

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 27.05.2015
Date of Reporting : 28.05.2015

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
41411	1902	43313	49.99	42363	1676	44039	50.05	1004.7	49.48

* 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	47.53	18.76		66.29	87.10	86.68	-0.42	152.96	0.00
Haryana	51.98	0.60		52.57	92.92	91.50	-1.42	144.07	0.07
Rajasthan	106.85	0.00	21.33	128.18	70.56	70.13	-0.43	198.31	0.00
Delhi	22.70			22.70	87.44	84.67	-2.77	107.36	0.51
UP	138.10	17.38		155.48	135.90	135.95	0.05	291.43	47.08
Uttarakhand		18.25		18.25	19.39	21.07	1.68	39.32	1.83
HP		17.96		17.96	6.96	8.44	1.48	26.40	0.00
J & K		14.60	0.00	14.60	21.45	24.07	2.62	38.67	0.00
Chandigarh				0.00	6.13	6.17	0.27	6.17	0.00
Total	367.16	87.55	21.33	476.03	527.84	528.66	1.06	1004.69	49.48

* 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	5580	0	-86	480	6112	0	1	689	7156
Haryana	6671	0	-97	325	6644	0	-198	300	7075
Rajasthan	7371	0	-234	490	8271	0	87	553	8870
Delhi	4329	0	-161	746	4703	0	-69	926	5176
UP	12478	1360	-198	970	12477	1420	69	1195	12946
Uttarakhand	1800	75	106	196	1539	0	4	76	1828
HP	1055	0	19	-1164	933	0	55	-1263	1230
J&K	1868	467	235	-336	1453	256	126	-608	1916
Chandigarh	260	0	-12	20	230	0	1	10	319
Total	41411	1902	-428	1726	42363	1676	76	1878	44757

* 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	1811	1837	43.09	1795	39.77	3.31
	Rihand I STPS (2*500)	1000	462	492	510	11.83	493	10.90	0.93
	Rihand II STPS (2*500)	1000	945	1029	1009	23.86	994	21.95	1.91
	Rihand III STPS (2*500)	1000	943	994	996	23.11	963	21.67	1.44
	Dadri I STPS (4*210)	840	815	615	561	14.91	621	14.17	0.74
	Dadri II STPS (2*490)	980	980	659	683	17.37	724	17.49	-0.12
	Unchahar I TPS (2*210)	420	405	393	418	9.41	392	9.25	0.17
	Unchahar II TPS (2*210)	420	401	280	319	8.38	349	8.11	0.26
	Unchahar III TPS (1*220)	210	201	150	146	4.09	170	3.97	0.12
	ISTPP (Jhajihar) (3*500)	1500	1000	930	653	16.10	671	16.39	-0.29
	Dadri GPS (4*130.19+2*154.51)	830	806	376	389	8.93	372	8.87	0.06
	Anta GPS (3*88.71+1*153.2)	419	381	234	191	5.15	215	5.24	-0.08
	Auraiya GPS (4*111.19+2*109.30)	663	645	153	152	3.68	153	3.81	-0.13
	Dadri Solar	5	1	0	0	0.03	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.03
	Singrauli Solar	15	3	0	0	0.07	3	0.07	0.00
KHEP	400	0	0	0	0.00	0	0.00	0.00	
Sub Total (A)	11712	9670	8116	7864	190	7918	182	8	
B. NPC	NAPS (2*220)	440	382	419	424	9.24	385	9.17	0.07
	RAPS- B (2*220)	440	361	411	415	8.80	367	8.66	0.14
	RAPS- C (2*220)	440	380	422	423	9.01	375	9.12	-0.11
	Sub Total (B)	1320	1123	1252	1262	27.05	1127	26.95	0.10
C. NHPC	Chamera I HPS (3*180)	540	540	552	548	13.19	550	12.96	0.23
	Chamera II HPS (3*100)	300	300	313	308	7.39	308	7.20	0.19
	Chamera III HPS (3*77)	231	231	237	241	5.67	236	5.55	0.12
	Bairasuil HPS(3*60)	180	179	184	125	3.32	139	3.26	0.07
	Salal-HPS (6*115)	690	666	673	673	16.20	675	15.97	0.23
	Tanakpur-HPS (3*40)	94	58	58	68	1.48	62	1.38	0.10
	Uri-I HPS (4*120)	480	475	479	477	11.63	485	11.40	0.23
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	265	290	73	4.48	187	4.26	0.22
	Dulhasti-HPS (3*130)	390	387	407	402	9.43	393	9.29	0.14
	Sewa-II HPS (3*40)	120	119	124	83	2.50	104	2.40	0.10
	Parbati 3 (4*130)	520	260	260	0	2.60	108	2.61	-0.01
	Sub Total (C)	4065	3480	3577	2997	78	3246	76	2
D. SJVNL	NJPC (6*250)	1500	1605	1617	1620	36.19	1508	36.16	0.02
	Rampur HEP (6*68.67)	412	442	446	448	10.21	425	10.00	0.20
	Sub Total (D)	1912	2047	2063	2068	46.39	1933	46.17	0.23
E. THDC	Tehri HPS (4*250)	1000	290	299	290	6.78	283	6.70	0.08
	Koteshwar HPS (4*100)	400	138	181	91	0.33	14	3.30	-2.97
	Sub Total (E)	1400	428	480	381	7.11	296	10.00	-2.89
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	863	1159	648	20.61	859	20.70	-0.09
	Dehar HPS (6*165)	990	608	825	495	14.91	621	14.59	0.32
	Pong HPS (6*66)	396	68	258	0	1.70	71	1.64	0.05
	Sub Total (F)	2900	1539	2242	1143	37.22	1551	36.93	0.28
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	99	89	2.69	112	2.83	-0.13
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1100	700	19.59	816	19.49	0.10
	Malana Stg-II HPS (2*50)	100	0	108	40	1.32	55	1.25	0.07
	Shree Cement TPS (2*150)	300	0	240	251	5.55	231	6.60	-1.05
	Budhil HPS(IPP)	70	0	74	73	1.63	68	1.75	-0.12
	Sub Total (G)	1662	0	1621	1154	30.79	1283	31.92	-1.13
H. Total Regional Entities (A-G)	24972	18286	19351	16869	416.50	17354	410.00	6.50	

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	350	320	8.71	363
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	90	120	2.34	97
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	174	212	4.26	177
	Goindwāl(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	721	702	24.01	1001
	Talwandi Saboo (1*660)	660	335	342	8.21	342
	Thermal (Total)	4680	1670	1696	47.53	1980
	Total Hydro	1148	734	799	18.76	782
	Total Punjab	5828	2404	2495	66.29	2762
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	508	543	11.94	498
Faridabad GPS (NTPC)		432	173	165	4.38	182
RGTTP (Khedar) (IPP) (2*600)		1200	719	910	18.45	769
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	607	1180	17.21	717
Thermal (Total)		4944	2007	2798	51.98	2166
Total Hydro		62	24	23	0.60	25
Total Haryana		5006	2031	2821	52.57	2191
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	879	700	20.79
	suratgarh TPS (6*250)	1500	384	374	9.38	391
	Chabra TPS (4*250)	1000	407	328	9.55	398
	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	148	157	3.77	157
	RAPS A (NPC) (1*100+1*200)	300	125	126	3.38	141
	Barsingar (NLC) (2*125)	250	154	186	3.44	143
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	507	961	20.67	861
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	435	432	10.68	445
	Kawai(Adani) (2*660)	1320	867	1145	25.19	1049
	Thermal (Total)	8276	3906	4409	107	4452
	Total Hydro	550	0	0	0.00	0
	Wind power	2798	971	983	20.59	858
	Biomass	99	26	26	0.62	26
	Solar	730	3	0	0.12	5
	Renewable/Others (Total)	3627	1000	1009	21.33	889
	Total Rajasthan	12453	4906	5418	128.18	5341
	UP	Anpara TPS (3*210+2*500)	1630	1330	1352	31.50
Obra TPS (2*50+2*94+5*200)		1194	460	257	7.90	329
Paricha TPS (2*110+2*220+2*250)		1140	864	847	18.20	758
Panki TPS (2*105)		210	135	126	3.10	129
Harduaganj TPS (1*60+1*105+2*250)		665	291	282	5.80	242
Tanda TPS (NTPC) (4*110)		440	380	370	8.60	358
Roza TPS (IPP) (4*300)		1200	1080	1062	24.90	1038
Anpara-C (IPP) (2*600)		1200	1089	1085	25.90	1079
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	299	404	9.10	379
Anpara-D		500	0	0	0.20	8
Thermal (Total)		8629	5928	5785	135	5633
Vishnuparyag HPS (IPP)(including Alakananada)		400	583	597	13.78	574
Other Hydro		527	243	146	3.60	150
Cogeneration		981	120	120	2.90	121
Total UP		10537	6874	6648	155.48	5904
Uttarakhand	Total Hydro	1398	805	739	18.25	760
	Total Uttarakhand	1398	805	739	18.25	760
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.02	1
	Delhi Gas Turbine (6x30 + 3x34)	282	71	75	1.71	71
	Pragati Gas Turbine (2x104+ 1x122)	330	263	260	6.40	266
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	284	301	6.87	286
	Badarpur TPS (NTPC) (3*95+2*210)	705	355	334	7.71	321
	Thermal (Total)	2917	973	970	22.70	946
	Total Delhi	2917	973	970	22.70	946
HP	Baspa HPS (IPP) (2*150)	300	220	240	5.58	233
	Malana HPS (IPP) (2*43)	86	65	40	1.30	54
	Other Hydro	728	410	476	11.08	462
	Total HP	1114	695	756	17.96	748
J & K	Baglihar HPS (IPP) (3*150)	450	450	440	10.52	438
	Other Hydro/IPP	436	171	169	4.08	170
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	621	609	14.60	608
Total State Control Area Generation		40347	19309	20456	476.03	19260
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5643	6219	137.05	5711
Total Regional Availability(Gross)		65319	44303	43544	1029.59	42325

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9669	7419	192.23	8010
State Control Area Hydro	5684	3122	3072	87.55	3073
Total Regional Hydro	17654	12791	10491	279.78	11083

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	150	250	250	50	3.13	0.30	2.83
Gwalior-Agra (D/C)	2119	1545	2122	0	41.18	0.00	41.18
Zerda-Kankroli	-117	-214	0	347	0.00	5.31	-5.31
Zerda-Bhinmal	-83	-190	0	320	0.00	4.38	-4.38
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00
Badod-Kota/Morak	-58	-4	53	55	0.00	0.11	-0.11
Mundra-Mohinderqar(HVDC)	2198	2303	2506	0	52.76	0.00	52.76
Vindhychal - Rihand	499	497	504	0	11.99	0.00	11.99
Sub Total WR	4708	4187			109.05	10.10	98.96
Pusauli Bypass	50	400	400	0	6.14	0.00	6.14
MZP- GKP (D/C)	219	488	498	3	8.62	0.00	8.62
Patna-Balia(D/C)	380	423	492	0	10.44	0.00	10.44
B'Sharif-Balia (D/C)	46	130	186	0	2.55	0.00	2.55
Pusauli-Balia	259	201	334	0	2.91	0.00	2.91
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	136	201	224	0	4.05	0.00	4.05
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-33	-44	0	-44	0.00	0.91	-0.91
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-122	233	316	122	4.30	0.00	4.30
Sub Total ER	935	2032			39.01	0.91	38.10
Total IR Exch	5643	6219			148.06	11.01	137.05

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
35.83	1.92	37.75	11.53	-4.90	7.58	4.66	0.76	-0.76

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Incids Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
57.63	78.61	136.24	38.10	98.96	137.05	-19.53	20.34	0.81

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	-6	-9	0	10	0	0	-0.19

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	2.33	19.47	64.98	68.44	8.17	3.41	0.56	NA

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
50.26	18.33	49.70	14.26	49.97	0.08	0.08	50.21	49.85

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	404	07:41	396	16:33	0.0	0.0	0.0	0.0
Gorakhpur	400	415	05:06	396	19:57	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	05:04	396	00:00	0.0	0.0	0.0	0.0
Dadri	400	416	06:38	394	00:00	76.0	76.0	0.0	0.0
Ballabgarh	400	419	05:05	397	00:00	0.0	0.0	0.0	0.0
Bawana	400	415	05:05	396	00:00	0.0	0.0	0.0	0.0
Bassi	400	420	18:32	393	00:00	0.0	0.0	0.0	0.0
Hissar	400	404	05:04	386	00:01	0.0	5.3	0.0	0.0
Moga	400	412	05:04	398	00:00	0.0	0.0	0.0	0.0
Abdullapur	400	414	05:05	396	00:00	0.0	0.0	0.0	0.0
Nalagarh	400	413	05:05	378	21:41	0.8	0.8	0.0	0.0
Kishenpur	400	414	03:22	402	20:13	0.0	0.0	0.0	0.0
Wagoora	400	408	03:17	383	20:12	0.0	11.9	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	794	18:32	757	23:07	0.0	0.0	0.0	0.0
Balia	765	770	05:04	740	23:36	0.0	0.3	0.0	0.0
Moga	765	788	05:04	756	15:23	0.0	0.0	0.0	0.0
Agra	765	790	18:34	748	00:06	0.0	0.0	0.0	0.0
Bhiwani	765	787	05:02	756	00:00	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 (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	487.82	661.49	479.76	454.47	714.52	710.47
Pong	426.72	384.05	405.73	361.16	402.83	288.96	119.21	113.18
Tehri	829.79	740.04	753.05	72.00	743.40	16.00	142.43	222.00
Koteshwar	612.50	598.50	605.90	2.88	609.81	4.44	222.00	220.00
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	328.31	357.34
Rihand	268.22	252.98	840.20	119.90	844.10	169.80	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	522.05	10.77	520.40	6.15	319.80	417.64

* 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	129	560	0	219	261	0	3.94	10.56	14.50
Delhi	721	205	0	515	231	0	14.24	5.69	19.93
Haryana	68	231	0	93	231	0	1.76	5.35	7.11
HP	-792	-471	0	-589	-575	0	-14.86	-12.72	-27.58
J&K	-557	-51	0	-395	59	0	-11.17	0.07	-11.10
CHD	0	10	0	0	20	0	0.24	0.67	0.91
Rajasthan	-121	672	2	-108	595	2	-2.78	17.30	14.52
UP	1195	0	0	970	0	0	24.76	0.00	24.76
Uttarakhand	74	2	0	74	122	0	1.77	0.94	2.71
Total	717	1159	2	779	945	2	17.90	27.86	45.75

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	228	129	592	69	0	0
Delhi	721	475	618	-231	0	0
Haryana	93	64	257	-32	0	0
HP	-488	-944	-372	-702	0	0
J&K	-355	-557	182	-65	0	0
CHD	30	0	69	0	0	0
Rajasthan	-108	-121	1284	141	2	2
UP	1216	921	0	0	0	0
Uttarakhand	74	74	126	2	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 27.05.2015 :**
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 :**