

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 24.02.2015
Date of Reporting : 25.02.2015

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
37250	2178	39427	50.01	30004	881	30886	50.01	792.8	37.13

* 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	33.04	11.51		44.55	43.24	43.00	-0.24	87.55	0.00
Haryana	54.60	0.39		54.98	61.17	60.80	-0.37	115.78	0.00
Rajasthan	127.78	5.17	10.54	143.48	66.80	65.13	-1.67	208.61	0.00
Delhi	17.18			17.18	42.10	42.57	0.47	59.74	0.01
UP	132.10	4.10		136.20	88.25	85.90	-2.36	222.10	30.00
Uttarakhand		9.58		9.58	20.76	22.67	1.91	32.25	0.00
HP		6.98		6.98	16.98	16.22	-0.75	23.20	0.00
J & K		7.57	0.00	7.57	37.15	32.67	-4.48	40.23	7.12
Chandigarh				0.00	3.49	3.39	0.27	3.39	0.00
Total	364.68	45.29	10.54	420.51	379.94	372.34	-7.23	792.85	37.13

* 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	4174	0	-48	-67	3010	0	-43	-283	4285
Haryana	6701	0	33	-463	3693	0	-61	-708	6701
Rajasthan	8477	0	-298	-116	8908	0	52	869	9755
Delhi	2915	0	-84	-367	1601	0	-71	-849	3213
UP	10297	1810	80	59	9203	600	48	68	11128
Uttarakhand	1618	45	29	442	1195	0	129	276	1618
HP	1057	0	-26	80	713	0	-1	300	1281
J&K	1828	323	-131	550	1595	281	-173	637	1860
Chandigarh	183	0	-17	0	87	0	-9	-31	185
Total	37250	2178	-461	117	30004	881	-130	280	38156

* STOA figures are at sellers boundary & PX figures are at regional boundary.

figures may not be at simultaneous hour.

Diversity is 1.05

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	1930	2058	1776	47.84	1993	45.83	2.02
Rihand I STPS (2*500)	1000	902	882	698	18.65	777	20.15	-1.50
Rihand II STPS (2*500)	1000	900	843	678	18.43	768	19.10	-0.67
Rihand III STPS (2*500)	1000	966	858	782	20.51	854	20.43	0.08
Dadri I STPS (4*210)	840	815	602	560	15.07	628	14.06	1.01
Dadri II STPS (2*490)	980	980	691	661	17.23	718	17.03	0.20
Unchahar I TPS (2*210)	420	405	350	271	6.92	288	7.29	-0.37
Unchahar II TPS (2*210)	420	403	352	272	6.93	289	6.93	0.00
Unchahar III TPS (1*220)	210	201	156	135	3.47	145	3.41	0.06
ISTPP (Jhajhar) (3*500)	1500	1500	646	650	15.09	629	16.94	-1.85
Dadri GPS (4*130.19+2*154.51)	830	844	188	174	4.35	181	4.45	-0.10
Anta GPS (3*88.71+1*153.2)	419	426	0	233	1.25	52	0.00	1.25
Auraiya GPS (4*111.19+2*109.30)	663	510	161	135	3.73	155	3.84	-0.11
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
Unchahar Solar	10	3	0	0	0.04	2	0.07	-0.03
Singrauli Solar	15	2	0	0	0.00	0	0	-0.04
Sub Total (A)	11312	10787	7787	7025	180	7480	180	0
B. NPC								
NAPS (2*220)	440	387	419	428	9.20	383	9.29	-0.09
RAPS- B (2*220)	440	406	447	450	9.74	406	9.74	-0.01
RAPS- C (2*220)	440	403	442	444	9.56	398	9.67	-0.11
Sub Total (B)	1320	1196	1308	1322	28.50	1187	28.70	-0.21
C. NHPC								
Chamera I HPS (3*180)	540	534	550	0	6.22	259	5.00	1.22
Chamera II HPS (3*100)	300	200	210	0	2.22	92	2.20	0.02
Chamera III HPS (3*77)	231	231	228	0	1.11	46	1.17	-0.06
Bairasuli HPS(3*60)	180	179	182	60	2.16	90	1.95	0.21
Salal-HPS (6*115)	690	213	230	215	5.70	237	5.11	0.59
Tanakpur-HPS (3*40)	94	21	26	33	0.60	25	0.51	0.09
Uri-I HPS (4*120)	480	312	265	302	7.72	322	7.51	0.21
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	140	140	0	0.77	32	0.70	0.07
Dulhasti-HPS (3*130)	390	387	406	0	3.55	148	3.00	0.55
Sewa-II HPS (3*40)	120	119	131	127	2.94	123	2.86	0.08
Parbati 3 (4*130)	520	260	130	0	0.52	22	0.65	-0.13
Sub Total (C)	4065	2596	2498	736	34	1396	31	3
D. SJVNL								
NJPC (6*250)	1500	1080	1085	0	6.41	267	5.99	0.42
Rampur HEP (4*68.67)	275	370	296	0	1.81	75	1.68	0.13
Sub Total (D)	1775	1450	1381	0	8.22	343	7.67	0.55
E. THDC								
Tehri HPS (4*250)	1000	844	849	0	8.68	362	7.40	1.28
Koteshwar HPS (4*100)	400	125	300	100	3.52	147	3.00	0.52
Sub Total (E)	1400	969	1149	100	12.20	508	10.40	1.80
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	730	1064	485	18.03	751	17.51	0.52
Dehar HPS (6*165)	990	314	330	330	7.38	307	7.53	-0.16
Pong HPS (6*66)	396	105	232	0	2.66	111	2.52	0.13
Sub Total (F)	2900	1149	1626	815	28.06	1169	27.57	0.49
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.41	17	0.35	0.06
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	0	0	3.15	131	3.13	0.03
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	133	84	2.85	119	3.05	-0.21
Budhil HPS(IPP)	70	0	0	36	0.29	12	0.21	0.07
Sub Total (G)	1662	0	133	120	6.70	279	6.74	-0.05
H. Total Regional Entities (A-G)	24434	18147	15882	10118	296.69	12362	291.33	5.36

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	330	7.56	315
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	100	2.26	94
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	339	405	8.05	335
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	359	330	7.84	327
	Talwandi Saboo (1*660)	660	346	344	7.33	306
	Thermal (Total)	4680	1464	1509	33.04	1377
	Total Hydro	1148	456	473	11.51	480
Total Punjab	5828	1920	1982	44.55	1856	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	231	221	5.25	219
	DCRTPP (Yamuna nagar) (2*300)	600	273	245	5.98	249
	Faridabad GPS (NTPC)	432	199	157	4.19	174
	RGTPP (khedar) (IPP) (2*600)	1200	1157	733	19.30	804
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	897	742	19.88	828
	Thermal (Total)	4944	2757	2098	54.60	2275
	Total Hydro	62	6	17	0.39	16
	Total Haryana	5006	2763	2115	54.98	2291
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1034	1043	25.65
suratgarh TPS (6*250)		1500	989	954	24.01	1001
Chabra TPS (3*250)		750	776	762	18.18	758
Dholpur GPS (3*110)		330	111	111	2.81	117
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	119	44	3.31	138
RAPS A (NPC) (1*100+1*200)		300	164	154	4.06	169
Barsingsar (NLC) (2*125)		250	180	189	4.28	179
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	660	780	19.19	800
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	881	1190	26.28	1095
Thermal (Total)		8026	4914	5227	128	5324
Total Hydro		550	255	88	5.17	215
Wind power		2798	716	249	10.11	421
Biomass		99	14	14	0.33	14
Solar		730	0	0	0.10	4
Renewable/Others (Total)		3627	730	263	10.54	439
Total Rajasthan		12203	5899	5578	143.48	5978
UP	Anpara TPS (3*210+2*500)	1630	1419	1427	33.60	1400
	Obra TPS (2*50+2*94+5*200)	1194	359	348	8.50	354
	Paricha TPS (2*110+2*220+2*250)	1140	674	629	15.40	642
	Panki TPS (2*105)	210	140	140	3.20	133
	Harduaganj TPS (1*60+1*105+2*250)	665	200	203	5.00	208
	Tanda TPS (NTPC) (4*110)	440	318	319	8.20	342
	Roza TPS (IPP) (4*300)	1200	774	779	19.60	817
	Anpara-C (IPP) (2*600)	1200	783	995	19.40	808
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Thermal (Total)	8129	4667	4840	112.90	4704
	Vishnuparyag HPS (IPP)	400	71	69	1.70	71
	Other Hydro	527	181	87	2.40	100
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5719	5796	136.20	5604
	Uttarakhand	Total Hydro	1398	502	281	9.58
Total Uttarakhand		1398	502	281	9.58	399
Delhi	Raighat TPS (2*67.5)	135	42	36	0.85	36
	Delhi Gas Turbine (6x30 + 3x34)	282	78	81	1.87	78
	Pragati Gas Turbine (2x104+ 1x122)	330	154	158	3.77	157
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	313	269	6.82	284
	Badarpur TPS (NTPC) (3*95+2*210)	705	158	160	3.87	161
	Thermal (Total)	2917	745	704	17.18	716
Total Delhi	2917	745	704	17.18	716	
HP	Baspa HPS (IPP) (2*150)	300	29	39	1.04	43
	Malana HPS (IPP) (2*43)	86	0	0	0.32	13
	Other Hydro	728	281	216	5.62	234
	Total HP	1114	310	255	6.98	291
J & K	Baqilhar HPS (IPP) (3*150)	450	294	214	5.55	231
	Other Hydro/IPP	436	98	78	2.02	84
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	392	292	7.57	315
Total State Control Area Generation		39597	18250	17003	420.51	17450
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5210	3411	115.28	4803
Total Regional Availability(Gross)		64032	39342	30532	832.47	34616

IV. Total Hydro Generation:

Regional Entities Hydro	11432	6654	1651	85.55	3565
State Control Area Hydro	5684	2102	1493	45.29	1816
Total Regional Hydro	17116	8756	3144	130.83	5381

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	-500	0	500	0.00	6.73	-6.73
Gwalior-Agra (D/C)	1663	1240	2080	0	38.76	0.00	38.76
Zerda-Kankroli	-222	-329	0	361	0.00	5.94	-5.94
Zerda-Bhinmal	-121	-223	13	272	0.00	3.32	-3.32
Malanpur-Auraiya	-70	-113	0	147	0.00	2.26	-2.26
Badod-Kota/Morak	-84	-187	0	192	0.00	2.82	-2.82
Mundra-Mohindergarh(HVDC)	2302	2298	2505	0	56.92	0.00	56.92
Vindhychal - Rihand	498	419	500	0	11.73	0.00	11.73
Sub Total WR	3766	2605			107.41	21.07	86.34
Pusauli Bypass	400	200	400	0	7.34	0.00	7.34
MZP- GKP (D/C)	193	47	208	104	1.92	0.00	1.92
Patna-Balia(D/C)	498	449	608	0	11.82	0.00	11.82
B'Sharif-Balia (D/C)	-64	-78	77	253	0.00	1.59	-1.59
Pusauli-Balia	24	-2	121	67	0.16	0.00	0.16
Gaya-Fatehpur (765 Kv)	284	136	400	0	6.17	0.00	6.17
Pusauli-Sahupuri	148	153	180	0	3.13	0.00	3.13
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-40	-30	0	46	0.00	0.83	-0.83
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	1	-69	132	166	0.33	0.00	0.33
Sub Total ER	1444	806			31.36	2.42	28.94
Total IR Exch	5210	3411			138.77	23.50	115.28

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
17.40	0.14	17.53	4.31	-0.85	10.12	-0.01	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
32.18	75.14	107.32	28.94	86.34	115.28	-3.24	11.20	7.95

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	0.56	2.64	22.89	62.32	60.28	10.06	5.93	1.20	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				
50.27	6.02	49.63	6.44	49.97	0.09	0.09	50.29	49.8

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	04:01	401	16:48	0.0	0.0	0.0	0.0
Gorakhpur	400	404	13:36	404	13:36	0.0	0.0	0.0	0.0
Bareilly	400	423	02:56	401	06:14	0.0	0.0	12.4	0.0
Kanpur	400	419	04:00	400	06:43	0.0	0.0	0.0	0.0
Dadri	400	409	13:02	403	11:18	77.5	77.5	0.0	0.0
Ballabgarh	400	429	04:00	408	13:49	0.0	0.0	28.8	0.0
Bawana	400	425	04:01	406	13:47	0.0	0.0	22.4	0.0
Bassi	400	421	05:01	396	06:38	0.0	0.0	0.9	0.0
Hissar	400	415	21:45	394	14:17	0.0	0.0	0.0	0.0
Moga	400	422	02:57	404	14:17	0.0	0.0	6.2	0.0
Abdullapur	400	423	00:23	396	14:36	0.0	0.0	3.6	0.0
Nalagarh	400	429	00:30	411	14:24	0.0	0.0	44.0	0.0
Kishenpur	400	427	23:49	402	18:49	0.0	0.0	25.2	0.0
Wagoora	400	414	21:20	377	18:58	3.4	40.5	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	769	21:54	746	11:19	0.0	0.0	0.0	0.0
Balia	765	774	17:04	750	22:24	0.0	0.0	0.0	0.0
Moga	765	801	03:01	767	06:44	0.0	0.0	0.1	0.0
Agra	765	794	04:01	754	06:45	0.0	0.0	0.0	0.0
Bhiwani	765	805	03:01	766	06:38	0.0	0.0	6.7	0.0
Unnao	765	767	03:58	739	06:43	0.0	1.4	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	483.83	552.50	491.02	768.41	223.84	598.45
Pong	426.72	384.05	399.28	203.01	406.18	379.44	200.88	192.75
Tehri	829.79	740.04	786.55	406.00	793.25	502.00	35.42	228.00
Koteshwar	612.50	598.50	610.35	4.69	610.37	4.69	228.00	233.00
Chamera-I	760.00	748.75	759.73	0.00	0.00	0.00	137.85	167.76
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	500.98	3.14	508.59	1.59	167.09	147.21

* 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	37	0	-290	223	0	-7.20	3.09	-4.11
Delhi	-674	-173	-2	-462	103	-8	-10.94	-0.11	-11.05
Haryana	-605	-103	0	-596	133	0	-15.69	2.18	-13.51
HP	463	-163	0	332	-252	0	11.30	-5.87	5.43
J&K	637	0	0	452	98	0	12.88	0.25	13.13
CHD	-31	0	0	0	0	0	-0.24	0.00	-0.24
Rajasthan	294	573	2	90	-135	-71	6.44	10.14	16.59
UP	68	0	0	59	0	0	0.52	0.00	0.52
Uttarakhand	269	7	0	269	125	49	6.35	2.31	8.66
Total	101	178	0	-147	295	-31	3.42	11.99	15.42

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-290	-321	333	2	0	0
Delhi	-230	-674	194	-180	-2	-31
Haryana	-596	-772	160	-146	0	0
HP	522	332	-111	-623	0	0
J&K	637	452	171	-204	0	0
CHD	0	-31	0	0	0	0
Rajasthan	294	90	576	-299	2	-71
UP	112	-95	0	0	0	0
Uttarakhand	269	253	162	-6	49	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 24.02.2015 :**

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 :**