

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 23.07.2014
Date of Reporting : 24.07.2014

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Demand Met	Off Peak (03:00 Hrs) MW			Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)		Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
42281	4887	47169	49.87	42903	3190	46093	50.04	1003.8	81.33

* 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	53.60	23.29	-111	76.88	119.79	121.28	1.48	198.16	10.30
Haryana	66.93	0.51		67.44	111.91	109.76	-2.16	177.20	0.00
Rajasthan	116.16	0.17	15.98	132.31	43.36	45.85	2.48	178.15	2.00
Delhi	32.58			32.58	76.39	74.86	-1.52	107.44	0.06
UP	120.80	4.20	1.20	126.20	113.25	120.43	7.18	246.63	64.62
Uttarakhand		20.77		20.77	11.46	13.01	1.55	33.78	1.03
HP		24.51		24.51	-0.42	-0.50	-0.08	24.01	1.63
J & K		14.71	0.00	14.71	16.45	17.81	1.35	32.52	1.70
Chandigarh				0.00	5.30	5.89	0.60	5.89	0.00
Total	390.06	88.15	17.18	495.39	497.50	508.39	10.89	1003.78	81.33

* 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	7895	775	-111	1478	8997	0	-16	1826	9165
Haryana	8118	0	-262	1611	7399	0	-67	1891	8483
Rajasthan	7253	0	246	-789	7318	0	140	-339	7850
Delhi	4522	50	67	471	4290	0	36	295	4988
UP	10232	3785	389	275	11016	3190	396	540	11317
Uttarakhand	1483	145	147	-13	1369	0	52	-3	1483
HP	910	32	-62	-1291	934	0	6	-1385	1164
J&K	1627	100	74	-8	1361	0	62	-404	1714
Chandigarh	242	0	23	0	220	0	21	0	300
Total	42281	4887	511	1734	42903	3190	630	2421	44101

* STOA figures are at sellers boundary & PX figures are at regional boundary. # figures may not be at simultaneous hour.

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III. Regional Entities :

A. NTPC	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
	Singrauli STPS	2000	1416	1466	1712	33.81	1409	33.80	0.00
	Rihand I STPS	1000	789	926	833	18.83	784	18.57	0.26
	Rihand II STPS	1000	635	522	832	14.83	618	15.11	-0.28
	Rihand III STPS	1000	434	494	437	10.45	436	10.25	0.20
	Dadri I STPS	840	770	697	703	16.99	708	17.90	-0.91
	Dadri II STPS	980	475	455	412	10.70	446	11.14	-0.45
	Unchahar I TPS	420	390	428	425	10.06	419	9.26	0.80
	Unchahar II TPS	420	400	439	437	10.24	427	9.34	0.89
	Unchahar III TPS	210	198	211	214	5.05	210	4.62	0.43
	ISTPP (Jhajhar)	1500	950	992	799	19.80	825	20.10	-0.30
	Dadri GPS	830	519	179	263	5.45	227	5.62	-0.17
	Anta GPS	419	384	251	244	5.95	248	5.86	0.09
	Auraiya GPS	663	470	153	153	3.61	150	3.52	0.09
	Dadri Solar	5	1	0	0	0.01	1	0.03	-0.02
	Unchahar Solar	10	3	0	0	0.01	1	0.07	-0.05
	Sub Total (A)	11297	7835	7213	7464	166	6908	165	1
B. NPC	NAPS	440	275	306	309	6.48	270	6.60	-0.12
	RAPS- B	440	396	434	444	9.46	394	9.50	-0.04
	RAPS- C	440	375	400	400	8.74	364	9.00	-0.27
	Sub Total (B)	1320	1046	1140	1153	24.67	1028	25.10	-0.43
C. NHPC	Chamera I HPS	540	534	551	543	13.11	546	12.82	0.30
	Chamera II HPS	300	301	309	306	7.31	305	7.22	0.09
	Chamera III HPS	231	229	236	231	5.56	232	5.50	0.07
	Bairasul HPS	180	178	182	130	2.93	122	2.78	0.14
	Salal-HPS	690	224	0	658	5.39	225	5.37	0.03
	Tanakpur-HPS	94	59	75	40	1.50	62	1.41	0.08
	Uri-HPS	480	475	476	474	11.53	480	11.40	0.13
	Uri-II HPS	240	240	249	244	5.82	243	5.76	0.06
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	386	396	395	9.31	388	9.26	0.04
	Sewa-II HPS	120	119	102	0	0.87	36	0.80	0.07
	Parbati 3	390	246	263	260	5.43	226	5.47	-0.05
	Sub Total ©	3935	2990	2840	3281	69	2865	68	1
D.SJVNL	NJPC	1500	1605	1616	1616	38.51	1604	38.52	-0.02
	Rampur HEP	275	268	285	217	6.58	274	6.42	0.16
	Sub Total (D)	1775	1873	1901	1833	45.08	1878	44.94	0.14
E. THDC	Tehri HPS	1000	784	776	525	10.13	422	10.00	0.13
	Koteshwar HPS	400	300	302	91	4.28	179	4.25	0.03
	Sub Total (E)	1400	1084	1078	616	14.42	601	14.25	0.17
F. BBMB	Bhakra HPS	1514	938	1341	882	22.57	940	22.51	0.06
	Dehar HPS	990	575	825	560	14.10	588	13.79	0.31
	Pong HPS	396	230	372	126	5.65	236	5.52	0.13
	Sub Total (F)	2900	1742	2538	1568	42.33	1764	41.82	0.51
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	229	228	5.43	226	5.17	0.26
	KWHEP HPS(IPP)	1000	0	1200	1200	28.66	1194	28.51	0.15
	Malana Stg-II HPS	100	0	113	112	2.67	111	2.50	0.17
	Shree Cement TPS	300	0	268	181	5.07	211	5.34	-0.27
	Budhil HPS(IPP)	70	0	72	71	1.69	70	1.67	0.01
	Sub Total (G)	1662	0	1881	1792	43.52	1813	43.19	0.33
H. Total Regional Entities (A-G)		24289	16570	18591	17706	404.55	16856	402.29	2.25

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)	1260	460	1025	13.68	570	
	Guru Nanak Dev TPS(Bhatinda)	440	427	425	9.09	379	
	Guru Hargobind Singh TPS(L.mbt)	920	704	716	15.00	625	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura	700	702	690	15.84	660	
	Talwandi Saboo	660	0	0	0.00	0	
	Thermal (Total)	3980	2293	2856	53.60	2233	
	Total Hydro	1148	974	978	23.29	970	
	Total Punjab	5128	3267	3834	76.88	3203	
	Haryana	Panipat TPS	1367	816	781	18.57	774
DCRTPP (Yamuna nagar)		600	529	463	10.86	453	
Faridabad GPS (NTPC)		432	194	181	4.48	186	
RGTPP (khedar) (IPP)		1200	1133	947	23.09	962	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP)		1320	561	369	9.93	414	
Thermal (Total)		4944	3233	2741	66.93	2789	
Total Hydro		62	21	20	0.51	21	
Total Haryana		5006	3254	2761	67.44	2810	
Rajasthan		kota TPS	1240	897	882	21.53	897
		suratgarh TPS	1500	1064	1040	25.25	1052
	Chabra TPS	750	359	346	8.78	366	
	Dholpur GPS	330	46	0	1.10	46	
	Ramgarh GPS	271	125	108	3.28	137	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingsar (NLC)	250	99	96	2.18	91	
	Giral LTPS	250	48	19	1.25	52	
	Rajwest LTPS (IPP)	1080	832	554	18.65	777	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Kalisindh Thermal	600	405	405	9.95	414	
	Kawai(Adani)	1320	1015	843	24.19	1008	
	Thermal (Total)	8026	4890	4293	116	4840	
	Total Hydro	550	0	0	0.17	7	
	Wind power	2798	187	1311	14.71	613	
	Biomass	99	39	39	0.94	39	
	Solar	730	0	0	0.34	14	
	Renewable/Others (Total)	3627	226	1350	15.98	666	
	Total Rajasthan	12203	5116	5643	132.31	5513	
	UP	Anpara TPS	1630	728	782	17.40	725
		Obra TPS	1288	508	495	11.90	496
Paricha TPS		1140	734	553	15.60	650	
Panki TPS		210	135	135	3.20	133	
Harduaganj TPS		665	412	419	9.80	408	
Tanda TPS (NTPC)		440	370	361	9.00	375	
Roza TPS (IPP)		1200	1098	941	23.20	967	
Anpara-C (IPP)		1200	902	891	21.30	888	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	403	401	9.40	392	
Thermal (Total)		8223	5290	4978	120.80	5033	
Vishnuparyag HPS (IPP)		400	0	0	0.00	0	
Other Hydro		527	173	187	4.20	175	
Cogeneration		981	50	50	1.20	50	
Total UP		10131	5513	5215	126.20	5258	
Uttarakhand		Total Hydro	1303	872	845	20.77	865
		Total Uttarakhand	1303	872	845	20.77	865
Delhi	Rajghat TPS	135	99	98	2.47	103	
	Delhi Gas Turbine	282	182	178	4.43	185	
	Pragati Gas Turbine	330	285	143	6.41	267	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	1370	302	301	7.37	307	
	Badarpur TPS (NTPC)	705	488	490	11.90	496	
	Thermal (Total)	2917	1356	1210	32.58	1357	
	Total Delhi	2917	1356	1210	32.58	1357	
HP	Baspa HPS (IPP)	300	331	331	7.63	318	
	Malana HPS (IPP)	86	104	104	2.47	103	
	Other Hydro	728	568	668	14.41	600	
	Total HP	1114	1003	1103	24.51	1021	
J & K	Baqilhar HPS (IPP)	450	438	436	10.49	437	
	Other Hydro/IPP	436	163	175	4.22	176	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	601	611	14.71	613	
Total State Control Area Generation		38896	20982	21222	495.39	20641	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4949	5678	126.77	5282	
Total Regional Availability(Gross)		63186	44522	44606	1026.71	42779	

IV. Total Hydro Generation:

Regional Entities Hydro	11302	9899	8837	207.34	8639
State Control Area Hydro	5589	3644	3744	88.15	3673
Total Regional Hydro	16891	13543	12581	295.49	12312

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	50	300	300	0	4.10	0.00	4.10
Gwalior-Agra (D/C)	1475	1636	2071	0	36.21	0.00	36.21
Zerda-Kankroli	-102	-200	0	296	0.00	3.86	-3.86
Zerda-Bhinmal	-72	-207	45	304	0.00	3.23	-3.23
Malanpur-Auraiya	-82	-49	0	78	0.00	1.21	-1.21
Badod-Kota/Morak	-132	-117	0	193	0.00	2.84	-2.84
Mundra-Mohindergarh(HVDC)	2202	1997	2204	0	49.23	0.00	49.23
Vindhychal - Rihand	430	430	434	0	9.42	0.00	9.42
Sub Total WR	3769	3790			98.96	11.14	87.82
Pusaui Bypass	400	400	400	0	9.71	0.00	9.71
MZP- GKP (D/C)	330	564	626	0	10.96	0.00	10.96
Patna-Balia(D/C)	314	432	496	0	9.04	0.00	9.04
B'Sharif-Balia (D/C)	102	298	329	0	5.06	0.00	5.06
Pusaui-Balia	-96	-53	0	104	0.00	1.50	-1.50
Gaya-Fatehpur (765 Kv)	-51	36	94	71	0.61	0.00	0.61
Pusaui-Sahupuri	169	128	171	0	3.21	0.00	3.21
K'nasa-Sahupuri	0	0	0	0	0.48	0.48	0.00
Son Ngr-Rihand	-30	-33	0	40	0.00	0.70	-0.70
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	42	116	178	191	2.57	0.00	2.57
Sub Total ER	1180	1888			41.63	2.69	38.95
Total IR Exch	4949	5678			140.59	13.82	126.77

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
22.43	3.87	26.31	15.11	11.91	-0.60	2.08	0.00	0.00

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
40.82	73.40	114.21	38.95	87.82	126.77	-1.87	14.43	12.56

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	1.53	11.63	33.16	69.56	52.38	10.93	2.89	0.84	NA

Frequency (Hz)				Average Frequency	Frequency Variation	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz	Index			
50.36	13.04	49.65	3.17	49.94	0.15	0.11	50.32	49.81

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	11:47	404	03:19	0.0	0.0	0.0	0.0
Gorakhpur	400	413	13:03	400	14:51	0.0	0.0	0.0	0.0
Bareilly	400	417	07:31	397	14:50	0.0	0.0	0.0	0.0
Kanpur	400	423	08:05	407	22:23	0.0	0.0	3.5	0.0
Dadri	400	413	07:43	398	14:40	0.0	0.0	0.0	0.0
Ballabgarh	400	422	08:01	403	14:41	0.0	0.0	3.7	0.0
Bawana	400	416	06:04	403	14:40	0.0	0.0	0.0	0.0
Bassi	400	428	04:01	412	14:39	0.0	0.0	47.5	0.0
Hissar	400	409	06:06	397	14:40	0.0	0.0	0.0	0.0
Moga	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Abdullapur	400	415	17:56	396	00:10	0.0	0.0	0.0	0.0
Nalagarh	400	413	06:06	401	16:30	0.0	0.0	0.0	0.0
Kishenpur	400	416	06:05	400	20:28	0.0	0.0	0.0	0.0
Wagoora	400	412	06:06	389	20:28	0.0	1.1	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	782	08:04	755	22:30	0.0	0.0	0.0	0.0
Balia	765	782	17:57	754	14:53	0.0	0.0	0.0	0.0
Moga	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Agra	765	799	08:01	767	22:11	0.0	0.0	0.0	0.0
Bhiwani	765	794	13:05	771	14:42	0.0	0.0	0.0	0.0
Unnao	765	772	07:32	740	15:52	0.0	4.4	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	487.48	652.97	491.45	778.28	1057.52	746.49
Pong	426.72	384.05	400.80	237.89	404.34	328.16	215.09	376.70
Tehri	829.79	740.04	748.65	42.00	NA	NA	301.26	205.00
Koteshwar	612.50	598.50	610.77	4.95	608.40	3.76	208.00	207.00
Chamera-I	760.00	748.75	757.00	12.82	NA	NA	505.02	347.40
Rihand	268.22	252.98	258.07	205.10	256.79	149.00	NA	NA
RPS	352.80	343.81	348.06	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.80	NA	NA	NA	NA	NA
RSD	527.91	487.91	516.64	144.00	506.65	144.00	224.47	197.51

* 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	1542	284	0	1478	1	0	35.98	7.37	43.34
Delhi	411	-106	-10	475	47	-51	14.29	-0.14	14.15
Haryana	1702	189	0	1476	135	0	36.50	3.56	40.06
HP	-1079	-306	0	-952	-339	0	-22.19	-8.31	-30.50
J&K	-334	-70	0	-334	326	0	-10.09	1.46	-8.63
CHD	0	0	0	0	0	0	0.33	0.14	0.47
Rajasthan	-791	449	3	-791	1	0	-16.93	5.73	-11.20
UP	540	0	0	275	0	0	8.88	0.00	8.88
Uttarakhand	-8	5	0	-8	-5	0	-0.19	-0.04	-0.23
Total	1983	445	-7	1619	165	-51	46.59	9.76	56.35

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1542	1463	428	1	0	0
Delhi	1022	362	365	-345	-9	-51
Haryana	1702	1232	199	-335	0	0
HP	-775	-1130	-252	-451	0	0
J&K	-334	-537	326	-304	0	0
CHD	41	0	30	0	0	0
Rajasthan	-575	-791	520	1	3	0
UP	600	241	0	0	0	0
Uttarakhand	-8	-8	11	-15	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 23.07.2014 :****XIV. Synchronisation of new generating units :**
0.00**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 :**