

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 08.07.2015
Date of Reporting : 09.07.2015

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
44432	2458	46890	50.01	41557	2167	43725	50.07	1015.4	51.88

* 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	72.04	21.80		93.84	105.25	104.71	-0.54	198.55	0.00
Haryana	52.81	0.79		53.60	112.23	110.33	-1.90	163.94	0.00
Rajasthan	101.71	0.00	15.08	116.80	61.17	61.80	0.63	178.60	0.00
Delhi	22.98			22.98	78.86	79.13	0.27	102.11	0.07
UP	130.00	11.00		141.00	127.25	128.86	1.61	269.86	42.40
Uttarakhand		22.54		22.54	12.99	14.25	1.26	36.79	1.22
HP		23.38		23.38	1.40	1.65	0.25	25.02	0.00
J & K		14.58	0.00	14.58	19.55	20.06	0.51	34.64	8.19
Chandigarh				0.00	5.76	5.91	0.27	5.91	0.00
Total	379.54	94.09	15.08	488.71	524.46	526.69	2.36	1015.41	51.88

* 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	8568	0	-70	1060	7526	0	-138	1239	9254
Haryana	7966	0	-60	1775	6755	0	-87	1453	8243
Rajasthan	6800	0	-178	-78	7515	40	182	88	8117
Delhi	4565	0	-8	219	3925	0	58	59	5142
UP	11614	1990	266	585	11836	1870	337	845	12149
Uttarakhand	1822	15	120	67	1419	0	3	-55	1908
HP	1020	0	-80	-1246	927	0	24	-1401	1188
J&K	1811	453	173	-246	1458	257	107	-298	1894
Chandigarh	267	0	28	0	196	0	-8	0	304
Total	44432	2458	192	2135	41557	2167	477	1931	46449

* 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 (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	1710	1868	1795	43.43	1810	39.84	3.59
	Rihand I STPS (2*500)	1000	847	958	947	20.83	868	19.02	1.81
	Rihand II STPS (2*500)	1000	943	1040	917	23.18	966	21.51	1.67
	Rihand III STPS (2*500)	1000	0	0	399	0.00	0	0.00	0.00
	Dadri I STPS (4*210)	840	810	557	438	12.85	535	12.40	0.45
	Dadri II STPS (2*490)	980	975	855	698	19.10	796	19.27	-0.17
	Unchahar I TPS (2*210)	420	402	379	378	9.24	385	9.05	0.19
	Unchahar II TPS (2*210)	420	200	197	180	4.21	176	4.11	0.10
	Unchahar III TPS (1*220)	210	200	141	180	4.03	168	4.13	-0.10
	ISTPP (Jhajihar) (3*500)	1500	1500	922	621	15.31	638	15.90	-0.59
	Dadri GPS (4*130.19+2*154.51)	830	800	244	245	6.15	256	6.24	-0.09
	Anta GPS (3*88.71+1*153.2)	419	383	0	0	0.00	0	0.00	0.00
	Auraiya GPS (4*111.19+2*109.30)	663	637	135	224	3.69	154	3.61	0.08
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.03
	Singrauli Solar	15	3	0	0	0.03	1	0.07	-0.04
	KHEP	800	0	803	801	19.35	806	0.00	19.35
Sub Total (A)	12112	9414	8099	7823	181	7561	155	26	
B. NPC	NAPS (2*220)	440	377	377	377	9.05	377	9.05	0.00
	RAPS- B (2*220)	440	376	427	424	9.05	377	9.02	0.03
	RAPS- C (2*220)	440	400	433	431	9.27	386	9.60	-0.33
	Sub Total (B)	1320	1153	1237	1232	27.37	1141	27.67	-0.30
C. NHPC	Chamera I HPS (3*180)	540	534	546	549	13.06	544	12.81	0.25
	Chamera II HPS (3*100)	300	273	303	206	6.47	270	6.57	-0.10
	Chamera III HPS (3*77)	231	229	238	237	5.62	234	5.50	0.12
	Bairasuil HPS(3*60)	180	179	185	63	2.86	119	2.76	0.09
	Salal-HPS (6*115)	690	646	557	667	15.52	647	15.45	0.07
	Tanakpur-HPS (3*40)	94	90	92	91	2.20	92	2.16	0.04
	Uri-I HPS (4*120)	480	462	450	471	11.25	469	11.09	0.16
	Uri-II HPS (4*60)	240	120	122	123	2.91	121	2.88	0.03
	Dhauliganga-HPS (4*70)	280	280	285	283	6.75	281	6.72	0.03
	Dulhasti-HPS (3*130)	390	386	395	398	9.32	389	9.26	0.06
	Sewa-II HPS (3*40)	120	119	95	0	1.34	56	1.21	0.13
	Parbati 3 (4*130)	520	305	391	266	6.14	256	6.08	0.06
	Sub Total (C)	4065	3623	3658	3353	83	3476	82	1
	D. SJVNL	NJPC (6*250)	1500	1605	1637	1631	38.85	1619	38.52
Rampur HEP (6*68.67)		412	442	442	441	10.68	445	10.61	0.07
Sub Total (D)		1912	2047	2079	2072	49.53	2064	49.13	0.40
E. THDC	Tehri HPS (4*250)	1000	608	608	152	6.06	253	6.00	0.06
	Koteshwar HPS (4*100)	400	121	301	94	2.95	123	2.90	0.05
	Sub Total (E)	1400	729	909	246	9.01	375	8.90	0.11
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	866	1219	681	20.87	869	20.78	0.08
	Dehar HPS (6*165)	990	600	660	600	14.42	601	14.40	0.02
	Pong HPS (6*66)	396	235	318	186	5.65	235	5.63	0.01
	Sub Total (F)	2900	1701	2197	1467	40.94	1706	40.82	0.12
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	232	232	5.37	224	5.36	0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	1200	28.32	1180	27.61	0.70
	Malana Stg-II HPS (2*50)	100	0	112	112	2.64	110	2.49	0.15
	Shree Cement TPS (2*150)	300	0	284	297	6.59	274	6.69	-0.10
	Budhil HPS(IPP) (2*35)	70	0	74	74	1.76	73	1.68	0.08
	Sub Total (G)	1662	0	1901	1914	44.68	1862	43.83	0.85
	H. Total Regional Entities (A-G)	25372	18666	20080	18107	436.41	18184	408.09	28.32

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	1080	25.63	1068
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	80	90	1.36	57
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	605	579	13.93	581
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	991	706	23.81	992
	Talwandi Saboo (1*660)	660	345	314	7.31	305
	Thermal (Total)	4700	3081	2769	72.04	3002
	Total Hydro	1000	925	934	21.80	908
	Total Punjab	5700	4006	3703	93.84	3910
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	432	622	11.82
DCRTPP (Yamuna nagar) (2*300)		600	451	447	11.37	474
Faridabad GPS (NTPC)		432	381	298	8.26	344
RGTPP (Khedar) (IPP) (2*600)		1200	381	369	10.45	435
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	416	373	10.91	455
Thermal (Total)		4944	2061	2109	52.81	2200
Total Hydro		62	30	33	0.79	33
Total Haryana		5006	2091	2142	53.60	2234
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	872	824	20.65
	suratgarh TPS (6*250)	1500	770	779	18.63	776
	Chabra TPS (4*250)	1000	416	520	10.53	439
	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	203	205	4.86	202
	RAPS A (NPC) (1*100+1*200)	300	143	144	3.38	141
	Barsingar (NLC) (2*125)	250	95	163	3.02	126
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	452	843	16.80	700
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	1060	903	23.84	993
	Kawai(Adani) (2*660)	1320	0	0	0.00	0
	Thermal (Total)	8276	4011	4381	102	4238
	Total Hydro	550	0	0	0.00	0
	Wind power	3214	858	180	14.35	598
	Biomass	99	26	26	0.62	26
	Solar	730	0	0	0.11	5
	Renewable/Others (Total)	4043	884	206	15.08	629
	Total Rajasthan	12869	4895	4587	116.80	4866
	UP	Anpara TPS (3*210+2*500)	1630	1327	1351	31.60
Obra TPS (2*50+2*94+5*200)		1194	319	279	7.30	304
Paricha TPS (2*110+2*220+2*250)		1140	748	706	17.50	729
Panki TPS (2*105)		210	117	36	2.30	96
Harduaganj TPS (1*60+1*105+2*250)		665	476	526	11.20	467
Tanda TPS (NTPC) (4*110)		440	360	362	9.00	375
Roza TPS (IPP) (4*300)		1200	801	810	19.40	808
Anpara-C (IPP) (2*600)		1200	1035	1086	25.80	1075
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	122	121	2.70	113
Anpara-D(1*500)		500	0	0	0.00	0
Lalitpur TPS(1*660)		660	0	0	0.30	13
Thermal (Total)		9289	5305	5277	127	5296
Vishnuparyag HPS (IPP)(including Alakanada)		730	291	280	7.00	292
Other Hydro		527	279	275	4.00	167
Cogeneration		981	120	120	2.90	121
Total UP		11527	5995	5952	141.00	5583
Uttarakhand	Total Hydro	1398	954	932	22.54	939
	Total Uttarakhand	1398	954	932	22.54	939
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.02	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	70	74	0.81	34
	Pragati Gas Turbine (2x104+ 1x122)	330	265	263	6.38	266
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	268	272	6.49	270
	Badarpur TPS (NTPC) (3*95+2*210)	705	337	348	9.32	388
	Thermal (Total)	2917	940	957	22.98	957
	Total Delhi	2917	940	957	22.98	957
HP	Baspa HPS (IPP) (2*100)	300	301	331	7.72	322
	Malana HPS (IPP) (2*43)	86	98	97	2.33	97
	Other Hydro	878	558	550	13.32	555
	Total HP	1264	957	978	23.38	974
J & K	Baqilhar HPS (IPP) (3*150)	450	440	438	10.55	439
	Other Hydro/IPP	560	184	115	4.03	168
	Gas/Diesel/Others	190	0	0	0.00	0
	Total J & K	1200	624	553	14.58	607
Total State Control Area Generation		41881	20462	19804	488.71	20071
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5931	4721	116.64	4860
Total Regional Availability(Gross)		67253	46473	42632	1041.76	43115

IV. Total Hydro Generation:

Regional Entities Hydro	12369	11189	9483	238.58	9941
State Control Area Hydro	5811	3769	3705	94.09	3629
Total Regional Hydro	18180	14958	13188	332.67	13569

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	100	100	100	300	1.61	2.34	-0.73
Gwalior-Agra (D/C)	2039	1265	2120	0	37.05	0.00	37.05
Zerda-Kankroli	-107	-272	0	361	0.00	5.41	-5.41
Zerda-Bhinmal	-122	-140	30	282	0.00	2.99	-2.99
Malanpur-Auraiya	2	26	0	28	0.00	0.29	-0.29
Badod-Kota/Morak	-36	20	42	45	0.00	0.07	-0.07
Mundra-Mohinderqarh(HVDC)	2202	1998	2506	0	40.05	0.00	40.05
Vindhychal - Rihand	499	495	505	0	11.79	0.00	11.79
Sub Total WR	4577	3492			90.50	11.10	79.40
Pusauli Bypass	300	300	300	0	7.17	0.00	7.17
MZP- GKP (D/C)	216	270	554	0	8.28	0.00	8.28
Patna-Balia(D/C)	406	309	496	0	8.60	0.00	8.60
B'Sharif-Balia (D/C)	4	30	196	0	1.37	0.00	1.37
Pusauli-Balia	-84	-59	0	109	0.00	0.98	-0.98
Gaya-Fatehpur (765 Kv)	122	81	216	0	3.45	0.00	3.45
Pusauli-Sahupuri	153	146	170	0	3.36	0.00	3.36
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-10	-20	0	35	0.00	0.42	-0.42
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-23	-53	136	120	0.64	0.00	0.64
Barh -GKP (D/C)	270	225	317	0	5.78	0.00	5.78
Sub Total ER	1354	1229			38.64	1.40	37.24
Total IR Exch	5931	4721			129.14	12.50	116.64

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
33.10	3.85	36.95	5.82	6.58	0.61	-0.69	1.66	-1.66

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
45.04	88.74	133.78	37.24	79.40	116.64	-7.80	-9.34	-17.14

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	28	24	0	40	0	1	-0.54

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	0.35	8.72	54.63	75.90	12.87	2.28	0.27	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)		
50.25	13.02	49.78	22.18	49.99	0.04	0.06	50.20	49.93

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	404	05:05	393	22:25	0.0	0.0	0.0	0.0
Gorakhpur	400	415	18:28	401	22:48	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	397	11:11	0.0	0.0	0.0	0.0
Dadri	400	417	05:05	400	09:36	0.0	0.0	0.0	0.0
Ballabhgarh	400	422	05:05	402	11:07	0.0	0.0	3.5	0.0
Bawana	400	419	05:04	402	11:12	0.0	0.0	0.0	0.0
Bassi	400	423	04:01	405	09:56	0.0	0.0	8.2	0.0
Hissar	400	418	04:01	401	14:14	0.0	0.0	0.0	0.0
Moga	400	416	03:52	400	14:45	0.0	0.0	0.0	0.0
Abdullapur	400	416	03:35	396	14:23	0.0	0.0	0.0	0.0
Nalagarh	400	419	03:43	406	14:23	0.0	0.0	0.0	0.0
Kishenpur	400	421	05:06	405	20:48	0.0	0.0	0.1	0.0
Wagoora	400	411	02:28	384	20:41	0.0	9.2	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	769	05:06	737	11:12	0.0	11.4	0.0	0.0
Balia	765	750	00:00	750	00:00	0.0	0.0	0.0	0.0
Moga	765	795	03:51	767	14:16	0.0	0.0	0.0	0.0
Agra	765	785	04:02	751	11:18	0.0	0.0	0.0	0.0
Bhiwani	765	798	03:50	768	14:52	0.0	0.0	0.0	0.0
Unnao	765	761	05:21	731	22:18	0.0	47.5	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	490.83	758.57	491.08	768.41	1377.08	711.57
Pong	426.72	384.05	406.12	370.28	400.65	230.85	578.80	385.73
Tehri	829.79	740.04	756.85	97.23	753.70	74.90	396.73	193.00
Koteshwar	612.50	598.50	611.03	5.20	611.13	5.20	193.00	194.24
Chamera-I	760.00	748.75	755.19	0.00	0.00	0.00	440.14	353.93
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	522.75	10.24	520.02	11.60	610.39	418.23

* 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	1034	205	0	940	121	0	23.89	4.98	28.87
Delhi	334	-272	-2	465	-219	-27	7.37	-2.65	4.71
Haryana	1382	71	0	1549	225	0	32.53	3.64	36.17
HP	-1108	-293	0	-905	-340	0	-23.35	-7.25	-30.60
J&K	-535	236	0	-434	187	0	-11.41	-0.97	-12.38
CHD	0	0	0	0	0	0	0.24	0.22	0.45
Rajasthan	-489	575	2	-489	408	2	-11.76	13.49	1.73
UP	845	0	0	585	0	0	14.40	0.00	14.40
Uttarakhand	-55	0	0	-55	98	24	-2.46	1.59	-0.87
Total	1409	522	0	1656	480	-1	29.44	13.04	42.48

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1231	850	322	121	0	0
Delhi	767	89	148	-445	0	-27
Haryana	1563	1216	248	-243	0	0
HP	-905	-1108	-260	-340	0	0
J&K	-434	-585	236	-323	0	0
CHD	30	0	30	0	0	0
Rajasthan	-489	-493	652	300	2	0
UP	861	440	0	0	0	0
Uttarakhand	-55	-202	98	0	24	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 08.07.2015 :**

Rain in most part of NR.

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 :**