

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 09.03.2015
Date of Reporting : 10.03.2015

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
32028	1512	33539	50.01	23306	171	23477	50.06	674.5	7.04

* 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	25.11	6.31		31.42	45.13	45.43	0.29	76.85	0.00
Haryana	21.99	0.66		22.64	60.21	61.62	1.41	84.26	0.00
Rajasthan	93.54	3.66	10.35	107.55	57.59	59.20	1.62	166.75	0.00
Delhi	12.76			12.76	40.93	42.84	1.91	55.59	0.02
UP	123.20	4.70		127.90	77.53	76.09	-1.44	203.99	0.00
Uttarakhand		9.77		9.77	18.35	20.92	2.57	30.69	1.61
HP		8.21		8.21	14.21	14.23	0.02	22.44	0.00
J & K		7.04	0.00	7.04	23.49	23.66	0.16	30.70	5.42
Chandigarh				0.00	3.39	3.27	0.27	3.27	0.00
Total	276.59	40.36	10.35	327.29	340.82	347.24	6.82	674.54	7.04

* 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	3799	0	90	-279	2499	0	-16	-262	4373
Haryana	4796	0	-30	141	2157	0	292	-180	5032
Rajasthan	7253	0	-148	623	6418	0	26	641	7853
Delhi	2585	0	-109	-424	1432	0	115	-840	3105
UP	9227	1165	68	135	8103	0	-261	82	10327
Uttarakhand	1655	75	207	336	1001	0	17	117	1655
HP	999	0	-21	-310	645	0	-43	154	1145
J&K	1540	272	-9	317	968	171	-31	253	1809
Chandigarh	175	0	-15	0	84	0	-12	0	183
Total	32028	1512	32	539	23306	171	87	-35	34278

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

Diversity is 1.04

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	1568	1554	37.22	1551	34.62	2.60
Rihand I STPS (2*500)	1000	920	992	847	21.57	899	19.76	1.81
Rihand II STPS (2*500)	1000	900	877	677	20.04	835	18.68	1.36
Rihand III STPS (2*500)	1000	973	501	509	12.08	503	11.71	0.38
Dadri I STPS (4*210)	840	795	583	382	12.83	534	12.39	0.44
Dadri II STPS (2*490)	980	980	750	722	18.02	751	17.36	0.66
Unchahar I TPS (2*210)	420	405	340	260	7.36	307	7.65	-0.29
Unchahar II TPS (2*210)	420	403	0	0	0.00	0	1.77	-1.77
Unchahar III TPS (1*220)	210	201	136	136	3.43	143	3.54	-0.11
ISTPP (Jhajhar) (3*500)	1500	1500	637	611	14.80	617	15.60	-0.80
Dadri GPS (4*130.19+2*154.51)	830	840	283	140	6.03	251	6.25	-0.22
Anta GPS (3*88.71+1*1153.2)	419	418	80	-1	1.12	47	1.33	-0.21
Auraiya GPS (4*111.19+2*109.30)	663	660	160	167	3.92	164	3.95	-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	0.00	0	0	-0.07
Sub Total (A)	11312	10457	6907	6004	158	6603	155	4
B. NPC								
NAPS (2*220)	440	390	431	433	9.46	394	9.36	0.10
RAPS- B (2*220)	440	409	456	455	9.88	412	9.82	0.06
RAPS- C (2*220)	440	414	452	453	9.79	408	9.94	-0.14
Sub Total (B)	1320	1213	1339	1341	29.13	1214	29.11	0.01
C. NHPC								
Chamera I HPS (3*180)	540	534	547	0	5.09	212	5.00	0.09
Chamera II HPS (3*100)	300	300	305	0	2.46	102	2.52	-0.06
Chamera III HPS (3*77)	231	231	228	0	1.25	52	1.20	0.05
Bairasuli HPS(3*60)	180	179	181	68	3.02	126	2.93	0.09
Salal-HPS (6*115)	690	415	440	550	10.18	424	9.96	0.22
Tanakpur-HPS (3*40)	94	38	62	39	0.94	39	0.91	0.03
Uri-I HPS (4*120)	480	475	478	0	8.83	368	11.03	-2.20
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	163	140	0	1.37	57	1.30	0.08
Dulhasti-HPS (3*130)	390	387	405	0	3.44	143	3.25	0.19
Sewa-II HPS (3*40)	120	82	87	87	2.08	87	1.97	0.12
Parbati 3 (4*130)	520	260	262	0	0.55	23	0.52	0.03
Sub Total (C)	4065	3063	3137	745	39	1634	41	-1
D. SJVNL								
NJPC (6*250)	1500	1605	1601	0	6.83	284	6.60	0.23
Rampur HEP (4*68.67)	275	370	373	0	1.61	67	1.74	-0.13
Sub Total (D)	1775	1975	1974	0	8.43	351	8.34	0.09
E. THDC								
Tehri HPS (4*250)	1000	812	813	0	7.05	294	7.00	0.05
Koteshwar HPS (4*100)	400	117	301	92	2.84	118	2.80	0.04
Sub Total (E)	1400	929	1114	92	9.89	412	9.80	0.09
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	397	783	335	9.87	411	9.53	0.34
Dehar HPS (6*165)	990	305	495	165	7.27	303	7.33	-0.06
Pong HPS (6*66)	396	15	60	0	0.23	9	0.36	-0.14
Sub Total (F)	2900	717	1338	500	17.37	724	17.22	0.15
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.49	21	0.48	0.02
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	625	0	3.64	152	3.60	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	76	2.76	115	2.74	0.02
Budhil HPS(IPP)	70	0	0	0	0.12	5	0.21	-0.10
Sub Total (G)	1662	0	755	76	7.01	292	7.03	-0.02
H. Total Regional Entities (A-G)	24434	18354	16564	8758	269.52	11230	266.84	2.67

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	0	3.01	125
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.05	-2
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	208	164	4.09	170
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	456	350	10.00	417
	Talwandi Saboo (1*660)	660	358	340	8.07	336
	Thermal (Total)	4680	1232	854	25.11	1046
	Total Hydro	1148	261	261	6.31	263
Total Punjab	5828	1493	1115	31.42	1309	
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	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1160	741	21.99	916
	Thermal (Total)	4944	1160	741	21.99	916
	Total Hydro	62	22	23	0.66	27
	Total Haryana	5006	1182	764	22.64	944
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	711	549	16.50
suratgarh TPS (6*250)		1500	384	364	9.88	412
Chabra TPS (3*250)		750	665	705	17.26	719
Dholpur GPS (3*110)		330	127	95	3.01	125
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	70	216	5.27	220
RAPS A (NPC) (1*100+1*200)		300	170	164	4.06	169
Barsingar (NLC) (2*125)		250	194	191	4.52	189
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	848	795	19.99	833
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	483	13.04	543
Thermal (Total)		8026	3769	3562	94	3898
Total Hydro		550	202	71	3.66	153
Wind power		2798	341	500	9.53	397
Biomass		99	26	26	0.63	26
Solar		730	2	0	0.19	8
Renewable/Others (Total)		3627	369	526	10.35	431
Total Rajasthan		12203	4340	4159	107.55	4481
UP	Anpara TPS (3*210+2*500)	1630	1400	1407	32.30	1346
	Obra TPS (2*50+2*94+5*200)	1194	276	265	6.40	267
	Paricha TPS (2*110+2*220+2*250)	1140	615	581	14.80	617
	Panki TPS (2*105)	210	135	68	2.90	121
	Harduaganj TPS (1*60+1*105+2*250)	665	354	409	9.20	383
	Tanda TPS (NTPC) (4*110)	440	318	320	8.20	342
	Roza TPS (IPP) (4*300)	1200	383	396	9.60	400
	Anpara-C (IPP) (2*600)	1200	792	936	20.60	858
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Thermal (Total)	8129	4273	4382	104.00	4333
	Vishnuparyag HPS (IPP)	400	53	68	1.70	71
	Other Hydro	527	168	139	3.00	125
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5294	5389	127.90	5258
	Uttarakhand	Total Hydro	1398	480	346	9.77
Total Uttarakhand		1398	480	346	9.77	407
Delhi	Raighat TPS (2*67.5)	135	0	0	-0.01	0
	Delhi Gas Turbine (6x30 + 3x34)	282	83	82	1.93	80
	Pragati Gas Turbine (2x104+ 1x122)	330	158	161	3.42	142
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	283	-5	3.55	148
	Badarpur TPS (NTPC) (3*95+2*210)	705	161	189	3.87	161
	Thermal (Total)	2917	685	426	12.76	532
Total Delhi	2917	685	426	12.76	532	
HP	Baspa HPS (IPP) (2*150)	300	63	0	1.04	43
	Malana HPS (IPP) (2*43)	86	0	0	0.27	11
	Other Hydro	728	312	249	6.90	288
	Total HP	1114	375	249	8.21	342
J & K	Baqilhar HPS (IPP) (3*150)	450	294	147	5.09	212
	Other Hydro/IPP	436	99	76	1.96	82
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	393	223	7.04	293
Total State Control Area Generation		39597	14242	12671	327.29	13566
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3400	1583	94.82	3951
Total Regional Availability(Gross)		64032	34206	23012	691.62	28747

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8188	1337	79.03	3293
State Control Area Hydro	5684	1901	1312	40.36	1611
Total Regional Hydro	17116	10089	2649	119.39	4904

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	-300	0	350	0.00	3.62	-3.62
Gwalior-Agra (D/C)	1479	818	2098	0	33.49	0.00	33.49
Zerda-Kankroli	-189	-303	0	343	0.00	4.94	-4.94
Zerda-Bhinmal	-146	-225	25	343	0.00	3.72	-3.72
Malanpur-Auraiya	-67	-110	0	114	0.00	1.87	-1.87
Badod-Kota/Morak	-96	-86	72	129	0.00	1.30	-1.30
Mundra-Mohindergarh(HVDC)	2302	1801	2405	0	52.69	0.00	52.69
Vindhychal - Rihand	387	0	491	0	4.86	0.00	4.86
Sub Total WR	3570	1595			91.03	15.44	75.59
Pusauli Bypass	200	200	200	0	4.82	0.00	4.82
MZP- GKP (D/C)	25	16	143	147	0.00	0.58	-0.58
Patna-Balia(D/C)	-560	-514	670	0	14.16	0.00	14.16
B'Sharif-Balia (D/C)	112	169	0	226	0.00	2.94	-2.94
Pusauli-Balia	-32	42	88	0	0.02	0.00	0.02
Gaya-Fatehpur (765 Kv)	94	75	208	0	2.85	0.00	2.85
Pusauli-Sahupuri	161	168	186	0	3.49	0.00	3.49
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-30	-40	0	43	0.00	0.88	-0.88
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-140	-128	30	171	0.00	2.19	-2.19
Sub Total ER	-170	-12			25.82	6.59	19.23
Total IR Exch	3400	1583			116.85	22.03	94.82

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
17.20	0.20	17.39	5.25	-0.90	4.72	0.83	0.58	-0.58

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
27.95	64.87	92.82	19.23	75.59	94.82	-8.72	10.72	2.00

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	1.13	13.29	47.67	61.62	18.29	6.59	0.24	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	18.33	49.73	18.41	50.00	0.06	0.08	50.20	49.93

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	413	03:19	406	15:54	0.0	0.0	0.0	0.0
Gorakhpur	400	407	17:20	396	18:40	0.0	0.0	0.0	0.0
Bareilly	400	425	03:13	397	18:54	0.0	0.0	19.8	0.0
Kanpur	400	420	03:18	406	18:55	0.0	0.0	0.0	0.0
Dadri	400	419	13:03	410	14:09	76.3	76.3	0.0	0.0
Ballabgarh	400	433	02:03	410	18:54	0.0	0.0	45.8	13.9
Bawana	400	432	03:00	407	18:52	0.0	0.0	35.3	3.3
Bassi	400	428	05:02	408	07:28	0.0	0.0	27.1	0.0
Hissar	400	424	03:01	396	18:53	0.0	0.0	12.1	0.0
Moga	400	428	00:00	404	18:52	0.0	0.0	28.0	0.0
Abdullapur	400	426	01:58	396	18:54	0.0	0.0	23.6	0.0
Nalagarh	400	437	03:01	406	18:50	0.0	0.0	59.5	18.9
Kishenpur	400	232	00:04	216	19:19	100.0	100.0	0.0	0.0
Wagoora	400	416	05:27	200	00:52	10.6	22.3	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	776	21:52	743	06:13	0.0	0.0	0.0	0.0
Balia	765	776	03:04	763	06:26	0.0	0.0	0.0	0.0
Moga	765	807	03:01	764	18:53	0.0	0.0	17.3	0.0
Agra	765	790	23:56	752	06:25	0.0	0.0	0.0	0.0
Bhiwani	765	810	03:02	765	18:54	0.0	0.0	20.3	0.0
Unnao	765	764	03:55	743	18:55	0.0	0.0	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	481.83	503.43	486.98	644.48	225.01	295.68
Pong	426.72	384.05	401.06	244.95	404.51	328.16	234.58	19.11
Tehri	829.79	740.04	781.85	340.00	787.55	418.00	42.03	191.00
Koteshwar	612.50	598.50	610.97	4.95	610.45	4.69	191.00	188.00
Chamera-I	760.00	748.75	757.12	0.00	0.00	0.00	184.64	137.14
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	0.00	0.00
RPS	352.80	343.81	1137.06	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	505.01	3.25	508.80	1.94	62.21	140.72

* 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	-324	62	0	-284	5	0	-7.07	3.36	-3.72
Delhi	-626	-212	-2	-431	9	-2	-10.89	-0.20	-11.08
Haryana	-1	-178	0	15	127	0	-0.51	-2.76	-3.27
HP	337	-183	0	63	-373	0	6.71	-5.43	1.27
J&K	560	-306	0	331	-14	0	10.09	-2.76	7.33
CHD	0	0	0	0	0	0	0.00	-0.08	-0.08
Rajasthan	0	640	2	0	621	2	0.00	14.01	14.01
UP	82	0	0	135	0	0	2.03	0.00	2.03
Uttarakhand	89	28	0	156	178	1	3.42	1.97	5.38
Total	115	-150	0	-14	553	1	3.77	8.11	11.88

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-278	-325	355	2	0	0
Delhi	-369	-626	292	-216	-2	-10
Haryana	15	-49	135	-585	0	0
HP	343	38	3	-870	0	0
J&K	560	331	0	-306	0	0
CHD	0	0	0	-20	0	0
Rajasthan	0	0	643	472	2	2
UP	149	29	0	0	0	0
Uttarakhand	156	89	234	-6	9	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 09.03.2015 :**

Rainfall in most parts of NR region and snowfall in some parts of 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 :**