

पावर 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 18.02.2015
Date of Reporting : 19.02.2015

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
36583	1867	38450	50.01	30355	292	30647	50.07	810.1	38.26

* 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	41.68	11.29		52.96	38.64	37.77	-0.87	90.73	0.00
Haryana	62.22	0.36		62.58	54.77	53.65	-1.11	116.23	0.00
Rajasthan	130.87	5.15	2.87	138.90	69.94	72.78	2.84	211.68	0.00
Delhi	17.25			17.25	40.92	40.27	-0.65	57.53	0.02
UP	136.00	3.12		139.12	92.42	90.54	-1.89	229.66	30.94
Uttarakhand		9.99		9.99	24.27	24.93	0.66	34.92	0.00
HP		5.61		5.61	18.81	18.86	0.05	24.47	0.00
J & K		4.99	0.00	4.99	36.37	36.40	0.03	41.39	7.31
Chandigarh				0.00	3.84	3.45	0.27	3.45	0.00
Total	388.02	40.50	2.87	431.40	379.98	378.66	-0.66	810.06	38.26

* 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	4675	0	-48	-205	2798	0	80	-314	4865
Haryana	5742	0	30	-536	3675	0	36	-455	6269
Rajasthan	8701	0	-169	522	8965	0	145	840	9694
Delhi	2849	0	-34	-404	1504	0	0	-885	3130
UP	9755	1535	15	68	9780	0	110	68	10113
Uttarakhand	1655	0	-11	452	1170	0	66	334	1811
HP	1139	0	45	269	724	0	-6	376	1331
J&K	1879	332	160	610	1654	292	25	640	1944
Chandigarh	188	0	-22	0	85	0	-4	-31	191
Total	36583	1867	-34	776	30355	292	453	573	37146

* 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	1920	2056	1712	47.35	1973	43.91	3.44
	Rihand I STPS (2*500)	1000	857	920	833	20.92	871	19.24	1.68
	Rihand II STPS (2*500)	1000	900	972	958	22.02	918	20.61	1.41
	Rihand III STPS (2*500)	1000	532	509	499	12.86	536	11.98	0.88
	Dadri I STPS (4*210)	840	815	631	610	14.94	623	13.91	1.03
	Dadri II STPS (2*490)	980	980	738	695	17.91	746	17.28	0.63
	Unchahar I TPS (2*210)	420	405	341	306	7.57	316	8.42	-0.85
	Unchahar II TPS (2*210)	420	403	321	273	7.32	305	7.95	-0.63
	Unchahar III TPS (1*220)	210	201	168	134	3.61	150	3.80	-0.19
	ISTPP (Jhajhar) (3*500)	1500	1500	679	583	15.02	626	16.27	-1.25
	Dadri GPS (4*130.19+2*154.51)	830	845	188	185	4.51	188	4.58	-0.06
	Anta GPS (3*88.71+1*153.2)	419	426	261	250	5.79	241	5.91	-0.12
	Auraiya GPS (4*111.19+2*109.30)	663	511	159	167	3.92	163	3.93	0.00
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Singrauli Solar	15	2	0	0	0.05	2	0	0.01
Sub Total (A)	11312	10299	7943	7205	184	7660	178	6	
B. NPC	NAPS (2*220)	440	390	424	428	9.32	388	9.36	-0.04
	RAPS- B (2*220)	440	409	449	456	9.77	407	9.82	-0.04
	RAPS- C (2*220)	440	409	442	451	9.50	396	9.82	-0.31
	Sub Total (B)	1320	1208	1315	1335	28.60	1192	28.99	-0.40
C. NHPC	Chamera I HPS (3*180)	540	534	551	0	4.94	206	4.82	0.12
	Chamera II HPS (3*100)	300	200	210	0	1.57	65	1.50	0.07
	Chamera III HPS (3*77)	231	231	226	0	0.75	31	0.70	0.05
	Bairasuli HPS(3*60)	180	179	180	0	1.37	57	1.27	0.10
	Salal-HPS (6*115)	690	143	230	135	3.65	152	3.43	0.22
	Tanakpur-HPS (3*40)	94	22	23	22	0.55	23	0.53	0.02
	Uri-I HPS (4*120)	480	244	312	205	5.97	249	5.85	0.13
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	140	140	0	0.95	40	0.90	0.05
	Dulhasti-HPS (3*130)	390	241	272	0	3.08	128	3.00	0.08
	Sewa-II HPS (3*40)	120	61	0	0	0.63	26	0.61	0.02
	Parbati 3 (4*130)	520	130	131	0	0.29	12	0.26	0.03
	Sub Total (C)	4065	2124	2276	362	24	990	23	1
D. SJVNL	NJPC (6*250)	1500	1541	1258	0	5.58	232	5.60	-0.02
	Rampur HEP (4*68.67)	275	323	371	0	1.56	65	1.51	0.04
	Sub Total (D)	1775	1864	1629	0	7.13	297	7.11	0.02
E. THDC	Tehri HPS (4*250)	1000	868	870	0	9.09	379	9.00	0.09
	Koteshwar HPS (4*100)	400	146	300	100	3.53	147	3.50	0.03
	Sub Total (E)	1400	1014	1170	100	12.62	526	12.50	0.12
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	744	1110	460	17.80	742	17.84	-0.04
	Dehar HPS (6*165)	990	142	330	0	3.54	147	3.42	0.12
	Pong HPS (6*66)	396	119	236	0	2.91	121	2.85	0.06
	Sub Total (F)	2900	1005	1676	460	24.26	1011	24.11	0.14
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.45	19	0.43	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	0	0	3.16	132	3.13	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	134	111	3.05	127	3.09	-0.04
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.14	-0.14
	Sub Total (G)	1662	0	134	111	6.66	278	6.79	-0.13
H. Total Regional Entities (A-G)	24434	17514	16143	9573	286.87	11953	280.29	6.57	

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	350	7.87	328
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	100	2.23	93
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	678	509	13.58	566
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	580	354	10.29	429
	Talwandi Saboo (1*660)	660	358	342	7.71	321
	Thermal (Total)	4680	2036	1655	41.68	1736
	Total Hydro	1148	480	425	11.29	470
Total Punjab	5828	2516	2080	52.96	2207	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	407	418	9.51	396
	DCRTPP (Yamuna nagar) (2*300)	600	248	243	5.83	243
	Faridabad GPS (NTPC)	432	201	190	4.38	182
	RGTPP (khedar) (IPP) (2*600)	1200	746	740	18.89	787
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1139	742	23.61	984
	Thermal (Total)	4944	2741	2333	62.22	2592
	Total Hydro	62	7	13	0.36	15
	Total Haryana	5006	2748	2346	62.58	2607
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1132	1132	26.53
suratgarh TPS (6*250)		1500	1310	1337	31.11	1296
Chabra TPS (3*250)		750	435	847	15.29	637
Dholpur GPS (3*110)		330	115	113	2.77	115
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	196	93	0.92	38
RAPS A (NPC) (1*100+1*200)		300	173	161	4.07	170
Barsingar (NLC) (2*125)		250	96	96	2.19	91
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	879	838	21.02	876
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	1178	1200	26.99	1124
Thermal (Total)		8026	5514	5817	131	5453
Total Hydro		550	196	93	5.15	215
Wind power		2798	46	216	2.33	97
Biomass		99	20	20	0.49	20
Solar		730	0	0	0.06	3
Renewable/Others (Total)		3627	66	236	2.87	120
Total Rajasthan		12203	5776	6146	138.90	5787
UP		Anpara TPS (3*210+2*500)	1630	1377	1387	32.80
	Obra TPS (2*50+2*94+5*200)	1194	344	317	7.90	329
	Paricha TPS (2*110+2*220+2*250)	1140	667	652	15.70	654
	Panki TPS (2*105)	210	113	113	2.80	117
	Harduaganj TPS (1*60+1*105+2*250)	665	439	442	10.60	442
	Tanda TPS (NTPC) (4*110)	440	310	312	8.20	342
	Roza TPS (IPP) (4*300)	1200	855	775	19.40	808
	Anpara-C (IPP) (2*600)	1200	543	549	13.10	546
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	280	279	6.30	263
	Thermal (Total)	8129	4928	4826	116.80	4867
	Vishnuparyag HPS (IPP)	400	67	70	1.62	68
	Other Hydro	527	98	28	1.50	63
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5893	5724	139.12	5729
	Uttarakhand	Total Hydro	1398	545	329	9.99
Total Uttarakhand		1398	545	329	9.99	416
Delhi	Raighat TPS (2*67.5)	135	33	34	0.79	33
	Delhi Gas Turbine (6x30 + 3x34)	282	77	100	1.85	77
	Pragati Gas Turbine (2x104+ 1x122)	330	154	159	3.77	157
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	307	271	7.10	296
	Badarpur TPS (NTPC) (3*95+2*210)	705	155	158	3.76	157
	Thermal (Total)	2917	727	722	17.25	719
Total Delhi	2917	727	722	17.25	719	
HP	Baspa HPS (IPP) (2*150)	300	32	0	0.92	38
	Malana HPS (IPP) (2*43)	86	0	0	0.23	10
	Other Hydro	728	212	141	4.46	186
	Total HP	1114	244	141	5.61	234
J & K	Baqilhar HPS (IPP) (3*150)	450	150	150	3.60	150
	Other Hydro/IPP	436	68	41	1.39	58
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	218	191	4.99	208
Total State Control Area Generation		39597	18667	17679	431.40	17907
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4804.51	4637.9	121.65	5069
Total Regional Availability(Gross)		64032	39614	31890	839.91	34929

IV. Total Hydro Generation:

Regional Entities Hydro	11432	6751	922	71.38	2974
State Control Area Hydro	5684	1788	1220	40.50	1620
Total Regional Hydro	17116	8539	2142	111.88	4594

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	100	-200	100	300	0.59	2.76	-2.16
Gwalior-Agra (D/C)	1313	1868	2291	0	40.92	0.00	40.92
Zerda-Kankroli	-239	-330	0	366	0.00	6.64	-6.64
Zerda-Bhinmal	-107	-213	0	306	0.00	3.71	-3.71
Malanpur-Auraiya	-92	-80	0	115	0.00	2.19	-2.19
Badod-Kota/Morak	-149	-156	0	196	0.00	3.65	-3.65
Mundra-Mohindergarh(HVDC)	2496	2297	2506	0	58.72	0.00	58.72
Vindhychal - Rihand	434	496	496	0	10.56	0.00	10.56
Sub Total WR	3756	3682			110.79	18.94	91.85
Pusauli Bypass	400	200	400	0	6.31	0.00	6.31
MZP- GKP (D/C)	-126	103	266	176	1.67	0.00	1.67
Patna-Balia(D/C)	503	504	689	0	12.63	0.00	12.63
B'Sharif-Balia (D/C)	65	25	220	146	0.26	0.00	0.26
Pusauli-Balia	33	-95	164	57	0.73	0.00	0.73
Gaya-Fatehpur (765 Kv)	258	162	413	0	6.80	0.00	6.80
Pusauli-Sahupuri	108	147	159	0	3.10	0.00	3.10
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-33	-36	0	44	0.00	0.84	-0.84
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-159	-54	171	209	0.00	0.85	-0.85
Sub Total ER	1049	956			31.48	1.68	29.80
Total IR Exch	4805	4638			142.28	20.62	121.65

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
24.17	0.07	24.24	4.84	-1.53	15.74	-0.31	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
45.03	75.02	120.06	29.80	91.85	121.65	-15.23	16.83	1.60

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	2.01	11.70	42.74	61.33	16.67	9.44	0.91	NA

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.25	12.01	49.74	8.11	50.00	0.07	0.09	50.23	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	12:00	404	09:02	0.0	0.0	0.0	0.0
Gorakhpur	400	413	04:00	403	07:00	0.0	0.0	0.0	0.0
Bareilly	400	423	21:56	404	15:36	0.0	0.0	3.3	0.0
Kanpur	400	420	04:04	402	15:40	0.0	0.0	0.0	0.0
Dadri	400	414	13:03	404	10:23	77.7	77.7	0.0	0.0
Ballabgarh	400	430	04:05	409	11:26	0.0	0.0	32.0	0.0
Bawana	400	427	04:00	410	10:40	0.0	0.0	32.5	0.0
Bassi	400	423	05:02	400	11:12	0.0	0.0	6.4	0.0
Hissar	400	417	05:03	399	11:27	0.0	0.0	0.0	0.0
Moga	400	422	21:29	408	09:10	0.0	0.0	2.0	0.0
Abdullapur	400	424	03:28	396	18:46	0.0	0.0	20.8	0.0
Nalagarh	400	433	21:38	414	07:41	0.0	0.0	54.1	2.5
Kishenpur	400	429	04:07	399	07:43	0.0	0.0	26.5	0.0
Wagoora	400	415	13:36	372	19:49	13.1	40.4	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	04:05	740	15:43	0.0	0.3	0.0	0.0
Balia	765	778	05:03	755	09:08	0.0	0.0	0.0	0.0
Moga	765	799	21:28	772	09:08	0.0	0.0	0.0	0.0
Agra	765	792	21:57	759	15:40	0.0	0.0	0.0	0.0
Bhiwani	765	806	05:02	773	09:09	0.0	0.0	10.8	0.0
Unnao	765	772	04:03	739	15:44	0.0	1.4	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	485.54	602.35	492.37	808.03	145.10	618.64
Pong	426.72	384.05	399.27	203.01	406.74	388.64	50.63	212.18
Tehri	829.79	740.04	789.40	439.29	795.05	529.09	35.78	235.00
Koteshwar	612.50	598.50	610.33	4.69	610.78	4.95	235.00	234.00
Chamera-I	760.00	748.75	759.43	0.00	0.00	0.00	103.23	133.14
Rihand	268.22	252.98	848.70	234.80	851.90	286.30	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	500.85	3.10	508.63	2.83	95.79	145.32

* 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	7	0	-291	86	0	-7.22	2.07	-5.15
Delhi	-688	-176	-20	-476	92	-20	-11.27	-0.76	-12.03
Haryana	-626	170	0	-626	90	0	-16.23	1.28	-14.95
HP	412	-36	0	382	-113	0	10.97	-2.53	8.44
J&K	643	-3	0	467	143	0	13.08	1.63	14.71
CHD	-31	0	0	0	0	0	-0.24	0.18	-0.07
Rajasthan	293	546	1	293	227	1	7.04	9.99	17.03
UP	68	0	0	68	0	0	0.64	0.00	0.64
Uttarakhand	268	34	32	268	172	12	6.34	5.30	11.63
Total	18	541	13	86	697	-7	3.09	17.16	20.26

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-291	-321	267	0	0	0
Delhi	-244	-688	210	-207	-20	-20
Haryana	-626	-793	171	-269	0	0
HP	521	382	16	-592	0	0
J&K	643	467	216	-156	0	0
CHD	0	-31	34	0	0	0
Rajasthan	293	293	546	-192	1	-37
UP	120	-95	0	0	0	0
Uttarakhand	268	252	340	34	49	12

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 18.02.2015 :**

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 :**