

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 18.07.2015
Date of Reporting : 19.07.2015

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
41981	2541	44522	50.06	43222	2915	46138	50.09	1007.6	45.85

* 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	49.60	17.73		67.33	115.27	115.38	0.11	182.71	0.00
Haryana	32.45	0.63		33.08	114.88	112.77	-2.11	145.85	0.01
Rajasthan	110.12	0.00	12.45	122.57	64.39	67.88	3.49	190.45	0.00
Delhi	21.46			21.46	76.18	74.57	-1.61	96.03	0.03
UP	129.40	11.20		140.60	141.40	143.51	2.11	284.11	37.85
Uttarakhand		23.18		23.18	15.06	15.38	0.32	38.56	0.00
HP		23.70		23.70	1.75	1.75	0.00	25.46	0.00
J & K		15.13	0.00	15.13	24.30	24.01	-0.29	39.14	7.97
Chandigarh				0.00	5.70	5.35	0.27	5.35	0.00
Total	343.03	91.57	12.45	447.05	558.93	560.60	2.29	1007.65	45.85

* 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	7656	0	12	1198	7994	0	-59	1369	8252
Haryana	6746	0	-41	1564	6524	8	-43	1508	7197
Rajasthan	7028	0	117	-107	8194	0	8	107	8468
Delhi	3766	0	-214	-104	4370	0	105	-34	4889
UP	12037	2110	155	625	12034	2655	294	860	12470
Uttarakhand	1753	0	116	67	1535	0	16	-55	1782
HP	1025	0	-120	-1287	931	0	6	-1489	1215
J&K	1723	431	110	-247	1429	252	-80	-570	1901
Chandigarh	247	0	-1	0	212	0	-11	0	254
Total	41981	2541	134	1709	43222	2915	236	1696	44074

* 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 (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	1731	1890	1925	45.38	1891	41.09	4.29
	Rihand I STPS (2*500)	1000	854	948	903	21.62	901	19.79	1.83
	Rihand II STPS (2*500)	1000	943	1024	1021	23.40	975	21.52	1.88
	Rihand III STPS (2*500)	1000	943	1003	994	22.78	949	21.40	1.38
	Dadri I STPS (4*210)	840	800	508	490	12.35	515	11.98	0.37
	Dadri II STPS (2*490)	980	980	805	707	18.80	783	19.04	-0.24
	Unchahar I TPS (2*210)	420	400	386	373	8.92	372	8.77	0.15
	Unchahar II TPS (2*210)	420	200	159	159	4.06	169	3.96	0.10
	Unchahar III TPS (1*220)	210	200	163	155	3.96	165	4.04	-0.09
	ISTPP (Jhajhar) (3*500)	1500	1500	617	628	13.67	570	14.40	-0.73
	Dadri GPS (4*130.19+2*154.51)	830	800	190	188	4.51	188	5.45	-0.94
	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	0.01	0	0.02	-0.01
	Unchahar Solar	10	3	0	0	0.02	1	0.06	-0.05
	Singrauli Solar	15	3	0	0	0.07	3	0.07	0.00
	KHEP	800	0	806	807	19.40	808	0.00	19.40
Sub Total (A)	12112	10384	8499	8350	199	8290	172	27	
B. NPC	NAPS (2*220)	440	370	399	408	8.82	368	8.88	-0.06
	RAPS- B (2*220)	440	199	211	208	4.40	183	4.77	-0.37
	RAPS- C (2*220)	440	287	362	375	6.53	272	6.88	-0.35
	Sub Total (B)	1320	855	972	991	19.74	823	20.53	-0.78
C. NHPC	Chamera I HPS (3*180)	540	534	548	542	12.95	540	12.81	0.14
	Chamera II HPS (3*100)	300	300	306	306	7.29	304	7.20	0.09
	Chamera III HPS (3*77)	231	229	231	230	5.52	230	5.50	0.02
	Bairasuil HPS(3*60)	180	179	186	122	3.32	138	3.22	0.10
	Salal-HPS (6*115)	690	653	670	670	16.10	671	15.66	0.44
	Tanakpur-HPS (3*40)	94	91	94	93	2.21	92	2.18	0.04
	Uri-I HPS (4*120)	480	471	472	472	11.47	478	11.30	0.17
	Uri-II HPS (4*60)	240	175	183	182	4.17	174	4.20	-0.03
	Dhauliganga-HPS (4*70)	280	280	280	280	6.77	282	6.72	0.05
	Dulhasti-HPS (3*130)	390	386	395	395	9.32	389	9.26	0.06
	Sewa-II HPS (3*40)	120	119	129	130	3.06	127	2.86	0.20
	Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	4065	3417	3492	3421	82	3424	81	1
	D. SJVNL	NJPC (6*250)	1500	1605	1631	1628	38.76	1615	38.52
Rampur HEP (6*68.67)		412	409	446	374	9.94	414	9.80	0.14
Sub Total (D)		1912	2014	2077	2002	48.70	2029	48.32	0.38
E. THDC	Tehri HPS (4*250)	1000	744	752	0	7.60	317	7.50	0.10
	Koteshwar HPS (4*100)	400	138	393	92	3.33	139	3.30	0.03
	Sub Total (E)	1400	882	1145	92	10.93	455	10.80	0.13
F. BBMB	Bhakra HPS (3*108+2*126+5*157)	1361	1215	1217	1226	29.15	1215	29.16	-0.01
	Dehar HPS (6*165)	990	610	660	560	14.65	611	14.64	0.01
	Pong HPS (6*66)	396	21	66	0	0.57	24	0.51	0.05
	Sub Total (F)	2747	1846	1943	1786	44.37	1849	44.31	0.06
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	231	231	5.50	229	5.36	0.13
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	1200	28.48	1187	27.92	0.56
	Malana Stg-II HPS (2*50)	100	0	111	111	2.64	110	2.49	0.15
	Shree Cement TPS (2*150)	300	0	149	149	2.67	111	3.68	-1.02
	Budhil HPS(IPP) (2*35)	70	0	72	72	1.70	71	1.67	0.03
	Sub Total (G)	1662	0	1763	1762	40.98	1707	41.13	-0.15
H. Total Regional Entities (A-G)	25219	19398	19891	18405	445.87	18578	417.62	28.25	

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	530	690	14.40	600
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	80	80	1.83	76
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	649	592	14.54	606
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	360	695	11.55	481
	Talwandi Saboo (1*660)	660	328	360	7.29	304
	Thermal (Total)	4700	1947	2417	49.60	2067
	Total Hydro	1000	766	697	17.73	739
	Total Punjab	5700	2713	3114	67.33	2806
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	238	221	5.41	225
Faridabad GPS (NTPC)		432	0	0	0.00	0
RGTPP (Khedar) (IPP) (2*600)		1200	385	357	9.16	382
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CL.P) (2*660)		1320	670	741	17.88	745
Thermal (Total)		4944	1293	1319	32.45	1352
Total Hydro		62	26	28	0.63	26
Total Haryana		5006	1319	1347	33.08	1378
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	907	933	21.85
	suratgarh TPS (6*250)	1500	935	874	22.97	957
	Chabra TPS (4*250)	1000	366	383	9.42	392
	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	185	181	4.93	205
	RAPS A (NPC) (1*100+1*200)	300	149	149	3.39	141
	Barsingar (NLC) (2*125)	250	95	95	2.06	86
	Giral LTPS (2*125)	250	74	71	1.44	60
	Rajwest LTPS (IPP) (8*135)	1080	421	829	16.54	689
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	0	0	0.00	0
	Kawai(Adani) (2*660)	1320	1056	1190	27.53	1147
	Thermal (Total)	8276	4188	4705	110	4588
	Total Hydro	550	0	0	0.00	0
	Wind power	3214	196	667	9.51	396
	Biomass	99	25	25	0.60	25
	Solar	730	0	0	2.34	97
	Renewable/Others (Total)	4043	221	692	12.45	519
	Total Rajasthan	12869	4409	5397	122.57	5107
	UP	Anpara TPS (3*210+2*500)	1630	1155	1031	25.80
Obra TPS (2*50+2*94+5*200)		1194	371	338	8.40	350
Paricha TPS (2*110+2*220+2*250)		1140	679	665	16.60	692
Panki TPS (2*105)		210	131	126	3.00	125
Harduaganj TPS (1*60+1*105+2*250)		665	469	527	11.80	492
Tanda TPS (NTPC) (4*110)		440	369	361	8.90	371
Roza TPS (IPP) (4*300)		1200	801	806	19.60	817
Anpara-C (IPP) (2*600)		1200	810	802	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	0	271	4.20	175
Thermal (Total)		9289	5190	5330	127	5292
Vishnuparyag HPS (IPP)(including Alakanada)		730	258	233	5.80	242
Other Hydro		527	230	279	5.40	225
Cogeneration		981	100	100	2.40	100
Total UP		11527	5778	5942	140.60	5617
Uttarakhand		Total Hydro	1398	1001	940	23.18
	Total Uttarakhand	1398	1001	940	23.18	966
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	72	67	1.72	72
	Pragati Gas Turbine (2x104+ 1x122)	330	262	257	6.38	266
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	271	270	6.49	270
	Badarpur TPS (NTPC) (3*95+2*210)	705	314	327	6.88	287
	Thermal (Total)	2917	919	921	21.46	894
	Total Delhi	2917	919	921	21.46	894
HP	Baspa HPS (IPP) (2*100)	300	304	334	7.53	314
	Malana HPS (IPP) (2*43)	86	97	100	2.34	98
	Other Hydro	878	599	561	13.83	576
	Total HP	1264	1000	995	23.70	988
J & K	Baglihar HPS (IPP) (3*150)	450	450	440	10.61	442
	Other Hydro/IPP	560	196	193	4.52	188
	Gas/Diesel/Others	190	0	0	0.00	0
	Total J & K	1200	646	633	15.13	630
Total State Control Area Generation		41881	17785	19289	447.05	18385
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			653.76	1025	122.92	5122
Total Regional Availability(Gross)		67100	38330	38719	1015.83	42085

IV. Total Hydro Generation:

Regional Entities Hydro	12216	11005	9650	242.20	10092
State Control Area Hydro	5811	3669	3572	91.57	3574
Total Regional Hydro	18027	14674	13222	333.77	13665

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	-350	0	500	0.00	8.25	-8.25
Gwalior-Agra (D/C)	-2604	-2201	-2604	0	49.75	0.00	49.75
Zerda-Kankroli	-85	-100	0	249	0.00	3.22	-3.22
Zerda-Bhinmal	-12	-52	74	274	0.00	1.34	-1.34
Malanpur-Auraiya	-7	0	0	9	0.30	0.00	0.30
Badod-Kota/Morak	135	59	145	0	0.76	0.00	0.76
Mundra-Mohinderqarh(HVDC)	2225	2200	2504	0	51.33	0.00	51.33
Vindhychal - Rihand	-503	-499	-507	0	-11.79	0.00	-11.79
Sub Total WR	-1151	-943			90.34	12.81	77.53
Pusauli Bypass	400	400	400	0	9.20	0.00	9.20
MZP- GKP (D/C)	322	460	632	0	11.17	0.00	11.17
Patna-Balia(D/C)	280	225	285	0	4.74	0.00	4.74
B'Sharif-Balia (D/C)	99	138	194	0	4.19	0.00	4.19
Pusauli-Balia	126	129	185	0	1.50	0.00	1.50
Gaya-Fatehpur (765 Kv)	185	218	252	0	5.21	0.00	5.21
Pusauli-Sahupuri	160	134	196	0	3.99	0.00	3.99
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-30	0	46	0.00	0.90	-0.90
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 Kv)	0	65	155	104	1.56	0.00	1.56
Barh -GKP (D/C)	269	229	269	0	4.75	0.00	4.75
Sub Total ER	1805	1968			46.29	0.90	45.39
Total IR Exch	654	1025			136.63	13.71	122.92

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
30.72	3.73	34.46	8.64	8.32	0.00	0.00	12.89	-12.89
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
55.99	85.63	141.62	45.39	77.53	122.92	-10.60	-8.09	-18.70

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	-13	-28	0	30	0	0	-0.48

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	0.29	7.74	58.78	78.78	11.30	2.13	0.05	0.00

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					
50.22	18.03	49.75	19.20	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	402	18:06	396	01:34	0.0	0.0	0.0	0.0
Gorakhpur	400	415	06:26	400	11:19	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	18:03	400	10:45	0.0	0.0	0.0	0.0
Dadri	400	412	06:00	398	10:42	0.0	0.0	0.0	0.0
Ballabgarh	400	418	06:00	401	11:19	0.0	0.0	0.0	0.0
Bawana	400	416	06:01	401	11:17	0.0	0.0	0.0	0.0
Bassi	400	424	18:02	404	10:45	0.0	0.0	6.9	0.0
Hissar	400	411	18:02	396	11:14	0.0	0.0	0.0	0.0
Moga	400	407	16:03	397	10:32	0.0	0.0	0.0	0.0
Abdullapur	400	409	15:25	396	11:08	0.0	29.5	0.0	0.0
Nalagarh	400	408	18:02	400	10:49	0.0	0.0	0.0	0.0
Kishenpur	400	412	02:30	403	06:51	0.0	0.0	0.0	0.0
Wagoora	400	404	02:30	381	06:51	0.0	24.2	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	770	18:06	742	10:45	0.0	0.0	0.0	0.0
Balia	765	766	05:14	743	11:19	0.0	0.0	0.0	0.0
Moga	765	784	18:03	761	10:45	0.0	0.0	0.0	0.0
Agra	765	786	18:03	756	10:46	0.0	0.0	0.0	0.0
Bhiwani	765	792	16:02	769	10:23	0.0	0.0	0.0	0.0
Unnao	765	764	18:50	737	11:48	0.0	9.7	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	497.70	1006.54	495.90	937.45	1861.63	1012.72
Pong	426.72	384.05	411.20	534.70	402.78	281.22	904.07	38.68
Tehri	829.79	740.04	774.15	252.00	769.40	200.00	658.36	229.00
Koteshwar	612.50	598.50	610.18	4.44	611.03	5.20	229.00	219.24
Chamera-I	760.00	748.75	753.67	0.00	0.00	0.00	511.86	351.03
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	523.59	10.78	519.97	10.81	886.31	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	1363	7	0	1195	3	0	32.29	0.64	32.93
Delhi	258	-290	-2	338	-415	-28	8.00	-4.07	3.93
Haryana	1327	181	0	1361	203	0	32.32	-1.11	31.21
HP	-1281	-208	0	-1078	-209	0	-27.50	-4.82	-32.32
J&K	-535	-35	0	-434	187	0	-11.27	1.60	-9.66
CHD	0	0	0	0	0	0	0.24	-0.07	0.17
Rajasthan	-489	594	2	-489	381	2	-11.74	12.55	0.80
UP	860	0	0	625	0	0	14.47	0.00	14.47
Uttarakhand	-55	0	0	-55	98	25	-1.33	1.24	-0.09
Total	1447	249	0	1463	247	-1	35.47	5.96	41.44

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1560	1179	125	3	0	0
Delhi	596	64	189	-415	-2	-28
Haryana	1402	1316	229	-467	0	0
HP	-1078	-1281	-180	-209	0	0
J&K	-434	-535	236	-35	0	0
CHD	30	0	20	-20	0	0
Rajasthan	-489	-490	640	255	2	2
UP	870	451	0	0	0	0
Uttarakhand	-55	-55	98	0	25	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 18.07.2015 :**

Rain in some 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 :**