

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 22.05.2015
Date of Reporting : 23.05.2015

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
41004	2119	43122	50.16	41445	1531	42977	50.12	969.0	44.81

* 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	34.99	18.12		53.11	99.56	99.10	-0.46	152.21	0.00
Haryana	49.00	0.68		49.68	92.71	91.02	-1.69	140.70	0.00
Rajasthan	95.39	0.00	17.72	113.11	66.92	67.36	0.44	180.47	0.00
Delhi	23.08			23.08	83.19	81.38	-1.81	104.46	0.29
UP	130.83	15.23		146.05	137.04	137.88	0.84	283.93	35.36
Uttarakhand		19.05		19.05	18.27	19.07	0.80	38.12	1.55
HP		21.43		21.43	4.60	3.84	-0.76	25.27	0.00
J & K		14.62	0.00	14.62	22.47	23.46	1.00	38.08	7.62
Chandigarh				0.00	5.84	5.80	0.27	5.80	0.00
Total	333.29	89.13	17.72	440.13	530.59	528.92	-1.36	969.05	44.81

* 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	6363	0	63	709	6396	0	12	989	7079
Haryana	6415	0	-380	314	6314	0	-125	295	6938
Rajasthan	7125	0	39	491	7339	0	-12	522	8189
Delhi	4380	0	4	506	4457	0	74	486	5007
UP	11957	1700	410	958	12934	1260	179	1136	12934
Uttarakhand	1859	75	167	207	1500	0	-10	58	1859
HP	930	0	-221	-1214	942	0	-36	-1274	1210
J&K	1718	344	227	-322	1356	271	-40	-558	1834
Chandigarh	258	0	-1	25	206	0	-4	0	301
Total	41004	2119	307	1675	41445	1531	38	1653	43024

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

Diversity is 1.05

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	
										UI [OG:(+ve), UG: (-ve)]
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1688	1814	1751	40.63	1693	39.60	1.03	
	Rihand I STPS (2*500)	1000	463	489	502	11.06	461	10.05	1.01	
	Rihand II STPS (2*500)	1000	954	902	980	21.92	914	20.09	1.84	
	Rihand III STPS (2*500)	1000	954	1005	823	21.02	876	19.41	1.61	
	Dadri I STPS (4*210)	840	815	737	730	16.02	668	15.11	0.91	
	Dadri II STPS (2*490)	980	980	875	696	18.38	766	18.07	0.31	
	Unchahar I TPS (2*210)	420	405	387	356	8.50	354	8.72	-0.22	
	Unchahar II TPS (2*210)	420	401	256	265	7.59	316	7.70	-0.10	
	Unchahar III TPS (1*220)	210	201	131	139	3.67	153	3.75	-0.09	
	ISTPP (Jhajjar) (3*500)	1500	1500	747	616	14.98	624	15.33	-0.35	
	Dadri GPS (4*130.19+2*154.51)	830	806	359	384	8.82	368	8.97	-0.15	
	Anta GPS (3*88.71+1*153.2)	419	380	225	227	5.58	232	5.44	0.14	
	Auraiya GPS (4*111.19+2*109.30)	663	644	150	138	3.57	149	3.67	-0.10	
	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	0.08	3	0.07	0.01	
KHEP	400	0	200	200	4.72	197	0.00	4.72		
Sub Total (A)	11712	10196	8277	7807	187	7775	176	11		
B. NPC	NAPS (2*220)	440	384	422	428	9.24	385	9.22	0.03	
	RAPS- B (2*220)	440	420	422	362	8.58	358	10.08	-1.50	
	RAPS- C (2*220)	440	280	432	350	8.57	357	6.72	1.85	
	Sub Total (B)	1320	1084	1276	1140	26.39	1100	26.02	0.38	
C. NHPC	Chamera I HPS (3*180)	540	540	549	550	13.16	548	12.96	0.20	
	Chamera II HPS (3*100)	300	300	311	309	7.37	307	7.20	0.17	
	Chamera III HPS (3*77)	231	231	237	233	5.60	233	5.55	0.05	
	Bairasuil HPS(3*60)	180	179	185	123	4.13	172	4.06	0.07	
	Salal-HPS (6*115)	690	666	673	673	16.24	677	15.97	0.27	
	Tanakpur-HPS (3*40)	94	66	84	58	1.67	70	1.56	0.11	
	Uri-I HPS (4*120)	480	475	478	476	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	210	221	206	4.94	206	4.85	0.10	
	Dulhasti-HPS (3*130)	390	387	407	404	9.47	395	9.29	0.18	
	Sewa-II HPS (3*40)	120	119	131	130	3.08	128	2.86	0.22	
	Parbati 3 (4*130)	520	260	262	132	3.57	149	3.51	0.06	
	Sub Total (C)	4065	3433	3538	3294	81	3369	79	2	
	D.SJVNL	NJPC (6*250)	1500	1605	1627	1622	38.75	1615	38.52	0.23
		Rampur HEP (6*68.67)	412	438	447	445	10.76	448	10.51	0.25
Sub Total (D)		1912	2043	2074	2067	49.51	2063	49.03	0.48	
E. THDC	Tehri HPS (4*250)	1000	290	290	148	6.75	281	6.67	0.09	
	Koteshwar HPS (4*100)	400	146	289	101	3.51	146	3.50	0.01	
	Sub Total (E)	1400	436	579	249	10.26	428	10.17	0.10	
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	839	1176	647	20.59	858	20.13	0.46	
	Dehar HPS (6*165)	990	605	825	495	14.86	619	14.51	0.35	
	Pong HPS (6*66)	396	52	198	0	1.24	51	1.25	-0.01	
	Sub Total (F)	2900	1495	2199	1142	36.68	1528	35.89	0.80	
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	192	225	4.36	182	4.15	0.21	
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1188	1140	27.45	1144	28.07	-0.62	
	Malana Stg-II HPS (2*50)	100	0	110	61	1.63	68	1.52	0.11	
	Shree Cement TPS (2*150)	300	0	257	285	6.24	260	6.30	-0.07	
	Budhil HPS(IPP)	70	0	71	71	1.66	69	1.68	-0.02	
	Sub Total (G)	1662	0	1819	1782	41.33	1722	41.72	-0.40	
H. Total Regional Entities (A-G)	24972	18687	19761	17480	431.64	17985	418.09	13.54		

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	420	340	8.52	355
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	120	90	2.34	98
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	210	212	4.37	182
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	700	741	19.76	823
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1450	1383	34.99	1458
	Total Hydro	1148	767	767	18.12	755
	Total Punjab	5828	2217	2150	53.11	2213
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	491	548	11.94	498
Faridabad GPS (NTPC)		432	175	190	4.40	183
RGTPP (kheadar) (IPP) (2*600)		1200	833	942	20.70	862
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	424	563	11.96	498
Thermal (Total)		4944	1923	2243	49.00	2042
Total Hydro		62	25	27	0.68	28
Total Haryana		5006	1948	2270	49.68	2070
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	693	696	16.88
	suratgarh TPS (6*250)	1500	373	378	9.23	384
	Chabra TPS (4*250)	1000	533	515	13.12	547
	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	145	145	3.61	151
	RAPS A (NPC) (1*100+1*200)	300	139	140	3.35	140
	Barsingsar (NLC) (2*125)	250	66	63	1.42	59
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	630	565	13.50	562
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	440	485	10.78	449
	Kawai(Adani) (2*660)	1320	1087	900	23.51	980
	Thermal (Total)	8276	4106	3887	95	3975
	Total Hydro	550	0	0	0.00	0
	Wind power	2798	263	884	16.93	705
	Biomass	99	26	26	0.62	26
	Solar	730	0	0	0.17	7
	Renewable/Others (Total)	3627	289	910	17.72	738
	Total Rajasthan	12453	4395	4797	113.11	4713
	UP	Anpara TPS (3*210+2*500)	1630	1265	1328	30.60
Obra TPS (2*50+2*94+5*200)		1194	468	473	11.00	458
Paricha TPS (2*110+2*220+2*250)		1140	808	834	19.00	792
Panki TPS (2*105)		210	135	149	3.40	142
Harduaganj TPS (1*60+1*105+2*250)		665	226	201	5.30	221
Tanda TPS (NTPC) (4*110)		440	385	380	9.42	392
Roza TPS (IPP) (4*300)		1200	1071	1072	25.09	1046
Anpara-C (IPP) (2*600)		1200	540	1089	17.79	741
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	324	324	6.32	264
Anpara-D		500	0	0	0.00	0
Thermal (Total)		8629	5222	5850	128	5330
Vishnuparyag HPS (IPP)(including Alaknanda)		400	596	596	13.78	574
Other Hydro		527	71	69	1.44	60
Cogeneration		981	120	120	2.90	121
Total UP		10537	6009	6635	146.05	5511
Uttarakhand	Total Hydro	1398	816	807	19.05	794
	Total Uttarakhand	1398	816	807	19.05	794
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.02	1
	Delhi Gas Turbine (6x30 + 3x34)	282	91	75	1.88	78
	Praagati Gas Turbine (2x104+ 1x122)	330	275	276	6.63	276
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	288	296	6.85	286
	Badarpur TPS (NTPC) (3*95+2*210)	705	322	329	7.69	320
	Thermal (Total)	2917	976	976	23.08	962
	Total Delhi	2917	976	976	23.08	962
HP	Baspa HPS (IPP) (2*150)	300	332	332	7.73	322
	Malana HPS (IPP) (2*43)	86	45	50	1.43	60
	Other Hydro	728	521	513	12.27	511
	Total HP	1114	898	895	21.43	893
J & K	Baglihar HPS (IPP) (3*150)	450	442	442	10.61	442
	Other Hydro/IPP	436	171	168	4.01	167
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	613	610	14.62	609
Total State Control Area Generation		40347	17872	19140	440.13	17765
J. Net Inter Regional Exchange (import (+ve)/Export (-ve))			4988	5601	121.52	5063
Total Regional Availability(Gross)		65319	42621	42221	993.29	40813

IV. Total Hydro Generation:

Regional Entities Hydro	11969	10080	8377	215.478842	8978
State Control Area Hydro	5684	3190	3175	89.13	3139
Total Regional Hydro	17654	13270	11552	304.61	12118

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	50	50	350	0.60	2.38	-1.78		
Gwalior-Agra (D/C)	1537	1747	1924	0	37.71	0.00	37.71		
Zerda-Kankroli	-113	-174	0	314	0.00	4.39	-4.39		
Zerda-Bhinmal	-54	-121	73	246	0.00	2.90	-2.90		
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00		
Badod-Kota/Morak	-76	-52	22	80	0.00	0.77	-0.77		
Mundra-Mohinderghar(HVDC)	2302	2303	2506	0	55.98	0.00	55.98		
Vindhyachal - Rihand	472	493	501	0	11.45	0.00	11.45		
Sub Total WR	3718	4246			105.74	10.44	95.30		
Pusaui Bypass	-113	-353	0	358	0.00	5.04	-5.04		
MZP- GKP (D/C)	360	390	421	0	7.09	0.00	7.09		
Patna-Balia(D/C)	426	490	490	0	10.13	0.00	10.13		
B'Sharif-Balia (D/C)	93	149	166	0	2.45	0.00	2.45		
Pusaui-Balia	194	249	284	0	2.39	0.00	2.39		
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00		
Pusaui-Sahupuri	167	174	199	0	3.99	0.00	3.99		
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48		
Son Ngr-Rihand	-36	-40	0	42	0.00	0.79	-0.79		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	179	296	332	0	5.53	0.00	5.53		
Sub Total ER	1270	1355			32.06	5.83	26.22		
Total IR Exch	4988	5601			137.79	16.27	121.52		

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	
	35.71	1.50	37.22	8.96	-4.91	1.04	5.22	0.82	-0.82

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Incld Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
48.04	83.78	131.82	26.22	95.30	121.52	-21.82	11.52	-10.30

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	-21	-21	0	28	0	1	-0.51		

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	1.57	16.30	63.35	69.17	10.06	3.62	0.88	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					
50.32	18.03	49.72	22.09	49.97	0.07	0.08	50.30	49.89

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	407	05:07	400	14:54	0.0	0.0
Gorakhpur	400	415	06:02	397	01:34	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	416	18:03	397	00:37	0.0	0.0	0.0	0.0
Dadri	400	412	05:28	399	14:52	0.0	0.0	0.0	0.0
Ballabgarh	400	419	06:01	401	22:17	0.0	0.0	0.0	0.0
Bawana	400	413	06:01	399	00:36	0.0	0.0	0.0	0.0
Bassi	400	419	18:36	397	15:26	0.0	0.0	0.0	0.0
Hissar	400	404	18:03	390	00:00	0.0	0.0	0.0	0.0
Moga	400	410	18:03	398	00:00	0.0	0.0	0.0	0.0
Abdullapur	400	410	05:28	396	11:25	0.0	0.0	0.0	0.0
Nalagarh	400	412	06:02	398	10:24	0.0	0.0	0.0	0.0
Kishenpur	400	415	18:10	403	14:22	0.0	0.0	0.0	0.0
Wagoora	400	411	18:10	388	10:21	0.0	6.7	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	781	18:06	741	22:15	0.0	0.0
Balia	765	768	18:03	740	01:35	0.0	0.7	0.0	0.0
Moga	765	786	18:03	761	00:37	0.0	0.0	0.0	0.0
Agra	765	786	18:07	744	22:10	0.0	0.0	0.0	0.0
Bhiwani	765	789	18:05	759	00:00	0.0	0.0	0.0	0.0
Unnao	765	760	17:06	730	01:35	0.0	15.0	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	487.34	652.97	480.11	461.24	860.26	711.86
Pong	426.72	384.05	405.54	352.07	403.26	296.79	164.52	86.08
Tehri	829.79	740.04	753.70	74.00	745.05	24.00	143.99	221.00
Koteswar	612.50	598.50	607.55	3.54	610.48	4.80	221.00	233.00
Chamera-I	760.00	748.75	757.67	0.00	0.00	0.00	400.41	356.43
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 Sagar	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	522.70	10.78	520.24	6.82	325.23	408.54

* 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	424	565	0	416	293	0	10.13	10.84	20.96
Delhi	570	-81	-3	514	-8	0	13.58	1.35	14.94
Haryana	68	226	0	93	221	0	1.67	4.15	5.82
HP	-1015	-258	0	-813	-401	0	-21.33	-7.95	-29.28
J&K	-507	-51	0	-396	74	0	-10.92	0.39	-10.53
CHD	0	0	0	0	25	0	0.24	0.53	0.77
Rajasthan	-121	641	2	-114	603	2	-2.84	16.72	13.88
UP	1136	0	0	958	0	0	23.08	0.00	23.08
Uttarakhand	36	22	0	74	134	0	1.02	1.04	2.06
Total	591	1064	-1	733	939	2	14.63	27.08	41.71

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	424	416	601	184	0	0
Delhi	672	475	448	-214	0	-3
Haryana	93	64	245	-219	0	0
HP	-813	-1167	-258	-477	0	0
J&K	-355	-545	182	-65	0	0
CHD	30	0	54	0	0	0
Rajasthan	-114	-121	1127	534	2	2
UP	1205	839	0	0	0	0
Uttarakhand	74	36	137	2	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 22.05.2015 :****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 :**