

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 25.03.2015
Date of Reporting : 26.03.2015

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
35945	2393	38338	49.98	31175	1277	32451	50.12	805.1	59.37

* 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	53.20	8.38		61.58	48.28	48.15	-0.14	109.72	0.00
Haryana	51.71	0.36		52.07	60.45	60.05	-0.40	112.12	2.15
Rajasthan	124.08	0.73	7.90	132.71	52.26	51.63	-0.64	184.33	0.00
Delhi	19.78			19.78	45.81	46.89	1.08	66.68	0.09
UP	126.71	7.06		133.77	99.68	103.17	3.50	236.94	47.85
Uttarakhand		9.02		9.02	20.51	23.48	2.97	32.50	2.63
HP		9.40		9.40	13.07	13.54	0.47	22.94	0.00
J & K		12.72	0.00	12.72	25.32	23.54	-1.78	36.25	6.65
Chandigarh				0.00	3.69	3.62	0.27	3.62	0.00
Total	375.49	47.66	7.90	431.04	369.07	374.06	5.33	805.10	59.37

* 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	5554	0	68	-236	4245	0	-19	-312	5554
Haryana	5396	0	-98	187	3586	0	-124	100	5890
Rajasthan	7264	0	11	495	7643	0	84	576	8253
Delhi	3175	0	-73	-138	1997	0	-4	-728	3414
UP	9996	2030	223	555	10444	1015	146	129	10666
Uttarakhand	1628	75	113	401	1262	0	168	203	1629
HP	921	0	-122	-451	756	0	74	66	1258
J&K	1815	288	303	303	1148	262	-258	225	1870
Chandigarh	196	0	10	-10	94	0	-10	0	196
Total	35945	2393	435	1105	31175	1277	57	260	37947

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

Diversity is 1.02

III. Regional Entities :

A. NTPC	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
	Singrauli STPS (5*200+2*500)	2000	1633	1582	2076	42.09	1754	39.01	3.07
	Rihand I STPS (2*500)	1000	925	997	989	23.42	976	21.60	1.82
	Rihand II STPS (2*500)	1000	475	458	477	11.66	486	10.69	0.97
	Rihand III STPS (2*500)	1000	973	884	992	23.64	985	22.29	1.35
	Dadri I STPS (4*210)	840	815	847	625	18.51	771	17.81	0.69
	Dadri II STPS (2*490)	980	480	474	397	10.69	445	10.48	0.21
	Unchahar I TPS (2*210)	420	405	380	371	9.17	382	9.22	-0.05
	Unchahar II TPS (2*210)	420	403	376	362	8.90	371	8.63	0.27
	Unchahar III TPS (1*220)	210	201	186	183	4.39	183	4.32	0.07
	ISTPP (Jhajhar) (3*500)	1500	1500	941	729	18.90	787	20.56	-1.66
	Dadri GPS (4*130.19+2*154.51)	830	827	331	335	8.12	338	8.13	-0.01
	Anta GPS (3*88.71+1*153.2)	419	172	-1	-1	0.00	0	0.00	0.00
	Auraiya GPS (4*111.19+2*109.30)	663	657	150	152	3.61	150	3.70	-0.09
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.04	2	0.06	-0.02
	Singrauli Solar	15	3	0	0	0.05	2	0	-0.02
	Sub Total (A)	11312	9471	7605	7687	183	7633	177	7
B. NPC	NAPS (2*220)	440	388	418	427	9.27	386	9.31	-0.05
	RAPS- B (2*220)	440	401	441	446	9.56	398	9.62	-0.07
	RAPS- C (2*220)	440	410	441	444	9.55	398	9.84	-0.29
	Sub Total (B)	1320	1199	1300	1317	28.37	1182	28.78	-0.41
C. NHPC	Chamera I HPS (3*180)	540	534	548	0	10.27	428	10.05	0.22
	Chamera II HPS (3*100)	300	300	309	26	4.41	184	4.30	0.11
	Chamera III HPS (3*77)	231	231	232	0	2.57	107	2.50	0.07
	Bairasuli HPS(3*60)	180	179	180	180	4.14	173	4.10	0.04
	Salal-HPS (6*115)	690	443	460	460	11.08	462	10.62	0.46
	Tanakpur-HPS (3*40)	94	36	39	41	0.93	39	0.87	0.06
	Uri-I HPS (4*120)	480	468	477	477	11.41	475	11.24	0.16
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	210	210	0	1.76	73	1.65	0.11
	Dulhasti-HPS (3*130)	390	387	404	19	4.59	191	4.30	0.29
	Sewa-II HPS (3*40)	120	120	130	130	3.08	128	2.89	0.19
	Parbati 3 (4*130)	520	260	0	0	0.00	0	1.11	-1.11
	Sub Total (C)	4065	3169	2989	1333	54	2260	54	1
D. SJVNL	NJPC (6*250)	1500	1605	1629	0	8.90	371	8.78	0.12
	Rampur HEP (4*68.67)	275	321	367	0	2.27	94	2.26	0.00
	Sub Total (D)	1775	1926	1996	0	11.17	465	11.04	0.12
E. THDC	Tehri HPS (4*250)	1000	570	577	0	6.69	279	6.80	0.09
	Koteshwar HPS (4*100)	400	117	300	90	2.84	119	2.80	0.04
	Sub Total (E)	1400	687	877	90	9.54	397	9.40	0.14
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	400	689	368	9.98	416	9.59	0.38
	Dehar HPS (6*165)	990	404	495	280	10.39	433	9.69	0.70
	Pong HPS (6*66)	396	23	184	0	0.59	25	0.55	0.05
	Sub Total (F)	2900	826	1368	648	20.96	873	19.83	1.13
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	113	0	0.69	29	0.64	0.05
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	790	0	4.60	192	4.56	0.03
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	296	189	6.27	261	6.26	0.01
	Budhil HPS(IPP)	70	0	36	0	0.34	14	0.43	-0.09
	Sub Total (G)	1662	0	1235	189	11.91	496	11.89	0.01
H. Total Regional Entities (A-G)		24434	17278	17369	11264	319.36	13307	311.17	8.19

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	420	320	8.38	349
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	110	110	2.07	86
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	685	508	13.87	578
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	694	690	15.61	650
	Talwandi Saboo (1*660)	660	645	676	13.28	553
	Thermal (Total)	4680	2554	2304	53.20	2217
	Total Hydro	1148	419	299	8.38	349
Total Punjab	5828	2973	2603	61.58	2566	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00	0
	DCRTPP (Yamuna nagar) (2*300)	600	550	477	12.04	502
	Faridabad GPS (NTPC)	432	155	153	3.82	159
	RGTPP (khedar) (IPP) (2*600)	1200	576	377	10.09	420
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1245	753	25.76	1073
	Thermal (Total)	4944	2526	1760	51.71	2155
	Total Hydro	62	15	14	0.36	15
Total Haryana	5006	2541	1774	52.07	2170	
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1080	1029	25.09	1045
	suratgarh TPS (6*250)	1500	938	954	23.27	970
	Chabra TPS (3*250)	750	747	564	16.25	677
	Dholpur GPS (3*110)	330	51	0	2.41	100
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	142	161	4.18	174
	RAPS A (NPC) (1*100+1*200)	300	174	163	4.02	168
	Barsingar (NLC) (2*125)	250	194	194	4.59	191
	Giral LTPS (2*125)	250	76	76	1.38	58
	Rajwest LTPS (IPP) (8*135)	1080	587	844	18.33	764
	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	962	965	24.57	1024
	Thermal (Total)	8026	4951	4950	124	5170
	Total Hydro	550	28	22	0.73	30
	Wind power	2798	51	613	7.09	295
	Biomass	99	32	32	0.77	32
	Solar	730	0	0	0.04	2
Renewable/Others (Total)	3627	83	645	7.90	329	
Total Rajasthan	12203	5062	5617	132.71	5530	
UP	Anpara TPS (3*210+2*500)	1630	1380	1337	32.40	1350
	Obra TPS (2*50+2*94+5*200)	1194	426	463	10.80	450
	Paricha TPS (2*110+2*220+2*250)	1140	665	713	16.40	683
	Panki TPS (2*105)	210	72	77	1.80	75
	Harduaganj TPS (1*60+1*105+2*250)	665	227	227	5.50	229
	Tanda TPS (NTPC) (4*110)	440	390	390	9.56	398
	Roza TPS (IPP) (4*300)	1200	236	266	5.92	247
	Anpara-C (IPP) (2*600)	1200	977	1080	25.13	1047
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Thermal (Total)	8129	4373	4553	107.51	4480
	Vishnuparyag HPS (IPP)	400	89	90	2.17	90
	Other Hydro	527	182	281	4.89	204
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5444	5724	133.77	5483
Uttarakhand	Total Hydro	1398	328	473	9.02	376
	Total Uttarakhand	1398	328	473	9.02	376
Delhi	Raighat TPS (2*67.5)	135	47	47	1.08	45
	Delhi Gas Turbine (6x30 + 3x34)	282	78	80	1.84	77
	Pragati Gas Turbine (2x104+ 1x122)	330	274	153	4.74	197
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	303	314	7.19	300
	Badarpur TPS (NTPC) (3*95+2*210)	705	250	228	4.93	205
	Thermal (Total)	2917	951	822	19.78	824
Total Delhi	2917	951	822	19.78	824	
HP	Baspa HPS (IPP) (2*150)	300	50	0	1.13	47
	Malana HPS (IPP) (2*43)	86	50	0	0.31	13
	Other Hydro	728	322	316	7.97	332
	Total HP	1114	422	316	9.40	392
J & K	Baqilhar HPS (IPP) (3*150)	450	442	440	10.58	441
	Other Hydro/IPP	436	94	76	2.14	89
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	536	516	12.72	530
Total State Control Area Generation		39597	18257	17845	431.04	17870
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2572	2300	71.89	2995
Total Regional Availability(Gross)		64032	38199	31409	822.28	34171

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8133	2071	101.19	4216
State Control Area Hydro	5684	1930	1921	47.66	1895
Total Regional Hydro	17116	10063	3992	148.85	6112

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	-300	-500	0	500	0.00	10.51	-10.51
Gwalior-Agra (D/C)	1200	1382	1907	0	36.99	0.00	36.99
Zerda-Kankroli	-228	-431	0	431	0.00	8.33	-8.33
Zerda-Bhinmal	-203	-347	0	365	0.00	6.32	-6.32
Malanpur-Auraiya	-66	-69	0	72	0.00	1.27	-1.27
Badod-Kota/Morak	-193	-173	0	102	0.00	3.71	-3.71
Mundra-Mohindergarh(HVDC)	1797	1802	2003	0	43.60	0.00	43.60
Vindhychal - Rihand	502	496	517	0	12.01	0.00	12.01
Sub Total WR	2509	2160			92.60	30.14	62.47
Pusauli Bypass	-438	-598	0	598	0.00	12.23	-12.23
MZP- GKP (D/C)	-27	36	64	102	0.00	0.53	-0.53
Patna-Balia(D/C)	377	435	544	0	11.09	0.00	11.09
B'Sharif-Balia (D/C)	-51	-62	42	82	0.00	0.98	-0.98
Pusauli-Balia	-31	5	71	47	0.00	0.51	-0.51
Gaya-Fatehpur (765 Kv)	150	62	330	0	4.11	0.00	4.11
Pusauli-Sahupuri	0	201	207	0	2.73	0.00	2.73
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-40	-43	0	-43	0.00	-0.81	0.81
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	123	104	305	0	4.45	0.00	4.45
Sub Total ER	63	140			22.85	13.44	9.42
Total IR Exch	2572	2300			115.46	43.57	71.89

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
23.40	0.14	23.54	3.00	-2.34	8.23	2.92	0.54	-0.54

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
35.31	39.56	74.87	9.42	62.47	71.89	-25.89	22.90	-2.99

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	2.78	14.98	57.19	64.99	13.85	6.24	0.01	0.00

←----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz	(Hz)	(Hz)		
50.20	7.02	49.71	9.13	49.98	0.07	0.08	50.18	49.86

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	411	01:49	400	08:46	0.0	0.0	0.0	0.0
Gorakhpur	400	415	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly	400	431	02:51	403	19:12	0.0	0.0	24.2	0.2
Kanpur	400	428	02:54	404	19:14	0.0	0.0	22.1	0.0
Dadri	400	426	23:24	406	19:17	53.1	53.1	11.5	0.0
Ballabgarh	400	437	01:27	410	19:19	0.0	0.0	56.1	24.2
Bawana	400	433	01:10	408	19:06	0.0	0.0	43.5	8.1
Bassi	400	430	01:26	396	07:31	0.0	0.0	32.8	0.0
Hissar	400	426	01:10	396	06:41	0.0	0.0	19.6	0.0
Moga	400	429	01:11	405	19:11	0.0	0.0	34.5	0.0
Abdullapur	400	430	01:10	396	06:39	0.0	0.0	25.7	0.0
Nalagarh	400	436	21:32	396	10:56	0.0	0.0	44.8	21.9
Kishenpur	400	231	02:32	216	19:23	100.0	100.0	0.0	0.0
Wagoora	400	410	01:14	362	08:10	1.9	13.8	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	782	02:53	743	06:25	0.0	0.0	0.0	0.0
Balia	765	785	02:54	744	19:16	0.0	0.0	0.0	0.0
Moga	765	814	01:10	768	06:43	0.0	0.0	30.3	0.0
Agra	765	796	01:27	751	06:25	0.0	0.0	0.0	0.0
Bhiwani	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Unnao	765	777	02:52	732	19:17	0.0	12.8	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	480.47	468.02	482.47	519.70	293.05	293.05
Pong	426.72	384.05	402.44	273.51	402.67	281.22	153.19	42.62
Tehri	829.79	740.04	775.30	267.00	780.60	326.00	68.47	188.00
Koteswar	612.50	598.50	0.00	0.00	0.00	0.00	0.00	0.00
Chamera-I	760.00	748.75	759.11	0.00	0.00	0.00	268.93	277.72
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	507.81	4.16	511.80	1.74	167.80	153.34

* 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	-326	14	0	-282	45	0	-7.11	1.87	-5.24
Delhi	-657	-30	-41	-463	361	-36	-11.65	2.95	-8.70
Haryana	61	39	0	61	126	0	0.88	-0.13	0.75
HP	161	-95	0	-85	-365	0	2.56	-4.45	-1.89
J&K	530	-304	0	317	-14	0	9.45	-3.16	6.30
CHD	0	0	0	0	-10	0	0.00	-0.06	-0.06
Rajasthan	0	574	2	0	493	2	0.00	11.15	11.15
UP	129	0	0	163	392	0	2.82	4.08	6.90
Uttarakhand	90	86	26	158	221	22	3.45	4.98	8.44
Total	-11	283	-12	-131	1248	-12	0.40	17.24	17.64

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-281	-326	342	0	0	0
Delhi	-402	-657	400	-36	-15	-41
Haryana	61	13	161	-500	0	0
HP	168	-85	-6	-847	0	0
J&K	530	317	0	-318	0	0
CHD	0	0	10	-15	0	0
Rajasthan	0	0	577	-24	2	2
UP	176	56	686	0	0	0
Uttarakhand	158	90	375	-15	27	2

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 25.03.2015 :**
Normal.**XIV. Synchronisation of new generating units :****XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**
1. 765kV Bus-II at Anpara-D first time charged at 1854Hrs on 25.03.2015.**XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**