

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पॉवरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 27.04.2015
Date of Reporting : 28.04.2015

I. Regional Availability/Demand:

Evening Peak (20:00 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
39002	2366	41368	50.07	33806	1306	35112	50.07	825.0	36.66

* 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	35.03	5.60		40.63	69.52	68.82	-0.69	109.46	0.00
Haryana	31.29	0.70		31.99	77.05	76.83	-0.21	108.82	0.00
Rajasthan	99.11	0.00	17.26	116.37	63.05	63.23	0.18	179.60	0.00
Delhi	23.43			23.43	60.54	60.64	0.10	84.07	0.02
UP	131.10	7.30		138.40	109.22	110.93	1.71	249.33	30.74
Uttarakhand		12.44		12.44	22.20	23.27	1.07	35.70	0.02
HP		15.06		15.06	9.38	8.75	-0.63	23.81	0.00
J & K		13.92	0.00	13.92	19.61	15.71	-3.90	29.63	5.88
Chandigarh				0.00	4.81	4.61	0.27	4.61	0.00
Total	319.96	55.02	17.26	392.24	435.37	432.81	-2.10	825.04	36.66

* 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 (20:00 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	5481	0	-158	113	4908	0	-15	345	5481
Haryana	6022	0	-2	329	5064	0	-26	312	6140
Rajasthan	7532	0	-132	375	6815	0	-207	462	8052
Delhi	3806	2	-67	203	3155	0	97	-139	4112
UP	11358	2010	542	238	10973	1165	529	617	12200
Uttarakhand	1774	0	102	369	1281	0	76	234	1774
HP	1040	0	-112	-687	758	0	-89	-556	1173
J&K	1770	354	358	-187	703	141	-426	-223	1862
Chandigarh	219	0	-16	0	149	0	-10	0	224
Total	39002	2366	514	753	33806	1306	-71	1053	39839

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

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	1703	1808	1823	42.07	1753	39.15	2.92
	Rihand I STPS (2*500)	1000	872	859	801	18.95	790	17.29	1.67
	Rihand II STPS (2*500)	1000	960	980	800	20.24	844	18.47	1.78
	Rihand III STPS (2*500)	1000	963	731	766	20.07	836	18.77	1.30
	Dadri I STPS (4*210)	840	615	463	413	11.53	480	10.86	0.67
	Dadri II STPS (2*490)	980	912	653	461	16.09	670	15.85	0.24
	Unchahar I TPS (2*210)	420	405	352	298	7.66	319	7.49	0.16
	Unchahar II TPS (2*210)	420	401	355	265	7.01	292	7.21	-0.20
	Unchahar III TPS (1*220)	210	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajjar) (3*500)	1500	1500	614	621	14.35	598	14.96	-0.61
	Dadri GPS (4*130.19+2*154.51)	830	808	255	250	6.70	279	6.57	0.13
	Anta GPS (3*88.71+1*153.2)	419	386	193	199	5.10	212	4.92	0.18
	Auraiya GPS (4*111.19+2*109.30)	663	649	113	114	2.99	125	2.91	0.08
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.03
	Singrauli Solar	15	3	0	0	0.00	0	0.07	-0.07
	KHEP	400	0	0	0	0.00	0	0.00	0.00
Sub Total (A)	11712	10180	7376	6811	173	7201	165	8	
B. NPC	NAPS (2*220)	440	386	419	437	9.28	387	9.26	0.01
	RAPS- B (2*220)	440	373	413	418	8.87	370	7.30	1.57
	RAPS- C (2*220)	440	410	434	445	9.47	395	9.84	-0.37
	Sub Total (B)	1320	1169	1266	1300	27.62	1151	26.40	1.21
C. NHPC	Chamera I HPS (3*180)	540	540	552	550	13.16	549	12.96	0.21
	Chamera II HPS (3*100)	300	300	314	313	7.36	307	7.20	0.17
	Chamera III HPS (3*77)	231	231	232	238	5.60	233	5.55	0.05
	Bairasul HPS(3*60)	180	179	183	122	4.15	173	4.02	0.13
	Salal-HPS (6*115)	690	666	666	668	16.09	670	15.94	0.15
	Tanakpur-HPS (3*40)	94	42	62	61	1.10	46	1.02	0.09
	Uri-I HPS (4*120)	480	465	474	475	11.39	474	11.15	0.23
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	210	206	0	2.67	111	2.49	0.18
	Dulhasti-HPS (3*130)	390	387	405	407	9.52	397	9.29	0.23
	Sewa-II HPS (3*40)	120	119	130	130	3.08	129	2.86	0.23
	Parbati 3 (4*130)	520	390	266	0	2.01	84	1.95	0.06
	Sub Total (C)	4065	3530	3489	2963	76	3172	74	2
D.SJVNL	NJPC (6*250)	1500	1605	1241	704	24.05	1002	23.64	0.41
	Rampur HEP (6*68.67)	412	430	345	212	6.80	284	6.58	0.23
	Sub Total (D)	1912	2035	1586	916	30.85	1286	30.21	0.64
E. THDC	Tehri HPS (4*250)	1000	501	502	0	8.26	344	8.20	0.06
	Koteshwar HPS (4*100)	400	142	299	101	3.43	143	3.40	0.03
	Sub Total (E)	1400	643	801	101	11.70	487	11.60	0.10
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	461	1064	322	11.92	497	11.06	0.87
	Dehar HPS (6*165)	990	603	660	600	14.44	602	14.46	-0.02
	Pong HPS (6*66)	396	6	130	0	0.15	6	0.16	-0.01
	Sub Total (F)	2900	1070	1854	922	26.51	1105	25.67	0.84
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	177	94	3.02	126	2.81	0.21
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1004	400	13.09	545	12.85	0.24
	Malana Stg-II HPS (2*50)	100	0	100	50	1.41	59	1.31	0.10
	Shree Cement TPS (2*150)	300	0	280	275	6.04	252	5.97	0.07
	Budhil HPS(IPP)	70	0	71	37	1.16	48	1.13	0.03
	Sub Total (G)	1662	0	1632	856	24.72	1030	24.07	0.66
H. Total Regional Entities (A-G)	24972	18626	18004	13869	370.35	15431	356.97	13.39	

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	7.96	332
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.07	-3
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	252	215	4.96	207
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1212	1077	22.18	924
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1884	1612	35.03	1460
	Total Hydro	1148	246	264	5.60	233
	Total Punjab	5828	2130	1876	40.63	1693
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	479	483	11.74	489
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	806	740	19.55	815
Thermal (Total)		4944	1285	1223	31.29	1304
Total Hydro		62	25	23	0.70	29
Total Haryana		5006	1310	1246	31.99	1333
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	908	966	20.68
	suratgarh TPS (6*250)	1500	573	572	13.56	565
	Chabra TPS (4*250)	1000	545	566	13.63	568
	Dholpur GPS (3*110)	330	110	90	2.57	107
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	177	182	4.44	185
	RAPS A (NPC) (1*100+1*200)	300	135	0	2.57	107
	Barsingar (NLC) (2*125)	250	195	194	4.52	189
	Giral LTPS (2*125)	250	81	81	1.61	67
	Rajwest LTPS (IPP) (8*135)	1080	564	441	13.42	559
	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	1028	734	22.11	921
	Thermal (Total)	8276	4316	3826	99	4130
	Total Hydro	550	0	0	0.00	0
	Wind power	2798	437	957	16.57	691
	Biomass	99	28	28	0.67	28
	Solar	730	0	0	0.02	1
	Renewable/Others (Total)	3627	465	985	17.26	719
	Total Rajasthan	12453	4781	4811	116.37	4849
	UP	Anpara TPS (3*210+2*500)	1630	1400	1363	32.30
Obra TPS (2*50+2*94+5*200)		1194	441	427	10.20	425
Paicha TPS (2*110+2*220+2*250)		1140	760	767	18.00	750
Panki TPS (2*105)		210	117	54	1.90	79
Harduaganj TPS (1*60+1*105+2*250)		665	202	229	4.60	192
Tanda TPS (NTPC) (4*110)		440	335	273	7.30	304
Roza TPS (IPP) (4*300)		1200	846	761	19.40	808
Anpara-C (IPP) (2*600)		1200	932	1086	21.00	875
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	322	283	6.80	506.3
Anpara-D		500	0	0	0.00	0
Thermal (Total)		8629	5355	5243	122	9842
Vishnuparyag HPS (IPP)		400	213	193	4.50	188
Other Hydro		527	305	90	2.80	117
Cogeneration		981	400	400	9.60	400
Total UP		10537	6273	5926	138.40	10358
Uttarakhand	Total Hydro	1398	537	485	12.44	518
	Total Uttarakhand	1398	537	485	12.44	518
Delhi	Rajghat TPS (2*67.5)	135	50	48	1.12	47
	Delhi Gas Turbine (6x30 + 3x34)	282	74	75	1.76	73
	Pragati Gas Turbine (2x104+ 1x122)	330	279	262	6.63	276
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	300	272	6.85	285
	Badarpur TPS (NTPC) (3*95+2*210)	705	305	305	7.07	295
	Thermal (Total)	2917	1008	962	23.43	976
Total Delhi	2917	1008	962	23.43	976	
HP	Baspa HPS (IPP) (2*150)	300	166	62	2.95	123
	Malana HPS (IPP) (2*43)	86	80	32	1.34	56
	Other Hydro	728	458	445	10.77	449
	Total HP	1114	704	539	15.06	628
J & K	Baglihar HPS (IPP) (3*150)	450	450	450	10.80	450
	Other Hydro/IPP	436	135	129	3.12	130
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	585	579	13.92	580
Total State Control Area Generation		40347	17328	16424	392.24	20935
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4580	4370	97.02	4043
Total Regional Availability(Gross)		65319	39912	34663	859.61	40409

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9010	5446	162.717327	6780
State Control Area Hydro	5684	2402	1980	55.02	2105
Total Regional Hydro	17654	11412	7426	217.74	8885

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	300	-300	200	300	1.59	3.50	-1.91
Gwalior-Agra (D/C)	1786	1947	2062	0	38.72	0.00	38.72
Zerda-Kankroli	-215	-310	0	415	0.00	7.78	-7.78
Zerda-Bhinmal	-162	-262	0	372	0.00	6.16	-6.16
Malanpur-Auraiya	-46	-31	0	72	0.00	1.13	-1.13
Badod-Kota/Morak	-72	-75	0	130	0.00	2.32	-2.32
Mundra-Mohinderghar(HVDC)	2202	2395	2408	0	55.22	0.00	55.22
Vindhychal - Rihand	454	503	505	0	11.43	0.00	11.43
Sub Total WR	4247	3867			106.96	20.88	86.08
Pusaali Bypass	200	200	200	0	4.98	0.00	4.98
MZP- GKP (D/C)	101	-64	121	101	-0.05	0.00	-0.05
Patna-Balia(D/C)	152	107	281	0	3.58	0.00	3.58
B'Sharif-Balia (D/C)	-112	-4	85	112	0.00	0.67	-0.67
Pusaali-Balia	41	106	122	100	0.42	0.00	0.42
Gaya-Fatehpur (765 Kv)	5	68	131	93	1.07	0.00	1.07
Pusaali-Sahupuri	134	207	207	0	4.14	0.00	4.14
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-30	-31	0	0	0.00	0.60	-0.60
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-158	-86	23	213	0.00	1.93	-1.93
Sub Total ER	333	503			14.14	3.20	10.94
Total IR Exch	4580	4370			121.10	24.08	97.02

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
15.77	1.02	16.79	-4.97	-1.75	10.02	-0.41	0.89	-0.89

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
22.73	73.01	95.73	10.94	86.08	97.02	-11.79	13.08	1.29

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	0.31	1.72	11.21	54.49	69.59	13.47	5.37	0.38	NA

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz	Index			
50.24	18.02	49.65	19.09	49.99	0.06	0.08	50.21	49.83

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	403	00:00	398	20:43	0.0	0.0	0.0	0.0
Gorakhpur	400	415	13:02	396	19:23	0.0	0.0	0.0	0.0
Bareilly	400	419	13:05	399	19:28	0.0	0.0	0.0	0.0
Kanpur	400	415	17:38	397	19:24	0.0	0.0	0.0	0.0
Dadri	400	415	13:02	399	19:23	1.7	1.7	0.0	0.0
Ballabgarh	400	420	05:09	402	19:22	0.0	0.0	0.0	0.0
Bawana	400	419	13:02	402	19:22	0.0	0.0	0.0	0.0
Bassi	400	421	04:04	402	23:15	0.0	0.0	0.6	0.0
Hissar	400	409	13:03	384	19:27	0.0	8.4	0.0	0.0
Moga	400	418	13:03	394	19:24	0.0	0.0	0.0	0.0
Abdullapur	400	424	13:02	396	19:23	0.0	0.0	6.5	0.0
Nalagarh	400	426	13:02	402	19:21	0.0	0.0	7.7	0.0
Kishenpur	400	413	13:02	396	20:30	0.0	0.0	0.0	0.0
Wagoora	400	404	09:44	370	21:19	22.3	36.8	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	769	17:35	737	19:24	0.0	7.2	0.0	0.0
Balia	765	771	17:34	744	22:38	0.0	0.0	0.0	0.0
Moga	765	786	18:07	751	19:26	0.0	0.0	0.0	0.0
Agra	765	783	18:04	748	19:25	0.0	0.0	0.0	0.0
Bhiwani	765	795	13:02	763	19:19	0.0	0.0	0.0	0.0
Unnao	765	755	17:36	724	19:25	3.1	54.0	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	484.12	560.76	483.28	544.27	568.91	353.34
Pong	426.72	384.05	404.99	344.07	402.52	281.22	137.73	11.36
Tehri	829.79	740.04	763.40	148.00	760.30	122.00	119.18	252.00
Koteshwar	612.50	598.50	611.00	5.20	611.10	5.20	252.00	228.00
Chamera-I	760.00	748.75	758.43	0.00	0.00	0.00	433.53	0.00
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	519.87	2.41	516.76	3.36	373.38	105.81

* NA: Not Available

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

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (20:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	-145	488	2	-152	264	0	-3.52	10.14	6.62
Delhi	-147	48	-41	-97	341	-41	-2.57	4.46	1.89
Haryana	169	143	0	165	164	0	4.00	0.72	4.73
HP	-206	-350	0	-105	-583	0	-1.29	-12.85	-14.14
J&K	-223	0	0	-172	-15	0	-4.04	-0.57	-4.61
CHD	0	0	0	0	0	0	0.00	0.28	0.28
Rajasthan	-125	585	2	-121	494	2	-2.95	13.55	10.61
UP	617	0	0	238	0	0	8.08	0.00	8.08
Uttarakhand	0	188	46	0	321	48	0.00	7.64	7.64
Total	-59	1103	9	-244	988	9	-2.28	23.37	21.10

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-145	-152	521	97	2	0
Delhi	-68	-147	505	-51	0	-41
Haryana	169	165	184	-397	0	0
HP	99	-409	-236	-742	0	0
J&K	-70	-223	59	-152	0	0
CHD	0	0	34	0	0	0
Rajasthan	-121	-125	643	475	2	2
UP	628	165	0	0	0	0
Uttarakhand	0	0	356	185	48	9

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 27.04.2015 :**

Normal

XIV. Synchronisation of new generating units :**XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**

400 kV Sarojani nagar 315 MVA ICT-1 first time charged at 14:42 hrs on no load by replacing an old 240 MVA ICT.

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