

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 27.01.2015
Date of Reporting : 28.01.2015

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
37103	2354	39457	50.06	26207	281	26489	50.21	772.3	44.39

* 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	42.57	6.45		49.02	35.03	36.24	1.22	85.26	0.00
Haryana	71.39	0.40		71.79	38.32	37.13	-1.19	108.92	1.28
Rajasthan	112.86	2.90	7.08	122.83	61.29	67.42	6.14	190.25	0.00
Delhi	21.58			21.58	45.09	44.48	-0.62	66.05	0.04
UP	131.10	2.50		133.60	84.02	84.60	0.58	218.20	35.23
Uttarakhand		7.92		7.92	24.19	25.62	1.44	33.55	0.57
HP		3.90		3.90	19.84	20.96	1.11	24.86	0.00
J & K		4.27	0.00	4.27	35.78	36.94	1.17	41.21	7.27
Chandigarh				0.00	3.79	3.99	0.27	3.99	0.00
Total	379.49	28.35	7.08	414.91	347.34	357.38	10.11	772.30	44.39

* 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	4276	0	-30	-207	2441	0	113	-260	4824
Haryana	5942	0	-145	-874	3170	0	-49	-849	5968
Rajasthan	8424	0	63	629	6852	0	558	917	9388
Delhi	3252	0	-205	-123	1349	0	-30	-929	3829
UP	10036	1940	91	100	9106	0	262	53	10080
Uttarakhand	1787	75	43	505	989	0	-23	478	1787
HP	1255	0	77	406	613	0	49	237	1332
J&K	1922	339	175	740	1593	281	18	695	1946
Chandigarh	209	0	21	0	94	0	6	-31	230
Total	37103	2354	90	1176	26207	281	904	309	37111

* 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 :

A. NTPC	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
		Singrauli STPS (5*200+2*500)	2000	1862	2033	1613	42.75	1781	42.60
	Rihand I STPS (2*500)	1000	886	881	671	21.23	885	19.65	1.58
	Rihand II STPS (2*500)	1000	916	953	670	21.08	878	19.85	1.23
	Rihand III STPS (2*500)	1000	856	952	729	18.83	785	18.11	0.72
	Dadri I STPS (4*210)	840	815	839	600	17.30	721	16.49	0.81
	Dadri II STPS (2*490)	980	980	930	703	20.64	860	20.24	0.40
	Unchahar I TPS (2*210)	420	405	354	277	8.80	367	8.50	0.30
	Unchahar II TPS (2*210)	420	403	280	274	8.32	347	7.81	0.51
	Unchahar III TPS (1*220)	210	201	158	138	4.21	175	3.93	0.28
	ISTPP (Jhajjar) (3*500)	1500	1500	640	591	15.12	630	16.86	-1.73
	Dadri GPS (4*130.19+2*154.51)	830	698	414	211	8.02	334	8.26	-0.24
	Anta GPS (3*88.71+1*153.2)	419	426	201	245	5.81	242	5.87	-0.07
	Auraiya GPS (4*111.19+2*109.30)	663	658	166	168	4.00	167	3.99	0.01
	Dadri Solar	5	1	0	0	0.02	1	0.02	-0.01
	Unchahar Solar	10	3	0	0	0.00	0	0.07	-0.06
	Singrauli Solar	15	2	0	0	0.00	0	0	-0.04
	Sub Total (A)	11312	10611	8801	6890	196	8171	192	4
B. NPC	NAPS (2*220)	440	396	432	437	9.46	394	9.50	-0.04
	RAPS- B (2*220)	440	210	230	228	4.72	197	5.04	-0.32
	RAPS- C (2*220)	440	220	235	238	4.95	206	5.28	-0.33
	Sub Total (B)	1320	826	897	903	19.13	797	19.82	-0.69
C. NHPC	Chamera I HPS (3*180)	540	534	543	0	2.13	89	2.00	0.13
	Chamera II HPS (3*100)	300	300	312	0	1.27	53	1.20	0.07
	Chamera III HPS (3*77)	231	231	228	0	0.58	24	0.53	0.05
	Bairasuli HPS(3*60)	180	120	120	0	0.55	23	0.50	0.05
	Salal-HPS (6*115)	690	88	228	120	2.23	93	2.10	0.13
	Tanakpur-HPS (3*40)	94	24	21	25	0.64	27	0.59	0.05
	Uri-I HPS (4*120)	480	97	206	16	2.51	105	2.32	0.19
	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	273	0	2.50	104	2.40	0.10
	Sewa-II HPS (3*40)	120	119	118	0	0.36	15	0.36	0.00
	Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	4065	1909	2189	161	14	565	13	1
D. SJVNL	NJPC (6*250)	1500	1350	1356	0	5.84	243	5.80	0.04
	Rampur HEP (4*68.67)	275	370	375	0	1.53	64	1.56	-0.03
	Sub Total (D)	1775	1720	1731	0	7.37	307	7.37	0.00
E. THDC	Tehri HPS (4*250)	1000	956	956	0	8.27	344	8.20	0.07
	Koteshwar HPS (4*100)	400	117	292	91	2.84	119	2.80	0.04
	Sub Total (E)	1400	1073	1248	91	11.11	463	11.00	0.11
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	518	1163	338	12.54	523	12.43	0.11
	Dehar HPS (6*165)	990	123	330	0	2.85	119	2.95	-0.10
	Pong HPS (6*66)	396	196	308	0	4.72	197	4.70	0.02
	Sub Total (F)	2900	836	1801	338	20.11	838	20.07	0.04
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	3.29	137	3.23	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	134	85	2.86	119	2.87	-0.02
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	926	85	6.51	271	6.46	0.05
H. Total Regional Entities (A-G)		24434	16975	17594	8468	273.91	11413	269.75	4.16

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	530	480	11.95	498
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	100	2.37	99
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	347	326	8.81	367
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	440	326	11.57	482
	Talwandi Saboo (1*660)	660	349	342	7.87	328
	Thermal (Total)	4680	1766	1574	42.57	1774
	Total Hydro	1148	362	156	6.45	269
Total Punjab	5828	2128	1730	49.02	2042	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	234	216	5.21	217
	DCRTPP (Yamuna nagar) (2*300)	600	537	502	11.63	485
	Faridabad GPS (NTPC)	432	422	323	9.53	397
	RGTPP (khedar) (IPP) (2*600)	1200	1167	740	20.58	857
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1202	719	24.44	1018
	Thermal (Total)	4944	3562	2500	71.39	2975
	Total Hydro	62	14	17	0.40	17
	Total Haryana	5006	3576	2517	71.79	2991
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1051	828	24.02
suratgarh TPS (6*250)		1500	829	765	19.26	803
Chabra TPS (3*250)		750	499	565	13.40	558
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	193	146	4.89	204
RAPS A (NPC) (1*100+1*200)		300	164	152	4.13	172
Barsingsar (NLC) (2*125)		250	164	162	3.80	158
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	921	519	18.63	776
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	1195	866	24.73	1030
Thermal (Total)		8026	5016	4003	113	4702
Total Hydro		550	35	57	2.90	121
Wind power		2798	168	296	6.34	264
Biomass		99	19	19	0.45	19
Solar		730	0	0	0.28	12
Renewable/Others (Total)		3627	187	315	7.08	295
Total Rajasthan		12203	5238	4375	122.83	5118
UP		Anpara TPS (3*210+2*500)	1630	1393	1400	33.00
	Obra TPS (2*50+2*94+5*200)	1194	329	356	8.30	346
	Paricha TPS (2*110+2*220+2*250)	1140	780	720	17.90	746
	Panki TPS (2*105)	210	63	63	1.60	67
	Harduaganj TPS (1*60+1*105+2*250)	665	428	445	10.60	442
	Tanda TPS (NTPC) (4*110)	440	266	186	5.10	213
	Roza TPS (IPP) (4*300)	1200	725	580	16.10	671
	Anpara-C (IPP) (2*600)	1200	537	522	12.70	529
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	280	232	6.60	275
	Thermal (Total)	8129	4801	4504	111.90	4663
	Vishnuparyag HPS (IPP)	400	70	66	1.60	67
	Other Hydro	527	55	93	0.90	38
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5726	5463	133.60	5500
	Uttarakhand	Total Hydro	1398	531	273	7.92
Total Uttarakhand		1398	531	273	7.92	330
Delhi	Raighat TPS (2*67.5)	135	45	39	0.50	21
	Delhi Gas Turbine (6x30 + 3x34)	282	162	121	3.40	142
	Pragati Gas Turbine (2x104+ 1x122)	330	276	162	5.92	247
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	315	292	7.31	305
	Badarpur TPS (NTPC) (3*95+2*210)	705	184	181	4.45	185
	Thermal (Total)	2917	982	795	21.58	899
Total Delhi	2917	982	795	21.58	899	
HP	Baspa HPS (IPP) (2*150)	300	80	0	0.93	39
	Malana HPS (IPP) (2*43)	86	0	0	0.20	8
	Other Hydro	728	191	89	2.78	116
	Total HP	1114	271	89	3.90	163
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	4.27	178
Total State Control Area Generation		39597	18680	15380	414.91	17221
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3758	3413	99.09	4129
Total Regional Availability(Gross)		64032	40032	27261	787.91	32763

IV. Total Hydro Generation:

Regional Entities Hydro	11432	7761	590	55.81	2325
State Control Area Hydro	5684	1496	823	28.35	1114
Total Regional Hydro	17116	9257	1413	84.15	3440

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	-400	0	500	0.00	8.72	-8.72
Gwalior-Agra (D/C)	954	1393	2160	0	39.24	0.00	39.24
Zerda-Kankroli	-56	-151	106	162	0.00	0.89	-0.89
Zerda-Bhinmal	3	-51	209	97	1.20	0.00	1.20
Malanpur-Auraiya	60	45	0	110	0.00	1.28	-1.28
Badod-Kota/Morak	-6	-73	0	106	0.00	1.30	-1.30
Mundra-Mohindergarh(HVDC)	1997	1999	2203	0	48.62	0.00	48.62
Vindhychal - Rihand	494	267	502	0	0.00	0.00	0.00
Sub Total WR	2946	3029			89.07	12.19	76.88
Pusauli Bypass	400	300	300	0	7.66	0.00	7.66
MZP- GKP (D/C)	133	135	214	49	1.73	0.00	1.73
Patna-Balia(D/C)	572	449	741	0	13.63	0.00	13.63
B'Sharif-Balia (D/C)	-231	-225	0	238	0.00	4.00	-4.00
Pusauli-Balia	-122	-80	0	122	0.00	0.71	-0.71
Gaya-Fatehpur (765 Kv)	134	-39	331	39	3.90	0.00	3.90
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	-47	-38	0	-50	0.00	0.84	-0.84
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-134	-248	94	248	0.00	2.00	-2.00
Sub Total ER	812	384			29.75	7.54	22.20
Total IR Exch	3758	3413			118.82	19.73	99.09

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
13.61	0.22	13.83	10.83	-5.35	3.77	16.39	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
28.65	71.42	100.06	22.20	76.88	99.09	-6.44	5.47	-0.98

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	1.12	7.05	24.47	45.27	47.96	15.38	9.53	2.70	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				
50.43	00:28:48	49.58	6.40	49.98	0.15	0.12	50.24	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	412	00:42	403	15:27	0.0	0.0	0.0	0.0
Gorakhpur	400	413	00:00	393	09:08	0.0	0.0	0.0	0.0
Bareilly	400	426	00:27	406	09:09	0.0	0.0	31.9	0.0
Kanpur	400	422	00:00	402	18:39	0.0	0.0	5.0	0.0
Dadri	400	0	00:00	9999	00:00	100.0	100.0	0.0	0.0
Ballabgarh	400	432	02:00	408	18:36	0.0	0.0	37.9	9.8
Bawana	400	429	02:57	408	18:40	0.0	0.0	31.9	0.0
Bassi	400	430	05:02	402	09:08	0.0	0.0	35.1	0.0
Hissar	400	414	23:13	407	09:44	0.0	0.0	0.0	0.0
Moga	400	425	02:58	404	11:11	0.0	0.0	20.2	0.0
Abdullapur	400	428	03:03	396	18:39	0.0	0.0	28.7	0.0
Nalagarh	400	432	02:57	403	11:23	0.0	0.0	42.6	1.9
Kishenpur	400	425	03:44	392	18:38	0.0	0.0	13.6	0.0
Wagoora	400	408	04:03	361	18:40	61.3	76.5	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	776	13:02	743	18:40	0.0	0.0	0.0	0.0
Balia	765	784	00:00	751	18:39	0.0	0.0	0.0	0.0
Moga	765	804	02:56	765	18:39	0.0	0.0	8.2	0.0
Agra	765	793	13:02	759	09:08	0.0	0.0	0.0	0.0
Bhiwani	765	805	02:56	769	09:08	0.0	0.0	14.7	0.0
Unnao	765	768	00:00	733	18:39	0.0	9.7	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	492.91	827.99	496.96	971.87	140.00	378.00
Pong	426.72	384.05	401.71	259.17	408.85	454.47	60.74	339.86
Tehri	829.79	740.04	799.40	592.30	802.75	665.65	36.20	203.00
Koteshwar	612.50	598.50	609.83	4.44	609.58	4.21	203.00	189.00
Chamera-I	760.00	748.75	758.90	0.00	0.00	0.00	58.00	57.12
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	502.89	1.56	509.24	2.11	49.55	75.44

* 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	149	0	-378	172	0	-8.61	3.00	-5.61
Delhi	-879	-31	-20	-477	365	-10	-10.67	4.40	-6.27
Haryana	-940	91	0	-979	104	0	-23.94	0.01	-23.93
HP	534	-297	0	504	-98	0	13.80	-4.74	9.07
J&K	695	0	0	496	244	0	13.44	3.05	16.49
CHD	-31	0	0	0	0	0	-0.25	0.00	-0.25
Rajasthan	487	428	2	487	139	2	15.68	8.29	23.98
UP	53	0	0	100	0	0	-1.87	0.00	-1.87
Uttarakhand	292	137	49	271	204	30	6.90	7.12	14.03
Total	-198	477	30	25	1129	22	4.49	21.14	25.63

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-327	-409	259	2	0	0
Delhi	33	-879	599	-31	-10	-22
Haryana	-937	-1088	126	-437	0	0
HP	631	480	10	-639	0	0
J&K	695	448	292	-51	0	0
CHD	0	-31	0	0	0	0
Rajasthan	844	487	496	-566	2	2
UP	134	-388	0	0	0	0
Uttarakhand	292	271	370	132	49	27

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 27.01.2015 :**
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 :**