

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्ट की पूर्ण स्वामित्व प्राप्त महायुक्त कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOH188682

Power Supply Position in Northern Region for 26.04.2015
Date of Reporting : 27.04.2015

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
36622	1996	38618	50.01	35944	294	36238	50.05	801.5	21.65

* 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	38.54	3.94		42.48	67.80	64.60	-3.20	107.08	0.00
Haryana	30.21	0.71		30.91	75.83	79.37	3.54	110.28	0.00
Rajasthan	98.78	0.00	13.39	112.17	65.47	66.44	0.97	178.61	0.00
Delhi	23.12			23.12	56.12	52.37	-3.75	75.49	0.03
UP	124.70	5.60		130.30	100.62	102.16	1.54	232.46	14.12
Uttarakhand		12.01		12.01	22.40	21.46	-0.94	33.46	0.00
HP		14.39		14.39	8.74	8.83	0.09	23.22	0.00
J & K		13.76	0.00	13.76	22.89	23.12	0.23	36.87	7.50
Chandigarh				0.00	4.30	4.03	0.27	4.03	0.00
Total	315.35	50.39	13.39	379.13	424.18	422.38	-1.25	801.51	21.65

* 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	5164	0	-176	138	5314	0	68	329	5574
Haryana	5913	0	-64	365	5413	0	-6	409	6146
Rajasthan	7125	0	-106	368	7533	0	120	507	8022
Delhi	3297	1	-314	282	3322	0	24	-91	3676
UP	10504	1640	213	192	10551	0	21	638	10704
Uttarakhand	1677	0	117	415	1336	0	-48	389	1677
HP	980	0	-27	-923	850	0	176	-526	1138
J&K	1774	355	228	-121	1469	294	127	-222	1809
Chandigarh	188	0	-17	0	156	0	-11	0	197
Total	36622	1996	-147	715	35944	294	472	1434	37598

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

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

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	899	679	799	18.77	782	17.22	1.55	
Rihand II STPS (2*500)	1000	960	808	773	18.51	771	17.13	1.38	
Rihand III STPS (2*500)	1000	964	844	724	18.25	760	17.05	1.20	
Dadri I STPS (4*210)	840	615	434	420	11.20	467	10.39	0.80	
Dadri II STPS (2*490)	980	980	684	692	16.88	703	16.46	0.42	
Unchahar I TPS (2*210)	420	405	271	270	6.58	274	6.89	-0.31	
Unchahar II TPS (2*210)	420	401	258	251	6.18	257	6.75	-0.57	
Unchahar III TPS (1*220)	210	0	0	0	0.00	0	0.00	0.00	
ISTPP (Jhajjar) (3*500)	1500	1500	632	627	14.00	583	14.40	-0.40	
Dadri GPS (4*130.19+2*154.51)	830	808	387	394	9.42	393	9.43	0.00	
Anta GPS (3*88.71+1*153.2)	419	390	228	233	5.72	238	5.61	0.11	
Auraiya GPS (4*111.19+2*109.30)	663	646	159	166	3.85	160	3.85	0.00	
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	10284	7169	7196	168	6994	161	7	
B. NPC	NAPS (2*220)	440	386	427	435	9.48	395	9.26	0.22
RAPS- B (2*220)	440	373	412	416	8.89	370	7.30	1.59	
RAPS- C (2*220)	440	410	438	445	9.51	396	9.84	-0.33	
Sub Total (B)	1320	1169	1277	1296	27.88	1162	26.40	1.48	
C. NHPC	Chamera I HPS (3*180)	540	540	554	547	13.01	542	12.84	0.17
Chamera II HPS (3*100)	300	300	312	313	7.29	304	7.09	0.20	
Chamera III HPS (3*77)	231	231	236	232	5.55	231	5.47	0.08	
Bairasuil HPS(3*60)	180	179	180	122	3.43	143	3.31	0.12	
Salal-HPS (6*115)	690	653	668	666	15.81	659	15.47	0.34	
Tanakpur-HPS (3*40)	94	48	61	45	1.18	49	1.13	0.05	
Uri-I HPS (4*120)	480	475	476	473	11.58	483	11.26	0.33	
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00	
Dhauliganga-HPS (4*70)	280	210	208	0	2.73	114	2.52	0.20	
Dulhasti-HPS (3*130)	390	387	409	400	9.51	396	9.29	0.22	
Sewa-II HPS (3*40)	120	119	130	130	3.07	128	2.82	0.25	
Parbati 3 (4*130)	520	390	264	0	1.97	82	1.95	0.02	
Sub Total (C)	4065	3533	3497	2928	75	3130	73	2	
D.SJVNL	NJPC (6*250)	1500	1605	1301	505	23.16	965	23.03	0.13
Rampur HEP (6*68.67)	412	430	403	142	6.62	276	6.40	0.22	
Sub Total (D)	1912	2035	1704	647	29.77	1241	29.43	0.35	
E. THDC	Tehri HPS (4*250)	1000	501	512	0	5.75	240	5.73	0.02
Koteswar HPS (4*100)	400	125	303	100	3.01	125	3.00	0.00	
Sub Total (E)	1400	626	815	100	8.75	365	8.73	0.02	
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	417	964	338	11.11	463	10.02	1.10
Dehar HPS (6*165)	990	620	660	560	14.92	622	14.88	0.04	
Pong HPS (6*66)	396	6	125	0	0.16	7	0.16	0.01	
Sub Total (F)	2900	1044	1749	898	26.20	1091	25.05	1.14	
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	200	139	2.90	121	3.20	-0.30
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1003	400	12.45	519	12.59	-0.14	
Malana Stg-II HPS (2*50)	100	0	100	25	1.23	51	1.14	0.08	
Shree Cement TPS (2*150)	300	0	235	287	5.86	244	5.85	0.01	
Budhil HPS(IPP)	70	0	70	70	1.45	60	1.43	0.02	
Sub Total (G)	1662	0	1608	921	23.88	995	24.21	-0.33	
H. Total Regional Entities (A-G)	24972	18690	17819	13986	359.46	14977	347.78	11.68	

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	320	880	13.09	545
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.06	-2
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	170	396	6.49	270
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1019	711	19.02	793
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1509	1987	38.54	1606
	Total Hydro	1148	228	225	3.94	164
	Total Punjab	5828	1737	2212	42.48	1770
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	468	479	11.29	471
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	782	761	18.91	788
Thermal (Total)		4944	1250	1240	30.21	1259
Total Hydro		62	25	25	0.71	29
Total Haryana		5006	1275	1265	30.91	1288
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	888	942	20.94
	suratgarh TPS (6*250)	1500	570	572	13.45	560
	Chabra TPS (4*250)	1000	574	579	14.08	587
	Dholpur GPS (3*110)	330	91	88	2.21	92
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	174	179	4.35	181
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingsar (NLC) (2*125)	250	195	194	4.33	181
	Giral LTPS (2*125)	250	81	81	1.71	71
	Rajwest LTPS (IPP) (8*135)	1080	535	710	14.90	621
	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	872	867	22.80	950
	Thermal (Total)	8276	3980	4212	99	4116
	Total Hydro	550	0	0	0.00	0
	Wind power	2798	249	866	12.62	526
	Biomass	99	30	30	0.72	30
	Solar	730	0	0	0.05	2
	Renewable/Others (Total)	3627	279	896	13.39	558
	Total Rajasthan	12453	4259	5108	112.17	4674
	UP	Anpara TPS (3*210+2*500)	1630	1365	1371	29.50
Obra TPS (2*50+2*94+5*200)		1194	446	461	10.50	438
Paricha TPS (2*110+2*220+2*250)		1140	701	726	17.50	729
Panki TPS (2*105)		210	59	54	1.40	58
Harduaganj TPS (1*60+1*105+2*250)		665	157	229	4.50	188
Tanda TPS (NTPC) (4*110)		440	280	276	7.00	292
Roza TPS (IPP) (4*300)		1200	761	761	18.20	758
Anpara-C (IPP) (2*600)		1200	743	1076	20.30	846
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	282	282	6.20	4796
Anpara-D		500	0	0	0.00	0
Thermal (Total)		8629	4794	5236	115	9333
Vishnuparyag HPS (IPP)		400	188	177	4.20	175
Other Hydro		527	63	55	1.40	58
Cogeneration		981	400	400	9.60	400
Total UP		10537	5445	5868	130.30	9792
Uttarakhand		Total Hydro	1398	495	478	12.01
	Total Uttarakhand	1398	495	478	12.01	500
Delhi	Rajghat TPS (2*67.5)	135	50	49	1.13	47
	Delhi Gas Turbine (6x30 + 3x34)	282	74	146	2.44	102
	Pragati Gas Turbine (2x104+ 1x122)	330	263	272	6.58	274
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	278	270	6.54	273
	Badarpur TPS (NTPC) (3*95+2*210)	705	305	307	6.45	269
	Thermal (Total)	2917	970	1044	23.12	963
Total Delhi	2917	970	1044	23.12	963	
HP	Baspa HPS (IPP) (2*150)	300	185	69	2.60	108
	Malana HPS (IPP) (2*43)	86	69	44	1.27	53
	Other Hydro	728	455	439	10.52	438
	Total HP	1114	709	552	14.39	600
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	15452	17103	379.13	20160
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3360	4373	89.44	3727
Total Regional Availability(Gross)		65319	36631	35462	828.03	38864

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9068	5137	156.417707	6517
State Control Area Hydro	5684	2082	1911	50.39	1925
Total Regional Hydro	17654	11150	7048	206.81	8442

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	-100	300	400	100	1.57	1.50	0.07
Gwalior-Agra (D/C)	1953	1990	2116	0	27.16	0.00	27.16
Zerda-Kankroli	-174	-262	0	488	0.00	7.67	-7.67
Zerda-Bhinmal	-138	-205	0	409	0.00	6.13	-6.13
Malanpur-Auraiya	-58	-25	0	138	0.00	1.56	-1.56
Badod-Kota/Morak	-45	-52	0	0	0.00	0.23	-0.23
Mundra-Mohindergarh(HVDC)	2198	2497	2506	0	58.25	0.00	58.25
Vindhychal - Rihand	-487	-478	501	0	10.94	0.00	10.94
Sub Total WR	3149	3765			97.92	17.09	80.83
Pusauli Bypass	200	200	200	0	4.57	0.00	4.57
MZP- GKP (D/C)	-46	-156	200	117	0.53	0.00	0.53
Patna-Balia(D/C)	-27	150	203	27	1.93	0.00	1.93
B'Sharif-Balia (D/C)	-76	37	67	112	0.00	0.38	-0.38
Pusauli-Balia	62	126	150	28	0.75	0.00	0.75
Gaya-Fatehpur (765 Kv)	56	132	166	81	0.00	0.00	0.00
Pusauli-Sahupuri	170	172	194	0	3.76	0.00	3.76
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-36	0	0	0.00	0.76	-0.76
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-92	-17	16	233	0.00	1.80	-1.80
Sub Total ER	211	608			11.54	2.93	8.62
Total IR Exch	3360	4373			109.46	20.02	89.44

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
16.24	0.97	17.21	-3.35	-1.75	14.22	0.51	0.84	-0.84

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
28.92	63.32	92.24	8.62	80.83	89.44	-20.31	17.51	-2.80

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	0.23	3.51	38.66	63.09	17.91	12.84	2.75	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					
50.46	12.44	49.78	19.23	50.03	0.07	0.08	50.29	49.90

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	13:17	402	01:40	0.0	0.0	0.0	0.0
Gorakhpur	400	415	12:43	399	19:11	0.0	0.0	4.3	0.0
Bareilly	400	428	12:43	396	14:34	0.0	0.0	23.3	0.0
Kanpur	400	424	12:43	400	19:26	0.0	0.0	2.1	0.0
Dadri	400	423	12:44	402	19:28	0.0	0.0	10.3	0.0
Ballabhgarh	400	429	12:44	406	19:29	0.0	0.0	59.5	0.0
Bawana	400	426	12:43	403	19:26	0.0	0.0	34.0	0.0
Bassi	400	423	05:03	404	22:17	0.0	0.0	3.5	0.0
Hissar	400	412	12:43	383	19:29	0.0	15.8	0.0	0.0
Moga	400	425	12:43	394	19:48	0.0	0.0	9.6	0.0
Abdullapur	400	432	12:44	396	19:26	0.0	0.0	54.8	0.6
Nalagarh	400	431	12:43	403	19:45	0.0	0.0	54.3	0.1
Kishenpur	400	420	12:43	399	19:45	0.0	0.0	0.0	0.0
Wagoora	400	410	17:47	399	18:46	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	787	12:43	740	22:17	0.0	1.0	0.0	0.0
Balia	765	797	12:43	749	22:18	0.0	0.0	0.0	0.0
Moga	765	809	12:44	751	19:45	0.0	0.0	2.7	0.0
Agra	765	797	12:45	750	19:27	0.0	0.0	0.0	0.0
Bhiwani	765	812	12:44	761	19:23	0.0	0.0	23.9	0.0
Unnao	765	782	12:42	729	22:15	0.0	20.2	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	483.93	560.76	483.24	536.06	543.65	328.08
Pong	426.72	384.05	404.91	336.10	402.50	281.22	159.08	11.61
Tehri	829.79	740.04	763.95	153.00	760.95	127.00	104.55	175.00
Koteshwar	612.50	598.50	610.00	5.20	611.12	5.20	175.00	199.00
Chamera-I	760.00	748.75	759.40	0.00	0.00	0.00	405.98	352.35
Rihand	268.22	252.98	841.20	132.50	848.10	225.50	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	519.49	1.43	516.64	4.05	369.42	67.53

* 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	-145	471	2	-152	289	0	-3.50	10.22	6.72
Delhi	-146	96	-41	-97	379	0	-2.56	4.45	1.89
Haryana	252	157	0	248	117	0	5.99	3.22	9.21
HP	-205	-320	0	-256	-667	0	-2.09	-11.99	-14.08
J&K	-222	0	0	-121	0	0	-3.63	-0.23	-3.86
CHD	0	0	0	0	0	0	0.00	0.00	0.00
Rajasthan	-125	630	2	-121	487	2	-2.94	14.24	11.30
UP	638	0	0	192	0	0	7.40	0.00	7.40
Uttarakhand	0	343	47	0	406	10	0.00	9.05	9.05
Total	47	1377	10	-306	1010	12	-1.34	28.96	27.62

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-145	-152	511	289	2	0
Delhi	-68	-146	444	-30	0	-41
Haryana	252	248	158	115	0	0
HP	99	-560	-300	-929	0	0
J&K	-70	-222	74	-96	0	0
CHD	0	0	0	0	0	0
Rajasthan	-121	-125	692	408	2	2
UP	654	129	0	0	0	0
Uttarakhand	0	0	411	294	49	10

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 26.04.2015 :**

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 :**