

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महासक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 16.07.2015
Date of Reporting : 17.07.2015

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
43718	2212	45930	0.00	42222	4808	47030	0.00	1021.2	56.70

* 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	58.55	19.05		77.60	117.69	117.72	0.03	195.32	0.00
Haryana	37.54	0.61		38.15	122.30	120.44	-1.86	158.58	1.24
Rajasthan	104.57	0.21	25.29	130.06	55.37	59.36	3.98	189.42	2.61
Delhi	21.47			21.47	85.62	86.46	0.84	107.93	0.00
UP	133.10	10.10		143.20	123.62	126.19	2.57	269.39	47.67
Uttarakhand		21.64		21.64	12.80	14.78	1.99	36.42	1.25
HP		20.08		20.08	-0.83	3.25	4.07	23.32	3.95
J & K		15.06	0.00	15.06	18.09	19.59	1.50	34.65	0.00
Chandigarh				0.00	6.08	6.20	0.27	6.20	0.00
Total	355.23	86.73	25.29	467.24	540.75	553.99	13.39	1021.23	56.70

* 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	8277	0	83	1195	7758	0	-39	976	8967
Haryana	7062	0	-452	1543	6693	0	261	1190	7328
Rajasthan	7660	61	216	-442	7926	0	-198	-100	8388
Delhi	4651	0	9	341	4433	0	182	215	5361
UP	11528	1690	-54	632	11230	4135	217	762	12167
Uttarakhand	1617	80	114	-55	1648	0	216	-55	1648
HP	1141	0	1	-1237	648	382	445	-1431	1211
J&K	1524	381	-187	-247	1649	291	323	-348	1739
Chandigarh	257	0	-14	0	236	0	5	-10	315
Total	43718	2212	-283	1730	42222	4808	1411	1198	44414

* STOA figures are at sellers boundary & PX figures are at regional boundary.

figures may not be at simultaneous hour.

Diversity is 1.06

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	1720	1905	1913	42.91	1788	41.28	1.63
	Rihand I STPS (2*500)	1000	853	941	934	21.93	914	20.36	1.57
	Rihand II STPS (2*500)	1000	943	1011	1033	24.16	1007	22.57	1.59
	Rihand III STPS (2*500)	1000	950	1001	991	23.75	990	22.71	1.04
	Dadri I STPS (4*210)	840	800	475	405	10.40	433	10.13	0.27
	Dadri II STPS (2*490)	980	975	773	955	22.20	925	22.41	-0.21
	Unchahar I TPS (2*210)	420	397	423	430	9.79	408	9.42	0.36
	Unchahar II TPS (2*210)	420	200	217	220	4.69	196	4.68	0.01
	Unchahar III TPS (1*220)	210	200	214	214	4.87	203	4.68	0.19
	ISTPP (Jhajjhar) (3*500)	1500	1500	755	496	13.17	549	14.02	-0.85
	Dadri GPS (4*130.19+2*154.51)	830	800	143	142	3.42	142	3.55	-0.14
	Anta GPS (3*88.71+1*153.2)	419	387	0	0	0.00	0	0.00	0.00
	Auraiya GPS (4*111.19+2*109.30)	663	640	0	0	0.00	0	0.00	0.00
	Dadri Solar	5	1	0	0	0.02	1	0.02	-0.01
	Unchahar Solar	10	3	0	0	0.04	2	0.06	-0.02
	Singrauli Solar	15	3	0	0	0.02	1	0.07	-0.05
	KHEP	800	0	605	807	18.14	756	0.00	18.14
Sub Total (A)	12112	10371	8463	8540	199	8312	176	24	
B. NPC	NAPS (2*220)	440	370	414	405	8.90	371	8.88	0.02
	RAPS- B (2*220)	440	185	339	185	4.98	208	4.44	0.54
	RAPS- C (2*220)	440	398	398	398	9.40	392	9.55	-0.15
	Sub Total (B)	1320	953	1151	988	23.29	970	22.87	0.42
C. NHPC	Chamera I HPS (3*180)	540	534	541	538	12.97	540	12.81	0.16
	Chamera II HPS (3*100)	300	221	205	304	5.38	224	5.36	0.01
	Chamera III HPS (3*77)	231	229	233	230	5.52	230	5.50	0.02
	Bairasuil HPS(3*60)	180	179	186	124	3.42	142	3.31	0.11
	Salal-HPS (6*115)	690	623	670	662	15.05	627	14.97	0.08
	Tanakpur-HPS (3*40)	94	92	93	92	2.22	93	2.21	0.01
	Uri-I HPS (4*120)	480	475	475	475	11.41	475	11.40	0.01
	Uri-II HPS (4*60)	240	163	183	159	3.84	160	3.92	-0.08
	Dhauliganga-HPS (4*70)	280	280	280	281	6.72	280	6.72	0.01
	Dulhasti-HPS (3*130)	390	265	393	396	4.99	208	4.92	0.07
	Sewa-II HPS (3*40)	120	119	127	130	3.00	125	2.86	0.14
	Parbati 3 (4*130)	520	314	264	391	6.67	278	7.05	-0.39
	Sub Total (C)	4065	3496	3650	3781	81	3382	81	0
D. SJVNL	NJPC (6*250)	1500	1237	1632	0	28.13	1172	28.06	0.07
	Rampur HEP (6*68.67)	412	285	375	0	6.53	272	6.50	0.03
	Sub Total (D)	1912	1522	2007	0	34.66	1444	34.55	0.10
E. THDC	Tehri HPS (4*250)	1000	708	714	180	7.02	292	6.90	0.12
	Koteshwar HPS (4*100)	400	138	394	97	3.30	137	3.30	0.00
	Sub Total (E)	1400	846	1108	277	10.32	430	10.20	0.12
F. BBMB	Bhakra HPS (3*108+2*126+5*157)	1361	1099	1200	790	26.36	1098	26.38	-0.02
	Dehar HPS (6*165)	990	608	660	560	14.65	610	14.58	0.07
	Pong HPS (6*66)	396	64	66	66	1.54	64	1.54	0.01
	Sub Total (F)	2747	1771	1926	1416	42.55	1773	42.49	0.06
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	231	230	5.51	229	5.36	0.14
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	0	21.19	883	21.60	-0.41
	Malana Stg-II HPS (2*50)	100	0	112	111	2.64	110	2.49	0.15
	Shree Cement TPS (2*150)	300	0	145	147	3.48	145	4.51	-1.03
	Budhil HPS(IPP) (2*35)	70	0	74	72	1.70	71	1.67	0.03
	Sub Total (G)	1662	0	1761	560	34.52	1438	35.64	-1.13
H. Total Regional Entities (A-G)	25219	18958	20666	15562	425.99	17750	402.77	23.22	

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	730	630	14.48	603
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	85	108	2.04	85
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	717	720	15.80	658
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	690	1376	26.23	1093
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4700	2222	2834	58.55	2440
	Total Hydro	1000	792	795	19.05	794
	Total Punjab	5700	3014	3629	77.60	3233
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	231	0	3.34	139
Faridabad GPS (NTPC)		432	0	0	0.00	0
RGTTP (Khedar) (IPP) (2*600)		1200	383	566	10.48	437
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	949	1072	23.71	988
Thermal (Total)		4944	1563	1638	37.54	1564
Total Hydro		62	22	28	0.61	25
Total Haryana		5006	1585	1666	38.15	1589
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	799	613	16.49
	suratgarh TPS (6*250)	1500	456	398	10.58	441
	Chabra TPS (4*250)	1000	378	354	7.94	331
	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	193	194	4.85	202
	RAPS A (NPC) (1*100+1*200)	300	150	145	3.41	142
	Barsingsar (NLC) (2*125)	250	92	187	2.75	115
	Giral LTPS (2*125)	250	64	66	0.59	25
	Rajwest LTPS (IPP) (8*135)	1080	734	953	21.33	889
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	0	455	8.36	348
	Kawai(Adani) (2*660)	1320	1204	1205	28.27	1178
	Thermal (Total)	8276	4070	4570	105	4357
	Total Hydro	550	10	0	0.21	9
	Wind power	3214	1109	1032	24.36	1015
	Biomass	99	27	27	0.64	27
	Solar	730	1	0	0.28	12
	Renewable/Others (Total)	4043	1137	1059	25.29	1054
	Total Rajasthan	12869	5217	5629	130.06	5419
	UP	Anpara TPS (3*210+2*500)	1630	1250	1130	27.90
Obra TPS (2*50+2*94+5*200)		1194	365	279	7.90	329
Paricha TPS (2*110+2*220+2*250)		1140	667	714	16.00	667
Panki TPS (2*105)		210	131	126	2.80	117
Harduaganj TPS (1*60+1*105+2*250)		665	530	500	12.30	513
Tanda TPS (NTPC) (4*110)		440	371	368	9.00	375
Roza TPS (IPP) (4*300)		1200	810	824	19.80	825
Anpara-C (IPP) (2*600)		1200	806	810	19.20	800
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	405	403	9.50	396
Anpara-D(1*500)		500	0	0	0.00	0
Lalitpur TPS(1*660)		660	272	275	5.80	242
Thermal (Total)		9289	5607	5429	130	5425
Vishnuparyag HPS (IPP)(including Alakanada)		730	236	250	5.80	242
Other Hydro		527	108	230	4.30	179
Cogeneration		981	120	120	2.90	121
Total UP	11527	6071	6029	143.20	5725	
Uttarakhand	Total Hydro	1398	846	945	21.64	902
	Total Uttarakhand	1398	846	945	21.64	902
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.23	-10
	Delhi Gas Turbine (6x30 + 3x34)	282	71	66	1.66	69
	Pragati Gas Turbine (2x104+ 1x122)	330	264	261	6.39	266
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	270	0	4.15	173
	Badarpur TPS (NTPC) (3*95+2*210)	705	385	456	9.50	396
	Thermal (Total)	2917	990	783	21.47	895
	Total Delhi	2917	990	783	21.47	895
HP	Baspa HPS (IPP) (2*100)	300	328	0	3.43	143
	Malana HPS (IPP) (2*43)	86	99	96	2.32	97
	Other Hydro	878	587	624	14.33	597
	Total HP	1264	1014	720	20.08	836
J & K	Baglihar HPS (IPP) (3*150)	450	440	440	10.56	440
	Other Hydro/IPP	560	181	189	4.50	187
	Gas/Diesel/Others	190	0	0	0.00	0
	Total J & K	1200	621	629	15.06	627
Total State Control Area Generation		41881	19358	20030	467.24	19227
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6802	7913	156.75	6531
Total Regional Availability(Gross)		67100	46226	43505	1049.98	43508

IV. Total Hydro Generation:

Regional Entities Hydro	12216	10838	6623	216.17	9007
State Control Area Hydro	5811	3413	3347	86.73	3372
Total Regional Hydro	18027	14251	9970	302.90	12379

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	-150	0	300	0.00	4.46	-4.46
Gwalior-Agra (D/C)	2237	2575	2575	0	48.77	0.00	48.77
Zerda-Kankroli	-89	-65	0	270	0.00	3.56	-3.56
Zerda-Bhinmal	-74	-83	0	268	0.00	3.19	-3.19
Malanpur-Auraiya	-9	18	12	41	0.00	0.48	-0.48
Badod-Kota/Morak	12	74	62	13	0.00	1.24	-1.24
Mundra-Mohinderghar(HVDC)	2502	2303	2516	0	56.87	0.00	56.87
Vindhychal - Rihand	502	507	507	0	11.67	0.00	11.67
Sub Total WR	4781	5179			117.31	12.92	104.39
Pusauli Bypass	400	400	400	0	9.21	0.00	9.21
MZP- GKP (D/C)	508	600	348	0	11.35	0.00	11.35
Patna-Balia(D/C)	271	349	399	0	7.30	0.00	7.30
B'Sharif-Balia (D/C)	52	233	233	0	2.64	0.00	2.64
Pusauli-Balia	51	160	160	0	0.92	0.00	0.92
Gaya-Fatehpur (765 Kv)	234	354	468	0	7.92	0.00	7.92
Pusauli-Sahupuri	202	170	202	0	3.27	0.00	3.27
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-26	-16	0	38	0.00	0.58	-0.58
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	71	209	310	26	4.60	0.00	4.60
Barh -GKP (D/C)	258	275	275	0	5.72	0.00	5.72
Sub Total ER	2021	2734			52.94	0.58	52.36
Total IR Exch	6802	7913			170.25	13.50	156.75

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
35.61	3.38	38.99	8.65	8.66	0.00	-0.10	6.20	-6.20
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
53.83	103.00	156.83	52.36	104.39	156.75	-1.47	1.39	-0.08

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 - Mahendarnagar	-21	-10	0	42	0	0	-0.46

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	0.31	9.90	55.05	72.87	12.94	4.27	0.09	0.00

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)		
50.21	10.06	49.75	13.39	49.99	0.05	0.07	50.10	0.00

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	402	05:06	396	00:36	0.0	0.0	0.0	0.0
Gorakhpur	400	415	05:07	401	22:11	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	412	05:05	394	14:33	0.0	0.0	0.0	0.0
Dadri	400	412	05:04	389	14:35	0.0	0.6	0.0	0.0
Ballabgarh	400	417	05:05	392	14:35	0.0	0.0	0.0	0.0
Bawana	400	415	05:05	393	14:36	0.0	0.0	0.0	0.0
Bassi	400	419	18:01	395	12:53	0.0	0.0	0.0	0.0
Hissar	400	410	03:29	388	14:35	0.0	1.1	0.0	0.0
Moga	400	409	03:58	388	14:36	0.0	1.3	0.0	0.0
Abdullapur	400	415	03:21	396	14:38	0.0	0.0	0.0	0.0
Nalagarh	400	420	03:58	392	14:38	0.0	0.0	0.0	0.0
Kishenpur	400	420	08:02	404	11:03	0.0	0.0	0.0	0.0
Wagoora	400	0	00:00	9999	00:00	0.0	0.0	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	774	05:07	734	14:40	0.0	5.0	0.0	0.0
Balia	765	770	05:03	751	00:34	0.0	0.0	0.0	0.0
Moga	765	785	03:58	740	14:39	0.0	0.6	0.0	0.0
Agra	765	782	05:06	743	14:38	0.0	0.0	0.0	0.0
Bhiwani	765	789	03:59	742	14:39	0.0	0.0	0.0	0.0
Unnao	765	761	05:08	735	14:37	0.0	12.6	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	496.26	948.89	494.88	903.28	2088.08	903.79
Pong	426.72	384.05	409.60	484.26	402.20	273.51	1879.05	104.04
Tehri	829.79	740.04	771.00	218.97	762.85	144.51	581.39	212.00
Koteshwar	612.50	598.50	610.26	4.69	611.11	5.20	212.00	217.37
Chamera-I	760.00	748.75	753.70	0.00	0.00	0.00	554.67	351.34
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	523.47	10.77	519.78	11.42	389.53	420.19

* 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	972	4	0	1195	0	0	30.34	0.76	31.10
Delhi	258	-41	-2	338	5	-2	8.00	2.02	10.02
Haryana	1327	-137	0	1361	182	0	32.68	0.50	33.18
HP	-1281	-150	0	-1078	-158	0	-27.50	-3.08	-30.58
J&K	-535	187	0	-434	187	0	-11.23	-0.62	-11.85
CHD	0	-10	0	0	0	0	0.24	-0.04	0.20
Rajasthan	-489	387	2	-489	45	2	-11.74	6.49	-5.26
UP	762	0	0	632	0	0	14.04	0.00	14.04
Uttarakhand	-55	0	0	-55	0	0	-1.33	0.00	-1.33
Total	958	241	0	1470	260	0	33.50	6.03	39.53

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1560	873	121	0	0	0
Delhi	596	64	423	-151	0	-2
Haryana	1562	1316	242	-389	0	0
HP	-1078	-1281	-85	-158	0	0
J&K	-384	-535	236	-338	0	0
CHD	30	0	30	-30	0	0
Rajasthan	-489	-490	655	-245	2	0
UP	803	445	0	0	0	0
Uttarakhand	-55	-55	0	0	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 16.07.2015 :**

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 :**