

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 26.03.2015
Date of Reporting : 27.03.2015

I. Regional Availability/Demand:

Demand Met	Evening Peak (19:00 Hrs) MW			Off Peak (03:00 Hrs) MW			Day Energy (Net MU)		
	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
35701	1528	37229	49.99	32182	1782	33964	50.04	819.2	50.30

* 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	57.54	7.58		65.12	47.81	49.12	1.31	114.23	0.65
Haryana	45.46	0.42		45.88	65.62	64.03	-1.59	109.91	0.00
Rajasthan	123.64	0.91	11.29	135.84	47.77	45.40	-2.36	181.24	0.00
Delhi	22.44			22.44	47.92	47.77	-0.14	70.21	0.03
UP	131.80	6.70		138.50	102.39	104.68	2.29	243.18	42.18
Uttarakhand		11.94		11.94	21.29	22.51	1.22	34.45	0.79
HP		9.78		9.78	13.57	13.26	-0.31	23.04	0.00
J & K		12.70	0.00	12.70	26.92	26.56	-0.36	39.26	6.65
Chandigarh				0.00	3.75	3.70	0.27	3.70	0.00
Total	380.87	50.03	11.29	442.19	377.04	377.03	0.31	819.22	50.30

* 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	5111	0	19	-274	4670	0	-45	-321	5437
Haryana	5502	0	136	175	3555	0	-51	114	5892
Rajasthan	6779	0	-371	523	7735	0	25	366	8124
Delhi	3295	0	-124	82	2125	0	6	-669	3564
UP	10446	1165	-125	639	10550	1520	301	129	11209
Uttarakhand	1634	75	144	457	1249	0	35	317	1652
HP	955	0	15	-446	738	0	-1	71	1256
J&K	1787	288	113	242	1461	262	-101	222	1939
Chandigarh	193	0	11	-10	99	0	-28	-5	193
Total	35701	1528	-183	1389	32182	1782	141	226	38099

* 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 :

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	1532	1562	1548	38.71	1613	35.94	2.78
Rihand I STPS (2*500)	1000	918	924	1011	23.18	966	21.27	1.91
Rihand II STPS (2*500)	1000	475	495	521	11.95	498	10.89	1.06
Rihand III STPS (2*500)	1000	970	907	1019	23.27	970	22.10	1.17
Dadri I STPS (4*210)	840	815	699	628	16.73	697	15.88	0.85
Dadri II STPS (2*490)	980	480	417	389	9.76	407	9.53	0.23
Unchahar I TPS (2*210)	420	405	315	438	9.38	391	9.44	-0.06
Unchahar II TPS (2*210)	420	403	292	436	9.24	385	9.03	0.22
Unchahar III TPS (1*220)	210	201	144	217	4.54	189	4.45	0.09
ISTPP (Jhajhar) (3*500)	1500	1500	955	743	20.35	848	22.06	-1.71
Dadri GPS (4*130.19+2*154.51)	830	828	329	331	8.05	336	7.98	0.08
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	656	149	151	3.61	150	3.66	-0.05
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
Unchahar Solar	10	3	0	0	0.04	2	0.06	-0.03
Singrauli Solar	15	3	0	0	0.04	2	0	-0.03
Sub Total (A)	11312	9362	7187	7431	179	7453	172	6
B. NPC								
NAPS (2*220)	440	388	425	432	9.33	389	9.31	0.02
RAPS- B (2*220)	440	401	440	445	9.56	398	9.62	-0.06
RAPS- C (2*220)	440	410	441	442	9.56	398	9.84	-0.28
Sub Total (B)	1320	1199	1306	1319	28.45	1185	28.78	-0.33
C. NHPC								
Chamera I HPS (3*180)	540	534	548	547	13.07	545	12.82	0.26
Chamera II HPS (3*100)	300	300	306	102	5.57	232	5.45	0.12
Chamera III HPS (3*77)	231	231	228	66	3.25	135	3.15	0.10
Bairasuli HPS(3*60)	180	179	180	180	4.20	175	4.15	0.05
Salal-HPS (6*115)	690	440	460	460	11.09	462	10.57	0.52
Tanakpur-HPS (3*40)	94	41	61	54	1.08	45	0.98	0.09
Uri-I HPS (4*120)	480	468	477	475	11.36	473	11.24	0.11
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	210	211	0	1.72	72	1.65	0.07
Dulhasti-HPS (3*130)	390	387	402	20	5.08	212	4.80	0.28
Sewa-II HPS (3*40)	120	119	130	130	3.08	128	2.85	0.23
Parbati 3 (4*130)	520	355	133	0	1.22	51	1.30	-0.08
Sub Total (C)	4065	3264	3137	2035	61	2529	59	2
D. SJVNL								
NJPC (6*250)	1500	1605	1605	0	9.71	404	9.60	0.11
Rampur HEP (4*68.67)	275	370	371	0	2.65	111	2.57	0.09
Sub Total (D)	1775	1975	1976	0	12.36	515	12.16	0.20
E. THDC								
Tehri HPS (4*250)	1000	570	570	0	6.31	263	6.29	0.03
Koteshwar HPS (4*100)	400	117	302	91	2.83	118	2.80	0.03
Sub Total (E)	1400	687	872	91	9.14	381	9.09	0.05
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	413	866	397	11.78	491	9.91	1.87
Dehar HPS (6*165)	990	450	495	495	11.65	485	10.80	0.85
Pong HPS (6*66)	396	23	184	0	0.60	25	0.55	0.05
Sub Total (F)	2900	886	1545	892	24.02	1001	21.26	2.77
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.89	37	0.85	0.04
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	790	0	5.09	212	5.05	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	295	191	6.21	259	6.07	0.14
Budhil HPS(IPP)	70	0	0	36	0.43	18	0.42	0.00
Sub Total (G)	1662	0	1085	227	12.63	526	12.39	0.23
H. Total Regional Entities (A-G)	24434	17372	17108	11994	326.17	13590	315.00	11.17

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	416	420	9.61	400
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	218	200	4.41	184
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	684	686	14.85	619
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	694	692	15.72	655
	Talwandi Saboo (1*660)	660	353	660	12.95	540
	Thermal (Total)	4680	2365	2658	57.54	2397
	Total Hydro	1148	382	262	7.58	316
Total Punjab	5828	2747	2920	65.12	2713	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	219	0	2.47	103
	DCRTPP (Yamuna nagar) (2*300)	600	539	478	12.38	516
	Faridabad GPS (NTPC)	432	145	139	3.52	147
	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	1247	824	27.09	1129
	Thermal (Total)	4944	2150	1441	45.46	1894
	Total Hydro	62	16	16	0.42	18
	Total Haryana	5006	2166	1457	45.88	1912
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1058	1071	25.69
suratgarh TPS (6*250)		1500	947	938	22.71	946
Chabra TPS (3*250)		750	799	753	17.71	738
Dholpur GPS (3*110)		330	117	122	3.04	127
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	203	166	4.60	192
RAPS A (NPC) (1*100+1*200)		300	162	195	4.04	168
Barsingar (NLC) (2*125)		250	198	194	4.55	190
Giral LTPS (2*125)		250	67	76	1.28	53
Rajwest LTPS (IPP) (8*135)		1080	462	846	16.80	700
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	900	860	23.22	967
Thermal (Total)		8026	4913	5221	124	5151
Total Hydro		550	61	22	0.91	38
Wind power		2798	400	679	10.52	438
Biomass		99	32	32	0.77	32
Solar		730	0	0	0.00	0
Renewable/Others (Total)		3627	432	711	11.29	470
Total Rajasthan		12203	5406	5954	135.84	5660
UP	Anpara TPS (3*210+2*500)	1630	1356	1310	32.00	1333
	Obra TPS (2*50+2*94+5*200)	1194	447	438	10.50	438
	Paricha TPS (2*110+2*220+2*250)	1140	708	696	15.90	663
	Panki TPS (2*105)	210	135	77	2.70	113
	Harduaganj TPS (1*60+1*105+2*250)	665	225	225	5.30	221
	Tanda TPS (NTPC) (4*110)	440	390	390	9.50	396
	Roza TPS (IPP) (4*300)	1200	532	378	11.20	467
	Anpara-C (IPP) (2*600)	1200	1076	1078	25.50	1063
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Thermal (Total)	8129	4869	4592	112.60	4692
	Vishnuparyag HPS (IPP)	400	99	96	2.20	92
	Other Hydro	527	72	257	4.50	188
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5840	5745	138.50	5679
	Uttarakhand	Total Hydro	1398	529	520	11.94
Total Uttarakhand		1398	529	520	11.94	498
Delhi	Raighat TPS (2*67.5)	135	48	47	1.09	45
	Delhi Gas Turbine (6x30 + 3x34)	282	76	80	1.82	76
	Pragati Gas Turbine (2x104+ 1x122)	330	275	276	6.64	277
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	303	273	7.11	296
	Badarpur TPS (NTPC) (3*95+2*210)	705	266	243	5.78	241
	Thermal (Total)	2917	968	919	22.44	935
Total Delhi	2917	968	919	22.44	935	
HP	Baspa HPS (IPP) (2*150)	300	76	0	1.24	52
	Malana HPS (IPP) (2*43)	86	14	12	0.66	28
	Other Hydro	728	322	348	7.88	328
	Total HP	1114	412	360	9.78	407
J & K	Baqilhar HPS (IPP) (3*150)	450	440	438	10.55	440
	Other Hydro/IPP	436	91	76	2.15	89
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	531	514	12.70	529
Total State Control Area Generation		39597	18599	18389	442.19	18333
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2886	2931	71.58	2983
Total Regional Availability(Gross)		64032	38593	33314	839.94	34906

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8320	3017	112.22	4676
State Control Area Hydro	5684	2003	1951	50.03	1993
Total Regional Hydro	17116	10323	4968	162.24	6668

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	-250	-500	0	500	0.00	10.75	-10.75
Gwalior-Agra (D/C)	1227	1776	1889	0	35.96	0.00	35.96
Zerda-Kankroli	-357	-393	0	506	0.00	8.37	-8.37
Zerda-Bhinmal	-267	-333	0	497	0.00	6.67	-6.67
Malanpur-Auraiya	59	43	0	93	0.00	1.29	-1.29
Badod-Kota/Morak	-225	-184	0	124	0.00	4.24	-4.24
Mundra-Mohindergarh(HVDC)	1804	1803	2006	0	44.26	0.00	44.26
Vindhychal - Rihand	499	497	510	0	11.96	0.00	11.96
Sub Total WR	2490	2709			92.19	31.32	60.87
Pusauli Bypass	-492	-460	0	572	0.00	10.97	-10.97
MZP- GKP (D/C)	-36	-16	80	138	0.00	0.35	-0.35
Patna-Balia(D/C)	450	478	559	0	11.70	0.00	11.70
B'Sharif-Balia (D/C)	-28	-32	21	73	0.00	0.62	-0.62
Pusauli-Balia	43	56	87	2	0.52	0.00	0.52
Gaya-Fatehpur (765 Kv)	153	101	324	0	4.62	0.00	4.62
Pusauli-Sahupuri	201	0	216	0	2.34	0.00	2.34
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-26	-30	0	40	0.00	0.74	-0.74
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	131	125	272	0	4.22	0.00	4.22
Sub Total ER	396	222			23.40	12.68	10.72
Total IR Exch	2886	2931			115.59	44.00	71.58

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
24.41	0.14	24.55	3.06	-2.08	4.88	8.51	2.94	-2.94

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
35.42	44.02	79.45	10.72	60.87	71.58	-24.71	16.85	-7.86

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	0.94	5.59	22.41	62.87	60.49	11.19	4.77	1.23	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				
50.31	17.03	49.59	13.36	49.96	0.11	0.10	50.22	49.8

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	21:44	400	16:01	0.0	0.0	0.0	0.0
Gorakhpur	400	415	17:05	390	13:35	0.0	0.0	0.0	0.0
Bareilly	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Kanpur	400	421	04:15	401	13:36	0.0	0.0	0.5	0.0
Dadri	400	425	22:55	404	10:48	0.0	0.0	29.9	0.0
Ballabgarh	400	432	23:30	403	10:06	0.0	0.0	38.1	2.2
Bawana	400	426	04:10	404	11:12	0.0	0.0	34.0	0.0
Bassi	400	423	21:25	398	11:36	0.0	0.0	4.9	0.0
Hissar	400	419	21:22	395	13:34	0.0	0.0	0.0	0.0
Moga	400	421	04:04	403	13:36	0.0	0.0	2.5	0.0
Abdullapur	400	427	23:28	396	18:50	0.0	0.0	32.6	0.0
Nalagarh	400	429	01:15	384	14:25	0.0	4.9	40.4	0.0
Kishenpur	400	226	03:21	214	19:39	100.0	100.0	0.0	0.0
Wagoora	400	409	04:36	378	19:43	1.0	23.7	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	781	21:40	745	13:35	0.0	0.0	0.0	0.0
Balia	765	767	17:18	738	13:35	0.0	1.3	0.0	0.0
Moga	765	801	21:49	765	13:35	0.0	0.0	0.0	0.0
Agra	765	792	21:40	755	10:24	0.0	0.0	0.0	0.0
Bhiwani	765	808	21:40	770	09:30	0.0	0.0	19.5	0.0
Unnao	765	771	21:40	737	13:36	0.0	4.1	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	480.43	468.02	482.41	519.70	311.26	349.46
Pong	426.72	384.05	402.49	281.22	402.62	281.22	137.34	42.53
Tehri	829.79	740.04	774.95	262.00	780.05	320.38	69.47	179.00
Koteshwar	612.50	598.50	611.10	5.20	610.78	4.95	179.00	187.00
Chamera-I	760.00	748.75	758.66	0.00	0.00	0.00	313.66	353.25
Rihand	268.22	252.98	846.00	195.00	850.20	258.70	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	508.19	4.52	512.03	2.17	322.44	201.81

* 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	6	0	-282	8	0	-7.10	1.46	-5.65
Delhi	-657	28	-41	-409	531	-41	-10.90	5.84	-5.06
Haryana	61	53	0	61	114	0	0.88	-0.33	0.56
HP	161	-90	0	-85	-361	0	2.56	-5.15	-2.60
J&K	530	-307	0	266	-24	0	8.74	-3.40	5.34
CHD	0	-5	0	0	-10	0	0.00	-0.09	-0.09
Rajasthan	0	364	2	0	521	2	0.00	9.78	9.78
UP	129	0	0	149	490	0	3.01	4.68	7.70
Uttarakhand	90	180	47	158	258	41	3.45	6.87	10.32
Total	-11	229	8	-142	1528	3	0.64	19.66	20.30

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-281	-326	340	0	0	0
Delhi	-347	-657	594	-36	-41	-41
Haryana	61	13	154	-355	0	0
HP	168	-85	-79	-652	0	0
J&K	530	266	-3	-321	0	0
CHD	0	0	10	-20	0	0
Rajasthan	0	0	548	-119	2	-7
UP	192	42	784	0	0	0
Uttarakhand	158	90	434	-16	49	41

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 26.03.2015 :****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 :**