

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(एयरलिड की पूर्ण स्वामित्व प्राप्त सहस्रक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 24.06.2014
Date of Reporting : 25.06.2014

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
43035	1415	44450	49.86	41219	1990	43209	50.16	1012.9	44.21

* 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:

UI [OD:(+ve), UD: (-ve)]

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	Renewables/other's \$	Total					
Punjab	58.51	21.65		80.16	126.13	125.96	-0.17	206.12	0.00
Haryana	49.15	0.60		49.74	115.55	114.27	-1.28	164.02	0.03
Rajasthan	113.77	0.03	25.89	139.70	35.91	31.69	-4.22	171.39	0.00
Delhi	31.89			31.89	80.51	75.40	-5.11	107.29	0.12
UP	126.70	13.76	1.20	141.65	126.20	125.53	-0.67	267.19	41.62
Uttarakhand		17.10		17.10	18.97	19.50	0.53	36.60	0.75
HP		23.73		23.73	2.10	1.83	-0.27	25.56	0.00
J & K		11.95	0.00	11.95	16.97	16.96	-0.01	28.91	1.70
Chandigarh				0.00	5.73	5.86	0.13	5.86	0.00
Total	380.02	88.81	27.09	495.92	528.08	517.01	-11.06	1012.93	44.21

* Shortage furnished by the respective constituent.\$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

UI/OA/PX [OD/Import: (+ve), UD/Export: (-ve)]

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	8865	0	-69	1515	8322	0	-26	1834	9121
Haryana	7485	0	-263	1597	6996	0	-26	1690	7754
Rajasthan	7269	0	104	-888	6514	0	-464	-318	8310
Delhi	4492	0	-223	231	4291	0	-278	313	5194
UP	10716	1240	-686	455	11598	1990	174	611	12034
Uttarakhand	1670	75	89	257	1513	0	59	141	1674
HP	977	0	-89	-1238	916	0	10	-1330	1197
J&K	1327	100	21	-510	856	0	-166	-744	1484
Chandigarh	234	0	-2	0	214	0	5	0	307
Total	43035	1415	-1117	1418	41219	1990	-712	2198	45594

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

Diversity is 1.03

III. Regional Entities :

UI [OG:(+ve), UG: (-ve)]

Station/ Constituent	Inst. Capacity	Declared	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
	(Effective) MW	Capacity(MW)	(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
A. NTPC								
Singrauli STPS	2000	1420	1537	1395	32.07	1336	31.67	0.40
Rihand I STPS	1000	897	905	879	19.55	815	19.28	0.27
Rihand II STPS	1000	965	993	880	20.82	868	20.46	0.36
Rihand III STPS	1000	895	890	792	19.25	802	19.02	0.23
Dadri I STPS	840	813	635	600	14.31	596	14.72	-0.41
Dadri II STPS	980	966	825	715	18.12	755	18.72	-0.60
Unchahar I TPS	420	406	416	368	8.70	363	9.02	-0.32
Unchahar II TPS	420	406	415	344	7.87	328	8.23	-0.36
Unchahar III TPS	210	202	206	153	3.82	159	3.96	-0.15
ISTPP (Jhajjar)	1500	1410	982	656	17.78	741	18.17	-0.39
Dadri GPS	830	793	369	549	9.59	399	9.85	-0.27
Anta GPS	419	384	355	334	8.44	352	8.45	-0.01
Auraiya GPS	663	621	372	441	8.67	361	8.63	0.05
Dadri Solar	5	1	0	0	0.03	1	0.03	0.00
Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
Sub Total (A)	11297	10182	8900	8106	189	7877	190	-1
B. NPC								
NAPS	440	272	305	318	6.59	275	6.53	0.07
RAPS- B	440	391	435	434	9.34	389	9.38	-0.04
RAPS- C	440	330	355	340	8.26	344	7.92	0.34
Sub Total (B)	1320	993	1095	1092	24.20	1008	23.83	0.37
C. NHPC								
Chamera I HPS	540	535	540	540	13.03	543	12.84	0.19
Chamera II HPS	300	301	310	302	7.30	304	7.22	0.08
Chamera III HPS	231	229	241	231	5.62	234	5.50	0.12
Bairasui HPS	180	179	180	120	2.78	116	2.68	0.09
Salal-HPS	690	658	682	680	16.32	680	15.78	0.53
Tanakpur-HPS	94	69	76	71	1.73	72	1.66	0.07
Uri-HPS	480	475	479	478	11.55	481	11.40	0.15
Uri-II HPS	240	240	245	240	5.82	243	5.76	0.06
Dhauliganga-HPS	280	159	210	209	3.65	152	3.83	-0.18
Dulhasi-HPS	390	258	273	264	6.39	266	6.19	0.20
Sewa-II HPS	120	119	127	117	1.51	63	1.40	0.11
Parbati 3	390	260	63	31	3.48	145	3.38	0.10
Sub Total (C)	3935	3482	3426	3283	79	3298	78	2
D.SJVNL								
NJPC	1500	1605	1620	1620	38.62	1609	38.46	0.17
Rampur HEP	275	249	260	260	6.20	258	5.74	0.46
Sub Total (D)	1775	1854	1880	1880	44.82	1868	44.20	0.63
E. THDC								
Tehri HPS	1000	408	408	245	6.10	254	6.00	0.10
Koteshwar HPS	400	129	395	93	3.23	135	3.20	0.03
Sub Total (E)	1400	537	803	338	9.33	389	9.20	0.13
F. BBMB								
Bhakra HPS	1514	841	1194	772	20.86	869	20.19	0.68
Dehar HPS	990	594	660	660	14.74	614	14.26	0.48
Pong HPS	396	265	364	182	6.52	272	6.36	0.16
Sub Total (F)	2900	1700	2218	1614	42.12	1755	40.80	1.32
G. IPP(s)/JV(s)								
ADHPL HPS(IPP)	192	0	196	143	3.96	165	4.59	-0.63
KWHEP HPS(IPP)	1000	0	1148	1187	24.98	1041	26.27	-1.28
Malana Stq-II HPS	100	0	110	105	2.25	94	1.85	0.40
Shree Cement TPS	300	0	285	283	6.95	290	6.91	0.03
Budhil HPS(IPP)	70	0	14	14	1.57	66	1.64	-0.07
Sub Total (G)	1662	0	1753	1732	39.71	1655	41.26	-1.55
H. Total Regional Entities (A-G)	24289	18748	20075	18045	428.39	17849	427.22	1.17

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	1250	1150	27	1126
	Guru Nanak Dev TPS(Bhatinda)	440	221	170	4	184
	Guru Hargobind Singh TPS(L.mbt)	920	888	654	19	786
	Goindwal(GVK)		0	0	0	0
	Rajpura	700	340	355	8	342
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	3980	2699	2329	59	2438
	Total Hydro	1148	949	845	21.65	902
	Total Punjab	5128	3648	3174	80.16	3340
	Haryana	Panipat TPS	1367	226	218	5.29
DCRTPP (Yamuna nagar)		600	535	513	12.20	508
Faridabad GPS (NTPC)		432	376	374	8.95	373
RGTPP (khedar) (IPP)		1200	572	449	11.34	473
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP)		1320	540	528	11.37	474
Thermal (Total)		4944	2249	2082	49	2048
Total Hydro		62	28	25	0.60	25
Total Haryana		5006	2277	2107	49.74	2073
Rajasthan		kota TPS	1240	950	912	21.65
	suratgarh TPS	1500	1287	1208	29.56	1232
	Chabra TPS	750	525	522	13.05	544
	Dholpur GPS	330	99	101	2.49	104
	Ramgarh GPS	221	105	59	2.18	91
	RAPS A (NPC)	300	170	170	4.13	172
	Barsingsar (NLC)	250	98	43	2.08	87
	Giral LTPS	250	70	70	1.53	64
	Rajwest LTPS (IPP)	1080	778	496	14.73	614
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	1320	1095	867	22.39	933
	Thermal (Total)	7976	5177	4448	114	4741
	Total Hydro	550	0	0	0.03	1
	Wind power	2798	932	1176	24.62	1026
	Biomass	99	39	39	0.95	39
	Solar	730	0	0	0.33	14
	Renewable/Others (Total)	3627	971	1215	26	1079
	Total Rajasthan	12153	6148	5663	139.70	5821
	UP	Anpara TPS	1630	1382	1413	30.00
Obra TPS		1288	421	426	7.90	329
Paricha TPS		1140	683	759	14.60	608
Panki TPS		210	150	145	3.20	133
Harduaganj TPS		665	432	430	9.50	396
Tanda TPS (NTPC)		440	285	278	6.85	285
Roza TPS (IPP)		1200	1107	1107	25.65	1069
Anpara-C (IPP)		1200	940	878	22.16	923
Bajaj Energy Pvt.Ltd(IPP) TPS		450	403	279	6.84	285
Thermal (Total)		8223	5803	5715	127	5279
Vishnuparyag HPS (IPP)		400	436	435	10.44	435
Other Hydro		527	215	121	3.31	138
Cogeneration		981	50	50	1.20	50
Total UP		10131	6504	6321	141.65	5467
Uttarakhand		Total Hydro	1303	707	669	17.10
	Total Uttarakhand	1303	707	669	17.10	712
Delhi	Rajghat TPS	135	96	100	2.33	97
	Delhi Gas Turbine	282	142	145	3.42	143
	Pragati Gas Turbine	330	262	266	6.48	270
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	270	218	5.91	246
	Badarpur TPS (NTPC)	705	655	580	13.75	573
	Thermal (Total)	2917	1425	1309	31.89	1329
	Total Delhi	2917	1425	1309	31.89	1329
HP	Baspa HPS (IPP)	300	298	298	7.66	319
	Malana HPS (IPP)	86	90	53	1.67	69
	Other Hydro	728	610	583	14.40	600
	Total HP	1114	998	934	23.73	989
J & K	Baglihar HPS (IPP)	450	440	440	10.55	440
	Other Hydro/IPP	436	94	44	1.39	58
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	534	484	11.95	498
Total State Control Area Generation		38846	22241	20661	495.92	20228
J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))			4333	4340	119.50	4979
Total Regional Availability(Gross)		63136	46649	43046	1043.81	43057

IV. Total Hydro Generation:

Regional Entities Hydro	11302	9781	8550	206.62	8609
State Control Area Hydro	5589	3431	3078	88.81	3265
Total Regional Hydro	16891	13212	11628	295.43	11874

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	250	500	100	6.68	0.40	6.28
Gwalior-Agra (D/C)	1589	1176	1999	0	41.69	0.00	41.69
Zerda-Kankroll	-241	-417	0	467	0.00	6.95	-6.95
Zerda-Bhinmal	-251	-409	0	476	0.00	6.73	-6.73
Malanpur-Auraiya	-116	-99	0	116	0.00	1.67	-1.67
Badod-Kota/Morak	-158	-225	0	270	0.00	3.19	-3.19
Mundra-Mohinderghar(HVDC)	2002	2303	2306	0	47.08	0.00	47.08
Sub Total WR	3125	2579			95.44	18.95	76.50
Pusauli Bypass	300	300	300	0	7.29	0.00	7.29
MZP- GKP (D/C)	280	602	742	0	13.22	0.00	13.22
Patna-Balia(D/C)	367	306	652	0	9.48	0.00	9.48
B'Sharif-Balia (D/C)	122	356	447	0	6.39	0.00	6.39
Pusauli-Balia	-76	-8	0	81	0.00	0.99	-0.99
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	158	163	229	0	4.10	0.00	4.10
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	0	0	0	0	0.00	0.00	0.00
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	57	42	302	54	3.52	0.00	3.52
Sub Total ER	1208	1761			44.00	0.99	43.00
Total IR Exch	4333	4340			139.44	19.94	119.50

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)		Power Exchange ShdI (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
29.76	3.82	33.58	16.12	7.31	-2.51	-0.17	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
47.18	73.24	120.43	43.00	76.50	119.50	-4.18	3.25	-0.93

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	1.78	13.21	39.25	72.57	50.06	8.40	2.73	0.06	0.00

<----- Maximum 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	Hz	Index			
50.21	6.01	49.55	15.15	49.92	0.17	0.11	50.18	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	407	06:01	399	15:08	0.0	0.0	0.0	0.0
Gorakhpur	400	430	08:03	409	13:51	0.0	0.0	62.5	0.0
Bareilly	400	413	19:02	390	15:14	0.0	0.0	0.0	0.0
Kanpur	400	417	08:00	397	13:53	0.0	0.0	0.0	0.0
Dadri	400	413	08:06	389	14:52	0.0	0.7	0.0	0.0
Ballabhgarh	400	421	07:02	393	15:08	0.0	0.0	0.5	0.0
Bawana	400	415	07:59	391	14:48	0.0	0.0	0.0	0.0
Bassi	400	422	04:04	395	15:08	0.0	0.0	3.1	0.0
Hissar	400	409	07:59	388	15:57	21.2	21.4	0.0	0.0
Moga	400	410	04:04	394	13:43	0.0	0.0	0.0	0.0
Abdullapur	400	415	07:59	396	13:53	0.0	0.0	0.0	0.0
Nalagarh	400	409	08:00	392	15:11	0.0	0.0	0.0	0.0
Kishenpur	400	414	03:27	404	14:52	0.0	0.0	0.0	0.0
Wagoora	400	401	03:00	392	08:00	0.0	0.0	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	771	08:00	726	13:50	0.5	9.2	0.0	0.0
Balia	765	778	18:10	736	13:53	0.0	1.3	0.0	0.0
Moga	765	792	08:01	757	15:16	0.0	0.0	0.0	0.0
Agra	765	782	03:27	735	13:50	0.0	3.4	0.0	0.0
Bhiwani	765	790	19:00	745	13:48	0.0	0.0	0.0	0.0
Unnao	765	763	08:04	725	13:44	0.8	30.9	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	485.71	610.73	486.77	636.01	1570.37	736.35
Pong	426.72	384.05	401.78	259.17	402.45	273.51	414.90	365.94
Tehri	829.79	740.04	746.35	32.00	NA	NA	438.59	242.00
Koteshwar	612.50	598.50	610.82	4.95	608.40	3.98	432.00	281.00
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. 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	1424	410	0	1424	91	0	34.18	7.16	41.33
Delhi	449	-126	-10	522	-281	-10	11.82	-5.24	6.58
Haryana	1538	152	0	1462	135	0	34.96	3.16	38.12
HP	-866	-463	0	-714	-524	0	-18.21	-10.92	-29.13
J&K	-547	-197	0	-547	37	0	-13.62	-1.27	-14.89
CHD	0	0	0	0	0	0	0.41	0.17	0.59
Rajasthan	-714	389	6	-1221	330	2	-18.96	8.16	-10.80
UP	611	0	0	455	0	0	11.57	0.96	12.52
Uttarakhand	105	30	6	105	152	0	2.52	2.35	4.87
Total	2000	196	2	1487	-61	-8	44.66	4.53	49.19

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 24.06.2014 :**

1. Normal weather in NR.

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 :**