

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्ट की पूर्ण स्वामित्व प्राप्त महायुक्त कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 14.03.2015
Date of Reporting : 15.03.2015

I. Regional Availability/Demand:

Evening Peak (19:00 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
31696	1183	32879	49.99	24607	516	25123	50.05	677.3	32.31

* 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	29.09	6.48		35.57	48.62	48.24	-0.38	83.80	0.00
Haryana	41.90	0.62		42.52	50.88	49.27	-1.61	91.79	0.00
Rajasthan	79.67	0.87	10.89	91.42	47.95	47.49	-0.45	138.91	0.00
Delhi	16.92			16.92	37.07	38.76	1.69	55.68	0.11
UP	122.50	2.70		125.20	81.33	81.84	0.51	207.04	24.08
Uttarakhand		9.07		9.07	21.33	23.62	2.29	32.69	1.07
HP		7.27		7.27	15.69	16.97	1.28	24.24	0.01
J & K		7.13	0.00	7.13	32.72	32.72	0.57	39.85	7.03
Chandigarh				0.00	3.17	3.30	0.27	3.30	0.00
Total	290.08	34.13	10.89	335.10	338.18	342.21	4.16	677.31	32.31

* 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 (19:00 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	3851	0	-296	-77	2895	0	103	-278	4269
Haryana	5263	0	33	155	2630	0	-206	-122	5512
Rajasthan	5808	0	51	526	5499	0	220	590	7474
Delhi	2609	0	-147	-356	1501	0	-40	-803	3116
UP	9476	775	419	139	8576	245	52	114	10314
Uttarakhand	1654	75	135	460	1151	0	146	253	1654
HP	975	0	-18	-147	735	0	35	98	1282
J&K	1885	333	107	317	1538	271	49	246	1885
Chandigarh	175	0	1	-20	82	0	-8	-15	185
Total	31696	1183	285	997	24607	516	351	83	32995

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

Diversity is 1.08

III. Regional Entities :

A. NTPC	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
	Singrauli STPS (5*200+2*500)	2000	1455	1494	1288	36.40	1517	33.38	3.02
	Rihand I STPS (2*500)	1000	897	891	737	21.24	885	19.47	1.76
	Rihand II STPS (2*500)	1000	900	770	742	20.29	846	18.74	1.56
	Rihand III STPS (2*500)	1000	973	853	766	20.93	872	19.65	1.28
	Dadri I STPS (4*210)	840	815	624	603	15.42	642	14.59	0.83
	Dadri II STPS (2*490)	980	479	385	350	8.73	364	8.84	-0.11
	Unchahar I TPS (2*210)	420	405	385	305	8.40	350	8.39	0.01
	Unchahar II TPS (2*210)	420	403	210	182	4.61	192	4.76	-0.15
	Unchahar III TPS (1*220)	210	201	150	148	3.82	159	3.75	0.06
	ISTPP (Jhajhar) (3*500)	1500	1500	708	686	15.49	646	17.03	-1.54
	Dadri GPS (4*130.19+2*154.51)	830	835	404	390	9.57	399	9.53	0.04
	Anta GPS (3*88.71+1*153.2)	419	418	224	207	5.25	219	5.06	0.19
	Auraiya GPS (4*111.19+2*109.30)	663	660	153	221	4.80	200	4.79	0.01
	Dadri Solar	5	1	0	0	0.02	1	0.02	-0.01
	Unchahar Solar	10	3	0	0	0.02	1	0.07	-0.05
	Singrauli Solar	15	3	0	0	0.00	0	0	-0.07
	Sub Total (A)	11312	9948	7251	6625	175	7291	168	7
B. NPC	NAPS (2*220)	440	395	420	429	9.35	390	9.48	-0.13
	RAPS- B (2*220)	440	406	451	452	9.79	408	9.74	0.04
	RAPS- C (2*220)	440	414	446	452	9.64	402	9.94	-0.30
	Sub Total (B)	1320	1215	1317	1333	28.78	1199	29.16	-0.38
C. NHPC	Chamera I HPS (3*180)	540	534	550	0	4.13	172	4.00	0.13
	Chamera II HPS (3*100)	300	300	204	0	1.98	82	1.93	0.05
	Chamera III HPS (3*77)	231	231	230	0	1.05	44	1.00	0.05
	Bairasuli HPS(3*60)	180	179	180	80	2.55	106	2.45	0.10
	Salal-HPS (6*115)	690	314	460	412	7.78	324	7.53	0.25
	Tanakpur-HPS (3*40)	94	33	31	36	0.86	36	0.78	0.07
	Uri-I HPS (4*120)	480	464	472	475	11.40	475	11.13	0.27
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	210	211	0	1.05	44	0.98	0.07
	Dulhasti-HPS (3*130)	390	387	404	0	2.94	123	2.80	0.14
	Sewa-II HPS (3*40)	120	122	130	130	3.10	129	2.93	0.17
	Parbati 3 (4*130)	520	260	264	0	0.56	23	0.52	0.04
	Sub Total (C)	4065	3033	3136	1133	37	1557	36	1
D. SJVNL	NJPC (6*250)	1500	1605	1598	0	6.45	269	6.40	0.05
	Rampur HEP (4*68.67)	275	262	370	0	1.69	71	1.67	0.02
	Sub Total (D)	1775	1867	1968	0	8.14	339	8.07	0.07
E. THDC	Tehri HPS (4*250)	1000	594	594	0	6.79	283	6.70	0.09
	Koteshwar HPS (4*100)	400	117	302	91	2.85	119	2.80	0.05
	Sub Total (E)	1400	711	896	91	9.64	402	9.50	0.14
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	452	973	345	11.45	477	10.84	0.61
	Dehar HPS (6*165)	990	244	495	330	5.70	237	5.86	-0.16
	Pong HPS (6*66)	396	7	120	0	0.11	5	0.16	-0.05
	Sub Total (F)	2900	702	1588	675	17.26	719	16.86	0.40
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.03	1	0.32	-0.29
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	580	0	3.32	138	3.36	-0.04
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	130	78	2.63	110	2.57	0.06
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.29	-0.29
	Sub Total (G)	1662	0	710	78	5.98	249	6.54	-0.56
H. Total Regional Entities (A-G)		24434	17476	16866	9934	282.17	11757	274.33	7.85

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	160	160	3.97	165
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.04	-2
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	160	162	3.89	162
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	613	356	12.93	539
	Talwandi Saboo (1*660)	660	404	334	8.34	347
	Thermal (Total)	4680	1337	1012	29.09	1212
	Total Hydro	1148	256	257	6.48	270
	Total Punjab	5828	1593	1269	35.57	1482
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00	0
	DCRTPP (Yamuna nagar) (2*300)	600	220	242	5.43	226
	Faridabad GPS (NTPC)	432	195	157	4.56	190
	RGTPP (khedar) (IPP) (2*600)	1200	576	366	10.61	442
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1167	741	21.31	888
	Thermal (Total)	4944	2158	1506	41.90	1746
	Total Hydro	62	21	22	0.62	26
	Total Haryana	5006	2179	1528	42.52	1772
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	558	1077	18.49	770
	suratgarh TPS (6*250)	1500	380	381	9.53	397
	Chabra TPS (3*250)	750	686	583	15.61	650
	Dholpur GPS (3*110)	330	0	5	0.19	8
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	221	223	5.49	229
	RAPS A (NPC) (1*100+1*200)	300	160	165	4.10	171
	Barsingar (NLC) (2*125)	250	100	100	2.24	93
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	566	441	15.02	626
	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	195	430	9.00	375
	Thermal (Total)	8026	2866	3405	80	3319
	Total Hydro	550	25	23	0.87	36
	Wind power	2798	983	203	10.10	421
	Biomass	99	33	33	0.79	33
	Solar	730	0	0	0.00	0
	Renewable/Others (Total)	3627	1016	236	10.89	454
	Total Rajasthan	12203	3907	3664	91.42	3809
UP	Anpara TPS (3*210+2*500)	1630	1281	1392	32.10	1338
	Obra TPS (2*50+2*94+5*200)	1194	337	311	7.70	321
	Paricha TPS (2*110+2*220+2*250)	1140	639	598	14.30	596
	Panki TPS (2*105)	210	131	135	3.20	133
	Harduaganj TPS (1*60+1*105+2*250)	665	414	370	9.50	396
	Tanda TPS (NTPC) (4*110)	440	394	320	7.70	321
	Roza TPS (IPP) (4*300)	1200	266	198	5.00	208
	Anpara-C (IPP) (2*600)	1200	1089	1090	23.80	992
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Thermal (Total)	8129	4551	4414	103.30	4304
	Vishnuparyag HPS (IPP)	400	75	71	0.00	0
	Other Hydro	527	197	50	2.70	113
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5623	5335	125.20	5217
Uttarakhand	Total Hydro	1398	440	331	9.07	378
	Total Uttarakhand	1398	440	331	9.07	378
Delhi	Raighat TPS (2*67.5)	135	45	43	0.92	38
	Delhi Gas Turbine (6x30 + 3x34)	282	80	82	1.87	78
	Pragati Gas Turbine (2x104+ 1x122)	330	153	159	3.78	158
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	316	270	6.70	279
	Badarpur TPS (NTPC) (3*95+2*210)	705	184	155	3.64	151
	Thermal (Total)	2917	778	709	16.92	705
Total Delhi	2917	778	709	16.92	705	
HP	Baspa HPS (IPP) (2*150)	300	58	0	0.84	35
	Malana HPS (IPP) (2*43)	86	0	0	0.24	10
	Other Hydro	728	317	236	6.19	258
	Total HP	1114	375	236	7.27	303
J & K	Baqilhar HPS (IPP) (3*150)	450	296	216	5.67	236
	Other Hydro/IPP	436	65	0	1.46	61
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	361	216	7.13	297
Total State Control Area Generation		39597	15256	13288	335.10	13962
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3570	3144	91.56	3815
Total Regional Availability(Gross)		64032	35692	26366	708.83	29535

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8168	1898	75.77	3157
State Control Area Hydro	5684	1675	1135	34.13	1422
Total Regional Hydro	17116	9843	3033	109.90	4579

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(19:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	-100	-200	50	350	0.02	4.87	-4.85
Gwalior-Agra (D/C)	1012	1383	2097	0	38.50	0.00	38.50
Zerda-Kankroli	-365	-435	0	491	0.00	8.53	-8.53
Zerda-Bhinmal	-305	-371	0	471	0.00	7.12	-7.12
Malanpur-Auraiya	-65	-134	0	149	0.00	2.15	-2.15
Badod-Kota/Morak	-108	-148	9	103	0.00	2.22	-2.22
Mundra-Mohindergarh(HVDC)	2397	2403	2406	0	52.61	0.00	52.61
Vindhychal - Rihand	406	264	499	0	9.16	0.00	9.16
Sub Total WR	2872	2762			100.28	24.89	75.40
Pusauli Bypass	200	200	200	0	4.82	0.00	4.82
MZP- GKP (D/C)	27	-29	241	209	0.00	0.33	-0.33
Patna-Balia(D/C)	670	469	743	0	14.50	0.00	14.50
B'Sharif-Balia (D/C)	-232	-184	0	315	0.00	4.86	-4.86
Pusauli-Balia	-51	29	60	71	0.00	0.26	-0.26
Gaya-Fatehpur (765 Kv)	113	-1	264	13	2.68	0.00	2.68
Pusauli-Sahupuri	147	168	195	0	3.52	0.00	3.52
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-36	0	43	0.00	0.95	-0.95
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-136	-234	20	241	0.00	2.97	-2.97
Sub Total ER	698	382			25.52	9.36	16.17
Total IR Exch	3570	3144			125.81	34.24	91.56

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
18.48	0.15	18.63	5.34	-2.08	-4.59	19.19	0.22	-0.22

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
19.59	63.38	82.98	16.17	75.40	91.56	-3.43	12.01	8.59

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	0.93	18.96	60.09	62.89	11.38	6.04	0.75	NA

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				
50.26	6.02	49.75	18.58	49.98	0.07	0.08	50.24	49.91

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	409	23:47	401	09:27	1.0	1.0	0.0	0.0
Gorakhpur	400	415	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly	400	426	03:01	404	18:58	0.0	0.0	23.8	0.0
Kanpur	400	424	03:01	407	10:05	0.0	0.0	10.6	0.0
Dadri	400	0	00:00	9999	00:00	100.0	100.0	0.0	0.0
Ballabgarh	400	435	03:00	414	09:46	0.0	0.0	60.8	24.8
Bawana	400	431	02:59	411	18:55	0.0	0.0	45.6	1.0
Bassi	400	434	21:28	406	06:46	0.0	0.0	56.5	10.4
Hissar	400	423	21:29	401	06:46	0.0	0.0	8.6	0.0
Moga	400	428	03:02	409	06:44	0.0	0.0	42.7	0.0
Abdullapur	400	430	23:43	396	18:58	0.0	0.0	24.7	0.0
Nalagarh	400	434	21:32	381	10:38	0.0	0.9	42.3	3.6
Kishenpur	400	232	16:09	215	18:59	100.0	100.0	0.0	0.0
Wagoora	400	406	22:20	374	19:05	9.5	45.5	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	780	03:01	746	11:34	0.0	0.0	0.0	0.0
Balia	765	766	16:08	746	18:59	0.0	0.0	0.0	0.0
Moga	765	810	03:01	774	06:43	0.0	0.0	31.1	0.0
Agra	765	794	03:01	759	11:34	0.0	0.0	0.0	0.0
Bhiwani	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Unnao	765	765	03:01	738	09:25	0.0	8.6	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	481.28	488.47	485.66	602.35	205.04	340.20
Pong	426.72	384.05	401.45	252.05	403.89	312.39	114.29	11.44
Tehri	829.79	740.04	779.80	318.00	785.35	385.20	43.87	186.00
Koteshwar	612.50	598.50	610.90	5.02	610.84	4.95	186.00	189.00
Chamera-I	760.00	748.75	756.98	0.00	0.00	0.00	135.25	111.50
Rihand	268.22	252.98	847.30	213.80	850.90	269.90	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	505.47	3.10	509.57	1.75	180.74	138.41

* NA: Not Available

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

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (19:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	-323	45	0	-284	207	0	-7.06	5.47	-1.60
Delhi	-672	-128	-3	-477	151	-31	-11.99	0.21	-11.77
Haryana	26	-147	0	34	121	0	0.09	0.43	0.52
HP	287	-189	0	90	-237	0	5.86	-4.58	1.28
J&K	552	-306	0	331	-14	0	9.77	-3.20	6.57
CHD	0	-15	0	0	-20	0	0.00	-0.21	-0.21
Rajasthan	0	601	-11	0	546	-20	0.00	12.92	12.92
UP	114	0	0	139	0	0	2.42	0.00	2.42
Uttarakhand	89	164	0	156	255	49	3.42	5.73	9.15
Total	72	25	-14	-10	1009	-2	2.51	16.77	19.28

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-277	-328	384	7	0	0
Delhi	-415	-672	249	-138	-3	-31
Haryana	34	-22	154	-352	0	0
HP	293	90	10	-803	0	0
J&K	552	331	0	-306	0	0
CHD	0	0	0	-20	0	0
Rajasthan	0	0	633	203	2	-62
UP	166	30	0	0	0	0
Uttarakhand	156	89	318	127	49	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 14.03.2015 :**

Cloudy/Rainfall with thunderstorm in rajasthan

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 :**