

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 26.07.2015
Date of Reporting : 27.07.2015

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Off Peak (03:00 Hrs) MW			Day Energy (Net MU)		
	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
40933	1867	42800	50.04	41100	2020	43120	50.12	949.5	42.30

* 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	63.76	21.54		85.30	121.92	120.42	-1.50	205.73	0.00
Haryana	40.25	0.65		40.90	116.94	115.26	-1.68	156.16	0.00
Rajasthan	71.69	2.73	9.73	84.14	45.31	44.01	-1.30	128.15	0.00
Delhi	13.06			13.06	82.10	81.36	-0.74	94.42	0.14
UP	124.77	9.00		133.77	139.37	139.60	0.23	273.36	35.11
Uttarakhand		21.58		21.58	13.83	13.91	0.08	35.49	0.04
HP		22.50		22.50	-0.97	-0.07	0.90	22.44	0.23
J & K		14.65	0.00	14.65	17.95	13.81	-4.14	28.46	6.79
Chandigarh				0.00	5.58	5.28	0.27	5.28	0.00
Total	313.52	92.66	9.73	415.91	542.02	533.58	-7.88	949.49	42.30

* 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	8446	0	-46	1563	8346	0	-208	1739	9124
Haryana	7075	0	-419	1495	7062	0	-114	1518	7442
Rajasthan	5498	0	84	-131	5854	0	-177	-341	6096
Delhi	3816	0	7	289	4457	0	205	282	4864
UP	11555	1450	447	605	12077	1860	47	1107	12355
Uttarakhand	1730	0	88	45	1489	0	10	-57	1749
HP	905	0	58	-1473	813	20	26	-1596	1080
J&K	1668	417	92	-300	795	140	-342	-763	1751
Chandigarh	240	0	-9	0	207	0	-21	-10	271
Total	40933	1867	302	2094	41100	2020	-575	1878	42704

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

figures may not be at simultaneous hour.

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 [OG:(+ve), UG: (-ve)]	
									Net MU	Net MU
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1835	1923	1777	37.50	1563	38.58	-1.08	
	Rihand I STPS (2*500)	1000	890	767	783	18.01	750	16.89	1.12	
	Rihand II STPS (2*500)	1000	470	393	425	9.64	402	9.24	0.40	
	Rihand III STPS (2*500)	1000	953	859	660	17.65	735	17.44	0.21	
	Dadri I STPS (4*210)	840	810	594	630	14.19	591	13.66	0.53	
	Dadri II STPS (2*490)	980	976	707	676	16.57	690	16.71	-0.14	
	Unchahar I TPS (2*210)	420	400	306	271	6.69	279	6.94	-0.25	
	Unchahar II TPS (2*210)	420	400	252	266	6.21	259	6.64	-0.43	
	Unchahar III TPS (1*220)	210	200	114	125	2.95	123	3.32	-0.37	
	ISTPP (Jhajhar) (3*500)	1500	1425	590	598	13.60	567	14.40	-0.80	
	Dadri GPS (4*130.19+2*154.51)	830	800	191	192	4.50	187	4.55	-0.05	
	Anta GPS (3*88.71+1*153.2)	419	396	0	0	0.00	0	0.00	0.00	
	Auraiya GPS (4*111.19+2*109.30)	663	638	0	0	0.00	0	0.00	0.00	
	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	0.08	3	0.07	0.01	
KHEP	800	0	816	819	19.70	821	19.40	0.30		
Sub Total (A)	12112	10200	7512	7222	167	6972	168	-1		
B. NPC	NAPS (2*220)	440	369	410	414	8.88	370	8.84	0.03	
	RAPS- B (2*220)	440	318	425	210	7.45	310	7.64	-0.18	
	RAPS- C (2*220)	440	385	424	427	9.14	381	9.24	-0.10	
	Sub Total (B)	1320	1072	1259	1051	25.46	1061	25.72	-0.26	
C. NHPC	Chamera I HPS (3*180)	540	539	552	548	13.05	544	12.94	0.11	
	Chamera II HPS (3*100)	300	200	202	202	4.82	201	4.80	0.02	
	Chamera III HPS (3*77)	231	229	233	233	5.57	232	5.50	0.07	
	Bairasuil HPS(3*60)	180	179	186	181	4.30	179	4.29	0.01	
	Salal-HPS (6*115)	690	204	0	660	4.78	199	4.89	-0.10	
	Tanakpur-HPS (3*40)	94	91	96	96	2.20	92	2.19	0.02	
	Uri-I HPS (4*120)	480	475	471	469	11.46	477	11.40	0.06	
	Uri-II HPS (4*60)	240	180	183	183	4.36	182	4.32	0.04	
	Dhauliganga-HPS (4*70)	280	280	283	276	6.68	278	6.72	-0.04	
	Dulhasti-HPS (3*130)	390	386	396	392	9.24	385	9.26	-0.02	
	Sewa-II HPS (3*40)	120	119	129	127	3.01	126	2.86	0.15	
	Parbati 3 (4*130)	520	390	394	261	7.85	327	7.83	0.02	
	Sub Total (C)	4065	3273	3124	3628	77	3222	77	0	
D. SJVNL	NJPC (6*250)	1500	1605	1604	1601	38.07	1586	38.52	-0.45	
	Rampur HEP (6*68.67)	412	424	427	417	10.21	425	10.18	0.03	
Sub Total (D)	1912	2029	2031	2018	48.27	2011	48.70	-0.43		
E. THDC	Tehri HPS (4*250)	1000	852	869	638	14.29	596	14.26	0.04	
	Koteshwar HPS (4*100)	400	400	395	388	5.87	245	5.90	-0.03	
Sub Total (E)	1400	1252	1264	1026	20.17	840	20.16	0.01		
F. BBMB	Bhakra HPS (3*108+2*126+5*157)	1361	1431	1450	1454	34.54	1439	34.34	0.20	
	Dehar HPS (6*165)	990	606	660	620	14.82	618	14.54	0.28	
	Pong HPS (6*66)	396	249	384	0	5.76	240	5.99	-0.23	
Sub Total (F)	2747	2286	2494	2074	55.12	2297	54.87	0.25		
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	231	231	5.50	229	5.37	0.13	
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	1200	28.58	1191	28.51	0.08	
	Malana Stg-II HPS (2*50)	100	0	111	111	2.63	109	2.47	0.15	
	Shree Cement TPS (2*150)	300	0	297	292	6.83	285	7.22	-0.39	
	Budhil HPS(IPP) (2*35)	70	0	73	71	1.72	72	1.68	0.04	
	Sub Total (G)	1662	0	1912	1905	45.26	1886	45.24	0.02	
H. Total Regional Entities (A-G)	25219	20112	19596	18924	438.93	18289	439.61	-0.68		

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	890	870	20.59	858
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	80	80	1.80	75
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	823	813	18.17	757
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	685	695	15.75	656
	Talwandi Saboo (1*660)	660	336	348	7.45	311
	Thermal (Total)	4700	2814	2806	63.76	2657
	Total Hydro	1000	932	891	21.54	898
	Total Punjab	5700	3746	3697	85.30	3554
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	396	400	9.34
DCRTPP (Yamuna nagar) (2*300)		600	472	480	11.24	468
Faridabad GPS (NTPC)		432	0	0	0.00	0
RGTTP (Khedar) (IPP) (2*600)		1200	367	375	8.83	368
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CL.P) (2*660)		1320	536	366	10.84	452
Thermal (Total)		4944	1771	1621	40.25	1677
Total Hydro		62	24	28	0.65	27
Total Haryana		5006	1795	1649	40.90	1704
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	267	575	7.74
	suratgarh TPS (6*250)	1500	188	398	5.81	242
	Chabra TPS (4*250)	1000	317	167	5.58	233
	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	157	161	4.00	167
	RAPS A (NPC) (1*100+1*200)	300	176	176	4.03	168
	Barsingar (NLC) (2*125)	250	95	95	2.00	83
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	480	450	10.60	442
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	420	422	10.82	451
	Kawai(Adani) (2*660)	1320	870	1080	21.11	880
	Thermal (Total)	8276	2970	3524	72	2987
	Total Hydro	550	167	0	2.73	114
	Wind power	3214	194	659	7.34	306
	Biomass	99	20	20	0.48	20
	Solar	730	0	0	1.91	80
	Renewable/Others (Total)	4043	214	679	9.73	405
	Total Rajasthan	12869	3351	4203	84.14	3506
	UP	Anpara TPS (3*210+2*500)	1630	1248	1224	29.00
Obra TPS (2*50+2*94+5*200)		1194	316	312	7.30	304
Paricha TPS (2*110+2*220+2*250)		1140	770	719	18.00	750
Panki TPS (2*105)		210	126	140	3.10	129
Harduaganj TPS (1*60+1*105+2*250)		665	448	404	10.10	421
Tanda TPS (NTPC) (4*110)		440	269	366	8.90	371
Roza TPS (IPP) (4*300)		1200	775	775	18.55	773
Anpara-C (IPP) (2*600)		1200	792	799	18.90	788
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	297	403	9.71	405
Anpara-D(1*500)		500	0	0	0.00	0
Lalitpur TPS(1*660)		660	0	0	0.00	0
Thermal (Total)		9289	5041	5142	124	5149
Vishnuparyag HPS (IPP)(including Alakanada)		730	304	288	5.80	242
Other Hydro		527	83	222	3.20	133
Cogeneration		981	50	50	1.20	50
Total UP		11527	5478	5702	133.77	5332
Uttarakhand		Total Hydro	1398	988	1005	21.58
	Total Uttarakhand	1398	988	1005	21.58	899
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	69	69	1.70	71
	Pragati Gas Turbine (2x104+ 1x122)	330	126	126	3.13	130
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	0	0	0.00	0
	Badarpur TPS (NTPC) (3*95+2*210)	705	384	387	8.24	343
	Thermal (Total)	2917	579	582	13.06	544
	Total Delhi	2917	579	582	13.06	544
HP	Baspa HPS (IPP) (2*100)	300	334	334	7.62	318
	Malana HPS (IPP) (2*43)	86	95	95	2.26	94
	Other Hydro	878	556	587	12.62	526
	Total HP	1264	985	1016	22.50	938
J & K	Baglihar HPS (IPP) (3*150)	450	440	440	10.57	440
	Other Hydro/IPP	560	178	196	4.08	170
	Gas/Diesel/Others	190	0	0	0.00	0
	Total J & K	1200	618	636	14.65	611
Total State Control Area Generation		41881	17540	18490	415.91	17088
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6565	5150	124.26	5177
Total Regional Availability(Gross)		67100	43701	42564	979.10	40554

IV. Total Hydro Generation:

Regional Entities Hydro	12216	11271	11107	257.30	10721
State Control Area Hydro	5811	3797	3798	92.66	3619
Total Regional Hydro	18027	15068	14905	349.95	14340

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	-100	250	400	0.63	5.89	-5.26		
Gwalior-Agra (D/C)	2313	1316	2505	0	37.12	0.00	37.12		
Zerda-Kankroli	-32	-166	88	263	0.00	2.88	-2.88		
Zerda-Bhinmal	-11	-237	58	319	0.00	3.46	-3.46		
Malanpur-Auraiya	-12	-14	0	29	0.00	0.02	-0.02		
Badod-Kota/Morak	77	5	79	-42	0.73	0.00	0.73		
Mundra-Mohinderqarh(HVDC)	2203	2502	2506	0	49.06	0.00	49.06		
Vindhychal - Rihand	399	349	437	0	7.71	0.00	7.71		
Sub Total WR	4887	3655			95.23	12.25	82.98		
Pusauli Bypass	400	400	400	0	9.25	0.00	9.25		
MZP- GKP (D/C)	304	360	540	0	9.36	0.00	9.36		
Patna-Balia(D/C)	201	191	299	0	5.33	0.00	5.33		
B'Sharif-Balia (D/C)	82	95	197	0	2.84	0.00	2.84		
Pusauli-Balia	61	42	114	0	0.64	0.00	0.64		
Gaya-Fatehpur (765 Kv)	211	88	224	0	4.01	0.00	4.01		
Pusauli-Sahupuri	180	181	229	0	4.43	0.00	4.43		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	-31	0	0	40	0.00	0.28	-0.28		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 Kv)	28	-59	92	59	0.39	0.00	0.39		
Barh -GKP (D/C)	242	197	249	0	4.82	0.00	4.82		
Sub Total ER	1678	1495			41.56	0.28	41.28		
Total IR Exch	6565	5150			136.79	12.53	124.26		

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
29.39	3.91	33.30	13.48	8.33	0.00	-0.01	2.30	-2.30

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
49.08	74.39	123.48	41.28	82.98	124.26	-7.81	8.59	0.78

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 - Mahendamaragar	-25	-9	0	32	0	0	-0.47		

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	0.08	2.56	25.26	54.04	24.58	15.08	3.88	0.00

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.33	6.02	49.79	19.47	50.04	0.08	0.08	50.34	49.96

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	408	15:08	399	22:34	0.0	0.0	0.0	0.0
Gorakhpur	400	415	06:03	399	23:07	0.0	0.0	0.0	0.0
Bareilly	400	418	08:00	396	20:00	0.0	0.0	0.2	0.0
Kanpur	400	423	06:01	403	22:10	0.0	0.0	2.7	0.0
Dadri	400	419	06:02	400	22:07	0.0	0.0	0.0	0.0
Ballabhgarh	400	426	06:03	404	22:04	0.0	0.0	28.5	0.0
Bawana	400	419	06:02	349	02:06	0.1	0.1	0.0	0.0
Bassi	400	429	18:02	412	19:50	0.0	0.0	40.1	0.0
Hissar	400	412	06:02	396	19:50	0.0	0.0	0.0	0.0
Moga	400	410	18:02	399	20:05	0.0	0.0	0.0	0.0
Abdullapur	400	409	06:02	396	00:11	0.0	3.3	0.0	0.0
Nalagarh	400	409	06:02	399	22:26	0.0	0.0	0.0	0.0
Kishenpur	400	416	08:01	398	20:34	0.0	0.0	0.0	0.0
Wagoora	400	411	06:01	381	20:37	0.0	12.8	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	795	06:02	754	22:26	0.0	0.0	0.0	0.0
Balia	765	781	06:03	746	23:06	0.0	0.0	0.0	0.0
Moga	765	788	06:02	762	22:04	0.0	0.0	0.0	0.0
Agra	765	799	06:05	752	22:26	0.0	0.0	0.0	0.0
Bhiwani	765	798	06:01	763	22:27	0.0	0.0	0.0	0.0
Unnao	765	778	06:02	740	23:01	0.0	0.7	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 (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	501.36	1153.36	499.53	1076.64	1980.96	1171.21
Pong	426.72	384.05	414.18	644.91	404.46	328.16	1473.10	356.79
Tehri	829.79	740.04	790.65	462.82	782.90	358.00	975.19	391.00
Koteshwar	612.50	598.50	609.45	4.21	611.40	5.27	391.00	387.07
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	606.58	353.29
Rihand	268.22	252.98	848.40	230.10	837.10	82.20	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	523.10	10.76	519.64	11.54	759.37	390.90

* 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	1417	322	0	1397	166	0	36.80	6.04	42.85
Delhi	259	26	-2	401	-85	-27	8.78	-3.35	5.43
Haryana	1325	193	0	1359	136	0	32.27	2.22	34.49
HP	-1385	-211	0	-1081	-393	0	-28.37	-7.96	-36.33
J&K	-687	-76	0	-434	134	0	-12.17	1.03	-11.14
CHD	0	-10	0	0	0	0	0.24	-0.46	-0.22
Rajasthan	-497	153	2	-494	362	2	-11.90	10.09	-1.81
UP	1107	0	0	605	0	0	15.78	0.00	15.78
Uttarakhand	-57	0	0	-57	78	24	-1.37	1.60	0.23
Total	1482	396	0	1696	399	-1	40.06	9.23	49.29

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1813	1318	322	166	0	0
Delhi	659	65	130	-357	-2	-27
Haryana	1400	1314	195	-183	0	0
HP	-1081	-1385	-211	-541	0	0
J&K	-434	-687	134	-91	0	0
CHD	29	0	0	-50	0	0
Rajasthan	-494	-498	644	153	2	2
UP	1123	433	0	0	0	0
Uttarakhand	-57	-57	156	0	24	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 26.07.2015 :**
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 :**