

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 28.01.2015
Date of Reporting : 29.01.2015

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
37711	2139	39850	50.06	28275	495	28770	50.10	797.2	10.41

* 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	43.58	6.29		49.87	38.69	39.38	0.69	89.25	0.00
Haryana	72.00	0.39		72.38	39.84	41.58	1.75	113.96	0.00
Rajasthan	118.76	0.98	10.10	129.83	65.50	68.65	3.16	198.49	0.00
Delhi	19.19			19.19	48.76	48.10	-0.65	67.29	0.03
UP	129.44	1.65		131.09	88.33	89.97	1.65	221.06	0.00
Uttarakhand		7.01		7.01	24.91	27.65	2.74	34.66	2.93
HP		3.64		3.64	22.32	22.46	0.14	26.10	0.00
J & K		4.36	0.00	4.36	36.85	37.90	1.05	42.26	7.46
Chandigarh				0.00	3.87	4.18	0.27	4.18	0.00
Total	382.95	24.32	10.10	417.36	369.05	379.88	10.80	797.25	10.41

* 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	4224	0	60	-233	2986	0	106	-325	4908
Haryana	6249	0	23	-849	3363	0	99	-825	6303
Rajasthan	8567	0	106	751	7186	0	366	1008	9999
Delhi	3261	0	-132	-118	1598	0	-27	-945	3860
UP	10361	1745	209	99	9367	195	-57	68	10361
Uttarakhand	1766	75	-70	548	1208	0	179	369	1873
HP	1267	0	25	395	769	0	-4	441	1388
J&K	1810	319	-46	716	1702	300	85	695	1915
Chandigarh	206	0	3	0	95	0	4	-31	242
Total	37711	2139	179	1308	28275	495	752	455	38555

* 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	1875	2035	1924	48.35	2015	44.82	3.53
Rihand I STPS (2*500)	1000	892	945	880	22.38	932	20.63	1.75
Rihand II STPS (2*500)	1000	913	961	790	22.04	918	20.48	1.56
Rihand III STPS (2*500)	1000	968	1010	827	23.02	959	21.78	1.24
Dadri I STPS (4*210)	840	815	852	602	17.19	716	16.32	0.87
Dadri II STPS (2*490)	980	980	944	700	20.37	849	20.03	0.34
Unchahar I TPS (2*210)	420	405	432	331	9.54	398	9.24	0.30
Unchahar II TPS (2*210)	420	403	430	311	9.15	381	8.84	0.32
Unchahar III TPS (1*220)	210	201	210	149	4.65	194	4.37	0.28
ISTPP (Jhajhar) (3*500)	1500	1500	868	581	16.04	669	17.94	-1.89
Dadri GPS (4*130.19+2*154.51)	830	647	404	400	9.41	392	9.40	0.01
Anta GPS (3*88.71+1*153.2)	419	426	256	229	5.90	246	6.06	-0.16
Auraiya GPS (4*111.19+2*109.30)	663	500	303	170	5.25	219	5.29	-0.04
Dadri Solar	5	1	0	0	0.02	1	0.02	-0.01
Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
Singrauli Solar	15	2	0	0	0.00	0	0	-0.05
Sub Total (A)	11312	10530	9650	7894	213	8889	205	8
B. NPC								
NAPS (2*220)	440	398	438	439	9.56	398	9.55	0.01
RAPS- B (2*220)	440	208	232	230	4.76	198	4.99	-0.23
RAPS- C (2*220)	440	220	235	238	5.00	208	5.28	-0.28
Sub Total (B)	1320	826	905	907	19.32	805	19.82	-0.50
C. NHPC								
Chamera I HPS (3*180)	540	534	548	0	2.30	96	2.20	0.10
Chamera II HPS (3*100)	300	300	311	0	0.97	40	0.90	0.07
Chamera III HPS (3*77)	231	231	227	0	0.54	22	0.50	0.04
Bairasuli HPS(3*60)	180	120	120	0	0.55	23	0.50	0.06
Salal-HPS (6*115)	690	88	228	127	2.25	94	2.13	0.12
Tanakpur-HPS (3*40)	94	26	34	27	0.63	26	0.61	0.01
Uri-I HPS (4*120)	480	96	217	21	2.46	103	2.30	0.16
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	139	140	0	0.88	37	0.80	0.08
Dulhasti-HPS (3*130)	390	258	272	0	2.41	100	2.30	0.11
Sewa-II HPS (3*40)	120	119	121	0	0.33	14	0.36	-0.02
Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
Sub Total (C)	4065	1910	2218	175	13	555	13	1
D. SJVNL								
NJPC (6*250)	1500	1291	1084	0	6.05	252	6.09	-0.04
Rampur HEP (4*68.67)	275	370	297	0	1.69	71	1.69	0.00
Sub Total (D)	1775	1661	1381	0	7.74	323	7.79	-0.04
E. THDC								
Tehri HPS (4*250)	1000	952	948	0	8.27	344	8.20	0.07
Koteshwar HPS (4*100)	400	117	200	90	2.88	120	2.80	0.08
Sub Total (E)	1400	1069	1148	90	11.14	464	11.00	0.14
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	567	1169	338	13.74	572	13.61	0.13
Dehar HPS (6*165)	990	125	330	0	3.13	130	3.00	0.12
Pong HPS (6*66)	396	164	308	0	3.95	164	3.93	0.02
Sub Total (F)	2900	856	1807	338	20.81	867	20.54	0.27
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.33	14	0.31	0.02
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	792	0	3.19	133	3.23	-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	81	2.74	114	2.78	-0.05
Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
Sub Total (G)	1662	0	922	81	6.25	260	6.32	-0.07
H. Total Regional Entities (A-G)	24434	16851	18031	9485	291.92	12163	283.39	8.54

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	570	11.54	481
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	120	2.35	98
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	335	460	9.18	383
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	350	358	11.62	484
	Talwandi Saboo (1*660)	660	330	352	8.89	370
	Thermal (Total)	4680	1595	1860	43.58	1816
	Total Hydro	1148	229	139	6.29	262
Total Punjab	5828	1824	1999	49.87	2078	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	235	218	5.27	220
	DCRTPP (Yamuna nagar) (2*300)	600	534	472	11.83	493
	Faridabad GPS (NTPC)	432	378	341	8.84	368
	RGTPP (khedar) (IPP) (2*600)	1200	1155	740	21.45	894
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1232	742	24.60	1025
	Thermal (Total)	4944	3534	2513	72.00	3000
	Total Hydro	62	12	12	0.39	16
	Total Haryana	5006	3546	2525	72.38	3016
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1034	1022	25.32
suratgarh TPS (6*250)		1500	767	764	19.19	799
Chabra TPS (3*250)		750	811	578	17.90	746
Dholpur GPS (3*110)		330	54	0	0.38	16
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	145	180	2.15	90
RAPS A (NPC) (1*100+1*200)		300	164	167	4.13	172
Barsingar (NLC) (2*125)		250	156	165	3.77	157
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	966	508	20.17	840
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	1091	864	25.75	1073
Thermal (Total)		8026	5188	4248	119	4948
Total Hydro		550	49	35	0.98	41
Wind power		2798	53	749	9.60	400
Biomass		99	14	14	0.34	14
Solar		730	0	0	0.16	6
Renewable/Others (Total)		3627	67	763	10.10	421
Total Rajasthan		12203	5304	5046	129.83	5410
UP	Anpara TPS (3*210+2*500)	1630	1358	1403	31.96	1332
	Obra TPS (2*50+2*94+5*200)	1194	355	357	8.41	350
	Paricha TPS (2*110+2*220+2*250)	1140	804	770	18.73	781
	Panki TPS (2*105)	210	63	63	1.32	55
	Harduaganj TPS (1*60+1*105+2*250)	665	455	444	10.81	450
	Tanda TPS (NTPC) (4*110)	440	288	292	7.16	298
	Roza TPS (IPP) (4*300)	1200	540	549	11.83	493
	Anpara-C (IPP) (2*600)	1200	540	536	12.83	534
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	165	402	7.20	300
	Thermal (Total)	8129	4568	4816	110.24	4593
	Vishnuparyag HPS (IPP)	400	69	69	0.00	0
	Other Hydro	527	13	38	1.65	69
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5450	5723	131.09	5462
Uttarakhand	Total Hydro	1398	477	214	7.01	292
	Total Uttarakhand	1398	477	214	7.01	292
Delhi	Raighat TPS (2*67.5)	135	43	39	0.97	40
	Delhi Gas Turbine (6x30 + 3x34)	282	163	121	3.50	146
	Pragati Gas Turbine (2x104+ 1x122)	330	325	275	7.25	302
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	24	291	3.19	133
	Badarpur TPS (NTPC) (3*95+2*210)	705	182	160	4.28	178
	Thermal (Total)	2917	737	886	19.19	799
Total Delhi	2917	737	886	19.19	799	
HP	Baspa HPS (IPP) (2*150)	300	30	0	0.80	33
	Malana HPS (IPP) (2*43)	86	0	0	0.17	7
	Other Hydro	728	170	68	2.67	111
	Total HP	1114	200	68	3.64	152
J & K	Baqilhar HPS (IPP) (3*150)	450	150	120	3.24	135
	Other Hydro/IPP	436	83	23	1.12	47
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	233	143	4.36	182
Total State Control Area Generation		39597	17771	16604	417.36	17390
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4224	2920	111.23	4635
Total Regional Availability(Gross)		64032	40026	29009	820.52	34188

IV. Total Hydro Generation:

Regional Entities Hydro	11432	7346	603	56.53	2355
State Control Area Hydro	5684	1213	649	24.32	1013
Total Regional Hydro	17116	8559	1252	80.85	3369

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	-500	-500	0	500	0.00	11.42	-11.42
Gwalior-Agra (D/C)	1330	964	2311	0	37.77	0.00	37.77
Zerda-Kankroli	25	-209	159	231	0.00	0.02	-0.02
Zerda-Bhinmal	3	-51	209	97	1.20	0.00	1.20
Malanpur-Auraiya	-20	-10	0	30	0.00	0.49	-0.49
Badod-Kota/Morak	68	-117	68	117	0.00	0.39	-0.39
Mundra-Mohindergarh(HVDC)	1998	1999	2004	0	48.37	0.00	48.37
Vindhychal - Rihand	482	304	500	0	10.52	0.00	10.52
Sub Total WR	3386	2380			97.87	12.32	85.55
Pusauli Bypass	400	300	300	0	7.66	0.00	7.66
MZP- GKP (D/C)	-81	-62	157	106	0.00	0.24	-0.24
Patna-Balia(D/C)	630	568	748	0	15.88	0.00	15.88
B'Sharif-Balia (D/C)	-154	-199	0	204	0.00	2.95	-2.95
Pusauli-Balia	-29	-102	50	102	0.00	0.30	-0.30
Gaya-Fatehpur (765 Kv)	136	79	341	0	4.77	0.00	4.77
Pusauli-Sahupuri	107	130	193	0	2.83	0.00	2.83
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-43	-41	0	44	0.00	0.88	-0.88
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-128	-133	70	156	0.00	1.09	-1.09
Sub Total ER	838	540			31.14	5.46	25.68
Total IR Exch	4224	2920			129.01	17.78	111.23

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
21.05	0.16	21.21	9.02	-5.56	0.51	22.16	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
30.96	78.14	109.09	25.68	85.55	111.23	-5.28	7.41	2.13

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	0.06	2.15	14.70	57.61	64.14	13.82	6.19	1.17	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				
50.32	00:14:24	49.68	6.39	49.99	0.08	0.09	50.23	49.90

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	01:59	402	18:37	0.0	0.0	0.0	0.0
Gorakhpur	400	409	05:01	111	17:17	0.2	0.2	0.0	0.0
Bareilly	400	422	05:02	399	15:40	0.0	0.0	1.0	0.0
Kanpur	400	420	05:02	399	18:36	0.0	0.0	0.0	0.0
Dadri	400	416	23:42	398	18:37	68.3	68.3	0.0	0.0
Ballabgarh	400	428	03:02	403	18:37	0.0	0.0	30.5	0.0
Bawana	400	425	03:57	404	18:34	0.0	0.0	25.8	0.0
Bassi	400	429	04:59	396	09:21	0.0	0.0	29.8	0.0
Hissar	400	415	01:59	396	11:24	0.0	0.0	0.0	0.0
Moga	400	422	23:53	399	10:09	0.0	0.0	2.8	0.0
Abdullapur	400	423	00:00	396	18:36	0.0	0.0	13.6	0.0
Nalagarh	400	428	21:53	395	12:11	0.0	0.0	29.3	0.0
Kishenpur	400	420	22:56	389	18:38	0.0	0.1	0.0	0.0
Wagoora	400	401	13:03	345	18:38	54.6	78.3	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	779	04:01	738	09:39	0.0	3.4	0.0	0.0
Balia	765	780	05:01	747	18:14	0.0	0.0	0.0	0.0
Moga	765	797	23:57	746	14:59	0.0	0.0	0.0	0.0
Agra	765	794	05:02	750	09:39	0.0	0.0	0.0	0.0
Bhiwani	765	802	23:57	764	08:25	0.0	0.0	0.1	0.0
Unnao	765	760	05:05	726	18:37	0.4	50.7	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 (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	492.67	817.99	489.45	719.44	101.15	423.79
Pong	426.72	384.05	401.57	252.05	405.47	352.07	58.30	283.59
Tehri	829.79	740.04	798.95	592.30	802.45	655.00	36.63	203.00
Koteshwar	612.50	598.50	610.39	4.69	609.49	4.21	203.00	191.00
Chamera-I	760.00	748.75	758.77	0.00	0.00	0.00	50.32	61.76
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	502.90	1.50	509.21	1.80	49.01	74.60

* 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	84	0	-378	145	0	-8.61	2.29	-6.33
Delhi	-899	-26	-20	-498	390	-10	-11.70	4.89	-6.81
Haryana	-982	157	0	-979	129	0	-24.76	0.59	-24.18
HP	534	-92	0	504	-109	0	13.80	-2.86	10.95
J&K	695	0	0	496	219	0	13.44	2.77	16.21
CHD	-31	0	0	0	0	0	-0.25	0.00	-0.25
Rajasthan	487	519	2	487	262	2	15.68	10.15	25.83
UP	68	0	0	99	0	0	-1.74	0.00	-1.74
Uttarakhand	271	51	48	271	252	25	6.50	5.89	12.39
Total	-266	692	29	3	1289	16	2.37	23.71	26.08

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-327	-409	268	0	0	0
Delhi	-36	-899	643	-26	-10	-26
Haryana	-979	-1130	158	-528	0	0
HP	631	480	34	-521	0	0
J&K	695	448	268	-51	0	0
CHD	0	-31	0	0	0	0
Rajasthan	844	487	686	-380	2	2
UP	130	-389	0	0	0	0
Uttarakhand	271	271	367	16	49	25

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 28.01.2015 :**
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 :**