

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 07.07.2015
Date of Reporting : 08.07.2015

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
43244	2827	46071	49.93	41296	2133	43430	50.06	1000.2	47.49

* 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	69.28	22.31		91.59	102.42	101.06	-1.35	192.65	0.00
Haryana	52.67	0.75		53.42	106.01	104.57	-1.44	157.99	0.00
Rajasthan	96.60	0.00	20.72	117.32	65.39	70.89	5.50	188.21	4.44
Delhi	20.95			20.95	75.57	76.34	0.77	97.29	0.04
UP	129.10	10.20		139.30	125.51	123.36	-2.15	262.66	34.89
Uttarakhand		22.13		22.13	12.48	13.16	0.68	35.30	0.08
HP		22.38		22.38	1.81	3.27	1.47	25.65	0.00
J & K		14.95	0.00	14.95	19.00	19.61	0.61	34.56	8.05
Chandigarh				0.00	5.91	5.85	0.27	5.85	0.00
Total	368.60	92.72	20.72	482.04	514.09	518.12	4.35	1000.16	47.49

* 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	8653	0	-32	1003	7203	0	-138	1132	8973
Haryana	7094	0	-288	1781	6388	0	178	1462	7566
Rajasthan	7552	109	225	-98	8236	0	261	-123	8570
Delhi	4185	12	125	366	3900	0	200	266	4869
UP	10914	2240	39	585	11534	1870	-22	845	11757
Uttarakhand	1723	0	229	-55	1384	0	45	-55	1723
HP	1004	0	-55	-1245	951	0	114	-1400	1239
J&K	1864	466	189	-246	1491	263	54	-298	1864
Chandigarh	255	0	-1	0	209	0	10	0	293
Total	43244	2827	431	2090	41296	2133	702	1828	44656

* 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	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	1676	1857	1774	41.92	1747	38.01	3.91
	Rihand I STPS (2*500)	1000	850	907	809	20.55	856	18.67	1.88
	Rihand II STPS (2*500)	1000	943	1015	804	21.90	913	20.26	1.65
	Rihand III STPS (2*500)	1000	280	0	398	5.54	231	5.53	0.01
	Dadri I STPS (4*210)	840	810	534	625	13.70	571	12.96	0.73
	Dadri II STPS (2*490)	980	975	745	690	18.18	758	18.11	0.07
	Unchahar I TPS (2*210)	420	401	434	275	8.36	348	8.44	-0.08
	Unchahar II TPS (2*210)	420	200	220	132	4.09	170	4.00	0.08
	Unchahar III TPS (1*220)	210	200	202	142	3.96	165	3.89	0.08
	ISTPP (Jhajihar) (3*500)	1500	1500	629	622	13.93	581	14.40	-0.47
	Dadri GPS (4*130.19+2*154.51)	830	800	233	241	6.01	250	6.03	-0.02
	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	199	203	5.42	226	5.31	0.11
	Dadri Solar	5	1	0	0	0.01	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.02	1	0.06	-0.04
	Singrauli Solar	15	3	0	0	0.06	2	0.07	-0.01
	KHEP	800	0	801	801	19.29	804	0.00	19.29
Sub Total (A)	12112	9662	7776	7516	183	7623	156	27	
B. NPC	NAPS (2*220)	440	375	199	200	9.02	376	9.00	0.02
	RAPS- B (2*220)	440	377	418	422	9.05	377	9.05	0.00
	RAPS- C (2*220)	440	400	431	426	9.23	385	9.60	-0.37
	Sub Total (B)	1320	1152	1048	1048	27.30	1137	27.65	-0.35
C. NHPC	Chamera I HPS (3*180)	540	539	549	548	13.10	546	12.93	0.16
	Chamera II HPS (3*100)	300	55	216	0	1.37	57	1.28	0.09
	Chamera III HPS (3*77)	231	0	0	0	0.16	7	0.11	0.04
	Bairasuil HPS(3*60)	180	179	183	62	2.81	117	2.68	0.12
	Salal-HPS (6*115)	690	633	667	655	15.12	630	15.21	-0.09
	Tanakpur-HPS (3*40)	94	88	93	92	1.09	46	2.11	-1.02
	Uri-I HPS (4*120)	480	475	476	472	11.52	480	11.40	0.12
	Uri-II HPS (4*60)	240	120	122	122	2.90	121	2.88	0.02
	Dhauliganga-HPS (4*70)	280	280	281	282	6.75	281	6.72	0.03
	Dulhasti-HPS (3*130)	390	386	396	397	9.18	383	9.26	-0.08
	Sewa-II HPS (3*40)	120	119	129	0	2.28	95	2.20	0.08
	Parbati 3 (4*130)	520	353	395	133	5.39	225	5.40	0.00
	Sub Total (C)	4065	3233	3507	2762	72	2986	72	-1
D. SJVNL	NJPC (6*250)	1500	1605	1642	1633	38.86	1619	38.52	0.34
	Rampur HEP (6*68.67)	412	442	443	442	10.67	445	10.61	0.06
Sub Total (D)	1912	2047	2085	2075	49.53	2064	49.13	0.40	
E. THDC	Tehri HPS (4*250)	1000	600	608	146	6.08	254	6.00	0.08
	Koteshwar HPS (4*100)	400	121	304	93	2.97	124	2.90	0.07
Sub Total (E)	1400	721	912	239	9.06	377	8.90	0.16	
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	872	1224	633	20.87	869	20.92	-0.06
	Dehar HPS (6*165)	990	601	660	610	14.74	614	14.43	0.31
	Pong HPS (6*66)	396	300	318	252	7.21	301	7.20	0.02
	Sub Total (F)	2900	1773	2202	1495	42.82	1784	42.55	0.27
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	231	231	5.50	229	5.36	0.14
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	1200	28.73	1197	28.53	0.20
	Malana Stg-II HPS (2*50)	100	0	111	112	2.64	110	2.49	0.15
	Shree Cement TPS (2*150)	300	0	241	144	5.14	214	4.93	0.21
	Budhil HPS(IPP) (2*35)	70	0	75	74	1.76	73	1.68	0.08
	Sub Total (G)	1662	0	1858	1761	43.77	1824	42.99	0.78
H. Total Regional Entities (A-G)	25372	18588	19387	16896	427.08	17795	399.18	27.91	

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	1080	1060	24.85	1035
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	108	110	1.14	47
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	652	569	13.58	566
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	924	715	22.69	945
	Talwandi Saboo (1*660)	660	355	327	7.04	293
	Thermal (Total)	4700	3119	2781	69.28	2887
	Total Hydro	1000	932	934	22.31	929
	Total Punjab	5700	4051	3715	91.59	3816
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	650	645	15.27
DCRTPP (Yamuna nagar) (2*300)		600	449	445	10.77	449
Faridabad GPS (NTPC)		432	381	300	8.14	339
RGTPP (Khedar) (IPP) (2*600)		1200	368	361	9.19	383
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	373	375	9.30	388
Thermal (Total)		4944	2221	2126	52.67	2194
Total Hydro		62	33	28	0.75	31
Total Haryana		5006	2254	2154	53.42	2226
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	808	811	19.51
	suratgarh TPS (6*250)	1500	605	453	13.07	545
	Chabra TPS (4*250)	1000	600	644	14.61	609
	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	202	203	4.83	201
	RAPS A (NPC) (1*100+1*200)	300	143	143	3.37	140
	Barsingar (NLC) (2*125)	250	166	164	3.79	158
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	695	837	19.57	815
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	492	955	17.85	744
	Kawai(Adani) (2*660)	1320	0	0	0.00	0
	Thermal (Total)	8276	3711	4210	97	4025
	Total Hydro	550	0	0	0.00	0
	Wind power	3214	1095	1286	20.17	840
	Biomass	99	22	22	0.54	22
	Solar	730	0	0	0.01	0
	Renewable/Others (Total)	4043	1117	1308	20.72	863
	Total Rajasthan	12869	4828	5518	117.32	4888
	UP	Anpara TPS (3*210+2*500)	1630	1341	1334	31.70
Obra TPS (2*50+2*94+5*200)		1194	288	342	7.50	313
Paricha TPS (2*110+2*220+2*250)		1140	701	718	16.90	704
Panki TPS (2*105)		210	54	59	1.40	58
Harduaganj TPS (1*60+1*105+2*250)		665	537	523	12.40	517
Tanda TPS (NTPC) (4*110)		440	336	355	8.90	371
Roza TPS (IPP) (4*300)		1200	653	801	18.80	783
Anpara-C (IPP) (2*600)		1200	1058	1085	25.60	1067
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	120	112	3.00	125
Anpara-D(1*500)		500	0	0	0.00	0
Lalitpur TPS(1*660)		660	0	0	0.00	0
Thermal (Total)		9289	5088	5329	126	5258
Vishnuparyag HPS (IPP)(including Alakanada)		730	295	280	6.80	283
Other Hydro		527	165	236	3.40	142
Cogeneration		981	120	120	2.90	121
Total UP		11527	5668	5965	139.30	5521
Uttarakhand	Total Hydro	1398	892	899	22.13	922
	Total Uttarakhand	1398	892	899	22.13	922
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	25	26	0.83	35
	Pragati Gas Turbine (2x104+ 1x122)	330	263	146	5.13	214
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	274	272	6.50	271
	Badarpur TPS (NTPC) (3*95+2*210)	705	407	398	8.49	354
	Thermal (Total)	2917	969	842	20.95	873
	Total Delhi	2917	969	842	20.95	873
HP	Baspa HPS (IPP) (2*100)	300	331	331	7.82	326
	Malana HPS (IPP) (2*43)	86	97	102	2.34	97
	Other Hydro	878	538	502	12.22	509
	Total HP	1264	966	935	22.38	932
J & K	Baglihar HPS (IPP) (3*150)	450	438	438	10.97	457
	Other Hydro/IPP	560	179	179	3.98	166
	Gas/Diesel/Others	190	0	0	0.00	0
	Total J & K	1200	617	617	14.95	623
Total State Control Area Generation		41881	20245	20645	482.04	19802
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5520	4352	114.88	4786
Total Regional Availability(Gross)		67253	45152	41893	1024.00	42383

IV. Total Hydro Generation:

Regional Entities Hydro	12369	11049	8915	229.23	9551
State Control Area Hydro	5811	3605	3649	92.72	3580
Total Regional Hydro	18180	14654	12564	321.95	13131

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)	1952	1253	1987	0	31.29	0.00	31.29
Zerda-Kankroli	-107	-272	0	361	0.00	5.41	-5.41
Zerda-Bhinmal	-97	-263	0	347	0.00	4.51	-4.51
Malanpur-Auraiya	13	29	0	51	0.00	0.68	-0.68
Badod-Kota/Morak	22	-40	35	41	0.00	0.00	0.00
Mundra-Mohinderqarh(HVDC)	1998	1998	2311	0	50.81	0.00	50.81
Vindhychal - Rihand	491	490	514	0	11.87	0.00	11.87
Sub Total WR	4372	3295			95.57	12.94	82.63
Pusaui Bypass	300	300	300	0	7.29	0.00	7.29
MZP- GKP (D/C)	208	270	536	0	7.50	0.00	7.50
Patna-Balia(D/C)	85	153	313	0	3.95	0.00	3.95
B'Sharif-Balia (D/C)	-17	53	117	45	1.14	0.00	1.14
Pusaui-Balia	-36	-20	24	84	0.00	0.50	-0.50
Gaya-Fatehpur (765 Kv)	180	59	316	0	4.07	0.00	4.07
Pusaui-Sahupuri	162	141	167	0	3.37	0.00	3.37
K'nasa-Sahupuri	0	0	1	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-40	0	44	0.00	0.84	-0.84
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 Kv)	39	-35	178	78	1.25	0.00	1.25
Barh -GKP (D/C)	267	176	311	0	5.00	0.00	5.00
Sub Total ER	1148	1057			33.58	1.33	32.25
Total IR Exch	5520	4352			129.15	14.27	114.88

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
31.83	3.92	35.74	10.03	9.42	0.22	-0.14	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
47.66	84.60	132.26	32.25	82.63	114.88	-15.41	-1.97	-17.39

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	-21	0	23	0	0	-0.43

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	0.50	4.27	17.36	57.51	70.50	10.29	1.91	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					
50.17	18.02	49.66	22.06	49.97	0.07	0.08	50.17	49.84

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	406	06:04	397	14:19	0.0	0.0	0.0	0.0
Gorakhpur	400	415	17:05	402	22:18	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	415	06:03	396	14:41	0.0	0.0	0.0	0.0
Dadri	400	418	06:01	398	14:42	0.0	0.0	0.0	0.0
Ballabgarh	400	424	06:03	401	14:40	0.0	0.0	15.8	0.0
Bawana	400	420	06:05	402	14:34	0.0	0.0	0.0	0.0
Bassi	400	422	04:04	404	12:19	0.0	0.0	1.8	0.0
Hissar	400	413	18:01	402	14:17	0.0	0.0	0.0	0.0
Moga	400	420	03:58	404	14:15	0.0	0.0	0.0	0.0
Abdullapur	400	416	06:02	396	14:48	0.0	0.0	0.0	0.0
Nalagarh	400	422	03:58	408	14:14	0.0	0.0	4.2	0.0
Kishenpur	400	423	06:02	408	20:49	0.0	0.0	17.0	0.0
Wagoora	400	411	05:53	387	20:46	0.0	7.3	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	772	06:02	739	12:20	0.0	4.6	0.0	0.0
Balia	765	750	00:00	750	00:00	0.0	0.0	0.0	0.0
Moga	765	801	04:05	770	14:41	0.0	0.0	0.5	0.0
Agra	765	786	06:01	754	14:41	0.0	0.0	0.0	0.0
Bhiwani	765	800	03:58	770	14:38	0.0	0.0	0.0	0.0
Unnao	765	756	18:05	733	13:41	0.0	76.6	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	490.33	748.75	490.71	758.57	1428.07	710.16
Pong	426.72	384.05	406.02	370.28	400.69	237.89	626.79	494.07
Tehri	829.79	740.04	755.80	91.11	753.05	70.05	369.15	195.00
Koteshwar	612.50	598.50	610.96	4.95	910.91	4.95	195.00	195.85
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	427.71	354.54
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	522.83	10.71	520.27	11.20	322.12	418.62

* 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	1009	123	0	940	63	0	25.12	3.21	28.33
Delhi	359	-91	-2	465	-96	-2	10.07	-1.23	8.84
Haryana	1382	80	0	1563	217	0	33.51	3.47	36.98
HP	-1108	-293	0	-905	-340	0	-23.35	-7.35	-30.70
J&K	-535	236	0	-434	187	0	-11.36	-0.55	-11.91
CHD	0	0	0	0	0	0	0.24	0.36	0.59
Rajasthan	-489	364	2	-489	389	2	-11.73	13.65	1.91
UP	845	0	0	585	0	0	14.44	0.00	14.44
Uttarakhand	-55	0	0	-55	0	0	-1.32	0.00	-1.32
Total	1409	419	0	1670	421	0	35.61	11.56	47.16

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1158	940	248	63	0	0
Delhi	742	165	177	-240	0	-2
Haryana	1563	1315	238	-306	0	0
HP	-905	-1108	-267	-340	0	0
J&K	-434	-585	236	-298	0	0
CHD	30	0	40	0	0	0
Rajasthan	-489	-489	982	329	2	0
UP	861	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 07.07.2015 :**

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 :**