

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 29.01.2015
Date of Reporting : 30.01.2015

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
37987	2223	40209	50.00	28480	1143	29623	50.13	807.9	8.77

* 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	42.00	6.77		48.76	40.65	41.32	0.67	90.09	0.00
Haryana	72.32	0.39		72.71	43.76	43.10	-0.66	115.81	0.00
Rajasthan	122.75	3.09	3.14	128.98	67.83	71.54	3.71	200.52	0.00
Delhi	21.71			21.71	46.44	45.89	-0.55	67.60	0.01
UP	133.12	3.60		136.72	89.30	91.36	2.05	228.08	0.00
Uttarakhand		6.90		6.90	26.46	29.04	2.57	35.93	1.83
HP		3.50		3.50	22.51	23.08	0.57	26.58	0.00
J & K		4.31	0.00	4.31	36.05	34.97	-1.08	39.28	6.93
Chandigarh				0.00	3.82	4.03	0.27	4.03	0.00
Total	391.89	28.56	3.14	423.59	376.82	384.32	7.57	807.91	8.77

* 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	4537	0	-76	-200	2862	0	71	-288	4855
Haryana	6115	0	13	-803	3491	0	43	-788	6196
Rajasthan	8638	0	46	846	7376	0	229	995	9840
Delhi	3252	0	-250	-67	1651	0	79	-981	3758
UP	10129	1805	-158	94	9545	895	180	68	10436
Uttarakhand	1893	75	199	577	1254	0	110	402	1893
HP	1266	0	55	387	797	0	-5	441	1395
J&K	1942	343	118	716	1407	248	-92	695	2010
Chandigarh	215	0	18	0	97	0	5	-31	222
Total	37987	2223	-35	1549	28480	1143	620	514	38751

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

Diversity is 1.05

III. Regional Entities :

Entity	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	1881	2037	2017	45.53	1897	45.14	0.39
	Rihand I STPS (2*500)	1000	894	973	805	22.26	927	20.69	1.56
	Rihand II STPS (2*500)	1000	900	960	745	21.80	908	20.65	1.15
	Rihand III STPS (2*500)	1000	968	933	776	21.55	898	20.20	1.35
	Dadri I STPS (4*210)	840	815	694	610	15.18	633	14.22	0.97
	Dadri II STPS (2*490)	980	980	869	706	18.83	785	18.56	0.27
	Unchahar I TPS (2*210)	420	405	362	375	8.77	365	9.08	-0.31
	Unchahar II TPS (2*210)	420	403	295	291	8.12	338	8.26	-0.15
	Unchahar III TPS (1*220)	210	201	173	173	4.09	170	4.08	0.01
	ISTPP (Jhajjar) (3*500)	1500	1500	965	583	15.67	653	17.35	-1.68
	Dadri GPS (4*130.19+2*154.51)	830	648	361	368	9.20	383	9.19	0.01
	Anta GPS (3*88.71+1*153.2)	419	426	258	225	5.94	247	6.06	-0.12
	Auraiya GPS (4*111.19+2*109.30)	663	499	292	307	7.31	304	7.21	0.10
	Dadri Solar	5	1	0	0	0.02	1	0.02	0.00
	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	10524	9172	7981	204	8512	201	3
B. NPC	NAPS (2*220)	440	394	434	439	9.55	398	9.46	0.09
	RAPS- B (2*220)	440	209	378	231	5.70	238	5.02	0.69
	RAPS- C (2*220)	440	220	235	238	4.99	208	5.28	-0.29
	Sub Total (B)	1320	823	1047	908	20.24	843	19.75	0.49
C. NHPC	Chamera I HPS (3*180)	540	534	535	0	2.42	101	2.35	0.07
	Chamera II HPS (3*100)	300	250	210	0	0.94	39	0.90	0.04
	Chamera III HPS (3*77)	231	231	228	0	0.53	22	0.50	0.03
	Bairasuli HPS(3*60)	180	120	120	0	0.51	21	0.45	0.06
	Salal-HPS (6*115)	690	90	230	125	2.23	93	2.16	0.07
	Tanakpur-HPS (3*40)	94	25	34	26	0.59	25	0.60	-0.01
	Uri-I HPS (4*120)	480	89	148	19	2.29	95	2.15	0.14
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	139	140	0	0.91	38	0.80	0.11
	Dulhasti-HPS (3*130)	390	258	272	0	2.39	100	2.30	0.09
	Sewa-II HPS (3*40)	120	119	105	0	0.32	13	0.36	-0.03
	Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	4065	1855	2022	170	13	547	13	1
D. SJVNL	NJPC (6*250)	1500	1400	1154	0	6.14	256	6.10	0.04
	Rampur HEP (4*68.67)	275	370	372	0	1.72	72	1.69	0.03
	Sub Total (D)	1775	1770	1526	0	7.86	328	7.79	0.07
E. THDC	Tehri HPS (4*250)	1000	944	944	0	8.05	335	8.00	0.05
	Koteshwar HPS (4*100)	400	125	303	90	3.04	127	3.00	0.04
	Sub Total (E)	1400	1069	1247	90	11.09	462	11.00	0.09
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	569	1164	338	13.61	567	13.66	-0.06
	Dehar HPS (6*165)	990	132	330	0	3.18	132	3.17	0.01
	Pong HPS (6*66)	396	180	368	0	4.34	181	4.32	0.02
	Sub Total (F)	2900	881	1862	338	21.12	880	21.15	-0.03
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.36	15	0.35	0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	792	0	3.27	136	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	127	73	2.69	112	2.70	-0.01
	Budhil HPS(IPP)	70	0	0	0	0.05	2	0.05	0.00
	Sub Total (G)	1662	0	919	73	6.37	265	6.34	0.03
H. Total Regional Entities (A-G)	24434	16923	17794	9560	284.12	11838	279.42	4.70	

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	380	320	8.14	339
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	100	2.40	100
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	398	366	9.84	410
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	469	357	11.61	484
	Talwandi Saboo (1*660)	660	560	350	10.00	417
	Thermal (Total)	4680	1907	1493	42.00	1750
	Total Hydro	1148	383	103	6.77	282
Total Punjab	5828	2290	1596	48.76	2032	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	232	223	5.28	220
	DCRTPP (Yamuna nagar) (2*300)	600	524	464	11.81	492
	Faridabad GPS (NTPC)	432	173	334	5.76	240
	RGTPP (khedar) (IPP) (2*600)	1200	1164	736	23.19	966
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1233	740	26.28	1095
	Thermal (Total)	4944	3326	2497	72.32	3013
	Total Hydro	62	14	20	0.39	16
	Total Haryana	5006	3340	2517	72.71	3030
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1038	1038	25.46
suratgarh TPS (6*250)		1500	766	754	19.04	793
Chabra TPS (3*250)		750	807	752	18.66	777
Dholpur GPS (3*110)		330	101	105	2.17	90
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	189	135	4.75	198
RAPS A (NPC) (1*100+1*200)		300	164	166	4.10	171
Barsingsar (NLC) (2*125)		250	164	156	3.78	158
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	816	783	19.52	813
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	1137	860	25.28	1053
Thermal (Total)		8026	5182	4749	123	5114
Total Hydro		550	155	52	3.09	129
Wind power		2798	67	68	2.44	102
Biomass		99	20	20	0.49	20
Solar		730	2	0	0.21	9
Renewable/Others (Total)		3627	89	88	3.14	131
Total Rajasthan		12203	5426	4889	128.98	5374
UP		Anpara TPS (3*210+2*500)	1630	1388	1406	32.83
	Obra TPS (2*50+2*94+5*200)	1194	351	351	8.45	352
	Paricha TPS (2*110+2*220+2*250)	1140	815	789	19.36	807
	Panki TPS (2*105)	210	0	0	0.00	0
	Harduaganj TPS (1*60+1*105+2*250)	665	464	451	10.89	454
	Tanda TPS (NTPC) (4*110)	440	289	288	7.19	300
	Roza TPS (IPP) (4*300)	1200	603	527	14.75	615
	Anpara-C (IPP) (2*600)	1200	538	536	12.88	537
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	280	338	7.58	316
	Thermal (Total)	8129	4728	4686	113.92	4747
	Vishnuparyag HPS (IPP)	400	69	67	1.58	66
	Other Hydro	527	18	209	2.02	84
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5615	5762	136.72	5631
Uttarakhand	Total Hydro	1398	477	213	6.90	287
	Total Uttarakhand	1398	477	213	6.90	287
Delhi	Raighat TPS (2*67.5)	135	43	43	0.95	40
	Delhi Gas Turbine (6x30 + 3x34)	282	163	122	2.84	118
	Pragati Gas Turbine (2x104+ 1x122)	330	325	276	7.08	295
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	283	291	6.75	281
	Badarpur TPS (NTPC) (3*95+2*210)	705	165	175	4.10	171
	Thermal (Total)	2917	979	907	21.71	904
Total Delhi	2917	979	907	21.71	904	
HP	Baspa HPS (IPP) (2*150)	300	30	0	0.90	37
	Malana HPS (IPP) (2*43)	86	0	0	0.21	9
	Other Hydro	728	134	91	2.39	100
	Total HP	1114	164	91	3.50	146
J & K	Baqilhar HPS (IPP) (3*150)	450	150	120	3.21	134
	Other Hydro/IPP	436	76	20	1.10	46
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	226	140	4.31	180
Total State Control Area Generation		39597	18517	16115	423.59	17584
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5040	3923	120.17	5007
Total Regional Availability(Gross)		64032	41351	29598	827.88	34429

IV. Total Hydro Generation:

Regional Entities Hydro	11432	7449	598	56.84	2368
State Control Area Hydro	5684	1437	828	28.56	1124
Total Regional Hydro	17116	8886	1426	85.40	3492

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	-350	-300	0	500	0.00	7.85	-7.85
Gwalior-Agra (D/C)	1498	1049	2122	0	38.54	0.00	38.54
Zerda-Kankroli	-48	-159	105	172	0.00	0.07	-0.07
Zerda-Bhinmal	3	-51	209	97	1.20	0.00	1.20
Malanpur-Auraiya	-25	-25	0	30	0.00	0.61	-0.61
Badod-Kota/Morak	-39	-58	62	66	0.00	0.12	-0.12
Mundra-Mohindergarh(HVDC)	2098	1998	2303	0	49.48	0.00	49.48
Vindhychal - Rihand	486	271	489	0	10.14	0.00	10.14
Sub Total WR	3623	2725			99.36	8.64	90.71
Pusauli Bypass	400	400	400	0	9.00	0.00	9.00
MZP- GKP (D/C)	-81	-62	157	106	0.00	0.24	-0.24
Patna-Balia(D/C)	652	561	800	0	15.51	0.00	15.51
B'Sharif-Balia (D/C)	162	166	0	189	0.00	2.01	-2.01
Pusauli-Balia	42	51	-125	89	0.00	0.19	-0.19
Gaya-Fatehpur (765 Kv)	224	113	397	0	5.73	0.00	5.73
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	-32	-33	0	46	0.00	0.79	-0.79
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-57	-128	141	128	0.00	0.39	-0.39
Sub Total ER	1417	1198			33.07	3.61	29.46
Total IR Exch	5040	3923			132.43	12.25	120.17

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
22.33	0.13	22.46	10.57	-5.57	0.86	25.29	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
34.11	86.94	121.05	29.46	90.71	120.17	-4.65	3.77	-0.87

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	1.04	11.71	42.91	53.10	18.68	13.63	2.91	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				
50.37	00:14:24	49.75	11.42	50.01	0.09	0.09	50.20	50.00

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	01:43	402	08:33	0.0	0.0	0.0	0.0
Gorakhpur	400	410	13:05	393	08:39	0.0	0.0	0.0	0.0
Bareilly	400	422	23:24	399	07:54	0.0	0.0	1.8	0.0
Kanpur	400	419	23:20	400	08:34	0.0	0.0	0.0	0.0
Dadri	400	420	03:01	399	09:09	1.9	1.9	0.0	0.0
Ballabgarh	400	427	03:01	404	08:36	0.0	0.0	30.9	0.0
Bawana	400	425	00:41	404	18:39	0.0	0.0	24.6	0.0
Bassi	400	424	04:38	404	10:05	0.0	0.0	48.1	0.0
Hissar	400	415	03:02	392	11:36	0.0	0.0	0.0	0.0
Moga	400	422	00:00	396	11:37	0.0	0.0	5.1	0.0
Abdullapur	400	426	23:18	396	18:53	0.0	0.0	30.3	0.0
Nalagarh	400	429	21:56	392	11:42	0.0	0.0	28.8	0.0
Kishenpur	400	421	00:06	392	18:13	0.0	0.0	0.0	0.0
Wagoora	400	414	13:06	354	07:58	34.5	72.5	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	783	23:22	738	08:37	0.0	0.7	0.0	0.0
Balia	765	777	23:20	750	08:41	0.0	0.0	0.0	0.0
Moga	765	796	00:00	751	11:41	0.0	0.0	0.0	0.0
Agra	765	792	03:01	749	08:41	0.0	0.0	0.0	0.0
Bhiwani	765	802	00:57	762	11:40	0.0	0.0	2.0	0.0
Unnao	765	768	23:19	733	07:32	0.0	14.6	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	492.44	817.99	496.61	960.37	122.36	424.87
Pong	426.72	384.05	401.41	252.05	408.61	454.47	62.24	311.99
Tehri	829.79	740.04	798.50	585.00	802.10	648.00	36.95	199.00
Koteshwar	612.50	598.50	0.00	0.00	0.00	0.00	0.00	0.00
Chamera-I	760.00	748.75	758.61	0.00	0.00	0.00	51.02	65.09
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	502.82	2.08	509.16	1.49	82.88	100.35

* 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	121	0	-378	178	0	-8.61	2.64	-5.97
Delhi	-899	-66	-15	-498	446	-15	-11.70	5.04	-6.66
Haryana	-940	152	0	-937	133	0	-23.75	2.07	-21.69
HP	534	-92	0	504	-118	0	13.80	-2.73	11.07
J&K	695	0	0	496	219	0	13.44	2.84	16.28
CHD	-31	0	0	0	0	0	-0.25	0.00	-0.25
Rajasthan	487	506	2	487	357	2	15.68	9.98	25.67
UP	68	0	0	94	0	0	-1.79	0.00	-1.79
Uttarakhand	292	69	41	292	263	22	7.00	7.36	14.36
Total	-203	689	27	61	1479	9	3.82	27.20	31.02

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-327	-409	283	0	0	0
Delhi	-36	-899	641	-66	-15	-15
Haryana	-937	-1088	153	-213	0	0
HP	631	480	59	-541	0	0
J&K	695	448	268	-26	0	0
CHD	0	-31	0	0	0	0
Rajasthan	844	487	711	-596	2	2
UP	126	-394	0	0	0	0
Uttarakhand	292	292	439	69	49	21

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 29.01.2015 :**
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 :**