

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 18.03.2015
Date of Reporting : 19.03.2015

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
32712	879	33590	50.01	24771	611	25382	50.10	695.0	23.75

* 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	27.43	6.00		33.43	50.80	50.61	-0.20	84.03	0.00
Haryana	26.75	0.46		27.21	66.42	68.47	2.05	95.68	0.00
Rajasthan	82.08	0.34	3.66	86.09	61.23	62.81	1.57	148.89	0.00
Delhi	17.09			17.09	40.58	40.38	-0.21	57.46	0.07
UP	127.10	3.90		131.00	81.49	80.48	-1.01	211.48	16.41
Uttarakhand		9.79		9.79	21.10	23.01	1.91	32.80	0.53
HP		8.00		8.00	15.03	16.33	1.30	24.32	0.22
J & K		9.21	0.00	9.21	29.49	27.80	-1.70	37.00	6.53
Chandigarh				0.00	3.46	3.37	0.27	3.37	0.00
Total	280.44	37.70	3.66	321.81	369.60	373.23	3.99	695.04	23.75

* 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	4170	0	-107	-86	2916	0	-12	-220	4352
Haryana	5156	0	-102	193	2821	0	301	216	5493
Rajasthan	6592	0	137	522	5678	0	188	717	6956
Delhi	2772	0	-137	-223	1509	0	-36	-828	3283
UP	9597	430	-151	153	8423	355	-138	125	10406
Uttarakhand	1606	40	84	502	1135	0	101	290	1678
HP	951	111	-116	-187	754	0	-10	109	1341
J&K	1689	298	103	316	1451	256	-19	239	1776
Chandigarh	178	0	-8	-10	85	0	-22	0	190
Total	32712	879	-297	1181	24771	611	353	646	34922

* 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 :

Entity	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
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1455	1581	1424	37.16	1548	34.10	3.06
	Rihand I STPS (2*500)	1000	582	879	460	14.63	610	13.23	1.40
	Rihand II STPS (2*500)	1000	470	504	387	11.30	471	10.31	0.98
	Rihand III STPS (2*500)	1000	976	955	743	22.75	948	21.44	1.31
	Dadri I STPS (4*210)	840	815	727	601	15.28	637	14.22	1.06
	Dadri II STPS (2*490)	980	480	482	342	9.05	377	8.69	0.36
	Unchahar I TPS (2*210)	420	405	279	261	8.16	340	8.55	-0.40
	Unchahar II TPS (2*210)	420	403	260	316	8.25	344	8.17	0.08
	Unchahar III TPS (1*220)	210	201	166	151	4.21	175	4.12	0.09
	ISTPP (Jhajhar) (3*500)	1500	1500	883	692	16.84	702	17.27	-0.43
	Dadri GPS (4*130.19+2*154.51)	830	839	398	204	7.41	309	7.45	-0.04
	Anta GPS (3*88.71+1*1153.2)	419	345	213	252	5.77	241	5.64	0.14
	Auraiya GPS (4*111.19+2*109.30)	663	660	162	168	3.98	166	4.03	-0.05
	Dadri Solar	5	1	0	0	0.03	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.05	2	0.07	-0.02
	Singrauli Solar	15	3	0	0	0.06	3	0	-0.01
	Sub Total (A)	11312	9136	7489	6001	165	6872	157	8
B. NPC	NAPS (2*220)	440	395	429	440	9.53	397	9.48	0.05
	RAPS- B (2*220)	440	407	429	445	9.42	392	9.77	-0.35
	RAPS- C (2*220)	440	420	450	451	9.75	406	10.08	-0.33
	Sub Total (B)	1320	1222	1308	1336	28.69	1195	29.33	-0.64
C. NHPC	Chamera I HPS (3*180)	540	534	552	549	12.55	523	12.28	0.27
	Chamera II HPS (3*100)	300	300	305	0	2.98	124	2.90	0.08
	Chamera III HPS (3*77)	231	231	230	0	1.48	62	1.45	0.03
	Bairasuli HPS(3*60)	180	179	182	181	3.41	142	3.36	0.05
	Salal-HPS (6*115)	690	429	456	460	10.66	444	10.29	0.37
	Tanakpur-HPS (3*40)	94	37	31	42	0.96	40	0.90	0.06
	Uri-I HPS (4*120)	480	464	435	475	11.42	476	11.23	0.18
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	210	208	0	1.33	55	1.26	0.07
	Dulhasti-HPS (3*130)	390	387	404	23	3.10	129	2.90	0.20
	Sewa-II HPS (3*40)	120	122	130	130	3.12	130	2.93	0.19
	Parbati 3 (4*130)	520	260	270	0	0.62	26	0.59	0.03
	Sub Total (C)	4065	3153	3203	1861	52	2151	50	2
	D. SJVNL	NJPC (6*250)	1500	1605	1611	0	6.62	276	6.49
Rampur HEP (4*68.67)		275	420	424	0	1.85	77	1.80	0.05
Sub Total (D)		1775	2025	2035	0	8.47	353	8.29	0.17
E. THDC	Tehri HPS (4*250)	1000	582	585	0	6.83	284	6.70	0.13
	Koteshwar HPS (4*100)	400	122	297	90	2.75	115	2.80	-0.05
	Sub Total (E)	1400	704	882	90	9.58	399	9.50	0.08
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	365	682	340	9.41	392	8.76	0.65
	Dehar HPS (6*165)	990	303	495	330	7.18	299	7.27	-0.09
	Pong HPS (6*66)	396	6	121	0	0.11	4	0.15	-0.05
	Sub Total (F)	2900	674	1298	670	16.70	696	16.18	0.51
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	89	0	0.33	14	0.31	0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	697	0	3.40	142	3.36	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	125	96	2.94	122	2.85	0.09
	Budhil HPS(IPP)	70	0	70	0	0.29	12	0.29	0.01
	Sub Total (G)	1662	0	982	96	6.95	290	6.81	0.14
H. Total Regional Entities (A-G)	24434	16914	17196	10054	286.93	11956	277.59	9.34	

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	210	190	4.04	168
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.05	-2
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	210	192	4.18	174
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	598	358	11.20	467
	Talwandi Saboo (1*660)	660	396	340	8.05	336
	Thermal (Total)	4680	1414	1080	27.43	1143
	Total Hydro	1148	258	240	6.00	250
Total Punjab	5828	1672	1320	33.43	1393	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00	0
	DCRTPP (Yamuna nagar) (2*300)	600	278	234	5.90	246
	Faridabad GPS (NTPC)	432	400	170	6.37	265
	RGTPP (khedar) (IPP) (2*600)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	918	305	14.48	603
	Thermal (Total)	4944	1596	709	26.75	1115
	Total Hydro	62	15	16	0.46	19
	Total Haryana	5006	1611	725	27.21	1134
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	601	368	11.81
suratgarh TPS (6*250)		1500	215	383	7.95	331
Chabra TPS (3*250)		750	694	580	15.79	658
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	205	211	5.32	222
RAPS A (NPC) (1*100+1*200)		300	174	166	4.30	179
Barsingar (NLC) (2*125)		250	182	182	4.48	187
Giral LTPS (2*125)		250	81	31	1.63	68
Rajwest LTPS (IPP) (8*135)		1080	724	721	17.21	717
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	602	480	13.59	566
Thermal (Total)		8026	3478	3122	82	3420
Total Hydro		550	20	23	0.34	14
Wind power		2798	153	84	2.95	123
Biomass		99	25	25	0.61	25
Solar		730	1	0	0.11	4
Renewable/Others (Total)		3627	179	109	3.66	153
Total Rajasthan	12203	3677	3254	86.09	3587	
UP	Anpara TPS (3*210+2*500)	1630	1389	1376	32.90	1371
	Obra TPS (2*50+2*94+5*200)	1194	426	427	10.60	442
	Paricha TPS (2*110+2*220+2*250)	1140	686	576	14.90	621
	Panki TPS (2*105)	210	135	131	3.10	129
	Harduaganj TPS (1*60+1*105+2*250)	665	425	442	10.00	417
	Tanda TPS (NTPC) (4*110)	440	386	300	8.00	333
	Roza TPS (IPP) (4*300)	1200	248	194	5.20	217
	Anpara-C (IPP) (2*600)	1200	826	1090	23.20	967
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Thermal (Total)	8129	4521	4536	107.90	4496
	Vishnuparyag HPS (IPP)	400	76	73	1.80	75
	Other Hydro	527	113	48	2.10	88
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5510	5457	131.00	5383
	Uttarakhand	Total Hydro	1398	428	388	9.79
Total Uttarakhand		1398	428	388	9.79	408
Delhi	Raighat TPS (2*67.5)	135	41	46	1.36	57
	Delhi Gas Turbine (6x30 + 3x34)	282	81	81	1.93	80
	Pragati Gas Turbine (2x104+ 1x122)	330	154	158	3.79	158
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	320	272	7.41	309
	Badarpur TPS (NTPC) (3*95+2*210)	705	168	165	2.60	108
	Thermal (Total)	2917	764	722	17.09	712
Total Delhi	2917	764	722	17.09	712	
HP	Baspa HPS (IPP) (2*150)	300	0	0	0.82	34
	Malana HPS (IPP) (2*43)	86	0	0	0.25	10
	Other Hydro	728	294	267	6.93	289
	Total HP	1114	294	267	8.00	333
J & K	Baqilhar HPS (IPP) (3*150)	450	326	320	7.74	323
	Other Hydro/IPP	436	65	0	1.46	61
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	391	320	9.21	384
Total State Control Area Generation		39597	14347	12453	321.81	13334
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4800	3121	117.74	4906
Total Regional Availability(Gross)		64032	36343	25628	726.48	30195

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8204	2621	90.10	3754
State Control Area Hydro	5684	1519	1302	37.70	1496
Total Regional Hydro	17116	9723	3923	127.80	5250

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	100	400	50	6.17	0.07	6.10
Gwalior-Agra (D/C)	1340	856	1998	0	35.74	0.00	35.74
Zerda-Kankroli	-134	-303	0	332	0.00	5.28	-5.28
Zerda-Bhinmal	-77	-239	4	282	0.00	3.77	-3.77
Malanpur-Auraiya	-70	-76	0	81	0.00	1.23	-1.23
Badod-Kota/Morak	-50	-52	26	59	0.00	0.79	-0.79
Mundra-Mohindergarh(HVDC)	2303	2002	2504	0	53.86	0.00	53.86
Vindhychal - Rihand	417	313	505	0	11.17	0.00	11.17
Sub Total WR	4129	2601			106.94	11.14	95.79
Pusauli Bypass	200	200	200	0	4.79	0.00	4.79
MZP- GKP (D/C)	-26	-20	118	147	0.08	0.00	0.08
Patna-Balia(D/C)	624	639	775	0	16.22	0.00	16.22
B'Sharif-Balia (D/C)	-179	-243	0	258	0.00	4.12	-4.12
Pusauli-Balia	-6	-52	47	105	0.00	0.47	-0.47
Gaya-Fatehpur (765 Kv)	85	50	260	36	3.09	0.00	3.09
Pusauli-Sahupuri	176	179	190	0	3.69	0.00	3.69
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-34	-33	0	40	0.80	0.00	0.80
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-169	-200	24	258	0.00	2.13	-2.13
Sub Total ER	671	520			28.67	6.72	21.95
Total IR Exch	4800	3121			135.60	17.86	117.74

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
24.90	0.18	25.08	3.71	-1.63	4.45	18.60	0.57	-0.57

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
33.82	74.45	108.27	21.95	95.79	117.74	-11.87	21.34	9.47

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	1.01	14.30	58.68	68.22	13.34	4.24	0.00	0.00

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				
50.19	23.46	49.73	21.06	49.98	0.06	0.07	50.19	49.92

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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	481.00	481.64	484.27	569.03	235.03	282.04
Pong	426.72	384.05	401.94	366.33	403.41	304.55	187.77	11.47
Tehri	829.79	740.04	778.10	299.00	783.75	368.00	41.49	189.00
Koteshwar	612.50	598.50	611.43	4.95	610.81	4.95	189.00	183.00
Chamera-I	760.00	748.75	758.12	0.00	0.00	0.00	266.62	338.74
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	507.09	3.07	510.17	1.64	500.40	143.66

* 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	106	0	-282	196	0	-7.09	5.99	-1.10
Delhi	-632	-165	-30	-439	246	-30	-11.07	2.13	-8.94
Haryana	23	193	0	23	170	0	-0.02	2.44	2.42
HP	162	-53	0	42	-229	0	3.33	-3.21	0.12
J&K	543	-304	0	330	-14	0	9.77	-3.17	6.61
CHD	0	0	0	0	-10	0	0.00	-0.06	-0.06
Rajasthan	0	715	2	0	520	2	0.00	14.17	14.17
UP	125	0	0	153	0	0	2.71	0.00	2.71
Uttarakhand	90	185	16	158	328	17	3.45	7.04	10.49
Total	-15	674	-13	-14	1206	-11	1.08	25.33	26.41

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-281	-326	397	15	0	0
Delhi	-377	-632	610	-165	-30	-30
Haryana	23	-25	194	-321	0	0
HP	168	42	-8	-604	0	0
J&K	543	330	0	-304	0	0
CHD	0	0	0	-21	0	0
Rajasthan	0	0	716	450	2	2
UP	176	51	0	0	0	0
Uttarakhand	158	90	356	184	46	8

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 18.03.2015 :**
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 :**