

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 21.02.2015
Date of Reporting : 22.02.2015

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
36379	1633	38012	49.95	29700	645	30344	50.12	812.3	26.70

* 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	35.94	10.17		46.10	43.04	44.28	1.24	90.39	0.00
Haryana	54.74	0.48		55.22	55.14	54.29	-0.86	109.50	0.00
Rajasthan	131.12	3.86	8.59	143.57	72.58	71.22	-1.36	214.79	0.00
Delhi	17.08			17.08	39.94	40.59	0.64	57.66	0.03
UP	141.70	5.40		147.10	91.92	90.35	-1.57	237.45	18.75
Uttarakhand		10.96		10.96	22.70	22.85	0.15	33.81	0.00
HP		6.85		6.85	17.53	16.46	-1.08	23.30	0.50
J & K		7.60	0.00	7.60	35.38	34.49	-0.89	42.08	7.43
Chandigarh				0.00	3.56	3.34	0.27	3.34	0.00
Total	380.57	45.31	8.59	434.46	381.80	377.87	-3.44	812.33	26.70

* 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	4279	0	-78	-107	2927	0	187	-284	4773
Haryana	5715	0	-260	-504	3130	0	61	-804	5715
Rajasthan	8588	0	-325	658	8758	0	60	853	9874
Delhi	2727	4	-92	-472	1634	0	148	-873	3058
UP	10256	1235	258	62	9774	353	-104	63	10808
Uttarakhand	1747	40	178	542	1151	0	16	299	1759
HP	1027	25	-118	214	726	25	-20	343	1262
J&K	1863	329	66	573	1512	267	-331	635	1920
Chandigarh	177	0	-21	0	89	0	-18	-31	191
Total	36379	1633	-391	965	29700	645	-2	201	37168

* 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 :

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	1930	2081	1701	47.95	1998	44.79	3.16
	Rihand I STPS (2*500)	1000	885	923	709	20.77	866	18.96	1.81
	Rihand II STPS (2*500)	1000	900	883	668	20.21	842	18.59	1.62
	Rihand III STPS (2*500)	1000	966	929	740	21.49	895	20.01	1.48
	Dadri I STPS (4*210)	840	815	608	545	14.82	618	13.75	1.07
	Dadri II STPS (2*490)	980	980	746	664	17.09	712	17.15	-0.06
	Unchahar I TPS (2*210)	420	405	378	272	7.61	317	7.91	-0.30
	Unchahar II TPS (2*210)	420	403	366	268	7.11	296	7.22	-0.11
	Unchahar III TPS (1*220)	210	201	161	130	3.50	146	3.60	-0.10
	ISTPP (Jhajhar) (3*500)	1500	1500	628	682	14.96	623	16.16	-1.20
	Dadri GPS (4*130.19+2*154.51)	830	844	149	195	4.13	172	4.14	-0.01
	Anta GPS (3*88.71+1*1153.2)	419	426	218	240	5.54	231	5.85	-0.31
	Auraiya GPS (4*111.19+2*109.30)	663	510	152	166	3.74	156	3.75	-0.01
	Dadri Solar	5	1	0	0	0.02	1	0.02	0.00
	Unchahar Solar	10	3	0	0	0.04	2	0.07	-0.03
	Singrauli Solar	15	2	0	0	0.07	3	0	0.04
Sub Total (A)	11312	10770	8222	6980	189	7878	182	7	
B. NPC	NAPS (2*220)	440	386	418	433	9.29	387	9.26	0.03
	RAPS- B (2*220)	440	407	448	454	9.77	407	9.77	0.01
	RAPS- C (2*220)	440	365	430	421	9.26	386	8.76	0.50
	Sub Total (B)	1320	1158	1296	1308	28.32	1180	27.79	0.53
C. NHPC	Chamera I HPS (3*180)	540	534	554	0	5.48	228	5.30	0.18
	Chamera II HPS (3*100)	300	200	210	0	2.37	99	2.30	0.07
	Chamera III HPS (3*77)	231	231	227	0	1.26	53	1.16	0.10
	Bairasuli HPS(3*60)	180	179	182	82	2.14	89	2.03	0.12
	Salal-HPS (6*115)	690	214	230	230	5.45	227	5.13	0.33
	Tanakpur-HPS (3*40)	94	25	30	0	0.64	27	0.60	0.04
	Uri-I HPS (4*120)	480	332	364	357	8.19	341	7.96	0.22
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	133	136	0	0.98	41	0.90	0.08
	Dulhasti-HPS (3*130)	390	258	272	0	2.62	109	2.50	0.12
	Sewa-II HPS (3*40)	120	119	130	0	2.91	121	2.86	0.05
	Parbati 3 (4*130)	520	203	133	0	0.66	28	0.65	0.01
	Sub Total (C)	4065	2427	2468	669	33	1363	31	1
	D. SJVNL	NJPC (6*250)	1500	1080	1080	0	6.26	261	6.24
Rampur HEP (4*68.67)		275	370	297	0	1.73	72	1.77	-0.04
Sub Total (D)		1775	1450	1377	0	7.99	333	8.01	-0.02
E. THDC	Tehri HPS (4*250)	1000	856	854	0	8.90	371	8.80	0.10
	Koteshwar HPS (4*100)	400	146	304	100	3.55	148	3.50	0.05
	Sub Total (E)	1400	1002	1158	100	12.45	519	12.30	0.15
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	728	1155	493	17.58	732	17.46	0.11
	Dehar HPS (6*165)	990	320	330	330	7.61	317	7.68	-0.07
	Pong HPS (6*66)	396	70	174	0	1.61	67	1.69	-0.08
	Sub Total (F)	2900	1118	1659	823	26.80	1116	26.83	-0.04
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	0	0	3.36	140	3.36	0.00
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	129	105	2.90	121	2.93	-0.03
	Budhil HPS(IPP)	70	0	0	0	0.21	9	0.21	0.00
	Sub Total (G)	1662	0	129	105	6.79	283	6.81	-0.02
H. Total Regional Entities (A-G)	24434	17925	16309	9985	304.12	12672	295.14	8.99	

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	320	320	7.76	324
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	100	2.25	94
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	334	388	8.91	371
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	478	353	9.71	405
	Talwandi Saboo (1*660)	660	353	335	7.31	305
	Thermal (Total)	4680	1585	1496	35.94	1497
	Total Hydro	1148	426	414	10.17	424
Total Punjab	5828	2011	1910	46.10	1921	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	233	223	5.35	223
	DCRTPP (Yamuna nagar) (2*300)	600	278	261	6.08	253
	Faridabad GPS (NTPC)	432	165	174	3.88	162
	RGTPP (khedar) (IPP) (2*600)	1200	1155	735	20.37	849
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	851	742	19.07	795
	Thermal (Total)	4944	2682	2135	54.74	2281
	Total Hydro	62	20	17	0.48	20
	Total Haryana	5006	2702	2152	55.22	2301
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1057	1064	26.02
suratgarh TPS (6*250)		1500	1151	1143	29.35	1223
Chabra TPS (3*250)		750	803	568	17.99	750
Dholpur GPS (3*110)		330	109	113	2.83	118
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	49	30	0.85	35
RAPS A (NPC) (1*100+1*200)		300	164	151	4.08	170
Barsingar (NLC) (2*125)		250	187	189	4.52	189
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	837	844	19.25	802
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	1069	974	26.23	1093
Thermal (Total)		8026	5426	5076	131	5463
Total Hydro		550	133	93	3.86	161
Wind power		2798	109	662	8.16	340
Biomass		99	14	14	0.33	14
Solar		730	1	0	0.10	4
Renewable/Others (Total)		3627	124	676	8.59	358
Total Rajasthan		12203	5683	5845	143.57	5982
UP		Anpara TPS (3*210+2*500)	1630	1398	1419	33.40
	Obra TPS (2*50+2*94+5*200)	1194	347	345	8.20	342
	Paricha TPS (2*110+2*220+2*250)	1140	617	643	15.10	629
	Panki TPS (2*105)	210	140	135	3.30	138
	Harduaganj TPS (1*60+1*105+2*250)	665	354	452	9.60	400
	Tanda TPS (NTPC) (4*110)	440	323	323	8.20	342
	Roza TPS (IPP) (4*300)	1200	594	756	18.90	788
	Anpara-C (IPP) (2*600)	1200	675	1076	21.50	896
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	113	252	4.30	179
	Thermal (Total)	8129	4561	5401	122.50	5104
	Vishnuparyag HPS (IPP)	400	67	64	1.60	67
	Other Hydro	527	211	57	3.80	158
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5639	6322	147.10	6063
	Uttarakhand	Total Hydro	1398	494	390	10.96
Total Uttarakhand		1398	494	390	10.96	457
Delhi	Raighat TPS (2*67.5)	135	32	35	0.82	34
	Delhi Gas Turbine (6x30 + 3x34)	282	77	79	1.87	78
	Pragati Gas Turbine (2x104+ 1x122)	330	159	162	3.76	157
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	304	272	6.77	282
	Badarpur TPS (NTPC) (3*95+2*210)	705	163	158	3.86	161
	Thermal (Total)	2917	734	706	17.08	712
Total Delhi	2917	734	706	17.08	712	
HP	Baspa HPS (IPP) (2*150)	300	61	0	0.69	29
	Malana HPS (IPP) (2*43)	86	0	0	0.25	11
	Other Hydro	728	307	238	5.90	246
	Total HP	1114	368	238	6.85	285
J & K	Baqilhar HPS (IPP) (3*150)	450	296	214	5.58	232
	Other Hydro/IPP	436	100	78	2.02	84
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	396	292	7.60	316
Total State Control Area Generation		39597	18027	17855	434.46	18036
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5693	3135	108.93	4539
Total Regional Availability(Gross)		64032	40029	30975	847.52	35246

IV. Total Hydro Generation:

Regional Entities Hydro	11432	6661	1593	83.62	3484
State Control Area Hydro	5684	2048	1501	45.31	1821
Total Regional Hydro	17116	8709	3094	128.93	5305

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	-50	-50	50	500	0.10	3.51	-3.42
Gwalior-Agra (D/C)	1755	904	2017	0	37.34	0.00	37.34
Zerda-Kankroli	-127	-327	0	353	0.00	4.94	-4.94
Zerda-Bhinmal	-19	-228	53	269	0.00	2.25	-2.25
Malanpur-Auraiya	-82	-134	0	138	0.00	2.43	-2.43
Badod-Kota/Morak	-73	-161	0	179	0.00	3.12	-3.12
Mundra-Mohindergarh(HVDC)	2502	2001	2505	0	54.55	0.00	54.55
Vindhychal - Rihand	495	495	512	0	11.71	0.00	11.71
Sub Total WR	4401	2500			103.70	16.26	87.43
Pusauli Bypass	200	100	100	200	0.72	2.58	-1.86
MZP- GKP (D/C)	45	28	250	97	1.18	0.00	1.18
Patna-Balia(D/C)	554	402	600	0	11.62	0.00	11.62
B'Sharif-Balia (D/C)	24	-72	101	114	0.00	0.49	-0.49
Pusauli-Balia	78	-27	118	45	0.32	0.00	0.32
Gaya-Fatehpur (765 Kv)	256	121	397	0	6.00	0.00	6.00
Pusauli-Sahupuri	130	161	0	179	2.95	0.00	2.95
K'nasa-Sahupuri	0	0	0	0	0.96	0.00	0.96
Son Ngr-Rihand	-30	-36	0	46	0.00	0.81	-0.81
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	35	-42	259	74	1.62	0.00	1.62
Sub Total ER	1292	635			25.37	3.88	21.49
Total IR Exch	5693	3135			129.07	20.14	108.93

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
21.21	0.18	21.39	4.22	-0.85	14.82	0.00	0.82	-0.82

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
41.26	74.75	116.01	21.49	87.43	108.93	-19.76	12.69	-7.08

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	0.36	1.36	10.00	54.66	71.18	12.15	5.97	0.76	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				
50.26	17.03	49.61	18.43	49.99	0.06	0.08	50.21	49.9

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	409	01:57	403	08:30	0.0	0.0	0.0	0.0
Gorakhpur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly	400	423	03:02	402	18:42	0.0	0.0	5.6	0.0
Kanpur	400	419	03:01	398	18:42	0.0	0.0	0.0	0.0
Dadri	400	0	00:00	9999	00:00	100.0	100.0	0.0	0.0
Ballabgarh	400	428	02:59	404	18:42	0.0	0.0	23.8	0.0
Bawana	400	426	03:01	405	18:42	0.0	0.0	21.6	0.0
Bassi	400	421	05:02	394	11:19	0.0	0.0	0.1	0.0
Hissar	400	416	03:02	395	14:18	0.0	0.0	0.0	0.0
Moga	400	423	03:00	404	11:19	0.0	0.0	10.2	0.0
Abdullapur	400	423	00:03	396	13:49	0.0	0.0	7.5	0.0
Nalagarh	400	431	03:02	410	14:23	0.0	0.0	39.9	0.9
Kishenpur	400	425	03:23	400	18:39	0.0	0.0	13.8	0.0
Wagoora	400	408	04:03	379	19:52	1.0	44.1	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	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Balia	765	776	03:01	746	18:42	0.0	0.0	0.0	0.0
Moga	765	803	04:00	767	14:37	0.0	0.0	3.7	0.0
Agra	765	793	03:00	754	11:24	0.0	0.0	0.0	0.0
Bhiwani	765	803	00:02	767	06:41	0.0	0.0	0.8	0.0
Unnao	765	770	03:02	741	06:48	0.0	0.5	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	484.46	569.03	491.61	788.17	178.00	587.94
Pong	426.72	384.05	399.25	203.01	406.41	379.44	138.95	118.59
Tehri	829.79	740.04	787.60	425.00	794.00	513.63	36.62	233.00
Koteshwar	612.50	598.50	610.66	4.95	610.54	4.80	233.00	233.00
Chamera-I	760.00	748.75	759.51	0.00	0.00	0.00	151.48	147.96
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	500.87	3.22	508.49	2.28	156.39	150.36

* 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	-321	37	0	-291	183	0	-7.22	5.00	-2.22
Delhi	-688	-160	-26	-476	29	-26	-11.27	-1.22	-12.49
Haryana	-608	-195	0	-649	145	0	-16.51	1.82	-14.69
HP	462	-119	0	432	-219	0	11.67	-5.19	6.48
J&K	635	0	0	450	122	0	12.85	0.42	13.27
CHD	-31	0	0	0	0	0	-0.24	0.00	-0.24
Rajasthan	293	557	2	293	363	2	7.04	11.31	18.35
UP	63	0	0	62	0	0	0.42	0.00	0.42
Uttarakhand	268	9	22	268	257	17	6.34	4.40	10.73
Total	73	129	-1	90	881	-6	3.07	16.54	19.61

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-291	-321	358	3	0	0
Delhi	-244	-688	113	-165	-26	-26
Haryana	-608	-825	172	-235	0	0
HP	521	432	-35	-745	0	0
J&K	635	450	195	-204	0	0
CHD	0	-31	0	0	0	0
Rajasthan	293	293	559	92	2	-32
UP	110	-106	0	0	0	0
Uttarakhand	268	252	269	-4	49	11

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 21.02.2015 :**

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 :**