

पावर 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 30.04.2015
Date of Reporting : 01.05.2015

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
38273	2332	40605	50.09	36147	842	36989	50.04	840.1	40.23

* 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	32.47	6.53		39.01	66.91	65.99	-0.92	104.99	0.00
Haryana	22.07	0.64		22.71	92.56	93.56	1.00	116.27	0.00
Rajasthan	100.63	0.14	14.67	115.45	62.21	62.42	0.21	177.87	0.00
Delhi	23.64			23.64	67.53	67.86	0.32	91.50	0.03
UP	131.31	5.78		137.09	112.32	112.09	-0.23	249.18	32.50
Uttarakhand		11.46		11.46	22.44	24.55	2.10	36.01	0.62
HP		15.54		15.54	9.14	9.49	0.35	25.03	0.27
J & K		14.07	0.00	14.07	20.57	20.34	-0.23	34.41	6.81
Chandigarh				0.00	4.81	4.80	0.27	4.80	0.00
Total	310.13	54.17	14.67	378.97	458.50	461.10	2.88	840.06	40.23

* 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	4492	0	-411	62	5165	0	171	335	5378
Haryana	6156	0	30	344	5354	0	37	362	6247
Rajasthan	7379	0	-229	380	7311	0	53	66	7929
Delhi	4055	0	-6	208	3598	13	135	-107	4442
UP	11303	1890	-342	234	10965	570	-88	692	11817
Uttarakhand	1736	75	94	366	1395	0	172	212	1746
HP	1134	9	126	-886	912	0	68	-679	1277
J&K	1792	358	269	-136	1293	259	-80	-324	1792
Chandigarh	226	0	2	0	155	0	0	0	241
Total	38273	2332	-466	572	36147	842	468	556	38980

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

III. Regional Entities :

A. NTPC	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
	Singrauli STPS (5*200+2*500)	2000	1879	2010	2024	47.80	1992	44.19	3.61
	Rihand I STPS (2*500)	1000	751	708	731	17.14	714	15.44	1.70
	Rihand II STPS (2*500)	1000	960	837	1024	21.25	885	19.55	1.70
	Rihand III STPS (2*500)	1000	963	867	1009	20.32	847	19.28	1.04
	Dadri I STPS (4*210)	840	615	574	500	12.02	501	11.81	0.21
	Dadri II STPS (2*490)	980	980	868	855	18.69	779	18.91	-0.22
	Unchahar I TPS (2*210)	420	405	374	326	7.86	327	8.21	-0.36
	Unchahar II TPS (2*210)	420	401	303	313	7.30	304	7.70	-0.40
	Unchahar III TPS (1*220)	210	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajhar) (3*500)	1500	1500	916	876	16.83	701	17.98	-1.15
	Dadri GPS (4*130.19+2*154.51)	830	808	381	395	9.23	385	9.34	-0.11
	Anta GPS (3*88.71+1*153.2)	419	386	-2	-2	0.00	0	0.00	0.00
	Auraiya GPS (4*111.19+2*109.30)	663	646	154	162	3.79	158	3.92	-0.13
	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	0.06	2	0.07	-0.01
	KHEP	400	0	0	0	0.00	0	0.00	0.00
	Sub Total (A)	11712	10300	7990	8213	182	7597	177	6
B. NPC	NAPS (2*220)	440	420	420	420	10.08	420	10.08	0.00
	RAPS- B (2*220)	440	368	409	421	8.86	369	7.30	1.56
	RAPS- C (2*220)	440	410	439	440	9.39	391	9.84	-0.45
	Sub Total (B)	1320	1198	1268	1281	28.33	1181	27.22	1.11
C. NHPC	Chamera I HPS (3*180)	540	540	554	545	13.09	545	12.96	0.13
	Chamera II HPS (3*100)	300	300	301	301	7.28	303	7.20	0.08
	Chamera III HPS (3*77)	231	231	236	229	5.58	232	5.55	0.03
	Bairasuil HPS(3*60)	180	179	180	180	4.34	181	4.29	0.04
	Salal-HPS (6*115)	690	666	667	666	16.01	667	15.97	0.03
	Tanakpur-HPS (3*40)	94	47	60	58	1.19	50	1.11	0.08
	Uri-I HPS (4*120)	480	475	476	474	11.61	484	11.40	0.21
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	210	210	0	3.00	125	2.89	0.11
	Dulhasti-HPS (3*130)	390	387	407	403	9.47	395	9.29	0.18
	Sewa-II HPS (3*40)	120	119	130	130	3.07	128	2.86	0.21
	Parbati 3 (4*130)	520	282	260	0	2.10	88	2.10	0.00
	Sub Total (C)	4065	3436	3481	2987	77	3198	76	1
D.SJVNL	NJPC (6*250)	1500	1605	1623	729	22.95	956	22.93	0.02
	Rampur HEP (6*68.67)	412	430	436	220	6.51	271	6.33	0.18
	Sub Total (D)	1912	2035	2059	949	29.46	1227	29.25	0.20
E. THDC	Tehri HPS (4*250)	1000	492	496	0	7.29	304	7.20	0.09
	Koteswar HPS (4*100)	400	142	302	101	3.40	142	3.40	0.00
	Sub Total (E)	1400	634	798	101	10.69	445	10.60	0.09
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	510	1048	329	12.96	540	12.23	0.73
	Dehar HPS (6*165)	990	611	660	560	14.99	625	14.67	0.32
	Pong HPS (6*66)	396	16	190	0	0.35	15	0.38	-0.03
	Sub Total (F)	2900	1137	1898	889	28.30	1179	27.28	1.03
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	113	121	2.62	109	2.92	-0.31
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1000	360	12.27	511	12.48	-0.22
	Malana Stg-II HPS (2*50)	100	0	50	30	1.19	50	1.14	0.05
	Shree Cement TPS (2*150)	300	0	287	287	6.54	273	6.69	-0.15
	Budhil HPS(IPP)	70	0	70	36	1.41	59	1.40	0.01
	Sub Total (G)	1662	0	1520	834	24.03	1001	24.64	-0.61
H. Total Regional Entities (A-G)		24972	18739	19014	15253	379.89	15829	371.12	8.76

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	320	320	7.72	322
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.06	-2
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	171	225	5.16	215
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1045	1054	19.65	819
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1536	1599	32.47	1353
	Total Hydro	1148	292	307	6.53	272
	Total Punjab	5828	1828	1906	39.01	1625
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	577	583	12.19	508
Faridabad GPS (NTPC)		432	188	195	4.71	196
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	570	0	5.17	215
Thermal (Total)		4944	1335	778	22.07	920
Total Hydro		62	25	23	0.64	27
Total Haryana		5006	1360	801	22.71	946
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	913	874	21.34
	suratgarh TPS (6*250)	1500	574	570	13.44	560
	Chabra TPS (4*250)	1000	575	580	13.90	579
	Dholpur GPS (3*110)	330	111	110	2.73	114
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	183	183	4.50	188
	RAPS A (NPC) (1*100+1*200)	300	137	132	3.42	143
	Barsingsar (NLC) (2*125)	250	197	195	4.47	186
	Giral LTPS (2*125)	250	84	84	1.70	71
	Rajwest LTPS (IPP) (8*135)	1080	672	592	13.76	573
	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	834	833	21.37	890
	Thermal (Total)	8276	4280	4153	101	4193
	Total Hydro	550	0	0	0.14	6
	Wind power	2798	361	837	14.07	586
	Biomass	99	25	25	0.61	25
	Solar	730	0	0	0.00	0
	Renewable/Others (Total)	3627	386	862	14.67	611
	Total Rajasthan	12453	4666	5015	115.45	4810
	UP	Anpara TPS (3*210+2*500)	1630	1313	1289	31.30
Obra TPS (2*50+2*94+5*200)		1194	337	338	8.20	342
Paricha TPS (2*110+2*220+2*250)		1140	840	824	17.50	729
Panki TPS (2*105)		210	117	59	1.40	58
Harduaganj TPS (1*60+1*105+2*250)		665	228	221	4.70	196
Tanda TPS (NTPC) (4*110)		440	364	380	8.17	340
Roza TPS (IPP) (4*300)		1200	1026	1058	21.03	876
Anpara-C (IPP) (2*600)		1200	1092	1080	22.85	952
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	282	282	6.55	5071
Anpara-D		500	0	0	0.00	0
Thermal (Total)		8629	5599	5531	122	9869
Vishnuparyag HPS (IPP)		400	203	190	4.49	187
Other Hydro		527	45	56	1.29	54
Cogeneration		981	400	400	9.60	400
Total UP		10537	6247	6177	137.09	10323
Uttarakhand	Total Hydro	1398	515	421	11.46	478
	Total Uttarakhand	1398	515	421	11.46	478
Delhi	Rajghat TPS (2*67.5)	135	50	50	1.02	43
	Delhi Gas Turbine (6x30 + 3x34)	282	75	77	1.77	74
	Pragati Gas Turbine (2x104+ 1x122)	330	284	271	6.75	281
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	307	270	7.06	294
	Badarpur TPS (NTPC) (3*95+2*210)	705	304	297	7.03	293
	Thermal (Total)	2917	1020	965	23.64	985
Total Delhi	2917	1020	965	23.64	985	
HP	Baspa HPS (IPP) (2*150)	300	126	58	2.64	110
	Malana HPS (IPP) (2*43)	86	71	29	1.16	48
	Other Hydro	728	488	494	11.74	489
	Total HP	1114	685	581	15.54	648
J & K	Baqlihar HPS (IPP) (3*150)	450	450	450	10.80	450
	Other Hydro/IPP	436	132	137	3.27	136
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	582	587	14.07	586
Total State Control Area Generation		40347	16903	16453	378.97	20401
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4716	5810	110.70	4612
Total Regional Availability(Gross)		65319	40633	37516	869.55	40842

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9398	5436	161.265963	6719
State Control Area Hydro	5684	2144	1975	54.17	2070
Total Regional Hydro	17654	11542	7411	215.43	8789

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	50	-100	200	-200	0.39	2.98	-2.59
Gwalior-Agra (D/C)	1884	2279	2279	0	42.14	0.00	42.14
Zerda-Kankroli	-142	-239	0	342	0.00	6.38	-6.38
Zerda-Bhinmal	-118	-193	0	292	0.00	5.00	-5.00
Malanpur-Auraiya	-49	-34	0	69	0.00	1.00	-1.00
Badod-Kota/Morak	-69	-39	2	65	0.00	1.78	-1.78
Mundra-Mohindergarh(HVDC)	2301	2502	2505	0	55.79	0.00	55.79
Vindhychal - Rihand	485	466	507	0	11.60	0.00	11.60
Sub Total WR	4342	4642			109.92	17.13	92.79
Pusauli Bypass	400	400	400	0	8.88	0.00	8.88
MZP- GKP (D/C)	-70	148	178	-155	0.33	0.00	0.33
Patna-Balia(D/C)	166	353	422	0	7.05	0.00	7.05
B'Sharif-Balia (D/C)	-135	-23	0	220	0.00	1.30	-1.30
Pusauli-Balia	42	5	57	77	0.00	0.09	-0.09
Gaya-Fatehpur (765 Kv)	17	158	165	86	1.81	0.00	1.81
Pusauli-Sahupuri	171	175	189	0	3.88	0.00	3.88
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-40	-40	0	-44	0.00	0.89	-0.89
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-177	-8	1	262	0.00	2.24	-2.24
Sub Total ER	374	1168			22.42	4.51	17.91
Total IR Exch	4716	5810			132.34	21.64	110.70

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
18.74	0.76	19.50	-5.13	-1.60	5.58	-0.91	0.91	-0.91

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
20.86	84.96	105.82	17.91	92.79	110.70	-2.95	7.83	4.88

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	0.90	7.71	44.65	64.86	19.93	6.67	0.83	NA

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.31	18.05	49.76	14.39	50.00	0.05	0.07	0.00	0.00

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	403	00:00	0.0	0.0	0.0	0.0
Gorakhpur	400	415	08:05	393	20:14	0.0	0.0	0.0	0.0
Bareilly	400	418	13:04	399	19:45	0.0	0.0	0.0	0.0
Kanpur	400	416	08:04	396	22:10	0.0	0.0	0.0	0.0
Dadri	400	418	06:00	402	19:28	0.0	0.0	0.0	0.0
Ballabgarh	400	425	06:02	404	22:06	0.0	0.0	10.9	0.0
Bawana	400	423	06:02	404	19:26	0.0	0.0	2.7	0.0
Bassi	400	424	06:01	404	23:06	0.0	0.0	6.7	0.0
Hissar	400	416	18:00	391	19:44	0.0	0.0	0.0	0.0
Moga	400	420	13:03	402	19:42	0.0	0.0	0.0	0.0
Abdullapur	400	426	06:01	396	20:16	0.0	0.0	21.8	0.0
Nalagarh	400	426	13:02	362	20:24	1.5	6.4	43.7	0.0
Kishenpur	400	421	13:02	403	20:06	0.0	0.0	0.1	0.0
Wagoora	400	410	04:04	376	20:27	5.5	15.7	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	772	08:04	734	22:11	0.0	5.5	0.0	0.0
Balia	765	774	08:10	736	22:07	0.0	5.1	0.0	0.0
Moga	765	800	18:02	764	19:43	0.0	0.0	0.0	0.0
Agra	765	790	18:03	753	22:05	0.0	0.0	0.0	0.0
Bhiwani	765	802	17:59	770	19:24	0.0	0.0	0.6	0.0
Unnao	765	765	13:06	728	22:22	0.0	25.4	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	484.64	577.33	482.89	527.87	568.18	380.86
Pong	426.72	384.05	405.25	352.07	402.58	281.22	125.67	25.60
Tehri	829.79	740.04	762.20	140.00	758.45	108.00	106.99	223.00
Koteshwar	612.50	598.50	611.25	5.20	611.27	5.20	223.00	226.00
Chamera-I	760.00	748.75	755.41	0.00	0.00	0.00	363.16	354.37
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 Sagor	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	521.42	2.71	517.09	3.37	577.21	125.37

* 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	-150	483	2	-152	214	0	-3.60	7.45	3.84
Delhi	-146	79	-41	-97	305	0	-2.56	6.07	3.51
Haryana	179	183	0	175	169	0	4.24	1.78	6.01
HP	-206	-473	0	-105	-782	0	-1.29	-13.79	-15.08
J&K	-273	-51	0	-121	-15	0	-3.94	-1.09	-5.03
CHD	0	0	0	0	0	0	0.00	0.28	0.28
Rajasthan	-106	170	2	-119	498	2	-2.80	11.37	8.57
UP	692	0	0	234	0	0	8.46	0.00	8.46
Uttarakhand	0	165	47	0	332	35	0.00	6.64	6.64
Total	-11	556	11	-185	720	37	-1.49	18.70	17.21

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-150	-152	509	11	2	0
Delhi	-68	-146	624	-84	0	-41
Haryana	179	175	184	-360	0	0
HP	99	-409	-219	-892	0	0
J&K	-70	-273	59	-116	0	0
CHD	0	0	49	0	0	0
Rajasthan	-106	-125	631	18	2	2
UP	702	161	0	0	0	0
Uttarakhand	0	0	339	106	49	32

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 30.04.2015 :**

Cloudy weather/Scattered Rainfall in punjab

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

- 220 kV Gurgaon (PGCIL)-Gurgaon sector 72 III & ckt. IV first time synchronized with grid at 14:34 & 14:56 hrs. respectively (dated 30/04/15).
- 220 KV Gurgaon (PGCIL) to Gurgaon sector 33 ckt I & II first time test charged at 17:39 and 17:43 hrs respectively (dated 30/04/2015).

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