

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायुक्त कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 25.04.2015
Date of Reporting : 26.04.2015

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
37066	2228	39295	50.04	36643	581	37224	50.25	828.9	20.71

* 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	42.98	4.65		47.62	67.15	68.52	1.37	116.14	0.00
Haryana	33.75	0.70		34.45	80.15	79.37	-0.78	113.82	0.00
Rajasthan	96.73	0.01	19.27	116.00	60.99	62.54	1.55	178.54	0.00
Delhi	25.56			25.56	60.85	59.78	-1.07	85.34	0.02
UP	125.70	5.90		131.60	104.22	101.06	-3.16	232.66	13.15
Uttarakhand		11.92		11.92	23.00	23.62	0.61	35.53	0.04
HP		14.04		14.04	11.42	10.73	-0.69	24.77	0.00
J & K		13.76	0.00	13.76	23.92	23.76	-0.16	37.52	7.50
Chandigarh				0.00	4.41	4.57	0.27	4.57	0.00
Total	324.71	50.97	19.27	394.94	436.11	433.95	-2.06	828.89	20.71

* 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	5574	0	44	107	5350	0	19	345	5746
Haryana	5913	0	-213	399	5413	0	35	424	6146
Rajasthan	7570	0	-94	412	7312	0	169	39	7853
Delhi	3762	12	-121	147	3574	0	144	-162	3900
UP	9512	1810	-4	238	11158	300	-289	1129	11312
Uttarakhand	1606	40	-100	531	1416	0	79	380	1606
HP	1078	0	-32	-847	860	0	25	-414	1195
J&K	1831	366	240	-136	1406	281	1	-222	1831
Chandigarh	220	0	5	0	153	0	9	-10	223
Total	37066	2228	-275	850	36643	581	193	1509	37791

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

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

Diversity is 1.05

III. Regional Entities :

A. NTPC	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
Rihand I STPS (2*500)	1000	866	820	912	17.85	744	16.60	1.25	
Rihand II STPS (2*500)	1000	809	768	487	16.07	670	14.69	1.37	
Rihand III STPS (2*500)	1000	960	867	772	18.45	769	17.42	1.03	
Dadri I STPS (4*210)	840	615	655	416	11.57	482	10.97	0.60	
Dadri II STPS (2*490)	980	980	666	415	16.83	701	16.66	0.17	
Unchahar I TPS (2*210)	420	405	254	289	6.75	281	7.27	-0.52	
Unchahar II TPS (2*210)	420	401	259	283	6.57	274	6.77	-0.19	
Unchahar III TPS (1*220)	210	0	0	0	0.00	0	0.00	0.00	
ISTPP (Jhajhar) (3*500)	1500	1500	729	612	14.13	589	14.90	-0.77	
Dadri GPS (4*130.19+2*154.51)	830	806	189	194	5.10	213	5.17	-0.07	
Anta GPS (3*88.71+1*153.2)	419	393	229	239	5.79	241	5.65	0.14	
Auraiya GPS (4*111.19+2*109.30)	663	647	161	162	3.81	159	3.83	-0.01	
Dadri Solar	5	1	0	0	0.02	1	0.03	0.00	
Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.03	
Singrauli Solar	15	3	0	0	0.05	2	0.07	-0.02	
KHEP	400	0	0	0	0.00	0	0.00	0.00	
Sub Total (A)	11712	10097	7446	6636	163	6771	157	5	
B. NPC	NAPS (2*220)	440	384	421	438	9.40	392	9.22	0.18
RAPS- B (2*220)	440	374	415	421	8.93	372	7.30	1.63	
RAPS- C (2*220)	440	410	441	443	9.51	396	9.84	-0.33	
Sub Total (B)	1320	1168	1277	1302	27.84	1160	26.36	1.48	
C. NHPC	Chamera I HPS (3*180)	540	539	552	511	12.83	534	12.91	-0.08
Chamera II HPS (3*100)	300	300	310	295	7.19	299	7.17	0.01	
Chamera III HPS (3*77)	231	231	239	230	5.51	229	5.53	-0.02	
Bairasuil HPS(3*60)	180	179	180	130	3.25	135	3.16	0.09	
Salal-HPS (6*115)	690	651	666	662	15.76	657	15.59	0.17	
Tanakpur-HPS (3*40)	94	43	48	57	1.06	44	1.02	0.04	
Uri-I HPS (4*120)	480	475	473	473	11.53	480	11.37	0.16	
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00	
Dhauliganga-HPS (4*70)	280	210	208	12	2.42	101	2.33	0.09	
Dulhasti-HPS (3*130)	390	387	407	400	9.41	392	9.29	0.12	
Sewa-II HPS (3*40)	120	119	130	130	3.07	128	2.85	0.22	
Parbati 3 (4*130)	520	263	263	0	1.95	81	2.02	-0.07	
Sub Total (C)	4065	3397	3476	2900	74	3082	73	1	
D.SJVNL	NJPC (6*250)	1500	1605	1607	504	21.97	915	21.53	0.44
Rampur HEP (6*68.67)	412	430	443	127	6.23	259	5.95	0.27	
Sub Total (D)	1912	2035	2050	631	28.20	1175	27.48	0.71	
E. THDC	Tehri HPS (4*250)	1000	501	507	0	5.57	232	6.50	-0.93
Koteshwar HPS (4*100)	400	133	304	101	3.13	130	3.20	-0.07	
Sub Total (E)	1400	634	811	101	8.70	362	9.70	-1.00	
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	375	795	301	9.05	377	9.01	0.04
Dehar HPS (6*165)	990	620	660	580	15.00	625	14.88	0.12	
Pong HPS (6*66)	396	6	125	0	0.18	7	0.16	0.02	
Sub Total (F)	2900	1002	1580	881	24.22	1009	24.04	0.18	
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	106	160	2.62	109	2.57	0.05
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1120	300	11.29	470	11.14	0.15	
Malana Stg-II HPS (2*50)	100	0	101	25	1.23	51	1.15	0.08	
Shree Cement TPS (2*150)	300	0	283	287	5.86	244	6.06	-0.20	
Budhil HPS(IPP)	70	0	70	74	1.42	59	1.40	0.03	
Sub Total (G)	1662	0	1680	847	22.42	934	22.32	0.11	
H. Total Regional Entities (A-G)	24972	18333	18320	13297	347.85	14494	340.52	7.33	

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	1040	850	20.51	855
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.07	-3
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	468	501	10.25	427
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	705	666	12.28	512
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	2213	2017	42.98	1791
	Total Hydro	1148	255	225	4.65	194
	Total Punjab	5828	2468	2242	47.62	1984
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	478	481	11.63	485
Faridabad GPS (NTPC)		432	0	0	0.00	0
RGTPP (khedar) (IPP) (2*600)		1200	0	0	0.00	0
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	875	1163	22.12	922
Thermal (Total)		4944	1353	1644	33.75	1406
Total Hydro		62	25	24	0.70	29
Total Haryana		5006	1378	1668	34.45	1435
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	874	870	20.67
	suratgarh TPS (6*250)	1500	572	573	13.46	561
	Chabra TPS (4*250)	1000	570	490	12.34	514
	Dholpur GPS (3*110)	330	89	88	2.12	88
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	177	138	4.08	170
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingsar (NLC) (2*125)	250	196	193	4.41	184
	Giral LTPS (2*125)	250	81	70	1.72	72
	Rajwest LTPS (IPP) (8*135)	1080	547	409	13.53	564
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	0	230	2.87	119
	Kawai(Adani) (2*660)	1320	1042	860	21.54	898
	Thermal (Total)	8276	4148	3921	97	4030
	Total Hydro	550	0	0	0.01	0
	Wind power	2798	500	1099	18.54	773
	Biomass	99	28	28	0.68	28
	Solar	730	0	0	0.05	2
	Renewable/Others (Total)	3627	528	1127	19.27	803
	Total Rajasthan	12453	4676	5048	116.00	4833
	UP	Anpara TPS (3*210+2*500)	1630	1361	1172	28.20
Obra TPS (2*50+2*94+5*200)		1194	445	474	10.70	446
Paricha TPS (2*110+2*220+2*250)		1140	730	744	17.70	738
Panki TPS (2*105)		210	0	131	2.30	96
Harduaganj TPS (1*60+1*105+2*250)		665	159	225	4.40	183
Tanda TPS (NTPC) (4*110)		440	214	282	5.80	242
Roza TPS (IPP) (4*300)		1200	761	1062	20.00	833
Anpara-C (IPP) (2*600)		1200	701	1092	20.00	833
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	282	403	7.00	4838
Anpara-D		500	0	0	0.00	0
Thermal (Total)		8629	4653	5585	116	9383
Vishnuparyag HPS (IPP)		400	177	168	4.00	167
Other Hydro		527	58	84	1.90	79
Cogeneration		981	400	400	9.60	400
Total UP		10537	5288	6237	131.60	9863
Uttarakhand	Total Hydro	1398	493	491	11.92	497
	Total Uttarakhand	1398	493	491	11.92	497
Delhi	Rajghat TPS (2*67.5)	135	51	50	1.12	47
	Delhi Gas Turbine (6x30 + 3x34)	282	144	144	3.51	146
	Pragati Gas Turbine (2x104+ 1x122)	330	298	280	6.97	290
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	287	304	6.87	286
	Badarpur TPS (NTPC) (3*95+2*210)	705	314	300	7.09	295
	Thermal (Total)	2917	1094	1078	25.56	1065
	Total Delhi	2917	1094	1078	25.56	1065
HP	Baspa HPS (IPP) (2*150)	300	218	59	2.30	96
	Malana HPS (IPP) (2*43)	86	72	45	1.36	57
	Other Hydro	728	431	436	10.38	432
	Total HP	1114	721	540	14.04	585
J & K	Baqilhar HPS (IPP) (3*150)	450	450	450	10.80	450
	Other Hydro/IPP	436	112	126	2.96	123
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	562	576	13.76	573
Total State Control Area Generation		40347	16680	17880	394.94	20835
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3113	4747	116.64	4860
Total Regional Availability(Gross)		65319	38113	35924	859.42	40188

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9244	4998	150.217436	6259
State Control Area Hydro	5684	2114	1940	50.97	1957
Total Regional Hydro	17654	11358	6938	201.18	8216

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	250	300	2.40	0.92	1.48
Gwalior-Agra (D/C)	1892	1933	2102	0	36.24	0.00	36.24
Zerda-Kankroli	-214	-315	0	444	0.00	8.02	-8.02
Zerda-Bhinmal	-181	-253	0	343	0.00	5.89	-5.89
Malanpur-Auraiya	1	6	0	34	0.00	0.36	-0.36
Badod-Kota/Morak	-51	-78	0	0	0.00	0.22	-0.22
Mundra-Mohindergarh(HVDC)	2200	2502	2505	0	57.79	0.00	57.79
Vindhychal - Rihand	-470	-433	501	0	11.05	0.00	11.05
Sub Total WR	2877	3612			107.48	15.41	92.07
Pusaui Bypass	200	200	200	0	4.79	0.00	4.79
MZP- GKP (D/C)	209	-301	406	209	2.98	0.00	2.98
Patna-Balia(D/C)	-12	467	506	12	6.51	0.00	6.51
B'Sharif-Balia (D/C)	-85	167	217	85	1.49	0.00	1.49
Pusaui-Balia	56	120	128	16	0.93	0.00	0.93
Gaya-Fatehpur (765 Kv)	-61	248	334	61	4.10	0.00	4.10
Pusaui-Sahupuri	136	107	148	0	2.55	0.00	2.55
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	0	-26	0	0	0.00	0.68	-0.68
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-207	153	228	227	1.40	0.00	1.40
Sub Total ER	236	1135			25.24	0.68	24.56
Total IR Exch	3113	4747			132.72	16.09	116.64

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

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
19.00	0.98	19.97	-1.83	-1.75	17.07	2.41	0.80	-0.80

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
36.01	75.12	111.13	24.56	92.07	116.64	-11.45	16.96	5.51

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	0.15	2.88	22.26	42.87	22.15	18.77	13.36	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					
50.55	11.47	49.76	21.05	50.07	0.16	0.10	50.29	49.869

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	405	08:14	402	03:30	0.0	0.0	0.0	0.0
Gorakhpur	400	415	11:46	399	19:08	0.0	0.0	56.7	2.4
Bareilly	400	424	11:03	403	00:32	0.0	0.0	9.0	0.0
Kanpur	400	422	13:04	406	00:19	0.0	0.0	2.0	0.0
Dadri	400	420	08:02	405	00:19	6.5	6.5	0.0	0.0
Ballabgarh	400	425	08:04	408	00:05	0.0	0.0	27.7	0.0
Bawana	400	423	13:03	405	19:30	0.0	0.0	8.8	0.0
Bassi	400	423	18:01	405	22:22	0.0	0.0	6.4	0.0
Hissar	400	410	13:03	382	19:36	0.0	19.2	0.0	0.0
Moga	400	422	13:03	399	19:36	0.0	0.0	1.1	0.0
Abdullapur	400	429	13:03	396	19:30	0.0	0.0	52.3	0.0
Nalagarh	400	427	13:04	401	19:35	0.0	0.0	25.2	0.0
Kishenpur	400	417	04:02	400	20:28	0.0	0.0	0.0	0.0
Wagoora	400	407	17:56	393	19:09	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	782	17:45	748	00:21	0.0	0.0	0.0	0.0
Balia	765	802	11:46	756	19:22	0.0	0.0	0.2	0.0
Moga	765	797	11:47	736	05:01	0.0	0.0	0.0	0.0
Agra	765	794	17:43	758	00:22	0.0	0.0	0.0	0.0
Bhiwani	765	804	13:02	771	00:00	0.0	0.0	4.1	0.0
Unnao	765	778	11:46	748	00:20	0.0	0.0	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	483.75	552.50	483.12	536.06	529.01	263.97
Pong	426.72	384.05	404.83	336.10	402.48	273.51	154.92	12.74
Tehri	829.79	740.04	764.10	155.00	761.65	132.00	100.45	169.00
Koteshwar	612.50	598.50	610.85	5.20	611.27	5.20	169.00	208.00
Chamera-I	760.00	748.75	759.80	0.00	0.00	0.00	408.67	347.32
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 Sagor	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	518.99	2.54	516.55	3.87	325.43	105.26

* 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	-150	493	2	-152	258	0	-3.60	9.56	5.96
Delhi	-146	25	-41	-97	284	-41	-2.56	4.10	1.54
Haryana	273	152	0	269	131	0	6.62	3.05	9.67
HP	-205	-209	0	-104	-743	0	-1.28	-9.66	-10.95
J&K	-222	0	0	-121	-15	0	-3.63	-0.34	-3.98
CHD	0	-10	0	0	0	0	0.00	0.14	0.14
Rajasthan	-125	162	2	-121	531	2	-2.76	11.94	9.17
UP	638	490	0	238	0	0	8.10	2.94	11.04
Uttarakhand	0	337	43	0	485	46	0.00	10.24	10.24
Total	62	1440	7	-88	931	7	0.89	31.97	32.85

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-150	-152	519	78	2	0
Delhi	-68	-146	513	-49	-25	-41
Haryana	282	269	157	-114	0	0
HP	99	-408	-209	-788	0	0
J&K	-70	-222	59	-101	0	0
CHD	0	0	25	-10	0	0
Rajasthan	0	-125	762	41	2	2
UP	654	120	490	0	0	0
Uttarakhand	0	0	487	336	46	31

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 25.04.2015 :**

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 :**