

पॉवर 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 11.03.2015
Date of Reporting : 12.03.2015

I. Regional Availability/Demand:

Demand Met	Evening Peak (19:00 Hrs) MW			Off Peak (03:00 Hrs) MW			Day Energy (Net MU)		
	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
34079	880	34959	49.92	25581	246	25827	50.05	726.8	27.43

* 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	27.57	6.18		33.75	49.26	48.02	-1.24	81.77	0.00
Haryana	29.05	0.66		29.70	63.69	63.83	0.13	93.53	0.02
Rajasthan	104.51	3.02	11.57	119.11	61.46	61.58	0.12	180.68	0.00
Delhi	17.64			17.64	39.65	39.71	0.06	57.35	0.06
UP	123.33	3.92		127.24	88.71	86.43	-2.28	213.67	19.62
Uttarakhand		9.32		9.32	21.74	23.75	2.01	33.07	0.74
HP		7.74		7.74	16.21	15.94	-0.27	23.68	0.00
J & K		8.55	0.00	8.55	30.51	31.09	0.58	39.63	6.99
Chandigarh				0.00	3.32	3.37	0.27	3.37	0.00
Total	302.10	39.39	11.57	353.05	374.53	373.70	-0.61	726.75	27.43

* 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	3826	0	-128	-95	2759	0	56	-280	4330
Haryana	5142	0	60	174	2368	0	-86	16	5349
Rajasthan	7892	0	-154	513	7070	0	113	655	8394
Delhi	2679	0	-191	-338	1426	0	7	-883	3219
UP	9892	485	-195	139	8574	0	-124	112	10642
Uttarakhand	1633	75	89	497	1177	0	115	232	1751
HP	1021	0	-110	-225	729	0	4	123	1303
J&K	1813	320	40	266	1392	246	-101	186	1911
Chandigarh	182	0	-11	-10	86	0	7	-20	187
Total	34079	880	-600	921	25581	246	-8	140	35989

* 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 :

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 (5*200+2*500)	2000	1455	1559	1485	34.37	1432	34.61	-0.24
Rihand I STPS (2*500)	1000	910	1002	941	23.32	972	21.38	1.94
Rihand II STPS (2*500)	1000	881	947	809	22.06	919	20.25	1.81
Rihand III STPS (2*500)	1000	973	1022	914	23.20	967	21.89	1.31
Dadri I STPS (4*210)	840	815	570	568	15.10	629	13.99	1.11
Dadri II STPS (2*490)	980	480	413	350	9.50	396	9.30	0.20
Unchahar I TPS (2*210)	420	405	379	315	8.44	352	8.17	0.27
Unchahar II TPS (2*210)	420	403	222	195	4.76	198	4.84	-0.08
Unchahar III TPS (1*220)	210	201	162	149	4.02	168	3.85	0.17
ISTPP (Jhajhar) (3*500)	1500	1500	985	601	16.38	683	17.55	-1.17
Dadri GPS (4*130.19+2*154.51)	830	835	412	285	9.19	383	9.03	0.16
Anta GPS (3*88.71+1*153.2)	419	418	257	248	6.13	255	6.02	0.11
Auraiya GPS (4*111.19+2*109.30)	663	660	329	219	7.37	307	7.25	0.12
Dadri Solar	5	1	0	0	0.02	1	0.03	-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	9943	8259	7079	184	7662	178	6
B. NPC								
NAPS (2*220)	440	394	432	439	9.48	395	9.46	0.02
RAPS- B (2*220)	440	411	449	459	9.80	408	9.86	-0.07
RAPS- C (2*220)	440	414	442	453	9.72	405	9.94	-0.21
Sub Total (B)	1320	1219	1323	1351	29.00	1208	29.26	-0.26
C. NHPC								
Chamera I HPS (3*180)	540	534	550	0	7.21	300	7.00	0.21
Chamera II HPS (3*100)	300	300	309	0	2.48	103	2.40	0.08
Chamera III HPS (3*77)	231	231	226	0	1.29	54	1.25	0.04
Bairasuli HPS(3*60)	180	179	181	69	2.81	117	2.70	0.11
Salal-HPS (6*115)	690	356	460	330	8.93	372	8.55	0.38
Tanakpur-HPS (3*40)	94	32	36	29	0.83	34	0.77	0.06
Uri-I HPS (4*120)	480	475	480	471	11.64	485	11.40	0.24
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	210	140	0	1.02	43	0.98	0.04
Dulhasti-HPS (3*130)	390	387	405	0	3.11	130	3.00	0.11
Sewa-II HPS (3*40)	120	122	131	131	3.10	129	2.93	0.17
Parbati 3 (4*130)	520	260	263	0	0.55	23	0.52	0.03
Sub Total (C)	4065	3086	3180	1030	43	1790	41	1
D. SJVNL								
NJPC (6*250)	1500	1605	1619	0	7.44	310	7.28	0.16
Rampur HEP (4*68.67)	275	262	374	0	1.82	76	1.79	0.03
Sub Total (D)	1775	1867	1993	0	9.26	386	9.07	0.19
E. THDC								
Tehri HPS (4*250)	1000	800	801	0	6.77	282	6.70	0.07
Koteshwar HPS (4*100)	400	117	302	90	2.87	120	2.80	0.07
Sub Total (E)	1400	917	1103	90	9.64	402	9.50	0.14
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	413	788	317	10.53	439	9.92	0.61
Dehar HPS (6*165)	990	279	495	165	6.58	274	6.69	-0.11
Pong HPS (6*66)	396	7	120	0	0.12	5	0.17	-0.05
Sub Total (F)	2900	699	1403	482	17.23	718	16.78	0.45
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.34	14	0.32	0.01
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	625	0	3.85	161	3.84	0.02
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	128	76	2.71	113	2.71	0.00
Budhil HPS(IPP)	70	0	0	0	0.22	9	0.22	0.00
Sub Total (G)	1662	0	753	76	7.12	297	7.09	0.03
H. Total Regional Entities (A-G)	24434	17731	18013	10107	299.10	12463	291.49	7.62

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	3.85	160
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.05	-2
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	164	161	4.05	169
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	402	358	11.47	478
	Talwandi Saboo (1*660)	660	344	356	8.25	344
	Thermal (Total)	4680	1070	1035	27.57	1149
	Total Hydro	1148	288	231	6.18	257
Total Punjab	5828	1358	1266	33.75	1406	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00	0
	DCRTPP (Yamuna nagar) (2*300)	600	0	0	0.00	0
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	572	0	7.40	308
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1173	744	21.65	902
	Thermal (Total)	4944	1745	744	29.05	1210
	Total Hydro	62	23	24	0.66	27
	Total Haryana	5006	1768	768	29.70	1238
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1044	1084	25.50
suratgarh TPS (6*250)		1500	389	370	9.92	413
Chabra TPS (3*250)		750	734	713	18.74	781
Dholpur GPS (3*110)		330	117	121	3.11	129
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	222	226	5.52	230
RAPS A (NPC) (1*100+1*200)		300	166	156	4.11	171
Barsingsar (NLC) (2*125)		250	98	192	3.64	152
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	969	781	21.00	875
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	563	468	12.97	541
Thermal (Total)		8026	4302	4111	105	4355
Total Hydro		550	109	87	3.02	126
Wind power		2798	528	475	10.67	444
Biomass		99	32	32	0.78	32
Solar		730	1	0	0.13	5
Renewable/Others (Total)		3627	561	507	11.57	482
Total Rajasthan		12203	4972	4705	119.11	4963
UP	Anpara TPS (3*210+2*500)	1630	1364	1392	32.30	1346
	Obra TPS (2*50+2*94+5*200)	1194	387	311	7.50	313
	Paricha TPS (2*110+2*220+2*250)	1140	645	664	15.50	646
	Panki TPS (2*105)	210	113	131	2.90	121
	Harduaganj TPS (1*60+1*105+2*250)	665	440	428	9.80	408
	Tanda TPS (NTPC) (4*110)	440	387	314	8.12	338
	Roza TPS (IPP) (4*300)	1200	225	198	5.12	213
	Anpara-C (IPP) (2*600)	1200	900	1080	22.89	954
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Thermal (Total)	8129	4461	4518	104.13	4339
	Vishnuparyag HPS (IPP)	400	72	71	1.70	71
	Other Hydro	527	60	69	2.22	92
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5393	5458	127.24	5231
	Uttarakhand	Total Hydro	1398	393	343	9.32
Total Uttarakhand		1398	393	343	9.32	388
Delhi	Raighat TPS (2*67.5)	135	39	0	0.51	21
	Delhi Gas Turbine (6x30 + 3x34)	282	83	81	1.93	81
	Pragati Gas Turbine (2x104+ 1x122)	330	155	159	3.82	159
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	321	270	7.41	309
	Badarpur TPS (NTPC) (3*95+2*210)	705	159	156	3.97	165
	Thermal (Total)	2917	757	666	17.64	735
Total Delhi	2917	757	666	17.64	735	
HP	Baspa HPS (IPP) (2*150)	300	67	0	0.79	33
	Malana HPS (IPP) (2*43)	86	0	0	0.25	10
	Other Hydro	728	320	244	6.71	280
	Total HP	1114	387	244	7.74	323
J & K	Baqilhar HPS (IPP) (3*150)	450	296	292	7.08	295
	Other Hydro/IPP	436	65	0	1.46	61
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	361	292	8.55	356
Total State Control Area Generation		39597	15389	13742	353.05	14640
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4343	2686	97.94	4081
Total Regional Availability(Gross)		64032	37745	26535	750.09	31183

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8303	1602	83.29	3470
State Control Area Hydro	5684	1621	1290	39.39	1570
Total Regional Hydro	17116	9924	2892	122.68	5041

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	-200	-400	150	400	0.30	3.47	-3.17
Gwalior-Agra (D/C)	1444	1287	1945	0	34.81	0.00	34.81
Zerda-Kankroli	0	-373	0	453	0.00	4.60	-4.60
Zerda-Bhinmal	-388	-291	0	616	0.00	8.37	-8.37
Malanpur-Auraiya	-107	-108	0	112	0.00	2.76	-2.76
Badod-Kota/Morak	-179	-173	0	117	0.00	3.79	-3.79
Mundra-Mohindergarh(HVDC)	2200	1800	2405	0	53.18	0.00	53.18
Vindhychal - Rihand	497	304	506	0	10.50	0.00	10.50
Sub Total WR	3267	2046			98.79	22.99	75.80
Pusauli Bypass	200	200	200	0	4.84	0.00	4.84
MZP- GKP (D/C)	51	11	177	158	0.23	0.00	0.23
Patna-Balia(D/C)	617	536	677	0	13.99	0.00	13.99
B'Sharif-Balia (D/C)	-65	-152	0	255	0.00	3.21	-3.21
Pusauli-Balia	114	-17	130	71	0.37	0.00	0.37
Gaya-Fatehpur (765 Kv)	139	81	322	0	4.24	0.00	4.24
Pusauli-Sahupuri	165	172	179	0	3.58	0.00	3.58
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-40	-40	0	0	0.00	0.90	-0.90
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-105	-151	69	172	0.00	1.48	-1.48
Sub Total ER	1076	640			27.73	5.59	22.14
Total IR Exch	4343	2686			126.52	28.58	97.94

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
19.35	0.19	19.54	5.14	-2.08	9.07	4.30	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
33.95	69.65	103.60	22.14	75.80	97.94	-11.82	6.15	-5.66

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	0.05	2.57	21.00	61.51	61.17	12.87	5.34	0.05	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				
50.21	18.18	49.69	13.39	49.97	0.08	0.09	50.18	49.85

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	00:00	400	19:34	0.0	0.0	0.0	0.0
Gorakhpur	400	409	15:05	390	19:08	0.0	0.0	0.0	0.0
Bareilly	400	423	02:10	402	19:21	0.0	0.0	12.5	0.0
Kanpur	400	419	02:03	402	09:13	0.0	0.0	0.0	0.0
Dadri	400	419	12:59	408	10:47	76.3	76.3	0.0	0.0
Ballabgarh	400	433	03:00	409	09:14	0.0	0.0	44.0	9.2
Bawana	400	430	02:03	408	06:57	0.0	0.0	33.2	0.0
Bassi	400	425	21:35	401	09:13	0.0	0.0	12.0	0.0
Hissar	400	422	02:03	396	06:56	0.0	0.0	4.2	0.0
Moga	400	428	03:00	406	06:56	0.0	0.0	31.2	0.0
Abdullapur	400	428	16:57	396	06:58	0.0	0.0	28.8	0.0
Nalagarh	400	435	02:02	408	18:54	0.0	0.0	47.1	22.0
Kishenpur	400	228	01:59	216	18:51	100.0	100.0	0.0	0.0
Wagoora	400	410	13:04	382	19:03	0.0	16.5	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	774	02:58	742	09:12	0.0	0.0	0.0	0.0
Balia	765	763	00:00	763	00:00	0.0	0.0	0.0	0.0
Moga	765	809	02:03	766	06:58	0.0	0.0	20.5	0.0
Agra	765	789	02:04	752	09:12	0.0	0.0	0.0	0.0
Bhiwani	765	808	02:03	766	06:58	0.0	0.0	35.3	0.0
Unnao	765	756	02:03	728	19:11	0.0	29.9	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	481.69	495.33	486.39	627.57	230.07	325.50
Pong	426.72	384.05	401.27	244.95	404.27	320.26	163.25	11.44
Tehri	829.79	740.04	781.05	334.00	786.65	406.00	43.04	184.00
Koteshwar	612.50	598.50	611.01	5.20	610.45	4.95	184.00	190.00
Chamera-I	760.00	748.75	756.88	0.00	0.00	0.00	178.83	194.66
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 Sagar	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	505.27	3.16	508.89	2.19	214.09	146.29

* 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	-321	41	0	-284	189	0	-7.02	3.28	-3.74
Delhi	-754	-128	-2	-477	140	-2	-12.40	1.68	-10.71
Haryana	24	-8	0	34	140	0	0.18	-0.33	-0.15
HP	287	-164	0	90	-315	0	5.86	-4.30	1.57
J&K	543	-357	0	331	-65	0	9.79	-3.60	6.19
CHD	0	-20	0	0	-10	0	0.00	-0.14	-0.14
Rajasthan	0	663	-8	0	562	-49	0.00	13.24	13.24
UP	112	0	0	139	0	0	2.42	0.00	2.42
Uttarakhand	89	143	0	156	292	49	3.42	6.08	9.50
Total	-20	170	-10	-10	933	-2	2.26	15.91	18.17

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-275	-323	343	7	0	0
Delhi	-415	-754	413	-173	-2	-15
Haryana	34	-14	162	-438	0	0
HP	293	90	10	-641	0	0
J&K	543	331	0	-357	0	0
CHD	0	0	0	-20	0	0
Rajasthan	0	0	665	96	2	-49
UP	159	33	0	0	0	0
Uttarakhand	156	89	400	122	49	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 11.03.2015 :****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 :**