

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 25.05.2015
Date of Reporting : 26.05.2015

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
41881	1495	43377	50.13	42514	1633	44147	50.11	999.8	40.07

* 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	45.10	18.48		63.58	92.71	91.36	-1.35	154.94	0.00
Haryana	50.82	0.65		51.47	91.24	90.28	-0.96	141.75	0.00
Rajasthan	100.20	0.00	22.03	122.24	69.88	70.33	0.44	192.56	0.00
Delhi	21.66			21.66	86.73	86.70	-0.03	108.36	0.00
UP	141.20	16.08		157.28	137.00	136.51	-0.49	293.79	30.25
Uttarakhand		19.74		19.74	18.22	19.67	1.45	39.41	1.09
HP		21.13		21.13	4.27	4.79	0.53	25.92	0.00
J & K		14.89	0.00	14.89	20.96	22.05	1.09	36.94	8.73
Chandigarh				0.00	5.97	6.17	0.27	6.17	0.00
Total	358.98	90.97	22.03	471.98	526.98	527.86	0.95	999.84	40.07

* 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	5896	0	-192	599	6571	0	-174	765	7116
Haryana	6595	0	99	295	6284	0	72	237	7344
Rajasthan	7650	0	-185	464	8191	0	163	529	8910
Delhi	4330	0	-133	573	4720	0	106	728	5212
UP	12441	970	-39	970	12656	1390	146	1149	12827
Uttarakhand	1815	75	31	197	1591	0	156	123	1849
HP	1094	0	15	-1208	901	0	14	-1425	1227
J&K	1802	450	155	-336	1379	243	52	-633	1802
Chandigarh	259	0	-10	15	220	0	18	0	318
Total	41881	1495	-258	1569	42514	1633	553	1473	44963

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

Diversity is 1.04

III. Regional Entities :

A. NTPC	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
				(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
	Singrauli STPS (5*200+2*500)	2000	1648	1691	1846	43.02	1793	38.81	4.21
	Rihand I STPS (2*500)	1000	463	511	507	11.68	487	10.70	0.98
	Rihand II STPS (2*500)	1000	951	831	1048	23.88	995	21.90	1.98
	Rihand III STPS (2*500)	1000	953	1020	1033	23.47	978	21.89	1.58
	Dadri I STPS (4*210)	840	815	650	578	15.82	659	15.02	0.80
	Dadri II STPS (2*490)	980	980	686	690	17.69	737	17.62	0.07
	Unchahar I TPS (2*210)	420	405	431	388	8.99	374	9.13	-0.15
	Unchahar II TPS (2*210)	420	401	349	290	7.87	328	7.96	-0.09
	Unchahar III TPS (1*220)	210	160	130	126	2.66	111	3.05	-0.40
	ISTPP (Jhajjar) (3*500)	1500	1000	632	619	14.52	605	14.92	-0.40
	Dadri GPS (4*130.19+2*154.51)	830	806	261	377	8.19	341	8.32	-0.13
	Anta GPS (3*88.71+1*153.2)	419	381	201	227	5.47	228	5.33	0.14
	Auraiya GPS (4*111.19+2*109.30)	663	645	147	152	3.54	147	3.60	-0.06
	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	0.01	0	0.07	-0.07
	KHEP	400	0	0	0	0.37	16	0.00	0.37
	Sub Total (A)	11712	9615	7540	7881	187	7801	178	9
B. NPC	NAAPS (2*220)	440	381	413	424	9.18	382	9.14	0.03
	RAPS- B (2*220)	440	420	406	410	8.71	363	10.08	-1.37
	RAPS- C (2*220)	440	382	418	419	8.72	363	9.17	-0.44
	Sub Total (B)	1320	1183	1237	1253	26.61	1109	28.39	-1.78
C. NHPC	Chamera I HPS (3*180)	540	540	550	545	13.17	549	12.96	0.22
	Chamera II HPS (3*100)	300	300	312	308	7.40	308	7.20	0.20
	Chamera III HPS (3*77)	231	231	236	232	5.54	231	5.55	-0.01
	Bairasul HPS(3*60)	180	179	184	125	3.46	144	3.40	0.06
	Salal-HPS (6*115)	690	666	673	673	16.23	676	15.97	0.25
	Tanakpur-HPS (3*40)	94	55	60	66	1.43	59	1.32	0.10
	Uri-I HPS (4*120)	480	475	477	476	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	280	273	80	4.50	187	4.23	0.27
	Dulhasti-HPS (3*130)	390	387	404	401	9.12	380	9.29	-0.17
	Sewa-II HPS (3*40)	120	119	130	130	3.08	128	2.86	0.22
	Parbati 3 (4*130)	520	260	262	0	3.21	134	3.12	0.09
	Sub Total (C)	4065	3492	3560	3036	79	3281	77	1
D.SJVNL	NJPC (6*250)	1500	1605	1605	1605	38.81	1617	38.52	0.29
	Rampur HEP (6*68.67)	412	442	450	449	10.70	446	10.61	0.09
	Sub Total (D)	1912	2047	2055	2054	49.50	2063	49.13	0.38
E. THDC	Tehri HPS (4*250)	1000	290	299	300	6.89	287	6.70	0.19
	Koteshwar HPS (4*100)	400	129	373	93	3.10	129	3.10	0.00
	Sub Total (E)	1400	419	672	393	9.99	416	9.80	0.19
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	858	1316	633	20.44	852	20.60	-0.16
	Dehar HPS (6*165)	990	612	825	495	14.91	621	14.68	0.23
	Pong HPS (6*66)	396	55	198	0	1.38	57	1.33	0.05
	Sub Total (F)	2900	1525	2339	1128	36.73	1530	36.61	0.12
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	196	143	3.45	144	3.65	-0.20
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1170	1095	25.99	1083	26.37	-0.38
	Malana Stg-II HPS (2*50)	100	0	108	40	1.43	60	1.39	0.05
	Shree Cement TPS (2*150)	300	0	256	272	6.21	259	6.10	0.11
	Budhil HPS(IPP)	70	0	72	73	1.55	65	1.75	-0.20
	Sub Total (G)	1662	0	1802	1624	38.63	1610	39.26	-0.63
H. Total Regional Entities (A-G)		24972	18281	19205	17369	427.43	17810	418.91	8.52

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	7.51	313
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	110	90	2.28	95
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	173	172	4.03	168
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	713	951	22.93	955
	Talwandi Saboo (1*660)	660	390	400	8.35	348
	Thermal (Total)	4680	1706	1933	45.10	1879
	Total Hydro	1148	776	763	18.48	770
	Total Punjab	5828	2482	2696	63.58	2649
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00	0
	DCRTPP (Yamuna nagar) (2*300)	600	479	480	11.58	482
	Faridabad GPS (NTPC)	432	169	171	4.29	179
	RGTPP (kheadar) (IPP) (2*600)	1200	707	755	14.26	594
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	807	741	20.69	862
	Thermal (Total)	4944	2162	2147	50.82	2117
	Total Hydro	62	23	25	0.65	27
	Total Haryana	5006	2185	2172	51.47	2145
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	687	705	17.07
suratgarh TPS (6*250)		1500	392	379	8.64	360
Chabra TPS (4*250)		1000	327	412	7.44	310
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	188	193	4.74	197
RAPS A (NPC) (1*100+1*200)		300	126	126	3.37	140
Barsingsar (NLC) (2*125)		250	131	66	2.86	119
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	785	829	19.74	823
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	452	440	10.77	449
Kawai(Adani) (2*660)		1320	973	969	25.58	1066
Thermal (Total)		8276	4061	4119	100	4175
Total Hydro		550	0	0	0.00	0
Wind power		2798	950	966	21.32	888
Biomass		99	24	24	0.58	24
Solar		730	0	0	0.14	6
Renewable/Others (Total)		3627	974	990	22.03	918
Total Rajasthan		12453	5035	5109	122.24	5093
UP	Anpara TPS (3*210+2*500)	1630	1285	1308	30.80	1283
	Obra TPS (2*50+2*94+5*200)	1194	441	288	8.20	342
	Paricha TPS (2*110+2*220+2*250)	1140	797	816	18.90	788
	Panki TPS (2*105)	210	108	140	2.90	121
	Harduaganj TPS (1*60+1*105+2*250)	665	493	428	11.10	463
	Tanda TPS (NTPC) (4*110)	440	390	390	9.20	383
	Roza TPS (IPP) (4*300)	1200	1062	1071	25.10	1046
	Anpara-C (IPP) (2*600)	1200	1071	1080	25.70	1071
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	241	324	6.40	267
	Anpara-D	500	0	0	0.00	0
	Thermal (Total)	8629	5888	5845	138	5763
	Vishnuparyag HPS (IPP)(including Alaknanda)	400	435	435	13.78	574
	Other Hydro	527	84	61	2.30	96
	Cogeneration	981	120	120	2.90	121
	Total UP	10537	6527	6461	157.28	5979
	Uttarakhand	Total Hydro	1398	845	788	19.74
Total Uttarakhand		1398	845	788	19.74	822
Delhi	Rajghat TPS (2*67.5)	135	-1	-1	-0.25	-10
	Delhi Gas Turbine (6x30 + 3x34)	282	68	72	1.64	68
	Praagati Gas Turbine (2x104+ 1x122)	330	262	264	6.39	266
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	294	291	6.87	286
	Badarpur TPS (NTPC) (3*95+2*210)	705	326	329	7.02	292
	Thermal (Total)	2917	950	955	21.66	902
	Total Delhi	2917	950	955	21.66	902
HP	Baspa HPS (IPP) (2*150)	300	299	329	7.58	316
	Malana HPS (IPP) (2*43)	86	80	40	1.27	53
	Other Hydro	728	521	497	12.28	512
	Total HP	1114	900	866	21.13	880
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	19543	19666	471.98	19092
J. Net Inter Regional Exchange (import +ve)/Export (-ve)			5066	6205	127.86	5328
Total Regional Availability(Gross)		65319	43813	43239	1027.27	42229

IV. Total Hydro Generation:

Regional Entities Hydro	11969	10100	7890	206.205700	8592
State Control Area Hydro	5684	3247	3122	90.97	3216
Total Regional Hydro	17654	13347	11012	297.17	11808

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	MU		
Vindhyachal B/B	-100	-100	100	100	0.21	2.26	-2.05		
Gwalior-Agra (D/C)	1618	1934	1934	0	37.37	0.00	37.37		
Zerda-Kankroli	-228	-116	0	298	0.00	5.20	-5.20		
Zerda-Bhinmal	-236	-101	0	288	0.00	4.50	-4.50		
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00		
Badod-Kota/Morak	-44	14	35	44	0.00	0.02	-0.02		
Mundra-Mohinderghar(HVDC)	2304	2502	2505	0	57.57	0.00	57.57		
Vindhyachal - Rihand	496	420	507	0	10.76	0.00	10.76		
Sub Total WR	3810	4553			105.91	11.98	93.93		
Pusaui Bypass	200	200	200	0	4.88	0.00	4.88		
MZP- GKP (D/C)	240	370	436	0	7.39	0.00	7.39		
Patna-Balia(D/C)	414	447	502	0	10.08	0.00	10.08		
B'Sharif-Balia (D/C)	41	106	160	0	2.13	0.00	2.13		
Pusaui-Balia	127	242	358	0	2.66	0.00	2.66		
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00		
Pusaui-Sahupuri	183	165	209	0	4.16	0.00	4.16		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	-36	-42	0	44	0.00	0.95	-0.95		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	87	164	286	96	3.61	0.00	3.61		
Sub Total ER	1256	1652			34.89	0.95	33.94		
Total IR Exch	5066	6205			140.80	12.93	127.86		

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	
36.18	1.80	37.99	11.43	-4.98	0.50	-1.92	0.57	-0.57	

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
50.48	76.21	126.70	33.94	93.93	127.86	-16.55	17.71	1.17

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	MU		
132 KV Tanakpur - Mahendarnagar	-22	-39	0	41	0	1	-0.74		

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	2.51	25.89	73.10	66.02	6.70	1.18	0.34	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	18.03	49.72	19.21	49.95	0.08	0.08	50.20	49.87

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	18:01	401	16:48	0.0	0.0	0.0	0.0
Gorakhpur	400	415	00:00	9999	00:00	100.0	100.0	0.0	0.0
Bareilly	400	418	08:00	396	20:00	100.0	100.0	0.0	0.0
Kanpur	400	409	06:00	197	20:46	49.9	49.9	0.0	0.0
Dadri	400	410	06:01	396	15:09	0.0	0.0	0.0	0.0
Ballabgarh	400	416	06:00	397	23:05	0.0	0.0	0.0	0.0
Bawana	400	412	06:01	397	22:46	0.0	0.0	0.0	0.0
Bassi	400	418	18:03	391	23:07	0.0	0.0	0.0	0.0
Hissar	400	402	18:04	386	23:20	0.0	9.2	0.0	0.0
Moga	400	410	18:03	397	23:05	0.0	0.0	0.0	0.0
Abdullapur	400	410	05:18	396	22:49	0.0	0.0	0.0	0.0
Nalagarh	400	410	06:03	373	10:50	17.1	20.0	0.0	0.0
Kishenpur	400	414	03:15	402	20:03	0.0	0.0	0.0	0.0
Wagoora	400	409	03:18	379	20:04	0.2	13.9	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	0	00:00	0	00:00	100.0	100.0	0.0	0.0
Balia	765	0	00:00	0	00:00	100.0	100.0	0.0	0.0
Moga	765	0	00:00	0	00:00	100.0	100.0	0.0	0.0
Agra	765	0	00:00	0	00:00	100.0	100.0	0.0	0.0
Bhiwani	765	0	00:00	0	00:00	100.0	100.0	0.0	0.0
Unnao	765	0	00:00	0	00:00	100.0	100.0	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	487.75	661.49	479.94	461.24	863.29	707.92
Pong	426.72	384.05	405.71	361.16	403.00	288.96	185.19	94.69
Tehri	829.79	740.04	753.50	73.00	744.10	19.04	146.40	225.00
Koteshwar	612.50	598.50	607.10	3.32	610.39	4.69	225.00	206.00
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	358.57	356.81
Rihand	268.22	252.98	840.30	121.20	844.30	172.40	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	522.27	10.80	520.30	6.00	319.80	421.62

* 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	222	544	0	318	281	0	7.09	10.70	17.78
Delhi	671	62	-5	515	59	0	14.26	2.59	16.85
Haryana	68	169	0	93	201	0	1.76	2.40	4.17
HP	-843	-582	0	-691	-517	0	-17.99	-12.52	-30.51
J&K	-557	-76	0	-395	59	0	-11.40	-0.13	-11.53
CHD	0	0	0	0	15	0	0.24	0.43	0.66
Rajasthan	-121	648	2	-117	579	2	-2.86	13.98	11.12
UP	1149	0	0	970	0	0	24.15	0.00	24.15
Uttarakhand	74	49	0	74	123	0	1.77	1.36	3.13
Total	662	813	-2	766	801	2	17.02	18.81	35.82

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	320	222	580	64	0	0
Delhi	721	475	437	-101	0	-5
Haryana	93	64	212	-195	0	0
HP	-691	-1045	-325	-693	0	0
J&K	-355	-557	175	-76	0	0
CHD	30	0	54	0	0	0
Rajasthan	-117	-121	660	81	2	2
UP	1216	892	0	0	0	0
Uttarakhand	74	74	132	7	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 25.05.2015 :**

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 :**