

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्ट की पूर्ण स्वामित्व प्राप्त महायुक्त कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 16.05.2015
Date of Reporting : 17.05.2015

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
40301	1168	41469	50.10	35597	809	36406	50.10	887.1	31.75

* 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	22.86	19.27		42.13	85.88	85.95	0.08	128.08	0.00
Haryana	45.70	0.63		46.32	78.31	77.50	-0.81	123.82	0.00
Rajasthan	92.83	0.00	17.53	110.36	73.96	76.45	2.50	186.81	0.00
Delhi	21.84			21.84	68.82	66.72	-2.11	88.56	0.04
UP	119.60	12.95		132.55	126.30	121.49	-4.81	254.04	23.75
Uttarakhand		17.84		17.84	18.66	20.05	1.38	37.88	0.47
HP		18.83		18.83	4.87	6.87	2.00	25.70	0.00
J & K		14.33	0.00	14.33	22.94	23.09	0.15	37.42	7.49
Chandigarh				0.00	5.08	4.74	0.27	4.74	0.00
Total	302.82	83.84	17.53	404.19	484.82	482.87	-1.34	887.06	31.75

* 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	5757	0	-43	129	5045	0	-85	565	5803
Haryana	6468	0	-134	282	5322	0	-16	272	6537
Rajasthan	7640	0	50	482	7595	0	62	390	8434
Delhi	3820	0	-116	575	3586	0	38	612	4322
UP	11797	740	122	1037	10311	550	-482	1110	11804
Uttarakhand	1765	75	125	204	1483	0	65	76	1792
HP	1063	0	-37	-1188	803	0	81	-1420	1220
J&K	1763	353	93	-263	1293	259	-71	-558	1891
Chandigarh	228	0	-2	0	159	0	-37	0	228
Total	40301	1168	59	1257	35597	809	-444	1047	41094

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

Diversity is 1.02

III. Regional Entities :

A. NTPC	Station/ Constituent	Inst. Capacity	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI Net MU
		(Effective) MW							
	Singrauli STPS (5*200+2*500)	2000	1695	1852	1743	42.41	1767	39.20	3.21
	Rihand I STPS (2*500)	1000	818	855	780	18.78	782	17.42	1.35
	Rihand II STPS (2*500)	1000	970	1044	906	22.11	921	20.73	1.39
	Rihand III STPS (2*500)	1000	970	996	867	21.87	911	20.89	0.98
	Dadri I STPS (4*210)	840	615	427	429	11.23	468	10.37	0.86
	Dadri II STPS (2*490)	980	980	640	653	16.68	695	16.46	0.22
	Unchahar I TPS (2*210)	420	405	339	260	6.91	288	7.38	-0.48
	Unchahar II TPS (2*210)	420	401	304	233	6.37	265	7.18	-0.81
	Unchahar III TPS (1*220)	210	201	160	128	3.22	134	3.57	-0.35
	ISTPP (Jhajjar) (3*500)	1500	1500	738	630	14.33	597	14.70	-0.36
	Dadri GPS (4*130.19+2*154.51)	830	808	262	405	7.97	332	7.91	0.06
	Anta GPS (3*88.71+1*153.2)	419	380	201	200	4.79	200	4.80	-0.01
	Auraiya GPS (4*111.19+2*109.30)	663	644	159	159	3.77	157	3.74	0.03
	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	0.00	0	0.07	-0.07
	KHEP	400	0	0	0	1.19	50	0.00	1.19
	Sub Total (A)	11712	10393	7977	7393	182	7571	175	7
B. NPC	NAPS (2*220)	440	416	424	431	9.30	388	9.98	-0.68
	RAPS- B (2*220)	440	371	412	416	8.82	368	7.30	1.52
	RAPS- C (2*220)	440	405	440	443	9.46	394	9.72	-0.26
	Sub Total (B)	1320	1192	1276	1290	27.58	1149	27.00	0.58
C. NHPC	Chamera I HPS (3*180)	540	534	537	537	12.95	540	12.81	0.14
	Chamera II HPS (3*100)	300	300	308	305	7.35	306	7.20	0.15
	Chamera III HPS (3*77)	231	231	238	234	5.64	235	5.55	0.09
	Bairasul HPS(3*60)	180	179	182	176	4.26	178	4.18	0.08
	Salal-HPS (6*115)	690	666	663	665	16.02	668	15.98	0.04
	Tanakpur-HPS (3*40)	94	55	63	50	1.38	57	1.33	0.04
	Uri-I HPS (4*120)	480	475	477	478	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	210	203	140	3.76	156	3.60	0.15
	Dulhasti-HPS (3*130)	390	387	408	398	9.43	393	9.29	0.13
	Sewa-II HPS (3*40)	120	119	130	130	3.08	128	2.86	0.22
	Parbati 3 (4*130)	520	390	396	0	2.06	86	2.02	0.05
	Sub Total (C)	4065	3547	3605	3114	78	3232	76	1
D.SJVNL	NJPC (6*250)	1500	1605	1592	1256	34.34	1431	34.67	-0.33
	Rampur HEP (6*68.67)	412	438	445	366	9.71	405	9.54	0.17
	Sub Total (D)	1912	2043	2037	1622	44.05	1835	44.21	-0.16
E. THDC	Tehri HPS (4*250)	1000	450	450	150	9.10	379	9.00	0.10
	Koteshwar HPS (4*100)	400	188	304	200	4.52	188	4.50	0.02
	Sub Total (E)	1400	638	754	350	13.62	568	13.50	0.12
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	790	1145	479	18.92	788	18.97	-0.05
	Dehar HPS (6*165)	990	601	800	560	14.40	600	14.42	-0.02
	Pong HPS (6*66)	396	77	192	0	1.80	75	1.84	-0.04
	Sub Total (F)	2900	1468	2137	1039	35.12	1463	35.23	-0.11
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	182	103	2.81	117	2.65	0.16
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1070	650	19.23	801	19.21	0.03
	Malana Stg-II HPS (2*50)	100	0	110	60	1.41	59	1.33	0.08
	Shree Cement TPS (2*150)	300	0	267	294	6.25	261	6.30	-0.05
	Budhil HPS(IPP)	70	0	69	68	1.44	60	1.43	0.01
	Sub Total (G)	1662	0	1697	1175	31.14	1298	30.92	0.22
H. Total Regional Entities (A-G)		24972	19280	19484	15983	410.78	17116	401.59	9.19

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	210	160	4.08	170	
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	120	90	2.30	96	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	255	193	5.02	209	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura (2*700)	1400	688	354	11.47	478	
	Talwandi Saboo (1*660)	660	0	0	0.00	0	
	Thermal (Total)	4680	1273	797	22.86	953	
	Total Hydro	1148	800	804	19.27	803	
	Total Punjab	5828	2073	1601	42.13	1755	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	471	454	10.19	425	
	DCRTPP (Yamuna nagar) (2*300)	600	541	478	11.49	479	
	Faridabad GPS (NTPC)	432	191	166	4.49	187	
	RGTPP (kheadar) (IPP) (2*600)	1200	580	371	9.44	394	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP) (2*660)	1320	548	376	10.08	420	
	Thermal (Total)	4944	2331	1845	45.70	1904	
	Total Hydro	62	27	26	0.63	26	
	Total Haryana	5006	2358	1871	46.32	1930	
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	555	544	13.32	555
		suratgarh TPS (6*250)	1500	610	668	15.45	644
Chabra TPS (4*250)		1000	413	410	10.34	431	
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	185	153	4.53	189	
RAPS A (NPC) (1*100+1*200)		300	140	141	3.44	143	
Barsingar (NLC) (2*125)		250	89	186	2.91	121	
Giral LTPS (2*125)		250	0	0	0.00	0	
Rajwest LTPS (IPP) (8*135)		1080	668	707	16.38	683	
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0	
Kalisindh Thermal(1*600)		600	454	450	10.11	421	
Kawai(Adani) (2*660)		1320	537	1173	16.35	681	
Thermal (Total)		8276	3651	4432	93	3868	
Total Hydro		550	0	0	0.00	0	
Wind power		2798	806	261	16.82	701	
Biomass		99	22	22	0.53	22	
Solar		730	0	0	0.18	7	
Renewable/Others (Total)		3627	828	283	17.53	730	
Total Rajasthan		12453	4479	4715	110.36	4598	
UP		Anpara TPS (3*210+2*500)	1630	1159	1319	29.04	1210
	Obra TPS (2*50+2*94+5*200)	1194	465	470	10.56	440	
	Paricha TPS (2*110+2*220+2*250)	1140	841	750	18.36	765	
	Panki TPS (2*105)	210	113	122	2.82	117	
	Harduaganj TPS (1*60+1*105+2*250)	665	216	170	4.16	173	
	Tanda TPS (NTPC) (4*110)	440	320	288	8.77	365	
	Roza TPS (IPP) (4*300)	1200	842	756	18.44	769	
	Anpara-C (IPP) (2*600)	1200	891	900	19.33	806	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	227	227	5.25	219	
	Anpara-D	500	0	104	0.00	0	
	Thermal (Total)	8629	5074	5106	117	4863	
	Vishnuparyag HPS (IPP)(including Alaknanda)	400	512	447	11.11	463	
	Other Hydro	527	50	55	1.84	77	
	Cogeneration	981	120	120	2.88	120	
	Total UP	10537	5756	5728	132.55	5060	
	Uttarakhand	Total Hydro	1398	729	728	17.84	743
		Total Uttarakhand	1398	729	728	17.84	743
Delhi	Rajghat TPS (2*67.5)	135	39	46	1.10	46	
	Delhi Gas Turbine (6x30 + 3x34)	282	112	114	2.69	112	
	Praagati Gas Turbine (2x104+ 1x122)	330	145	152	3.48	145	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (6*250)	1370	294	268	6.57	274	
	Badarpur TPS (NTPC) (3*95+2*210)	705	332	327	7.99	333	
	Thermal (Total)	2917	922	907	21.84	910	
	Total Delhi	2917	922	907	21.84	910	
HP	Baspa HPS (IPP) (2*150)	300	218	218	5.01	209	
	Malana HPS (IPP) (2*43)	86	77	46	1.34	56	
	Other Hydro	728	516	522	12.48	520	
	Total HP	1114	811	786	18.83	785	
J & K	Baglihar HPS (IPP) (3*150)	450	440	440	10.56	440	
	Other Hydro/IPP	436	163	145	3.77	157	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	603	585	14.33	597	
Total State Control Area Generation		40347	17731	16921	404.19	16378	
J. Net Inter Regional Exchange (import +ve)/Export (-ve)			4920.3	4204.38	100.18	4174	
Total Regional Availability(Gross)		65319	42135	37109	915.14	37668	

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9895	6938	195.004740	8125
State Control Area Hydro	5684	3020	2984	83.84	3030
Total Regional Hydro	17654	12915	9922	278.84	11156

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			
Vindhyachal B/B	-350	-300	0	500	0.00	7.38	-7.38		
Gwalior-Agra (D/C)	1588	1101	1725	0	28.05	0.00	28.05		
Zerda-Kankroli	-102	-242	0	310	0.00	5.30	-5.30		
Zerda-Bhinmal	-79	-167	0	251	0.00	3.87	-3.87		
Malanpur-Auraiya	-59	-68	0	92	0.00	1.38	-1.38		
Badod-Kota/Morak	-34	-43	11	47	0.00	0.86	-0.86		
Mundra-Mohinderghar(HVDC)	2002	2198	2204	0	49.22	0.00	49.22		
Vindhyachal - Rihand	480	450	488	0	10.97	0.00	10.97		
Sub Total WR	3446	2929			88.24	18.78	69.46		
Pusaui Bypass	-332	-298	0	430	0.00	7.01	-7.01		
MZP- GKP (D/C)	334	453	435	0	8.29	0.00	8.29		
Patna-Balia(D/C)	534	380	571	0	11.07	0.00	11.07		
B'Sharif-Balia (D/C)	203	165	352	0	5.17	0.00	5.17		
Pusaui-Balia	340	228	410	0	3.51	0.00	3.51		
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00		
Pusaui-Sahupuri	164	196	220	0	4.22	0.00	4.22		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	-24	-32	0	40	0.00	0.84	-0.84		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	255	183	335	0	6.30	0.00	6.30		
Sub Total ER	1474	1275			38.56	7.85	30.71		
Total IR Exch	4920	4204			126.80	26.62	100.18		

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	
25.30	2.06	27.36	13.13	-6.40	1.68	0.07	0.79	-0.79	

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
42.95	57.30	100.25	30.71	69.46	100.18	-12.23	12.16	-0.07

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 - Mahendarnagar	-25	-27	0	1	0	1	-0.60		

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	0.00	5.83	43.08	72.57	16.97	4.56	0.00	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					
50.20	13.01	49.80	22.07	50.00	0.04	0.06	50.16	49.93

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	399	16:17	0.0	0.0	0.0	0.0
Gorakhpur	400	415	08:20	399	21:17	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	423	04:01	403	19:52	0.0	0.0	1.2	0.0
Dadri	400	426	05:06	406	14:16	79.9	79.9	0.8	0.0
Ballabgarh	400	427	03:59	406	16:16	0.0	0.0	29.8	0.0
Bawana	400	424	03:59	406	19:22	0.0	0.0	22.5	0.0
Bassi	400	423	04:01	397	10:47	0.0	0.0	4.6	0.0
Hissar	400	414	06:01	395	19:22	0.0	0.0	0.0	0.0
Moga	400	422	03:59	402	19:22	0.0	0.0	6.9	0.0
Abdullapur	400	424	05:16	396	19:21	0.0	0.0	20.5	0.0
Nalagarh	400	426	04:36	404	19:20	0.0	0.0	23.5	0.0
Kishenpur	400	423	03:10	406	21:07	0.0	0.0	12.7	0.0
Wagoora	400	415	03:22	387	21:02	0.0	5.7	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	777	06:03	750	20:11	0.0	0.0	0.0	0.0
Moga	765	806	05:05	764	19:22	0.0	0.0	14.9	0.0
Agra	765	789	04:01	752	22:08	0.0	0.0	0.0	0.0
Bhiwani	765	807	03:58	772	19:22	0.0	0.0	28.4	0.0
Unnao	765	776	08:04	743	20:50	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	0.00	0.00	0.00	0.00	0.00	0.00
Pong	426.72	384.05	0.00	0.00	0.00	0.00	0.00	0.00
Tehri	829.79	740.04	754.70	81.00	747.80	38.00	139.26	294.00
Koteshwar	612.50	598.50	611.20	5.20	610.46	4.89	294.00	300.00
Chamera-I	760.00	748.75	754.23	0.00	0.00	0.00	340.11	350.67
Rihand	268.22	252.98	840.50	123.70	845.90	193.70	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	523.38	10.77	520.69	7.57	325.32	419.43

* 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	32	533	0	23	107	0	0.84	10.85	11.69
Delhi	721	-108	0	613	-38	0	15.41	0.03	15.44
Haryana	64	208	0	93	188	0	1.71	3.62	5.33
HP	-661	-759	0	-610	-578	0	-14.65	-13.84	-28.48
J&K	-558	0	0	-396	133	0	-11.18	0.61	-10.57
CHD	0	0	0	0	0	0	0.24	0.10	0.34
Rajasthan	-117	505	2	-117	597	2	-2.81	14.49	11.68
UP	1110	0	0	1037	0	0	25.06	0.00	25.06
Uttarakhand	74	2	0	74	130	0	1.76	1.08	2.84
Total	665	380	2	716	540	2	16.39	16.94	33.33

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	44	23	601	39	0	0
Delhi	760	475	238	-184	0	0
Haryana	93	64	214	-197	0	0
HP	-509	-762	-386	-797	0	0
J&K	-355	-558	206	-15	0	0
CHD	30	0	20	0	0	0
Rajasthan	-117	-117	767	72	2	0
UP	1132	975	0	0	0	0
Uttarakhand	74	74	135	2	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 16.05.2015 :**

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 :**