

पावर 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 26.05.2015
Date of Reporting : 27.05.2015

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
41375	2158	43534	49.97	43179	2074	45253	50.09	1005.7	54.24

* 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	45.97	18.56		64.53	90.25	88.98	-1.27	153.51	0.00
Haryana	56.74	0.66		57.40	90.04	88.43	-1.60	145.83	0.00
Rajasthan	107.88	0.00	14.00	121.87	75.98	76.26	0.28	198.13	0.00
Delhi	20.85			20.85	88.64	89.49	0.85	110.34	0.37
UP	135.60	16.88		152.48	138.06	139.30	1.24	291.78	44.33
Uttarakhand		19.19		19.19	18.52	20.93	2.41	40.12	1.49
HP		18.81		18.81	5.84	7.15	1.31	25.96	0.00
J & K		14.89	0.00	14.89	19.67	18.94	-0.73	33.83	8.04
Chandigarh				0.00	6.17	6.22	0.27	6.22	0.00
Total	367.03	89.00	14.00	470.02	533.16	535.70	2.76	1005.72	54.24

* 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	5452	0	-213	598	6494	0	-20	799	7170
Haryana	6678	0	-440	322	6770	0	-131	286	7261
Rajasthan	7786	0	-145	614	8359	0	-59	592	8961
Delhi	4379	0	-140	666	4797	0	151	804	5362
UP	12168	1640	-170	964	12990	1900	252	1195	12991
Uttarakhand	1814	75	89	205	1621	0	104	76	1847
HP	1058	0	-50	-1212	933	0	42	-1306	1289
J&K	1774	443	162	-336	988	174	-356	-608	1882
Chandigarh	266	0	-16	15	227	0	14	0	324
Total	41375	2158	-923	1835	43179	2074	-3	1837	45276

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

UI/OA/PX (OD/Import: (+ve), UD/Export: (-ve))

Diversity is 1.04

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	1680	1861	1852	40.88	1703	40.23	0.64
	Rihand I STPS (2*500)	1000	463	492	506	11.87	495	10.60	1.27
	Rihand II STPS (2*500)	1000	951	1029	1021	23.89	995	21.91	1.97
	Rihand III STPS (2*500)	1000	895	994	1024	21.44	893	20.33	1.11
	Dadri I STPS (4*210)	840	761	571	584	16.21	675	15.21	1.00
	Dadri II STPS (2*490)	980	980	718	655	18.66	778	18.91	-0.25
	Unchahar I TPS (2*210)	420	405	425	356	9.08	378	9.31	-0.23
	Unchahar II TPS (2*210)	420	401	409	311	8.60	358	8.67	-0.07
	Unchahar III TPS (1*220)	210	201	216	150	4.24	177	4.28	-0.04
	ISTPP (Jhajhar) (3*500)	1500	1000	695	638	15.18	633	15.39	-0.21
	Dadri GPS (4*130.19+2*154.51)	830	808	362	381	8.85	369	9.06	-0.20
	Anta GPS (3*88.71+1*153.2)	419	380	231	214	5.35	223	5.45	-0.10
	Auraiya GPS (4*111.19+2*109.30)	663	644	146	150	3.53	147	3.65	-0.12
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.00	0	0.06	-0.06
	Singrauli Solar	15	3	0	0	0.01	0	0.07	-0.07
	KHEP	400	0	0	0	0.00	0	0.00	0.00
Sub Total (A)	11712	9574	8149	7842	188	7825	183	5	
B. NPC	NAPS (2*220)	440	381	414	425	9.10	379	9.14	-0.04
	RAPS- B (2*220)	440	368	409	411	8.75	365	8.82	-0.07
	RAPS- C (2*220)	440	380	417	419	8.95	373	9.12	-0.17
	Sub Total (B)	1320	1129	1240	1255	26.81	1117	27.08	-0.28
C. NHPC	Chamera I HPS (3*180)	540	540	558	548	13.21	550	12.92	0.29
	Chamera II HPS (3*100)	300	300	312	309	7.42	309	7.20	0.22
	Chamera III HPS (3*77)	231	231	239	236	5.68	237	5.55	0.13
	Bairasuil HPS(3*60)	180	179	185	123	3.65	152	3.58	0.07
	Salal-HPS (6*115)	690	666	673	673	16.12	672	15.97	0.15
	Tanakpur-HPS (3*40)	94	59	86	79	1.51	63	1.40	0.11
	Uri-I HPS (4*120)	480	475	478	476	11.64	485	11.40	0.24
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	260	220	69	4.44	185	4.33	0.11
	Dulhasti-HPS (3*130)	390	387	406	398	9.42	392	9.29	0.13
	Sewa-II HPS (3*40)	120	119	130	130	3.07	128	2.86	0.22
	Parbati 3 (4*130)	520	260	263	0	2.72	113	2.67	0.05
	Sub Total (C)	4065	3476	3549	3040	79	3287	77	2
D. SJVNL	NJPC (6*250)	1500	1605	1605	1605	38.82	1617	38.52	0.30
	Rampur HEP (6*68.67)	412	442	450	450	10.83	451	10.61	0.22
	Sub Total (D)	1912	2047	2055	2055	49.65	2069	49.13	0.52
E. THDC	Tehri HPS (4*250)	1000	290	299	297	6.63	276	6.47	0.16
	Koteshwar HPS (4*100)	400	138	181	91	3.36	140	3.30	0.06
	Sub Total (E)	1400	428	480	388	9.99	416	9.77	0.22
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	847	1316	632	20.46	853	20.34	0.13
	Dehar HPS (6*165)	990	605	825	495	14.84	618	14.51	0.33
	Pong HPS (6*66)	396	66	258	0	1.64	68	1.58	0.05
	Sub Total (F)	2900	1518	2399	1127	36.94	1539	36.43	0.51
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	117	121	2.94	123	3.31	-0.37
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1005	910	22.35	931	23.43	-1.07
	Malana Stg-II HPS (2*50)	100	0	110	45	1.50	62	1.47	0.03
	Shree Cement TPS (2*150)	300	0	292	286	6.55	273	6.49	0.07
	Budhil HPS(IPP)	70	0	74	73	1.75	73	1.75	0.00
	Sub Total (G)	1662	0	1598	1435	35.09	1462	36.44	-1.35
H. Total Regional Entities (A-G)	24972	18172	19470	17142	425.16	17715	419.18	5.99	

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	8.05	335
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	90	2.23	93
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	197	199	4.07	170
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	729	864	23.40	975
	Talwandi Saboo (1*660)	660	341	370	8.22	342
	Thermal (Total)	4680	1687	1843	45.97	1915
	Total Hydro	1148	777	776	18.56	773
	Total Punjab	5828	2464	2619	64.53	2689
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	483	545	11.79	491
Faridabad GPS (NTPC)		432	176	184	4.46	186
RGTTP (Khedar) (IPP) (2*600)		1200	713	915	18.18	757
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	810	1108	22.31	930
Thermal (Total)		4944	2182	2752	56.74	2364
Total Hydro		62	27	28	0.66	28
Total Haryana		5006	2209	2780	57.40	2392
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	868	693	17.77
	suratgarh TPS (6*250)	1500	413	384	10.27	428
	Chabra TPS (4*250)	1000	340	342	8.64	360
	Dholpur GPS (3*110)	330	0	0	0.00	0
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	158	158	3.78	157
	RAPS A (NPC) (1*100+1*200)	300	126	126	3.40	142
	Barsingar (NLC) (2*125)	250	186	131	3.55	148
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	965	840	21.93	914
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	432	430	10.66	444
	Kawai(Adani) (2*660)	1320	1207	1132	27.87	1161
	Thermal (Total)	8276	4695	4236	108	4495
	Total Hydro	550	75	0	0.00	0
	Wind power	2798	77	1157	13.24	552
	Biomass	99	27	27	0.64	27
	Solar	730	0	0	0.12	5
	Renewable/Others (Total)	3627	104	1184	14.00	583
	Total Rajasthan	12453	4874	5420	121.87	5078
	UP	Anpara TPS (3*210+2*500)	1630	1283	1350	31.40
Obra TPS (2*50+2*94+5*200)		1194	267	314	7.20	300
Paricha TPS (2*110+2*220+2*250)		1140	856	740	19.20	800
Panki TPS (2*105)		210	131	113	3.00	125
Harduaganj TPS (1*60+1*105+2*250)		665	226	479	6.40	267
Tanda TPS (NTPC) (4*110)		440	374	370	9.20	383
Roza TPS (IPP) (4*300)		1200	1080	1080	25.30	1054
Anpara-C (IPP) (2*600)		1200	1035	1089	22.70	946
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	404	322	8.30	346
Anpara-D		500	0	0	0.00	0
Thermal (Total)		8629	5656	5857	133	5529
Vishnuparyag HPS (IPP)(including Alakananada)		400	595	597	13.78	574
Other Hydro		527	154	199	3.10	129
Cogeneration		981	120	120	2.90	121
Total UP		10537	6525	6773	152.48	5779
Uttarakhand	Total Hydro	1398	814	809	19.19	800
	Total Uttarakhand	1398	814	809	19.19	800
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	69	72	1.64	69
	Pragati Gas Turbine (2x104+ 1x122)	330	264	260	6.40	267
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	283	294	6.76	282
	Badarpur TPS (NTPC) (3*95+2*210)	705	322	324	6.04	252
	Thermal (Total)	2917	938	950	20.85	869
	Total Delhi	2917	938	950	20.85	869
HP	Baspa HPS (IPP) (2*150)	300	142	243	5.96	248
	Malana HPS (IPP) (2*43)	86	66	41	0.71	30
	Other Hydro	728	518	505	12.14	506
	Total HP	1114	726	789	18.81	784
J & K	Baglihar HPS (IPP) (3*150)	450	450	450	10.80	450
	Other Hydro/IPP	436	169	169	4.09	170
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	619	619	14.89	620
Total State Control Area Generation		40347	19169	20759	470.02	19010
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4885	6086	133.94	5581
Total Regional Availability(Gross)		65319	43524	43987	1029.13	42306

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9715	7686	202.25	8427
State Control Area Hydro	5684	3192	3220	89.00	3134
Total Regional Hydro	17654	12907	10906	291.25	11561

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	250	100	0.75	0.85	-0.09
Gwalior-Agra (D/C)	1315	1783	1924	0	35.68	0.00	35.68
Zerda-Kankroli	-171	-202	0	352	0.00	5.59	-5.59
Zerda-Bhinmal	-118	-186	0	332	0.00	4.46	-4.46
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00
Badod-Kota/Morak	-25	-15	56	40	0.00	0.30	-0.30
Mundra-Mohinderqarh(HVDC)	2503	2297	2506	0	57.73	0.00	57.73
Vindhychal - Rihand	502	504	507	0	11.97	0.00	11.97
Sub Total WR	4056	4081			106.13	11.19	94.94
Pusauli Bypass	400	200	400	0	6.65	0.00	6.65
MZP- GKP (D/C)	116	522	522	0	8.90	0.00	8.90
Patna-Balia(D/C)	288	453	553	0	10.95	0.00	10.95
B'Sharif-Balia (D/C)	-63	178	213	78	2.95	0.00	2.95
Pusauli-Balia	-27	279	288	47	2.15	0.00	2.15
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	195	142	222	0	3.95	0.00	3.95
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	43	0.00	0.88	-0.88
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-44	271	289	125	4.32	0.00	4.32
Sub Total ER	829	2005			39.88	0.88	39.00
Total IR Exch	4885	6086			146.01	12.07	133.94

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
35.98	1.70	37.68	11.52	-4.98	2.99	4.70	0.30	-0.30

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Incids Mindra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
52.48	80.17	132.65	39.00	94.94	133.94	-13.48	14.77	1.29

V(C). Inter National Exchange with Nepal [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	
132 KV Tanakpur - Mahendamar	-8	-23	0	24	0	0	-0.28

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	1.03	6.01	29.85	74.93	63.14	4.18	2.78	0.09	NA

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev. (Hz)	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.25	17.56	49.57	19.41	49.94	0.11	0.09	50.17	49.77

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	405	03:40	397	21:05	0.0	0.0	0.0	0.0
Gorakhpur	400	415	13:42	396	23:36	0.0	0.0	0.0	0.0
Bareilly	400	418	08:00	396	20:00	0.0	0.0	0.0	0.0
Kanpur	400	415	06:02	395	23:34	0.0	0.0	0.0	0.0
Dadri	400	412	05:59	393	23:26	8.5	8.5	0.0	0.0
Ballabgarh	400	419	06:00	395	23:35	0.0	0.0	0.0	0.0
Bawana	400	414	06:02	394	23:37	0.0	0.0	0.0	0.0
Bassi	400	414	04:02	389	23:06	0.0	2.3	0.0	0.0
Hissar	400	401	06:03	384	23:37	0.0	9.4	0.0	0.0
Moga	400	409	18:04	396	23:34	0.0	0.0	0.0	0.0
Abdullapur	400	409	05:32	396	23:05	0.0	0.0	0.0	0.0
Nalagarh	400	410	18:46	372	10:49	40.5	53.4	0.0	0.0
Kishenpur	400	416	05:03	402	20:22	0.0	0.0	0.0	0.0
Wagoora	400	413	03:33	380	20:36	0.0	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	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Balia	765	768	06:02	737	19:41	0.0	10.9	0.0	0.0
Moga	765	783	06:02	755	10:49	0.0	0.0	0.0	0.0
Agra	765	785	06:03	743	10:46	0.0	0.0	0.0	0.0
Bhiwani	765	787	06:00	752	23:36	0.0	0.0	0.0	0.0
Unnao	765	0	00:00	9999	00:00	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	487.82	661.49	479.84	454.47	797.91	709.19
Pong	426.72	384.05	409.73	361.16	402.91	288.96	140.82	110.66
Tehri	829.79	740.04	753.30	71.00	743.75	19.00	148.40	217.00
Koteshwar	612.50	598.50	606.35	2.88	610.24	4.69	217.00	223.00
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	352.65	357.93
Rihand	268.22	252.98	840.30	121.20	844.20	171.10	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	522.17	10.60	520.23	6.83	319.80	423.19

* 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	228	571	0	318	280	0	6.68	10.91	17.59
Delhi	721	85	-3	515	151	0	14.36	3.60	17.96
Haryana	68	217	0	93	229	0	1.76	3.13	4.89
HP	-893	-413	0	-691	-521	0	-17.69	-11.87	-29.56
J&K	-557	-51	0	-395	59	0	-11.30	0.02	-11.28
CHD	0	0	0	0	15	0	0.24	0.52	0.75
Rajasthan	-121	711	2	-117	729	2	-2.86	18.52	15.66
UP	1195	0	0	964	0	0	24.62	0.00	24.62
Uttarakhand	74	2	0	74	131	0	1.77	1.02	2.79
Total	714	1123	-1	760	1072	2	17.58	25.83	43.42

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	326	228	597	61	0	0
Delhi	721	475	473	-216	0	-5
Haryana	93	64	235	-163	0	0
HP	-589	-1045	-324	-663	0	0
J&K	-355	-557	175	-65	0	0
CHD	30	0	59	0	0	0
Rajasthan	-117	-121	1151	184	2	2
UP	1216	918	0	0	0	0
Uttarakhand	74	74	140	2	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 26.05.2015 :**
Normal**XIV. Synchronisation of new generating units :****XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**
0.00**XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**