

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 26.01.2015
Date of Reporting : 27.01.2015

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
34300	1785	36085	50.11	26468	292	26759	50.18	745.4	27.21

* 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	35.92	5.49		41.41	33.72	35.64	1.92	77.05	0.00
Haryana	63.85	0.42		64.27	35.91	35.25	-0.65	99.52	0.00
Rajasthan	107.44	3.05	5.36	115.85	64.23	70.84	6.62	186.69	0.00
Delhi	18.92			18.92	37.56	36.83	-0.73	55.75	0.00
UP	144.30	3.30		147.60	78.07	79.74	1.67	227.34	19.58
Uttarakhand		7.55		7.55	22.10	23.83	1.73	31.38	0.04
HP		3.65		3.65	17.64	17.53	-0.11	21.18	0.00
J & K		4.28	0.00	4.28	37.98	38.72	0.74	43.00	7.59
Chandigarh				0.00	3.27	3.54	0.27	3.54	0.00
Total	370.43	27.73	5.36	403.52	330.48	341.92	11.44	745.44	27.21

* 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	4058	0	89	-156	2587	0	170	-228	4255
Haryana	5251	0	-434	-882	3100	0	45	-854	5275
Rajasthan	7905	0	71	833	6818	0	621	1057	9253
Delhi	2615	0	-9	-267	1510	0	-16	-889	3095
UP	9707	1400	-415	53	8963	0	33	59	10723
Uttarakhand	1573	40	-24	462	1074	0	65	419	1613
HP	1049	0	58	462	667	0	46	294	1165
J&K	1956	345	80	838	1653	292	98	695	1998
Chandigarh	185	0	-4	0	96	0	12	-31	204
Total	34300	1785	-588	1342	26468	292	1074	523	36024

* 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	1850	1953	1406	42.64	1777	39.42	3.22
Rihand I STPS (2*500)	1000	859	868	601	18.95	789	17.34	1.60
Rihand II STPS (2*500)	1000	919	934	683	19.52	813	18.37	1.15
Rihand III STPS (2*500)	1000	978	884	763	20.16	840	18.29	1.87
Dadri I STPS (4*210)	840	815	652	548	15.32	638	14.39	0.93
Dadri II STPS (2*490)	980	980	741	666	17.84	743	17.81	0.03
Unchahar I TPS (2*210)	420	405	268	276	7.02	292	7.45	-0.43
Unchahar II TPS (2*210)	420	403	274	271	6.97	291	6.92	0.06
Unchahar III TPS (1*220)	210	201	147	133	3.53	147	3.54	-0.01
ISTPP (Jhajhar) (3*500)	1500	1500	584	558	12.99	541	14.57	-1.58
Dadri GPS (4*130.19+2*154.51)	830	848	206	199	4.91	204	5.08	-0.17
Anta GPS (3*88.71+1*153.2)	419	426	207	216	5.53	230	5.54	-0.02
Auraiya GPS (4*111.19+2*109.30)	663	680	169	167	4.03	168	4.04	-0.01
Dadri Solar	5	1	0	0	0.07	3	0.02	0.05
Unchahar Solar	10	3	0	0	0.02	1	0.07	-0.05
Singrauli Solar	15	2	0	0	0.00	0	0	-0.05
Sub Total (A)	11312	10869	7887	6487	179	7479	173	7
B. NPC								
NAPS (2*220)	440	390	437	438	9.55	398	9.36	0.19
RAPS- B (2*220)	440	292	230	456	6.53	272	7.00	-0.47
RAPS- C (2*220)	440	211	236	237	5.01	209	5.06	-0.05
Sub Total (B)	1320	893	903	1131	21.09	879	21.42	-0.34
C. NHPC								
Chamera I HPS (3*180)	540	534	541	0	1.69	71	1.60	0.09
Chamera II HPS (3*100)	300	300	290	0	1.04	43	1.00	0.04
Chamera III HPS (3*77)	231	231	230	0	0.69	29	0.65	0.04
Bairasuli HPS(3*60)	180	120	120	0	0.43	18	0.40	0.03
Salal-HPS (6*115)	690	93	225	120	2.28	95	2.22	0.06
Tanakpur-HPS (3*40)	94	26	34	23	0.63	26	0.62	0.01
Uri-I HPS (4*120)	480	103	200	20	2.51	105	2.46	0.05
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	139	140	0	0.81	34	0.75	0.06
Dulhasti-HPS (3*130)	390	258	271	0	2.49	104	2.40	0.09
Sewa-II HPS (3*40)	120	119	66	0	0.30	13	0.36	-0.06
Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
Sub Total (C)	4065	1923	2118	163	13	536	12	0
D. SJVNL								
NJPC (6*250)	1500	1350	1356	0	6.42	268	6.31	0.11
Rampur HEP (4*68.67)	275	370	371	0	1.83	76	1.75	0.07
Sub Total (D)	1775	1720	1727	0	8.25	344	8.07	0.19
E. THDC								
Tehri HPS (4*250)	1000	964	951	0	8.38	349	8.35	0.03
Koteshwar HPS (4*100)	400	117	295	90	2.80	117	2.80	0.00
Sub Total (E)	1400	1081	1246	90	11.18	466	11.15	0.03
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	498	1092	338	11.95	498	11.95	-0.01
Dehar HPS (6*165)	990	138	330	0	3.38	141	3.30	0.08
Pong HPS (6*66)	396	186	306	0	4.43	185	4.47	-0.04
Sub Total (F)	2900	822	1728	338	19.75	823	19.72	0.04
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.26	11	0.26	0.01
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	577	0	3.19	133	3.24	-0.05
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	102	107	2.43	101	2.45	-0.02
Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
Sub Total (G)	1662	0	679	107	5.88	245	5.95	-0.07
H. Total Regional Entities (A-G)	24434	17306	16287	8315	258.51	10771	251.66	6.85

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	480	480	11.00	458	
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	120	90	2.03	85	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	463	329	7.71	321	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura (2*700)	1400	357	327	7.70	321	
	Talwandi Saboo (1*660)	660	345	368	7.48	312	
	Thermal (Total)	4680	1765	1594	35.92	1497	
	Total Hydro	1148	322	160	5.49	229	
Total Punjab	5828	2087	1754	41.41	1725		
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	214	218	5.10	213	
	DCRTPP (Yamuna nagar) (2*300)	600	501	505	11.40	475	
	Faridabad GPS (NTPC)	432	420	280	8.59	358	
	RGTPP (khedar) (IPP) (2*600)	1200	730	714	18.30	763	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP) (2*660)	1320	1134	744	20.46	853	
	Thermal (Total)	4944	2999	2461	63.85	2660	
	Total Hydro	62	10	11	0.42	17	
	Total Haryana	5006	3009	2472	64.27	2678	
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	855	830	20.84	868
suratgarh TPS (6*250)		1500	770	758	18.99	791	
Chabra TPS (3*250)		750	563	495	13.81	576	
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	145	144	4.41	184	
RAPS A (NPC) (1*100+1*200)		300	151	150	4.16	173	
Barsingsar (NLC) (2*125)		250	163	192	4.04	168	
Giral LTPS (2*125)		250	0	0	0.00	0	
Rajwest LTPS (IPP) (8*135)		1080	808	462	17.12	713	
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	964	880	24.08	1003	
Thermal (Total)		8026	4419	3911	107	4477	
Total Hydro		550	223	34	3.05	127	
Wind power		2798	72	396	4.39	183	
Biomass		99	21	21	0.51	21	
Solar		730	0	0	0.46	19	
Renewable/Others (Total)		3627	93	417	5.36	223	
Total Rajasthan		12203	4735	4362	115.85	4827	
UP		Anpara TPS (3*210+2*500)	1630	1405	1400	32.80	1367
	Obra TPS (2*50+2*94+5*200)	1194	356	355	8.50	354	
	Paricha TPS (2*110+2*220+2*250)	1140	697	723	17.60	733	
	Panki TPS (2*105)	210	77	77	1.70	71	
	Harduaganj TPS (1*60+1*105+2*250)	665	378	464	11.00	458	
	Tanda TPS (NTPC) (4*110)	440	224	312	7.00	292	
	Roza TPS (IPP) (4*300)	1200	581	587	15.50	646	
	Anpara-C (IPP) (2*600)	1200	860	1062	23.90	996	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	279	279	7.10	296	
	Thermal (Total)	8129	4857	5259	125.10	5213	
	Vishnuparyag HPS (IPP)	400	73	68	1.60	67	
	Other Hydro	527	55	14	1.70	71	
	Cogeneration	981	800	800	19.20	800	
	Total UP	10037	5785	6141	147.60	6083	
	Uttarakhand	Total Hydro	1398	502	247	7.55	315
		Total Uttarakhand	1398	502	247	7.55	315
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	161	161	3.83	160	
	Pragati Gas Turbine (2x104+ 1x122)	330	161	164	3.94	164	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (6*250)	1370	288	290	7.07	295	
	Badarpur TPS (NTPC) (3*95+2*210)	705	156	183	4.08	170	
	Thermal (Total)	2917	766	798	18.92	788	
	Total Delhi	2917	766	798	18.92	788	
HP	Baspa HPS (IPP) (2*150)	300	60	30	1.00	42	
	Malana HPS (IPP) (2*43)	86	0	0	0.22	9	
	Other Hydro	728	193	120	2.43	101	
	Total HP	1114	253	150	3.65	152	
J & K	Baqilhar HPS (IPP) (3*150)	450	150	120	3.27	136	
	Other Hydro/IPP	436	78	18	1.01	42	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	228	138	4.28	178	
Total State Control Area Generation		39597	17365	16062	403.52	16747	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3450	2807	94.02	3917	
Total Regional Availability(Gross)		64032	37102	27184	756.05	31435	

IV. Total Hydro Generation:

Regional Entities Hydro	11432	7396	591	55.50	2312
State Control Area Hydro	5684	1593	754	27.73	1089
Total Regional Hydro	17116	8989	1345	83.23	3401

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	300	300	0.23	3.88	-3.65
Gwalior-Agra (D/C)	736	836	2058	0	33.38	0.00	33.38
Zerda-Kankroli	-78	-213	104	228	0.00	1.16	-1.16
Zerda-Bhinmal	5	-117	200	131	1.00	0.00	1.00
Malanpur-Auraiya	-60	-45	0	110	0.00	1.63	-1.63
Badod-Kota/Morak	-22	-69	0	69	0.00	1.10	-1.10
Mundra-Mohindergarh(HVDC)	2002	1999	2004	0	48.37	0.00	48.37
Vindhychal - Rihand	501	296	503	0	0.00	0.00	0.00
Sub Total WR	2984	2387			82.98	7.77	75.21
Pusauli Bypass	300	300	300	0	7.24	0.00	7.24
MZP- GKP (D/C)	186	230	42	209	3.50	0.00	3.50
Patna-Balia(D/C)	417	380	623	0	11.37	0.00	11.37
B'Sharif-Balia (D/C)	-270	-234	0	274	0.00	4.71	-4.71
Pusauli-Balia	-158	-91	38	158	0.00	0.79	-0.79
Gaya-Fatehpur (765 Kv)	83	-32	321	32	2.89	0.00	2.89
Pusauli-Sahupuri	109	140	190	0	3.35	0.00	3.35
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-22	0	46	0.00	0.89	-0.89
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-161	-251	61	251	0.00	3.13	-3.13
Sub Total ER	466	420			28.34	9.53	18.81
Total IR Exch	3450	2807			111.32	17.30	94.02

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
15.37	0.30	15.66	11.84	-5.36	0.19	22.85	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
27.91	72.06	99.97	18.81	75.21	94.02	-9.09	3.14	-5.95

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	0.00	0.00	4.16	31.68	48.33	20.30	22.91	4.38	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				
50.46	00:00:00	49.78	5.14	50.05	0.11	0.09	50.38	50.02

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	00:50	404	09:12	0.0	0.0	0.0	0.0
Gorakhpur	400	413	23:37	395	09:13	0.0	0.0	0.0	0.0
Bareilly	400	426	23:28	411	11:04	0.0	0.0	36.8	0.0
Kanpur	400	423	02:02	409	09:34	0.0	0.0	20.8	0.0
Dadri	400	422	00:07	420	00:36	95.3	95.3	4.3	0.0
Ballabgarh	400	432	03:01	417	18:37	0.0	0.0	74.4	6.1
Bawana	400	428	03:02	416	12:16	0.0	0.0	62.0	0.0
Bassi	400	431	05:02	404	07:31	0.0	0.0	46.2	0.1
Hissar	400	417	03:01	403	06:57	0.0	0.0	0.0	0.0
Moga	400	424	23:57	408	18:53	0.0	0.0	3.0	0.0
Abdullapur	400	427	23:25	396	06:07	0.0	0.0	55.2	0.0
Nalagarh	400	432	16:31	414	05:51	0.0	0.0	87.3	1.3
Kishenpur	400	423	23:58	394	18:51	0.0	0.0	0.4	0.0
Wagoora	400	400	23:58	360	18:27	50.9	94.0	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	781	23:31	747	06:44	0.0	0.0	0.0	0.0
Balia	765	784	23:38	758	09:13	0.0	0.0	0.0	0.0
Moga	765	802	23:54	774	19:31	0.0	0.0	0.4	0.0
Agra	765	798	02:04	769	06:44	0.0	0.0	0.0	0.0
Bhiwani	765	807	16:33	778	06:56	0.0	0.0	8.2	0.0
Unnao	765	777	03:01	748	11:07	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	493.09	838.00	497.08	983.40	116.78	358.77
Pong	426.72	384.05	401.88	259.17	408.95	464.36	63.12	31.77
Tehri	829.79	740.04	799.80	608.45	803.10	665.65	36.38	205.00
Koteshwar	612.50	598.50	609.33	4.21	609.48	3.76	205.00	186.00
Chamera-I	760.00	748.75	758.89	0.00	0.00	0.00	35.63	45.31
Rihand	268.22	252.98	849.80	252.30	853.50	313.00	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	502.96	0.84	509.32	1.39	57.87	42.53

* 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	-409	182	0	-378	222	0	-8.61	5.27	-3.34
Delhi	-838	-31	-20	-436	190	-20	-9.69	1.37	-8.32
Haryana	-940	86	0	-937	54	0	-23.75	1.30	-22.45
HP	534	-240	0	504	-43	0	13.80	-4.10	9.70
J&K	695	0	0	496	341	0	13.44	5.04	18.48
CHD	-31	0	0	0	0	0	-0.25	0.00	-0.25
Rajasthan	487	568	2	487	344	2	15.68	11.06	26.75
UP	59	0	0	53	0	0	-2.68	0.00	-2.68
Uttarakhand	292	79	49	292	127	43	7.00	4.28	11.27
Total	-151	644	30	81	1236	24	4.94	24.23	29.17

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-327	-409	290	36	0	0
Delhi	74	-838	385	-31	-20	-20
Haryana	-937	-1088	86	-157	0	0
HP	631	480	16	-741	0	0
J&K	695	448	390	0	0	0
CHD	0	-31	0	0	0	0
Rajasthan	844	487	571	150	2	2
UP	95	-445	0	0	0	0
Uttarakhand	292	292	246	42	49	42

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 26.01.2015 :**
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 :**