

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 31.03.2015
Date of Reporting : 01.04.2015

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
31230	1268	32498	49.88	27233	837	28069	50.09	730.6	34.82

* 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	38.07	5.59		43.65	45.22	45.31	0.09	88.97	0.00
Haryana	22.42	0.55		22.97	70.38	69.45	-0.93	92.42	2.63
Rajasthan	98.28	0.58	6.38	105.25	56.16	58.38	2.22	163.63	0.00
Delhi	18.02			18.02	46.30	46.40	0.10	64.41	0.02
UP	122.51	5.71		128.22	95.12	94.98	-0.15	223.20	25.41
Uttarakhand		11.94		11.94	18.21	19.54	1.33	31.48	0.12
HP		12.31		12.31	11.42	12.55	1.14	24.86	0.00
J & K		12.69	0.00	12.69	27.55	25.39	-2.16	38.08	6.65
Chandigarh				0.00	3.59	3.52	0.27	3.52	0.00
Total	299.29	49.37	6.38	355.05	373.95	375.52	1.91	730.57	34.82

* 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	3998	0	-97	-24	3302	0	-169	-80	4386
Haryana	4374	0	-124	175	2737	0	-108	198	5383
Rajasthan	6705	0	112	505	6424	0	-17	676	7557
Delhi	3100	0	-67	-21	1983	0	51	-683	3303
UP	8516	940	-932	142	9492	575	305	129	10088
Uttarakhand	1524	40	115	343	1101	0	74	196	1578
HP	1052	0	83	-642	812	0	50	-63	1338
J&K	1782	288	-78	314	1283	262	-57	27	1875
Chandigarh	180	0	6	-10	99	0	-4	0	181
Total	31230	1268	-982	781	27233	837	126	400	35515

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

Diversity is 1.00

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	1945	2079	1884	46.23	1926	46.23	-0.01
	Rihand I STPS (2*500)	1000	925	958	704	20.62	859	18.93	1.68
	Rihand II STPS (2*500)	1000	475	476	361	10.24	427	9.30	0.94
	Rihand III STPS (2*500)	1000	970	944	757	20.90	871	19.64	1.26
	Dadri I STPS (4*210)	840	815	715	565	16.07	670	15.51	0.56
	Dadri II STPS (2*490)	980	480	367	355	9.20	383	9.09	0.11
	Unchahar I TPS (2*210)	420	405	360	260	7.40	308	7.95	-0.55
	Unchahar II TPS (2*210)	420	403	340	260	6.96	290	7.20	-0.24
	Unchahar III TPS (1*220)	210	201	194	128	3.62	151	3.68	-0.06
	ISTPP (Jhajhar) (3*500)	1500	1500	707	722	16.85	702	17.74	-0.89
	Dadri GPS (4*130.19+2*154.51)	830	816	394	414	9.25	385	9.35	-0.10
	Anta GPS (3*88.71+1*153.2)	419	172	0	0	0.00	0	0.00	0.00
	Auraiya GPS (4*111.19+2*109.30)	663	647	268	167	4.97	207	5.17	-0.20
	Dadri Solar	5	1	0	0	0.02	1	0.02	0.00
	Unchahar Solar	10	3	0	0	0.04	2	0.06	-0.02
	Singrauli Solar	15	3	0	0	0.00	0	0	-0.07
	Sub Total (A)	11312	9760	7802	6577	172	7182	170	2
B. NPC	NAPS (2*220)	440	393	434	442	9.62	401	9.43	0.19
	RAPS- B (2*220)	440	195	217	220	4.58	191	4.68	-0.10
	RAPS- C (2*220)	440	270	214	218	4.45	185	6.48	-2.03
	Sub Total (B)	1320	858	865	880	18.66	777	20.59	-1.94
C. NHPC	Chamera I HPS (3*180)	540	534	550	0	9.85	410	9.91	-0.06
	Chamera II HPS (3*100)	300	300	304	209	6.42	267	6.38	0.04
	Chamera III HPS (3*77)	231	231	230	80	3.54	147	3.59	-0.05
	Bairasuli HPS(3*60)	180	179	179	150	3.59	150	3.54	0.05
	Salal-HPS (6*115)	690	533	548	545	13.05	544	12.63	0.43
	Tanakpur-HPS (3*40)	94	52	61	63	1.32	55	1.23	0.09
	Uri-I HPS (4*120)	480	460	476	478	11.30	471	11.06	0.24
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	210	209	0	1.87	78	1.82	0.05
	Dulhasti-HPS (3*130)	390	387	406	107	6.25	260	6.00	0.25
	Sewa-II HPS (3*40)	120	119	130	130	3.09	129	2.85	0.24
	Parbati 3 (4*130)	520	130	131	0	1.13	47	1.11	0.03
	Sub Total (C)	4065	3135	3223	1762	61	2559	60	1
D. SJVNL	NJPC (6*250)	1500	1605	1604	0	11.55	481	11.48	0.08
	Rampur HEP (4*68.67)	275	388	300	0	2.86	119	2.87	-0.02
	Sub Total (D)	1775	1993	1904	0	14.41	600	14.35	0.06
E. THDC	Tehri HPS (4*250)	1000	744	750	0	6.45	269	6.40	0.05
	Koteshwar HPS (4*100)	400	117	300	0	2.85	119	2.80	0.05
	Sub Total (E)	1400	861	1050	0	9.30	388	9.20	0.10
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	414	381	382	10.11	421	9.95	0.16
	Dehar HPS (6*165)	990	480	495	495	11.68	487	11.52	0.16
	Pong HPS (6*66)	396	8	124	0	0.13	5	0.18	-0.05
	Sub Total (F)	2900	902	1000	877	21.92	913	21.65	0.27
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.50	21	0.48	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	850	0	5.83	243	6.48	-0.65
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	211	175	4.98	207	4.90	0.07
	Budhil HPS(IPP)	70	0	35	0	0.69	29	0.91	-0.22
	Sub Total (G)	1662	0	1095	175	11.99	500	12.77	-0.78
H. Total Regional Entities (A-G)		24434	17509	16940	10271	310.05	12919	308.63	1.42

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	160	160	3.88	162
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	110	80	2.12	88
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	367	365	8.74	364
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	709	693	15.91	663
	Talwandi Saboo (1*660)	660	365	340	7.43	309
	Thermal (Total)	4680	1711	1638	38.07	1586
	Total Hydro	1148	255	132	5.59	233
	Total Punjab	5828	1966	1770	43.65	1819
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	0	0	0.00	0
Faridabad GPS (NTPC)		432	0	0	0.00	0
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	984	754	22.42	934
Thermal (Total)		4944	984	754	22.42	934
Total Hydro		62	19	18	0.55	23
Total Haryana		5006	1003	772	22.97	957
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	879	874	21.24
	suratgarh TPS (6*250)	1500	563	569	14.57	607
	Chabra TPS (3*250)	750	794	752	19.04	793
	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	168	219	5.19	216
	RAPS A (NPC) (1*100+1*200)	300	168	148	4.06	169
	Barsingsar (NLC) (2*125)	250	198	200	4.64	193
	Giral LTPS (2*125)	250	75	78	1.28	53
	Rajwast LTPS (IPP) (8*135)	1080	846	602	18.17	757
	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	583	435	10.09	420
	Thermal (Total)	8026	4274	3877	98	4095
	Total Hydro	550	48	22	0.58	24
	Wind power	2798	41	600	5.64	235
	Biomass	99	25	25	0.59	25
	Solar	730	1	0	0.15	6
	Renewable/Others (Total)	3627	67	625	6.38	266
	Total Rajasthan	12203	4389	4524	105.25	4385
UP	Anpara TPS (3*210+2*500)	1630	916	1123	22.92	955
	Obra TPS (2*50+2*94+5*200)	1194	479	481	11.37	474
	Paricha TPS (2*110+2*220+2*250)	1140	691	660	15.98	666
	Panki TPS (2*105)	210	122	126	2.97	124
	Harduaganj TPS (1*60+1*105+2*250)	665	223	227	5.28	220
	Tanda TPS (NTPC) (4*110)	440	389	380	9.39	391
	Roza TPS (IPP) (4*300)	1200	774	1000	22.64	944
	Anpara-C (IPP) (2*600)	1200	536	540	12.75	531
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Thermal (Total)	8129	4130	4537	103.31	4305
	Vishnuparyag HPS (IPP)	400	98	99	2.30	96
	Other Hydro	527	59	303	3.41	142
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5087	5739	128.22	5247
	Uttarakhand	Total Hydro	1398	469	469	11.94
Total Uttarakhand		1398	469	469	11.94	497
Delhi	Raighat TPS (2*67.5)	135	46	48	1.06	44
	Delhi Gas Turbine (6x30 + 3x34)	282	77	77	1.89	79
	Pragati Gas Turbine (2x104+ 1x122)	330	153	157	3.70	154
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	308	269	7.12	297
	Badarpur TPS (NTPC) (3*95+2*210)	705	234	237	4.26	177
	Thermal (Total)	2917	818	788	18.02	751
Total Delhi	2917	818	788	18.02	751	
HP	Baspa HPS (IPP) (2*150)	300	32	32	1.31	55
	Malana HPS (IPP) (2*43)	86	12	47	0.62	26
	Other Hydro	728	424	435	10.38	433
	Total HP	1114	468	514	12.31	513
J & K	Baqilhar HPS (IPP) (3*150)	450	440	436	10.54	439
	Other Hydro/IPP	436	94	76	2.15	89
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	534	512	12.69	529
Total State Control Area Generation		39597	14734	15088	355.05	14698
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3349	2701	84.91	3538
Total Regional Availability(Gross)		64032	35022	28061	750.00	31154

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8027	2639	113.36	4723
State Control Area Hydro	5684	1852	1970	49.37	1961
Total Regional Hydro	17116	9879	4609	162.73	6685

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	-500	-500	0	500	0.00	12.11	-12.11
Gwalior-Agra (D/C)	1588	955	2032	0	34.95	0.00	34.95
Zerda-Kankroli	-206	-296	0	325	0.00	5.65	-5.65
Zerda-Bhinmal	-149	-245	0	309	0.00	4.51	-4.51
Malanpur-Auraiya	-46	-74	0	75	0.00	1.21	-1.21
Badod-Kota/Morak	-123	-77	12	123	0.00	1.15	-1.15
Mundra-Mohindergarh(HVDC)	2002	1501	2204	0	42.11	0.00	42.11
Vindhychal - Rihand	505	499	509	0	11.78	0.00	11.78
Sub Total WR	3071	1763			88.84	24.62	64.22
Pusauli Bypass	-415	-321	0	418	0.00	8.49	-8.49
MZP- GKP (D/C)	10	205	258	18	2.83	0.00	2.83
Patna-Balia(D/C)	519	623	667	0	14.31	0.00	14.31
B'Sharif-Balia (D/C)	-26	85	105	26	0.96	0.00	0.96
Pusauli-Balia	-8	6	59	22	0.34	0.00	0.34
Gaya-Fatehpur (765 Kv)	102	203	277	0	4.89	0.00	4.89
Pusauli-Sahupuri	137	156	161	0	3.12	0.00	3.12
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	40	42	0	42	0.00	0.90	-0.90
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-81	-61	10	86	3.63	0.00	3.63
Sub Total ER	278	938			30.08	9.39	20.69
Total IR Exch	3349	2701			118.92	34.02	84.91

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
20.89	0.55	21.45	3.00	-2.38	5.69	-0.04	2.83	-2.83

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
32.96	50.02	82.98	20.69	64.22	84.91	-12.27	14.19	1.93

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	0.60	1.84	11.28	47.00	60.53	17.04	10.60	1.27	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				
50.29	4.34	49.57	19.11	50.00	0.08	0.09	50.29	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	407	02:03	401	21:54	0.0	0.0	0.0	0.0
Gorakhpur	400	415	18:02	394	19:10	0.0	0.0	0.0	0.0
Bareilly	400	423	03:01	401	19:21	0.0	0.0	9.6	0.0
Kanpur	400	421	04:31	409	11:23	0.0	0.0	1.2	0.0
Dadri	400	425	03:01	406	19:10	0.0	0.0	24.9	0.0
Ballabgarh	400	431	03:01	403	19:11	0.0	0.0	44.2	0.6
Bawana	400	427	02:06	405	19:10	0.0	0.0	41.1	0.0
Bassi	400	422	03:58	400	19:10	0.0	0.0	0.6	0.0
Hissar	400	421	02:18	396	19:08	0.0	0.0	0.0	0.0
Moga	400	425	03:00	405	19:10	0.0	0.0	25.7	0.0
Abdullapur	400	428	16:49	396	19:10	0.0	0.0	48.1	0.0
Nalagarh	400	434	03:03	410	19:12	0.0	0.0	60.9	15.1
Kishenpur	400	227	02:52	214	19:21	100.0	100.0	0.0	0.0
Wagoora	400	407	04:29	374	19:38	8.6	25.8	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	777	18:01	740	19:10	0.0	1.1	0.0	0.0
Balia	765	773	04:23	745	19:20	0.0	0.0	0.0	0.0
Moga	765	802	23:54	767	19:10	0.0	0.0	1.1	0.0
Agra	765	792	04:35	750	19:10	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	775	04:29	744	19:11	0.0	0.0	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	480.51	468.02	482.25	511.55	358.34	303.07
Pong	426.72	384.05	402.83	288.96	402.12	266.33	274.73	11.41
Tehri	829.79	740.04	773.65	251.76	777.50	285.56	83.25	184.00
Koteshwar	612.50	598.50	611.25	5.20	610.92	4.95	184.00	189.00
Chamera-I	760.00	748.75	759.50	0.00	0.00	0.00	323.73	266.56
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	509.67	2.99	513.33	2.14	276.53	113.05

* 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	-322	242	0	-282	257	1	-7.04	6.53	-0.51
Delhi	-657	15	-41	-464	484	-41	-11.67	5.02	-6.65
Haryana	60	139	0	56	119	0	0.80	2.11	2.90
HP	161	-225	0	-86	-557	0	2.55	-9.23	-6.68
J&K	530	-502	0	317	-3	0	9.46	-4.36	5.10
CHD	0	0	0	0	-10	0	0.00	-0.04	-0.04
Rajasthan	-4	677	2	0	503	2	-0.04	12.53	12.49
UP	129	0	0	142	0	0	2.68	0.00	2.68
Uttarakhand	90	80	26	158	141	45	3.44	3.43	6.87
Total	-13	426	-13	-159	933	7	0.18	15.98	16.16

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-277	-326	364	5	1	0
Delhi	-402	-657	543	-41	-41	-41
Haryana	60	7	139	-287	0	0
HP	167	-86	-172	-738	0	0
J&K	530	317	-3	-502	0	0
CHD	0	0	0	-20	0	0
Rajasthan	0	-4	679	397	2	2
UP	197	42	0	0	0	0
Uttarakhand	158	90	264	0	46	25

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 31.03.2015 :****XIV. Synchronisation of new generating units :****XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**

1. Anpara D TPS unit no 2 (500MW) of UPPCL First Time Test synchronized at 0917 hrs on 31.03.2015.
2. Koldam HEP unit no 1 (200MW) of NTPC Ltd First Time Test synchronized at 1030 hrs on 31.03.2015.
3. 400 kV Panchkula-Panipat First Time Test synchronized at 12:03 hrs of on 31.03.2015 after LIL0 of 400 kV Dehar-Panipat line at 400 kV Panchkula (PG S/S).
4. 400 kV Tie bay of Kashipur S/S of 400kV Kashipur- Bareilly line First Time Test synchronized at 23:45 hrs of on 31.03.2015
5. 765 kV Sasan- Vindhyachal of PGCIL First Time Test synchronized at 23:45 hrs of on 31.03.2015 (WRLDC)

XVI. Tripping of lines in pooling stations :**XVII. Complete generation loss in a generating station :**