

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पॉवरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 18.01.2015
Date of Reporting : 19.01.2015

I. Regional Availability/Demand:

Evening Peak (19:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Day Energy (Net MU)	
Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
36792	1939	38730	50.07	29267	1027	30294	50.07	802.8	50.31

* 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	42.17	6.42		48.60	37.11	37.27	0.17	85.87	0.00
Haryana	63.04	0.41		63.45	42.89	41.58	-1.32	105.03	0.01
Rajasthan	126.01	4.26	3.27	133.53	73.28	74.15	0.87	207.68	0.00
Delhi	19.82			19.82	44.74	43.31	-1.43	63.13	0.01
UP	153.90	4.60		158.50	80.21	78.11	-2.11	236.61	42.36
Uttarakhand		9.84		9.84	24.68	25.26	0.58	35.09	0.40
HP		3.98		3.98	19.81	19.22	-0.58	23.20	0.00
J & K		4.41	0.00	4.41	35.85	38.23	2.38	42.64	7.53
Chandigarh				0.00	3.56	3.54	0.27	3.54	0.00
Total	404.94	33.92	3.27	442.12	362.12	360.66	-1.17	802.78	50.31

* 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	4317	0	-108	-315	2925	0	118	-362	4724
Haryana	5510	0	-75	-904	3510	0	-94	-818	5749
Rajasthan	8577	0	67	832	8018	0	-112	1099	10090
Delhi	3013	0	-213	-190	1584	0	-105	-929	3834
UP	10328	1550	-353	67	9501	730	-37	58	10435
Uttarakhand	1712	40	-144	651	1205	0	-12	537	1774
HP	1172	0	-22	331	741	0	-33	476	1259
J&K	1976	349	109	620	1685	297	151	683	1976
Chandigarh	186	0	-14	15	98	0	3	-31	207
Total	36792	1939	-753	1108	29267	1027	-120	712	37610

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

figures may not be at simultaneous hour.

Diversity is 1.06

III. Regional Entities :

Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI Net MU
A. NTPC								
Singrauli STPS (5*200+2*500)	2000	1372	1472	1364	35.96	1498	32.93	3.03
Rihand I STPS (2*500)	1000	897	942	910	22.49	937	21.00	1.49
Rihand II STPS (2*500)	1000	903	955	871	22.10	921	20.77	1.34
Rihand III STPS (2*500)	1000	875	884	938	19.65	819	19.68	-0.03
Dadri I STPS (4*210)	840	815	708	598	16.70	696	15.75	0.95
Dadri II STPS (2*490)	980	980	861	771	20.92	872	20.55	0.37
Unchahar I TPS (2*210)	420	391	373	308	8.97	374	8.49	0.48
Unchahar II TPS (2*210)	420	391	327	304	8.57	357	7.93	0.64
Unchahar III TPS (1*220)	210	196	163	146	4.25	177	3.93	0.31
ISTPP (Jhajhar) (3*500)	1500	1500	1027	896	20.34	847	21.64	-1.30
Dadri GPS (4*130.19+2*154.51)	830	848	418	265	8.85	369	8.80	0.05
Anta GPS (3*88.71+1*153.2)	419	426	239	211	6.05	252	5.92	0.12
Auraiva GPS (4*111.19+2*109.30)	663	679	166	132	3.83	160	3.83	0.00
Dadri Solar	5	1	0	0	0.01	0	0.02	-0.01
Unchahar Solar	10	3	0	0	0.01	0	0.07	-0.06
Singrauli Solar	15	0	0	0	0.00	0	0	0.00
Sub Total (A)	11312	10277	8535	7714	199	8279	191	7
B. NPC								
NAPS (2*220)	440	381	381	381	9.14	381	9.14	0.00
RAPS- B (2*220)	440	392	460	438	9.68	403	9.41	0.28
RAPS- C (2*220)	440	210	72	0	0.06	3	5.04	-4.98
Sub Total (B)	1320	983	913	819	18.89	787	23.59	-4.70
C. NHPC								
Chamera I HPS (3*180)	540	534	408	0	1.70	71	1.60	0.10
Chamera II HPS (3*100)	300	300	312	0	1.11	46	1.05	0.06
Chamera III HPS (3*77)	231	154	150	0	0.58	24	0.55	0.03
Bairasuli HPS(3*60)	180	120	120	0	0.42	18	0.37	0.05
Salal-HPS (6*115)	690	85	222	70	2.15	90	2.04	0.11
Tanakpur-HPS (3*40)	94	27	32	27	0.69	29	0.65	0.03
Uri-I HPS (4*120)	480	92	206	20	2.34	98	2.20	0.15
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	78	70	0	0.99	41	0.90	0.09
Dulhasti-HPS (3*130)	390	257	395	0	2.48	103	2.40	0.08
Sewa-II HPS (3*40)	120	119	120	0	0.23	10	0.36	-0.12
Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
Sub Total (C)	4065	1766	2034	117	13	529	12	1
D. SJVNL								
NJPC (6*250)	1500	1080	1087	0	6.20	258	6.19	0.00
Rampur HEP (4*68.67)	275	301	300	0	1.67	69	1.74	-0.07
Sub Total (D)	1775	1381	1387	0	7.86	328	7.93	-0.07
E. THDC								
Tehri HPS (4*250)	1000	988	992	0	9.19	383	9.10	0.09
Koteshwar HPS (4*100)	400	134	292	91	3.27	136	3.20	0.07
Sub Total (E)	1400	1122	1284	91	12.46	519	12.30	0.16
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	551	1092	338	13.33	555	13.22	0.11
Dehar HPS (6*165)	990	116	330	0	2.81	117	2.79	0.02
Pong HPS (6*66)	396	191	316	0	4.47	186	4.58	-0.12
Sub Total (F)	2900	858	1738	338	20.60	858	20.58	0.02
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.31	13	0.30	0.01
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	601	0	3.44	144	3.48	-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	271	149	5.41	225	5.45	-0.04
Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
Sub Total (G)	1662	0	872	149	9.16	382	9.23	-0.07
H. Total Regional Entities (A-G)	24434	16386	16763	9228	280.37	11682	277.09	3.28

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	510	11.59	483
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	110	80	2.08	87
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	175	402	6.75	281
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	600	359	12.63	526
	Talwandi Saboo (1*660)	660	353	348	9.12	380
	Thermal (Total)	4680	1718	1699	42.17	1757
	Total Hydro	1148	225	154	6.42	268
Total Punjab	5828	1943	1853	48.60	2025	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	423	432	10.34	431
	DCRTPP (Yamuna nagar) (2*300)	600	473	474	11.79	491
	Faridabad GPS (NTPC)	432	410	335	9.05	377
	RGTPP (khedar) (IPP) (2*600)	1200	853	731	19.75	823
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	624	376	12.11	505
	Thermal (Total)	4944	2783	2348	63.04	2627
	Total Hydro	62	16	18	0.41	17
	Total Haryana	5006	2799	2366	63.45	2644
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1043	1051	25.65
suratgarh TPS (6*250)		1500	1141	1143	28.83	1201
Chabra TPS (3*250)		750	608	554	14.52	605
Dholpur GPS (3*110)		330	112	104	2.67	111
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	167	169	3.96	165
RAPS A (NPC) (1*100+1*200)		300	180	180	4.40	183
Barsingsar (NLC) (2*125)		250	191	191	4.43	185
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	727	839	16.86	703
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	1072	1072	24.69	1029
Thermal (Total)		8026	5241	5303	126	5250
Total Hydro		550	133	85	4.26	178
Wind power		2798	82	135	2.53	105
Biomass		99	15	15	0.36	15
Solar		730	4	0	0.38	16
Renewable/Others (Total)		3627	101	150	3.27	136
Total Rajasthan		12203	5475	5538	133.53	5564
UP	Anpara TPS (3*210+2*500)	1630	1285	1318	30.50	1271
	Obra TPS (2*50+2*94+5*200)	1194	345	347	8.30	346
	Paricha TPS (2*110+2*220+2*250)	1140	834	807	19.70	821
	Panki TPS (2*105)	210	0	0	0.00	0
	Harduaganj TPS (1*60+1*105+2*250)	665	487	482	11.50	479
	Tanda TPS (NTPC) (4*110)	440	327	376	9.30	388
	Roza TPS (IPP) (4*300)	1200	900	878	23.30	971
	Anpara-C (IPP) (2*600)	1200	993	995	23.80	992
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	279	280	8.30	346
	Thermal (Total)	8129	5450	5483	134.70	5613
	Vishnuparyag HPS (IPP)	400	82	70	1.30	54
	Other Hydro	527	63	84	3.30	138
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	6395	6437	158.50	6550
	Uttarakhand	Total Hydro	1398	602	337	9.84
Total Uttarakhand		1398	602	337	9.84	410
Delhi	Raighat TPS (2*67.5)	135	45	42	1.00	42
	Delhi Gas Turbine (6x30 + 3x34)	282	159	159	3.79	158
	Pragati Gas Turbine (2x104+ 1x122)	330	0	0	0.00	0
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	309	291	7.30	304
	Badarpur TPS (NTPC) (3*95+2*210)	705	341	341	7.74	322
	Thermal (Total)	2917	854	833	19.82	826
Total Delhi	2917	854	833	19.82	826	
HP	Baspa HPS (IPP) (2*150)	300	77	0	0.91	38
	Malana HPS (IPP) (2*43)	86	0	0	0.17	7
	Other Hydro	728	164	75	2.89	121
	Total HP	1114	241	75	3.98	166
J & K	Baglihar HPS (IPP) (3*150)	450	150	120	3.28	137
	Other Hydro/IPP	436	79	20	1.14	47
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	229	140	4.41	184
Total State Control Area Generation		39597	18538	17579	442.12	18368
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3677	3494	106.71	4446
Total Regional Availability(Gross)		64032	38978	30301	829.20	34496

IV. Total Hydro Generation:

Regional Entities Hydro	11432	7044	546	57.37	2390
State Control Area Hydro	5684	1509	893	33.92	1359
Total Regional Hydro	17116	8553	1439	91.29	3750

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	-250	100	150	250	1.12	2.25	-1.13
Gwalior-Agra (D/C)	591	574	1411	0	20.76	0.00	20.76
Zerda-Kankroli	-43	-177	114	177	0.00	0.41	-0.41
Zerda-Bhinmal	36	-98	217	98	1.84	0.00	1.84
Malanpur-Auraiya	38	50	0	65	0.00	1.23	-1.23
Badod-Kota/Morak	-23	-94	15	102	0.00	0.82	-0.82
Mundra-Mohindergarh(HVDC)	1598	1801	1804	0	40.83	0.00	40.83
Vindhychal - Rihand	501	283	506	0	11.43	0.00	11.43
Sub Total WR	2448	2439			75.98	4.71	71.28
Pusauli Bypass	100	100	100	0	2.44	0.00	2.44
MZP- GKP (D/C)	40	-17	308	85	1.50	0.00	1.50
Patna-Balia(D/C)	680	595	921	0	17.69	0.00	17.69
B'Sharif-Balia (D/C)	-93	-95	150	141	0.00	0.94	-0.94
Pusauli-Balia	-28	-40	66	57	0.00	0.01	-0.01
Gaya-Fatehpur (765 Kv)	326	319	694	0	10.24	0.00	10.24
Pusauli-Sahupuri	160	124	186	0	3.00	0.00	3.00
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-37	-33	0	52	0.00	0.92	-0.92
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	81	102	326	0	2.43	0.00	2.43
Sub Total ER	1229	1055			37.30	1.87	35.43
Total IR Exch	3677	3494			113.29	6.58	106.71

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
29.27	0.21	29.48	10.64	-5.58	10.65	10.85	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
50.98	60.02	111.00	35.43	71.28	106.71	-15.55	11.26	-4.30

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	1.94	7.89	19.45	56.42	58.96	12.59	7.86	1.23	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	00:28:48	49.58	11:45:36	49.97	0.12	0.11	50.23	49.82

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	01:18	393	03:57	0.0	0.0	0.0	0.0
Gorakhpur	400	414	03:57	394	08:47	0.0	0.0	0.0	0.0
Bareilly	400	424	03:26	401	15:45	0.0	0.0	9.4	0.0
Kanpur	400	422	03:02	398	10:30	0.0	0.0	9.6	0.0
Dadri	400	422	03:02	401	10:24	0.0	0.0	3.3	0.0
Ballabgarh	400	429	03:02	404	10:30	0.0	0.0	34.2	0.0
Bawana	400	426	01:17	409	10:24	0.0	0.0	26.5	0.0
Bassi	400	431	05:01	399	11:36	0.0	0.0	35.8	0.2
Hissar	400	416	01:18	398	15:44	0.0	0.0	0.0	0.0
Moga	400	421	01:14	402	11:16	0.0	0.0	1.0	0.0
Abdullapur	400	424	03:02	396	18:23	0.0	0.0	15.8	0.0
Nalagarh	400	427	21:28	394	15:47	0.0	0.0	32.6	0.0
Kishenpur	400	412	13:01	390	07:31	0.0	0.0	0.0	0.0
Wagoora	400	397	13:03	363	19:38	72.2	99.6	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	03:03	734	10:34	0.0	4.6	0.0	0.0
Balia	765	788	05:05	756	10:25	0.0	0.0	0.0	0.0
Moga	765	799	01:19	763	11:34	0.0	0.0	0.0	0.0
Agra	765	794	01:20	753	10:29	0.0	0.0	0.0	0.0
Bhiwani	765	805	01:18	769	15:45	0.0	0.0	5.1	0.0
Unnao	765	773	04:00	736	10:32	0.0	7.7	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	494.47	880.64	498.20	1029.80	135.27	399.98
Pong	426.72	384.05	403.01	288.96	409.68	484.26	65.58	318.37
Tehri	829.79	740.04	803.30	665.65	805.60	704.59	36.57	221.00
Koteshwar	612.50	598.50	609.11	4.11	610.44	4.69	221.00	217.00
Chamera-I	760.00	748.75	759.18	29.48	0.00	0.00	38.53	45.57
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	503.62	1.84	509.82	2.21	39.06	128.23

* 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	-411	48	0	-380	65	0	-8.64	1.55	-7.09
Delhi	-893	-5	-31	-490	310	-10	-11.40	3.36	-8.04
Haryana	-947	128	0	-975	71	0	-24.44	-1.79	-26.23
HP	531	-55	0	502	-171	0	13.45	-3.14	10.30
J&K	683	0	0	485	135	0	13.17	2.14	15.30
CHD	-31	0	0	0	15	0	-0.25	0.37	0.12
Rajasthan	486	612	2	486	345	2	15.62	15.90	31.53
UP	58	0	0	67	0	0	-1.93	0.00	-1.93
Uttarakhand	290	198	48	275	352	24	6.58	7.87	14.45
Total	-233	926	19	-30	1123	16	2.16	26.26	28.42

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-329	-411	280	0	0	0
Delhi	-79	-893	582	-5	0	-31
Haryana	-947	-1083	131	-639	0	0
HP	603	478	10	-614	0	0
J&K	683	437	232	-51	0	0
CHD	0	-31	39	0	0	0
Rajasthan	841	486	1157	142	2	2
UP	104	-318	0	0	0	0
Uttarakhand	290	245	425	164	48	14

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 18.01.2015 :**

Fog observed in most parts of NR.

XIV. Synchronisation of new generating units :

0.00

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 :**