

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 17.03.2015
Date of Reporting : 18.03.2015

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
30906	1767	32673	49.98	23633	507	24140	50.05	673.6	26.28

* 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	28.44	6.15		34.59	47.06	46.62	-0.44	81.21	0.00
Haryana	30.93	0.47		31.39	61.08	60.94	-0.14	92.34	0.00
Rajasthan	74.33	1.00	6.96	82.29	56.76	58.37	1.61	140.66	0.00
Delhi	17.68			17.68	39.87	39.88	0.00	57.56	0.01
UP	125.80	2.70		128.50	80.00	78.83	-1.18	207.33	20.14
Uttarakhand		10.71		10.71	21.76	22.52	0.76	33.23	0.12
HP		8.36		8.36	14.88	15.59	0.72	23.95	0.00
J & K		11.86	0.00	11.86	23.57	22.25	-1.32	34.11	6.02
Chandigarh				0.00	3.37	3.27	0.27	3.27	0.00
Total	277.18	41.24	6.96	325.38	348.34	348.26	0.29	673.63	26.28

* 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	3912	0	7	-60	2732	0	38	-253	4298
Haryana	5123	0	-232	202	2668	0	22	-25	5594
Rajasthan	6143	0	-28	597	5154	0	41	723	6770
Delhi	2715	0	-85	-270	1517	0	-12	-833	3193
UP	8497	1435	-106	142	8553	330	8	120	9498
Uttarakhand	1639	40	76	491	1199	0	81	225	1734
HP	1049	0	-73	-187	724	0	27	115	1307
J&K	1652	292	111	303	1003	177	-258	225	1773
Chandigarh	176	0	-18	-10	83	0	4	-7	184
Total	30906	1767	-348	1209	23633	507	-49	291	33375

* 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	1578	1387	36.89	1537	33.87	3.01
Rihand I STPS (2*500)	1000	681	484	698	15.79	658	14.12	1.67
Rihand II STPS (2*500)	1000	470	466	367	11.07	461	10.03	1.04
Rihand III STPS (2*500)	1000	978	1017	776	22.28	928	20.95	1.33
Dadri I STPS (4*210)	840	815	630	596	15.36	640	14.45	0.91
Dadri II STPS (2*490)	980	480	408	350	8.96	373	8.65	0.31
Unchahar I TPS (2*210)	420	405	344	268	8.18	341	8.37	-0.19
Unchahar II TPS (2*210)	420	403	250	149	5.17	215	5.51	-0.33
Unchahar III TPS (1*220)	210	201	174	138	3.80	158	3.73	0.08
ISTPP (Jhajhar) (3*500)	1500	1500	913	690	16.83	701	17.99	-1.16
Dadri GPS (4*130.19+2*154.51)	830	838	379	397	4.74	198	4.85	-0.11
Anta GPS (3*88.71+1*1153.2)	419	418	224	198	5.31	221	5.18	0.14
Auraiya GPS (4*111.19+2*109.30)	663	660	163	152	3.94	164	3.97	-0.03
Dadri Solar	5	1	0	0	0.03	1	0.03	0.00
Unchahar Solar	10	3	0	0	0.04	2	0.07	-0.03
Singrauli Solar	15	3	0	0	0.05	2	0	-0.02
Sub Total (A)	11312	9311	7030	6166	158	6602	152	7
B. NPC								
NAPS (2*220)	440	395	431	431	9.45	394	9.48	-0.03
RAPS- B (2*220)	440	408	446	451	9.69	404	9.79	-0.10
RAPS- C (2*220)	440	420	450	451	9.72	405	10.08	-0.36
Sub Total (B)	1320	1223	1327	1333	28.86	1203	29.35	-0.49
C. NHPC								
Chamera I HPS (3*180)	540	534	551	0	9.22	384	9.00	0.22
Chamera II HPS (3*100)	300	300	308	0	3.18	132	3.10	0.08
Chamera III HPS (3*77)	231	231	232	0	1.55	65	1.50	0.05
Bairasuli HPS(3*60)	180	179	182	134	3.69	154	3.67	0.02
Salal-HPS (6*115)	690	429	460	458	10.63	443	10.28	0.35
Tanakpur-HPS (3*40)	94	37	42	62	0.95	40	0.92	0.03
Uri-I HPS (4*120)	480	468	465	470	10.83	451	11.19	-0.36
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	210	211	0	1.38	58	1.30	0.08
Dulhasti-HPS (3*130)	390	387	401	33	2.67	111	2.50	0.17
Sewa-II HPS (3*40)	120	122	130	130	3.09	129	2.93	0.16
Parbati 3 (4*130)	520	260	266	0	0.62	26	0.59	0.04
Sub Total (C)	4065	3156	3247	1286	48	1992	47	1
D. SJVNL								
NJPC (6*250)	1500	1605	1598	0	6.28	262	6.20	0.08
Rampur HEP (4*68.67)	275	420	445	0	1.77	74	1.72	0.06
Sub Total (D)	1775	2025	2043	0	8.06	336	7.92	0.14
E. THDC								
Tehri HPS (4*250)	1000	588	592	0	6.76	282	6.70	0.06
Koteshwar HPS (4*100)	400	117	300	90	2.86	119	2.80	0.06
Sub Total (E)	1400	705	892	90	9.62	401	9.50	0.12
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	357	513	343	9.18	383	8.56	0.63
Dehar HPS (6*165)	990	298	495	165	7.40	308	7.15	0.25
Pong HPS (6*66)	396	6	121	0	0.11	5	0.15	-0.04
Sub Total (F)	2900	661	1129	508	16.69	695	15.86	0.83
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.29	12	0.28	0.01
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	697	0	3.39	141	3.36	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	128	90	2.89	120	2.83	0.05
Budhil HPS(IPP)	70	0	0	0	0.28	12	0.29	0.00
Sub Total (G)	1662	0	825	90	6.85	285	6.76	0.09
H. Total Regional Entities (A-G)	24434	17081	16494	9473	276.34	11514	268.19	8.15

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	210	160	4.11	171
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.05	-2
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	210	163	3.73	155
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	556	355	12.23	510
	Talwandi Saboo (1*660)	660	346	342	8.42	351
	Thermal (Total)	4680	1322	1020	28.44	1185
	Total Hydro	1148	274	250	6.15	256
Total Punjab	5828	1596	1270	34.59	1441	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00	0
	DCRTPP (Yamuna nagar) (2*300)	600	278	231	5.91	246
	Faridabad GPS (NTPC)	432	197	165	4.43	185
	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	1232	741	20.59	858
	Thermal (Total)	4944	1707	1137	30.93	1289
	Total Hydro	62	16	15	0.47	19
	Total Haryana	5006	1723	1152	31.39	1308
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	178	369	7.89
suratgarh TPS (6*250)		1500	391	385	10.18	424
Chabra TPS (3*250)		750	583	583	13.86	578
Dholpur GPS (3*110)		330	0	0	0.00	0
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	208	218	5.16	215
RAPS A (NPC) (1*100+1*200)		300	99	0	1.05	44
Barsingar (NLC) (2*125)		250	182	182	4.41	184
Giral LTPS (2*125)		250	31	0	1.17	49
Rajwest LTPS (IPP) (8*135)		1080	841	644	17.24	718
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	600	480	13.37	557
Thermal (Total)		8026	3113	2861	74	3097
Total Hydro		550	39	23	1.00	42
Wind power		2798	219	456	6.16	257
Biomass		99	27	27	0.66	27
Solar		730	1	0	0.14	6
Renewable/Others (Total)		3627	247	483	6.96	290
Total Rajasthan	12203	3399	3367	82.29	3429	
UP	Anpara TPS (3*210+2*500)	1630	1385	1386	32.80	1367
	Obra TPS (2*50+2*94+5*200)	1194	458	439	10.60	442
	Paricha TPS (2*110+2*220+2*250)	1140	464	524	12.00	500
	Panki TPS (2*105)	210	131	126	3.10	129
	Harduaganj TPS (1*60+1*105+2*250)	665	329	447	10.20	425
	Tanda TPS (NTPC) (4*110)	440	280	298	8.00	333
	Roza TPS (IPP) (4*300)	1200	194	194	5.30	221
	Anpara-C (IPP) (2*600)	1200	774	1094	24.60	1025
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Thermal (Total)	8129	4015	4508	106.60	4442
	Vishnuparyag HPS (IPP)	400	76	72	0.00	0
	Other Hydro	527	102	72	2.70	113
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	4993	5452	128.50	5354
	Uttarakhand	Total Hydro	1398	460	435	10.71
Total Uttarakhand		1398	460	435	10.71	446
Delhi	Raighat TPS (2*67.5)	135	44	43	1.01	42
	Delhi Gas Turbine (6x30 + 3x34)	282	82	82	1.92	80
	Pragati Gas Turbine (2x104+ 1x122)	330	154	157	3.79	158
	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	169	168	3.56	148
	Thermal (Total)	2917	771	719	17.68	737
Total Delhi	2917	771	719	17.68	737	
HP	Baspa HPS (IPP) (2*150)	300	30	0	0.94	39
	Malana HPS (IPP) (2*43)	86	0	0	0.23	10
	Other Hydro	728	320	279	7.18	299
	Total HP	1114	350	279	8.36	348
J & K	Baqilhar HPS (IPP) (3*150)	450	440	436	10.39	433
	Other Hydro/IPP	436	65	0	1.46	61
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	505	436	11.86	494
Total State Control Area Generation		39597	13797	13110	325.38	13557
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4278	2036	95.09	3962
Total Regional Availability(Gross)		64032	34568	24619	696.80	29033

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8008	1884	85.85	3577
State Control Area Hydro	5684	1746	1510	41.24	1718
Total Regional Hydro	17116	9754	3394	127.09	5295

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	50	-500	500	500	1.75	4.23	-2.49
Gwalior-Agra (D/C)	1615	1038	2087	0	34.85	0.00	34.85
Zerda-Kankroli	-130	-348	0	387	0.00	5.36	-5.36
Zerda-Bhinmal	-87	-303	0	378	0.00	4.14	-4.14
Malanpur-Auraiya	-60	-62	0	83	0.00	1.32	-1.32
Badod-Kota/Morak	36	-78	48	45	0.00	0.04	-0.04
Mundra-Mohindergarh(HVDC)	1998	1703	2005	0	46.62	0.00	46.62
Vindhychal - Rihand	460	315	498	0	10.32	0.00	10.32
Sub Total WR	3882	1765			93.53	15.09	78.44
Pusauli Bypass	200	200	200	0	4.97	0.00	4.97
MZP- GKP (D/C)	-102	-34	152	176	0.00	0.27	-0.27
Patna-Balia(D/C)	580	514	682	0	14.29	0.00	14.29
B'Sharif-Balia (D/C)	-250	-240	0	324	0.00	5.16	-5.16
Pusauli-Balia	-46	-37	0	105	0.00	0.60	-0.60
Gaya-Fatehpur (765 Kv)	96	-45	220	45	2.78	0.00	2.78
Pusauli-Sahupuri	109	173	208	0	3.78	0.00	3.78
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-35	0	40	0.00	0.79	-0.79
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-151	-225	16	233	0.00	2.35	-2.35
Sub Total ER	396	271			25.81	9.17	16.65
Total IR Exch	4278	2036			119.35	24.26	95.09

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
23.62	0.18	23.80	3.71	-1.63	2.99	20.32	0.57	-0.57

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
31.06	64.77	95.83	16.65	78.44	95.09	-14.42	13.67	-0.75

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	0.02	1.63	16.57	60.27	66.84	12.18	4.44	0.00	0.00

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				
50.20	18.01	49.70	20.34	49.98	0.07	0.08	50.15	49.9

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	411	01:49	400	08:46	0.0	0.0	0.0	0.0
Gorakhpur	400	415	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly	400	431	02:51	403	19:12	0.0	0.0	24.2	0.2
Kanpur	400	428	02:54	404	19:14	0.0	0.0	22.1	0.0
Dadri	400	426	23:24	406	19:17	53.1	53.1	11.5	0.0
Ballabgarh	400	437	01:27	410	19:19	0.0	0.0	56.1	24.2
Bawana	400	433	01:10	408	19:06	0.0	0.0	43.5	8.1
Bassi	400	430	01:26	396	07:31	0.0	0.0	32.8	0.0
Hissar	400	426	01:10	396	06:41	0.0	0.0	19.6	0.0
Moga	400	429	01:11	405	19:11	0.0	0.0	34.5	0.0
Abdullapur	400	430	01:10	396	06:39	0.0	0.0	25.7	0.0
Nalagarh	400	436	21:32	396	10:56	0.0	0.0	44.8	21.9
Kishenpur	400	231	02:32	216	19:23	100.0	100.0	0.0	0.0
Wagoora	400	410	01:14	362	08:10	1.9	13.8	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	02:53	743	06:25	0.0	0.0	0.0	0.0
Balia	765	785	02:54	744	19:16	0.0	0.0	0.0	0.0
Moga	765	814	01:10	768	06:43	0.0	0.0	30.3	0.0
Agra	765	796	01:27	751	06:25	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	777	02:52	732	19:17	0.0	12.8	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	481.05	481.64	484.60	577.33	256.30	288.61
Pong	426.72	384.05	401.83	259.17	403.52	304.55	217.16	11.47
Tehri	829.79	740.04	778.50	302.00	784.10	371.99	42.25	187.00
Koteswar	612.50	598.50	610.89	4.95	610.81	4.95	187.00	190.00
Chamera-I	760.00	748.75	759.05	0.00	0.00	0.00	256.18	249.14
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	506.64	3.12	509.91	2.24	207.93	124.11

* 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	-326	73	0	-282	222	0	-7.10	5.87	-1.23
Delhi	-632	-175	-25	-439	194	-25	-11.07	1.47	-9.60
Haryana	36	-61	0	36	166	0	0.29	3.25	3.53
HP	162	-47	0	42	-229	0	3.33	-2.75	0.58
J&K	530	-304	0	317	-14	0	9.45	-3.44	6.02
CHD	0	-7	0	0	-10	0	0.00	-0.10	-0.10
Rajasthan	0	721	2	0	595	2	0.00	14.10	14.10
UP	120	0	0	142	0	0	2.60	0.00	2.60
Uttarakhand	90	125	10	158	319	14	3.45	7.27	10.73
Total	-21	325	-14	-26	1243	-9	0.95	25.66	26.61

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-281	-326	380	7	0	0
Delhi	-377	-632	585	-181	-25	-25
Haryana	36	-12	189	-61	0	0
HP	168	42	10	-614	0	0
J&K	530	317	0	-304	0	0
CHD	0	0	15	-25	0	0
Rajasthan	0	0	722	185	2	-47
UP	172	35	0	0	0	0
Uttarakhand	158	90	433	118	49	1

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 17.03.2015 :**
Cloudy/Rainfall in Northern region.**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 :**