.09	0.13
	Salal-HPS (6*115)	690	642	670	667	15.71	655	15.43	0.28
	Tanakpur-HPS (3*40)	94	67	78	69	1.60	67	1.61	-0.01
	Uri-I HPS (4*120)	480	475	478	472	11.50	479	11.40	0.10
	Uri-II HPS (4*60)	240	120	121	121	2.82	118	2.88	-0.06
	Dhauliganga-HPS (4*70)	280	280	295	293	6.94	289	6.72	0.22
	Dulhasti-HPS (3*130)	390	386	395	394	9.31	388	9.26	0.05
	Sewa-II HPS (3*40)	120	121	128	124	2.96	123	2.87	0.09
	Parbati 3 (4*130)	520	390	393	133	4.17	174	4.10	0.07
	Sub Total (C)	4065	3730	3835	3490	84	3512	83	1
D. SJVNL	NJPC (6*250)	1500	1605	1619	1625	38.69	1612	38.52	0.17
	Rampur HEP (6*68.67)	412	442	448	448	10.81	450	10.61	0.20
	Sub Total (D)	1912	2047	2067	2073	49.50	2063	49.13	0.38
E. THDC	Tehri HPS (4*250)	1000	488	488	120	8.62	359	8.50	0.12
	Koteshwar HPS (4*100)	400	196	202	203	4.70	196	4.70	0.00
	Sub Total (E)	1400	684	690	323	13.31	555	13.20	0.11
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	1127	1310	920	26.80	1117	27.04	-0.24
	Dehar HPS (6*165)	990	605	825	560	14.58	607	14.53	0.05
	Pong HPS (6*66)	396	251	318	258	6.13	255	6.01	0.11
	Sub Total (F)	2900	1982	2453	1738	47.50	1979	47.58	-0.08
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	231	231	5.42	226	5.35	0.07
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	1200	28.63	1193	28.51	0.12
	Malana Stg-II HPS (2*50)	100	0	100	110	2.57	107	2.43	0.14
	Shree Cement TPS (2*150)	300	0	295	295	7.02	293	7.04	-0.01
	Budhil HPS(IPP) (2*35)	70	0	74	74	1.76	73	1.68	0.08
	Sub Total (G)	1662	0	1901	1911	45.41	1892	45.01	0.40
	H. Total Regional Entities (A-G)	24972	19040	20516	17992	446.26	18594	440.74	5.53

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	1060	1060	24.63	1026
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	400	360	8.79	366
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	888	802	18.75	781
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1385	712	27.39	1141
	Talwandi Saboo (1*660)	660	614	325	10.95	456
	Thermal (Total)	4700	4347	3259	90.51	3771
	Total Hydro	1000	866	667	18.44	768
	Total Punjab	5700	5213	3926	108.94	4539
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	224	216	5.07
DCRTPP (Yamuna nagar) (2*300)		600	289	243	5.68	237
Faridabad GPS (NTPC)		432	185	168	4.43	185
RGTPP (Khedar) (IPP) (2*600)		1200	447	374	10.11	421
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	806	425	17.76	740
Thermal (Total)		4944	1951	1426	43.06	1794
Total Hydro		62	32	33	0.79	33
Total Haryana		5006	1983	1459	43.85	1827
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	874	780	18.83
	suratgarh TPS (6*250)	1500	770	757	18.40	766
	Chabra TPS (4*250)	1000	387	572	11.94	497
	Dholpur GPS (3*110)	330	72	77	1.80	75
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	197	207	4.97	207
	RAPS A (NPC) (1*100+1*200)	300	136	138	3.18	133
	Barsingar (NLC) (2*125)	250	95	91	2.15	90
	Giral LTPS (2*125)	250	94	94	1.81	75
	Rajwest LTPS (IPP) (8*135)	1080	658	368	15.59	650
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	453	470	11.32	472
	Kawai(Adani) (2*660)	1320	455	479	11.85	494
	Thermal (Total)	8276	4191	4033	102	4243
	Total Hydro	550	0	0	0.00	0
	Wind power	2798	69	1012	5.31	221
	Biomass	99	26	26	0.63	26
	Solar	730	0	0	0.49	20
	Renewable/Others (Total)	3627	95	1038	6.42	267
	Total Rajasthan	12453	4286	5071	108.26	4511
	UP	Anpara TPS (3*210+2*500)	1630	864	905	21.30
Obra TPS (2*50+2*94+5*200)		1194	392	374	9.20	383
Paricha TPS (2*110+2*220+2*250)		1140	741	761	17.30	721
Panki TPS (2*105)		210	117	117	2.90	121
Harduaganj TPS (1*60+1*105+2*250)		665	443	536	11.50	479
Tanda TPS (NTPC) (4*110)		440	370	368	9.00	375
Roza TPS (IPP) (4*300)		1200	793	802	19.10	796
Anpara-C (IPP) (2*600)		1200	1080	1080	25.80	1075
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	403	403	9.10	379
Anpara-D(1*500)		500	0	0	0.00	0
Lalitpur TPS(1*660)		660	0	0	0.00	0
Thermal (Total)		9289	5203	5346	125	5217
Vishnuparyag HPS (IPP)(including Alakanada)		730	677	708	16.10	671
Other Hydro		527	134	154	3.20	133
Cogeneration		981	120	120	2.90	121
Total UP		11527	6134	6328	147.40	5471
Uttarakhand	Total Hydro	1398	885	817	20.12	838
	Total Uttarakhand	1398	885	817	20.12	838
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.03	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	63	50	1.30	54
	Pragati Gas Turbine (2x104+ 1x122)	330	262	146	5.13	214
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	29	273	4.83	201
	Badarpur TPS (NTPC) (3*95+2*210)	705	373	390	9.76	407
	Thermal (Total)	2917	727	859	20.98	874
	Total Delhi	2917	727	859	20.98	874
HP	Baspa HPS (IPP) (2*100)	300	302	302	7.62	318
	Malana HPS (IPP) (2*43)	86	93	97	2.32	97
	Other Hydro	878	485	471	11.44	477
	Total HP	1264	880	870	21.38	891
J & K	Baglihar HPS (IPP) (3*150)	450	442	440	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	638	633	15.10	629
Total State Control Area Generation		41465	20746	19963	486.03	19580
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5983.95	6812.89	146.16	6090
Total Regional Availability(Gross)		66437	47246	44768	1078.45	44265

IV. Total Hydro Generation:

Regional Entities Hydro	11969	10575	9165	231.23	9634
State Control Area Hydro	5811	3435	3174	95.13	3293
Total Regional Hydro	17780	14010	12339	326.35	12927

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	350	350	50	5.54	0.19	5.35	
Gwalior-Agra (D/C)	1812	1924	2205	0	38.42	0.00	38.42		
Zerda-Kankroli	-113	-165	3	232	0.00	2.96	-2.96		
Zerda-Bhinmal	-83	-177	289	59	0.00	2.32	-2.32		
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00		
Badod-Kota/Morak	-36	-34	80	71	0.00	0.01	-0.01		
Mundra-Mohinderqarh(HVDC)	2502	2501	2511	0	60.46	0.00	60.46		
Vindhychal - Rihand	471	387	471	0	8.04	0.00	8.04		
Sub Total WR	4603	4786			112.46	5.48	106.98		
Pusauli Bypass	400	400	400	0	8.88	0.00	8.88		
MZP- GKP (D/C)	156	318	205	0	7.27	0.00	7.27		
Patna-Balia(D/C)	343	415	415	0	8.64	0.00	8.64		
B'Sharif-Balia (D/C)	115	207	232	0	4.43	0.00	4.43		
Pusauli-Balia	64	278	278	0	1.91	0.00	1.91		
Gaya-Fatehpur (765 Kv)	0	-2	0	3	0.00	0.03	-0.03		
Pusauli-Sahupuri	128	134	159	0	3.49	0.00	3.49		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	-28	-42	0	43	0.00	0.92	-0.92		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	-37	48	106	196	0.29	0.00	0.29		
Barh -GKP (D/C)	240	271	271	0	5.21	0.00	5.21		
Sub Total ER	1381	2027			40.12	0.95	39.18		
Total IR Exch	5984	6813			152.58	6.43	146.16		

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
36.31	1.57	37.88	18.28	2.02	-0.01	0.00	0.79	-0.79
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
56.95	89.95	146.91	39.18	106.98	146.16	-17.77	17.02	-0.75

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	-27	-32	0	33	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	0.00	1.41	8.62	43.13	64.26	18.28	8.06	0.69	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					
50.29	13.03	49.67	16.27	50.01	0.06	0.08	50.26	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	401	04:04	396	01:26	0.0	0.0
Gorakhpur	400	415	05:08	399	22:08	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	05:04	395	11:48	0.0	0.0	0.0	0.0
Dadri	400	411	05:04	395	11:39	0.0	0.0	0.0	0.0
Ballabhgarh	400	417	05:06	398	11:40	0.0	0.0	0.0	0.0
Bawana	400	409	18:01	397	11:38	0.0	0.0	0.0	0.0
Bassi	400	418	03:57	397	11:39	0.0	0.0	0.0	0.0
Hissar	400	405	05:08	388	11:34	0.0	7.8	0.0	0.0
Moga	400	409	03:59	394	11:20	0.0	0.0	0.0	0.0
Abdullapur	400	411	08:01	396	19:56	0.0	0.0	0.0	0.0
Nalagarh	400	415	03:35	399	11:48	0.0	0.0	0.0	0.0
Kishenpur	400	413	05:08	400	20:12	0.0	0.0	0.0	0.0
Wagoora	400	412	06:18	383	20:13	0.0	9.7	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	764	05:05	730	11:50	0.0	21.2
Balia	765	767	08:01	735	19:55	0.0	4.8	0.0	0.0
Moga	765	784	05:04	746	11:48	0.0	0.0	0.0	0.0
Agra	765	777	05:05	746	11:52	0.0	0.0	0.0	0.0
Bhiwani	765	787	05:04	756	11:39	0.0	0.0	0.0	0.0
Unnao	765	760	05:05	732	11:53	0.0	32.3	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	487.88	671.08	486.24	619.14	1210.01	963.99
Pong	426.72	384.05	405.83	361.16	401.73	259.17	449.27	419.12
Tehri	829.79	740.04	742.10	9.85	746.40	31.00	306.13	305.00
Koteshwar	612.50	598.50	610.35	4.69	609.27	4.21	305.00	311.00
Chamera-I	760.00	748.75	757.15	0.00	0.00	0.00	440.24	356.68
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	522.27	8.33	521.44	8.40	324.67	206.64

* 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	1163	42	0	881	0	0	25.88	0.51	26.38
Delhi	362	-270	-2	254	-266	-20	7.69	-4.41	3.27
Haryana	1091	124	0	992	87	0	25.46	3.50	28.97
HP	-983	-342	0	-831	-376	0	-21.17	-7.52	-28.69
J&K	-439	162	0	-434	155	0	-10.66	-0.70	-11.36
CHD	0	0	0	0	0	0	0.24	0.08	0.32
Rajasthan	-287	835	2	-414	774	0	-7.80	22.50	14.70
UP	916	0	0	643	0	0	15.34	0.00	15.34
Uttarakhand	61	0	0	23	128	20	1.19	1.02	2.20
Total	1883	551	0	1114	502	-1	36.17	14.97	51.14

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1261	881	86	0	0	0
Delhi	436	220	75	-430	0	-20
Haryana	1125	992	202	67	0	0
HP	-831	-983	-170	-460	0	0
J&K	-398	-498	254	-338	0	0
CHD	30	0	40	-15	0	0
Rajasthan	-242	-414	1529	616	2	0
UP	930	472	0	0	0	0
Uttarakhand	74	23	128	0	20	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 22.06.2015 :**

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 :**