

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 26.02.2015
Date of Reporting : 27.02.2015

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
35572	1380	36952	0.00	28611	985	29596	0.00	785.8	30.74

* 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	24.83	9.54		34.36	43.33	43.23	-0.10	77.59	0.00
Haryana	54.82	0.52		55.34	63.54	62.60	-0.94	117.94	0.00
Rajasthan	126.29	4.49	6.91	137.68	75.12	76.91	1.80	214.59	0.00
Delhi	17.43			17.43	43.21	41.39	-1.82	58.82	0.01
UP	121.70	5.40		127.10	91.91	93.79	1.88	220.89	24.04
Uttarakhand		12.36		12.36	19.94	18.73	-1.21	31.09	0.10
HP		9.03		9.03	17.16	15.12	-2.03	24.15	0.00
J & K		11.21	0.00	11.21	32.71	26.16	-6.55	37.37	6.60
Chandigarh				0.00	3.79	3.41	0.27	3.41	0.00
Total	345.07	52.54	6.91	404.51	390.70	381.34	-8.70	785.85	30.74

* 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	3870	0	-92	-206	2451	0	-82	-306	3990
Haryana	5892	0	-112	-442	3809	0	-146	-416	6057
Rajasthan	8500	0	-72	369	8759	0	133	851	9765
Delhi	2799	0	-148	-317	1563	0	-125	-917	3133
UP	9787	1025	317	59	9020	750	-108	74	10735
Uttarakhand	1669	40	15	363	852	0	-267	262	1669
HP	1087	0	-139	105	737	0	-93	117	1270
J&K	1786	315	-78	501	1333	235	-451	637	1852
Chandigarh	182	0	-21	0	87	0	-31	-31	185
Total	35572	1380	-330	431	28611	985	-1170	272	36957

* 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	1930	2032	1557	46.36	1932	43.24	3.11
	Rihand I STPS (2*500)	1000	925	891	704	20.28	845	18.53	1.75
	Rihand II STPS (2*500)	1000	900	822	682	18.65	777	17.21	1.44
	Rihand III STPS (2*500)	1000	966	873	724	19.69	820	18.71	0.98
	Dadri I STPS (4*210)	840	815	611	597	14.81	617	13.94	0.86
	Dadri II STPS (2*490)	980	980	698	708	17.27	720	16.68	0.59
	Unchahar I TPS (2*210)	420	347	299	261	5.88	245	5.95	-0.08
	Unchahar II TPS (2*210)	420	401	285	269	6.72	280	6.74	-0.02
	Unchahar III TPS (1*220)	210	201	147	130	3.29	137	3.37	-0.08
	ISTPP (Jhajhar) (3*500)	1500	1500	865	633	16.74	698	17.32	-0.58
	Dadri GPS (4*130.19+2*154.51)	830	845	191	194	4.61	192	4.64	-0.03
	Anta GPS (3*88.71+1*153.2)	419	426	0	-1	0.00	0	0.00	0.00
	Auraiya GPS (4*111.19+2*109.30)	663	510	311	314	7.51	313	7.35	0.16
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	1	0	0	0.00	0	0.02	-0.02
	Singrauli Solar	15	3	0	0	0.04	2	0	-0.03
	Sub Total (A)	11312	10751	8025	6772	182	7578	174	8
B. NPC	NAPS (2*220)	440	381	419	430	9.26	386	9.14	0.12
	RAPS- B (2*220)	440	405	456	453	9.93	414	9.72	0.21
	RAPS- C (2*220)	440	403	446	450	9.71	405	9.67	0.04
	Sub Total (B)	1320	1189	1321	1333	28.90	1204	28.54	0.37
C. NHPC	Chamera I HPS (3*180)	540	534	551	547	13.09	546	12.82	0.28
	Chamera II HPS (3*100)	300	197	110	202	4.42	184	4.40	0.02
	Chamera III HPS (3*77)	231	231	231	79	2.24	93	2.20	0.04
	Bairasuli HPS(3*60)	180	179	181	181	4.29	179	4.30	0.00
	Salal-HPS (6*115)	690	338	345	345	8.39	350	8.11	0.28
	Tanakpur-HPS (3*40)	94	26	29	32	0.65	27	0.62	0.03
	Uri-I HPS (4*120)	480	440	478	474	11.05	460	10.55	0.50
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	140	139	0	0.97	41	0.90	0.07
	Dulhasti-HPS (3*130)	390	387	394	0	3.64	151	3.50	0.14
	Sewa-II HPS (3*40)	120	122	130	131	3.12	130	2.93	0.19
	Parbati 3 (4*130)	520	260	268	0	0.82	34	0.78	0.04
	Sub Total (C)	4065	2853	2858	1990	53	2195	51	2
D. SJVNL	NJPC (6*250)	1500	1329	1350	0	8.03	335	7.95	0.08
	Rampur HEP (4*68.67)	275	370	370	0	2.14	89	2.18	-0.04
	Sub Total (D)	1775	1699	1720	0	10.17	424	10.13	0.05
E. THDC	Tehri HPS (4*250)	1000	836	843	0	7.46	311	7.40	0.06
	Koteshwar HPS (4*100)	400	125	300	0	3.03	126	3.00	0.03
	Sub Total (E)	1400	961	1143	0	10.49	437	10.40	0.09
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	689	1064	477	16.79	699	16.53	0.25
	Dehar HPS (6*165)	990	320	330	330	7.76	323	7.68	0.08
	Pong HPS (6*66)	396	43	174	0	0.97	40	1.03	-0.06
	Sub Total (F)	2900	1052	1568	807	25.52	1063	25.24	0.28
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.43	18	0.42	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	620	150	4.14	172	4.15	-0.01
	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	114	3.05	127	3.12	-0.07
	Budhil HPS(IPP)	70	0	0	0	0.11	5	0.21	-0.10
	Sub Total (G)	1662	0	754	264	7.73	322	7.89	-0.16
H. Total Regional Entities (A-G)	24434	18504	17389	11166	317.36	13223	307.11	10.25	

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	350	160	5.13	214
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.06	-2
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	199	170	4.18	174
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	399	349	8.26	344
	Talwandi Saboo (1*660)	660	340	341	7.31	305
	Thermal (Total)	4680	1288	1020	24.83	1034
	Total Hydro	1148	392	400	9.54	397
Total Punjab	5828	1680	1420	34.36	1432	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	215	219	5.20	216
	DCRTPP (Yamuna nagar) (2*300)	600	276	239	5.94	248
	Faridabad GPS (NTPC)	432	199	171	4.34	181
	RGTPP (khedar) (IPP) (2*600)	1200	738	745	17.67	736
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1129	741	21.68	903
	Thermal (Total)	4944	2557	2115	54.82	2284
	Total Hydro	62	23	16	0.52	22
	Total Haryana	5006	2580	2131	55.34	2306
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1049	1005	25.29
suratgarh TPS (6*250)		1500	1181	1160	30.51	1271
Chabra TPS (3*250)		750	416	412	10.23	426
Dholpur GPS (3*110)		330	114	113	2.88	120
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	219	222	5.22	218
RAPS A (NPC) (1*100+1*200)		300	164	168	5.22	218
Barsingar (NLC) (2*125)		250	94	95	2.11	88
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	846	846	20.27	845
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	953	1133	24.55	1023
Thermal (Total)		8026	5036	5154	126	5262
Total Hydro		550	123	90	4.49	187
Wind power		2798	145	267	6.01	250
Biomass		99	25	25	0.59	25
Solar		730	3	0	0.31	13
Renewable/Others (Total)		3627	173	292	6.91	288
Total Rajasthan		12203	5332	5536	137.68	5737
UP	Anpara TPS (3*210+2*500)	1630	1377	1417	30.40	1267
	Obra TPS (2*50+2*94+5*200)	1194	378	339	8.70	363
	Paricha TPS (2*110+2*220+2*250)	1140	0	521	9.70	404
	Panki TPS (2*105)	210	140	140	3.40	142
	Harduaganj TPS (1*60+1*105+2*250)	665	339	365	8.60	358
	Tanda TPS (NTPC) (4*110)	440	324	320	8.20	342
	Roza TPS (IPP) (4*300)	1200	581	774	16.40	683
	Anpara-C (IPP) (2*600)	1200	744	653	17.10	713
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Thermal (Total)	8129	3883	4529	102.50	4271
	Vishnuparyag HPS (IPP)	400	78	82	1.80	75
	Other Hydro	527	266	164	3.60	150
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5027	5575	127.10	5221
Uttarakhand	Total Hydro	1398	556	492	12.36	515
	Total Uttarakhand	1398	556	492	12.36	515
Delhi	Raighat TPS (2*67.5)	135	39	38	0.90	37
	Delhi Gas Turbine (6x30 + 3x34)	282	75	76	1.89	79
	Pragati Gas Turbine (2x104+ 1x122)	330	157	158	3.78	158
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	315	271	7.01	292
	Badarpur TPS (NTPC) (3*95+2*210)	705	157	158	3.84	160
	Thermal (Total)	2917	743	701	17.43	726
Total Delhi	2917	743	701	17.43	726	
HP	Baspa HPS (IPP) (2*150)	300	33	0	0.78	32
	Malana HPS (IPP) (2*43)	86	0	0	0.32	13
	Other Hydro	728	325	329	7.93	330
	Total HP	1114	358	329	9.03	376
J & K	Baqilhar HPS (IPP) (3*150)	450	442	292	9.13	381
	Other Hydro/IPP	436	105	82	2.08	87
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	547	374	11.21	467
Total State Control Area Generation		39597	16823	16558	404.51	16779
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5150	2739	92.92	3871
Total Regional Availability(Gross)		64032	39362	30463	814.78	33874

IV. Total Hydro Generation:

Regional Entities Hydro	11432	7909	2947	103.43	4310
State Control Area Hydro	5684	2265	1865	52.54	2114
Total Regional Hydro	17116	10174	4812	155.97	6424

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	-400	-200	0	500	0.00	9.24	-9.24
Gwalior-Agra (D/C)	1621	524	1848	0	32.67	0.00	32.67
Zerda-Kankroli	-112	-389	0	402	0.00	4.73	-4.73
Zerda-Bhinmal	-23	-276	60	308	0.00	2.16	-2.16
Malanpur-Auraiya	84	172	0	176	0.00	2.88	-2.88
Badod-Kota/Morak	-24	-156	0	157	0.00	2.18	-2.18
Mundra-Mohindergarh(HVDC)	2102	2097	2102	0	50.77	0.00	50.77
Vindhychal - Rihand	479	447	507	0	11.40	0.00	11.40
Sub Total WR	3727	2219			94.84	21.19	73.65
Pusauli Bypass	400	400	400	0	8.81	0.00	8.81
MZP- GKP (D/C)	71	183	74	209	0.00	2.10	-2.10
Patna-Balia(D/C)	636	344	679	0	12.66	0.00	12.66
B'Sharif-Balia (D/C)	-85	-154	20	173	0.00	2.07	-2.07
Pusauli-Balia	37	-25	104	36	0.34	0.00	0.34
Gaya-Fatehpur (765 Kv)	180	-61	251	75	2.69	0.00	2.69
Pusauli-Sahupuri	129	166	186	0	3.14	0.00	3.14
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-35	0	43	0.00	0.89	-0.89
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	95	-298	25	309	0.00	3.31	-3.31
Sub Total ER	1423	520			27.63	8.37	19.27
Total IR Exch	5150	2739			122.47	29.55	92.92

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
15.18	0.16	15.34	5.80	-0.85	7.25	0.00	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
28.60	74.22	102.82	19.27	73.65	92.92	-9.33	-0.57	-9.90

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	0.56	6.57	37.13	62.75	19.35	10.75	1.46	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					
50.29	13.01	49.74	5.56	50.02	0.06	0.08	0.00	0

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	03:56	400	19:28	0.0	0.0	0.0	0.0
Gorakhpur	400	413	21:55	393	14:33	0.0	0.0	0.0	0.0
Bareilly	400	423	21:55	394	14:40	0.0	0.0	4.3	0.0
Kanpur	400	422	03:58	399	14:23	0.0	0.0	3.1	0.0
Dadri	400	419	03:57	396	14:23	0.5	0.5	0.0	0.0
Ballabgarh	400	429	03:58	400	14:16	0.0	0.0	35.2	0.0
Bawana	400	427	03:58	400	14:15	0.0	0.0	32.8	0.0
Bassi	400	424	21:47	395	13:44	0.0	0.0	6.3	0.0
Hissar	400	417	03:58	388	14:42	0.0	3.0	0.0	0.0
Moga	400	423	03:58	393	14:51	0.0	0.0	6.2	0.0
Abdullapur	400	424	03:57	396	14:21	0.0	0.0	9.2	0.0
Nalagarh	400	433	21:57	403	14:36	0.0	0.0	40.9	2.6
Kishenpur	400	225	04:00	207	19:45	100.0	100.0	0.0	0.0
Wagoora	400	402	04:02	364	19:44	52.8	70.4	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	783	23:57	737	14:39	0.0	5.4	0.0	0.0
Balia	765	783	23:57	746	09:10	0.0	0.0	0.0	0.0
Moga	765	802	03:58	746	14:42	0.0	0.0	0.6	0.0
Agra	765	793	21:52	747	14:26	0.0	0.0	0.0	0.0
Bhiwani	765	807	03:59	753	14:42	0.0	0.0	9.5	0.0
Unnao	765	773	23:57	729	14:38	0.0	20.9	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	482.89	527.87	490.08	738.95	139.40	549.35
Pong	426.72	384.05	399.37	203.01	405.75	361.16	234.77	72.46
Tehri	829.79	740.04	785.25	385.20	792.05	483.10	62.27	198.00
Koteshwar	612.50	598.50	610.57	4.95	610.01	4.69	198.00	201.00
Chamera-I	760.00	748.75	759.74	0.00	0.00	0.00	351.76	353.52
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	0.00	0.00
RPS	352.80	343.81	1136.94	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	501.75	3.04	508.58	2.39	253.71	145.54

* 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	-312	6	0	-287	81	0	-7.02	3.30	-3.72
Delhi	-674	-243	0	-462	155	-10	-10.94	-1.04	-11.98
Haryana	-590	174	0	-591	150	0	-15.41	3.03	-12.37
HP	463	-347	0	434	-329	0	11.71	-8.07	3.64
J&K	637	0	0	452	49	0	12.88	-0.01	12.87
CHD	-31	0	0	0	0	0	-0.24	0.00	-0.24
Rajasthan	294	555	2	294	92	-17	7.05	9.99	17.04
UP	74	0	0	59	0	0	0.63	0.00	0.63
Uttarakhand	269	-6	0	269	95	0	6.35	2.13	8.48
Total	131	139	2	166	292	-27	5.03	9.32	14.35

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-281	-312	351	3	0	0
Delhi	-230	-674	255	-249	0	-20
Haryana	-590	-758	176	-117	0	0
HP	522	434	-124	-714	0	0
J&K	637	452	49	-204	0	0
CHD	0	-31	0	0	0	0
Rajasthan	294	294	557	-407	2	-74
UP	112	-89	0	0	0	0
Uttarakhand	269	253	197	-7	49	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 26.02.2015 :**
Scattered rain in JK, HP, Uttarakhand and Punjab.**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 :**