

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 09.05.2015
Date of Reporting : 10.05.2015

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
41866	3673	45539	50.10	41702	2536	44239	50.06	983.5	66.25

* 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	36.02	13.00		49.02	104.93	103.41	-1.52	152.43	6.51
Haryana	56.09	0.67		56.75	94.74	93.13	-1.61	149.89	0.00
Rajasthan	112.31	0.00	12.23	124.54	72.57	72.21	-0.36	196.75	0.00
Delhi	24.13			24.13	74.51	74.33	-0.18	98.46	0.42
UP	135.90	12.30		148.20	131.66	132.51	0.85	280.71	50.91
Uttarakhand		15.14		15.14	22.75	23.86	1.10	39.00	0.45
HP		19.91		19.91	5.01	5.91	0.89	25.82	0.00
J & K		13.83	0.00	13.83	22.35	21.17	-1.18	34.99	7.97
Chandigarh				0.00	5.22	5.43	0.27	5.43	0.00
Total	364.45	74.84	12.23	451.52	533.74	531.96	-1.73	983.47	66.25

* 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	6371	0	-128	1093	6170	206	-77	1262	7076
Haryana	6492	0	-414	314	6645	0	9	262	6940
Rajasthan	7981	0	51	720	8085	0	56	622	8669
Delhi	4295	0	-54	516	4318	0	140	325	4730
UP	11870	3190	128	403	12611	1955	80	1670	12611
Uttarakhand	1846	75	118	413	1502	80	57	300	1846
HP	1078	0	-44	-1094	931	0	74	-1324	1215
J&K	1687	408	59	-303	1246	295	-35	-556	1835
Chandigarh	247	0	2	10	195	0	10	0	265
Total	41866	3673	-282	2071	41702	2536	314	2560	43022

* 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 :

A. NTPC	Station/ Constituent	Inst. Capacity	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentour(MW)	Schedule Net MU	UI Net MU
		(Effective) MW							
	Singrauli STPS (5*200+2*500)	2000	1876	1926	1857	47.22	1967	43.59	3.63
	Rihand I STPS (2*500)	1000	470	479	449	11.61	484	10.49	1.12
	Rihand II STPS (2*500)	1000	968	1005	970	23.35	973	21.79	1.56
	Rihand III STPS (2*500)	1000	958	893	923	22.96	957	21.61	1.35
	Dadri I STPS (4*210)	840	410	424	386	9.49	395	9.05	0.43
	Dadri II STPS (2*490)	980	980	936	810	19.23	801	19.29	-0.06
	Unchahar I TPS (2*210)	420	405	371	417	9.44	393	9.34	0.10
	Unchahar II TPS (2*210)	420	401	327	420	9.03	376	8.78	0.25
	Unchahar III TPS (1*220)	210	163	115	62	2.85	119	3.36	-0.52
	ISTPP (Jhajjhan) (3*500)	1500	1500	1008	822	17.52	730	18.33	-0.81
	Dadri GPS (4*130.19+2*154.51)	830	806	174	374	6.58	274	6.61	-0.03
	Anta GPS (3*88.71+1*153.2)	419	378	192	34	3.58	149	3.87	-0.29
	Auraiya GPS (4*111.19+2*109.30)	663	636	156	156	3.70	154	3.64	0.05
	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	0.07	3	0.07	0.00
	KHEP	400	0	0	0	0.00	0	0.00	0.00
	Sub Total (A)	11712	9955	8006	7680	187	7778	180	7
B. NPC	NAPS (2*220)	440	379	417	426	9.14	381	9.10	0.04
	RAPS- B (2*220)	440	360	412	394	8.99	375	7.30	1.69
	RAPS- C (2*220)	440	410	432	446	9.50	396	9.84	-0.34
	Sub Total (B)	1320	1149	1261	1266	27.63	1151	26.24	1.40
C. NHPC	Chamera I HPS (3*180)	540	538	544	549	13.09	546	12.79	0.31
	Chamera II HPS (3*100)	300	302	286	313	7.34	306	7.12	0.22
	Chamera III HPS (3*77)	231	231	226	234	5.61	234	5.46	0.15
	Bairasuli HPS(3*60)	180	179	180	180	4.36	182	4.20	0.16
	Salal-HPS (6*115)	690	661	667	670	15.99	666	15.69	0.30
	Tanakpur-HPS (3*40)	94	54	61	47	1.35	56	1.26	0.08
	Uri-I HPS (4*120)	480	475	476	478	11.61	484	11.24	0.37
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	210	206	210	4.15	173	4.00	0.14
	Dulhasti-HPS (3*130)	390	387	408	395	9.40	392	9.29	0.11
	Sewa-II HPS (3*40)	120	119	130	130	3.07	128	2.81	0.26
	Parbati 3 (4*130)	520	390	259	0	3.14	131	3.19	-0.05
	Sub Total (C)	4065	3546	3444	3206	79	3296	77	2
D.SJVNL	NJPC (6*250)	1500	1605	1605	1605	38.43	1601	37.39	1.04
	Rampur HEP (6*68.67)	412	427	430	370	10.35	431	10.17	0.18
	Sub Total (D)	1912	2032	2035	1975	48.78	2033	47.55	1.23
E. THDC	Tehri HPS (4*250)	1000	393	302	157	7.91	329	7.80	0.11
	Koteshwar HPS (4*100)	400	177	302	100	4.10	171	4.10	0.00
	Sub Total (E)	1400	570	604	257	12.00	500	11.90	0.10
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	607	1043	482	15.20	633	14.56	0.64
	Dehar HPS (6*165)	990	608	660	580	15.05	627	14.58	0.47
	Pong HPS (6*66)	396	194	252	66	4.40	183	4.65	-0.25
	Sub Total (F)	2900	1408	1955	1128	34.65	1444	33.80	0.85
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	220	222	4.69	195	4.90	-0.21
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1056	1000	23.67	986	24.56	-0.88
	Malana Stg-II HPS (2*50)	100	0	110	80	2.13	89	2.00	0.13
	Shree Cement TPS (2*150)	300	0	248	297	5.91	246	6.05	-0.15
	Budhil HPS(IPP)	70	0	73	73	1.76	74	1.66	0.11
	Sub Total (G)	1662	0	1707	1673	38.16	1590	39.17	-1.01
H. Total Regional Entities (A-G)		24972	18661	19012	17185	427.01	17792	415.63	11.38

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	950	1020	22.41	934
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	113	120	2.50	104
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	488	508	11.11	463
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	0	0	0.00	0
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1551	1648	36.02	1501
	Total Hydro	1148	478	559	13.00	542
	Total Punjab	5828	2029	2207	49.02	2043
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	665	641	14.85
DCRTPP (Yamuna nagar) (2*300)		600	534	544	12.42	517
Faridabad GPS (NTPC)		432	178	183	4.25	177
RGTPP (khedar) (IPP) (2*600)		1200	582	562	11.93	497
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	596	593	12.65	527
Thermal (Total)		4944	2555	2523	56.09	2337
Total Hydro		62	18	16	0.67	28
Total Haryana		5006	2573	2539	56.75	2365
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	686	698	16.97
	suratgarh TPS (6*250)	1500	753	743	18.18	758
	Chabra TPS (4*250)	1000	537	576	13.11	546
	Dholpur GPS (3*110)	330	107	106	2.29	96
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	131	137	3.65	152
	RAPS A (NPC) (1*100+1*200)	300	142	142	3.49	145
	Barsingsar (NLC) (2*125)	250	95	98	2.13	89
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwst LTPS (IPP) (8*135)	1080	487	704	16.54	689
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	442	183	9.71	405
	Kawai(Adani) (2*660)	1320	938	1171	26.24	1093
	Thermal (Total)	8276	4318	4558	112	4680
	Total Hydro	550	0	0	0.00	0
	Wind power	2798	595	613	11.73	489
	Biomass	99	18	18	0.43	18
	Solar	730	0	0	0.06	3
	Renewable/Others (Total)	3627	613	631	12.23	509
	Total Rajasthan	12453	4931	5189	124.54	5189
	UP	Anpara TPS (3*210+2*500)	1630	1288	1342	29.90
Obra TPS (2*50+2*94+5*200)		1194	465	453	10.70	446
Paricha TPS (2*110+2*220+2*250)		1140	771	752	16.90	704
Panki TPS (2*105)		210	63	54	1.00	42
Harduaganj TPS (1*60+1*105+2*250)		665	223	221	5.30	221
Tanda TPS (NTPC) (4*110)		440	290	300	7.10	296
Roza TPS (IPP) (4*300)		1200	1062	1053	24.90	1038
Anpara-C (IPP) (2*600)		1200	1080	1080	25.90	1079
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	403	403	8.50	354
Anpara-D		500	0	46	0.90	38
Thermal (Total)		8629	5645	5704	131	5463
Vishnuparyag HPS (IPP)(including Alakananda)		400	480	445	10.70	446
Other Hydro		527	71	76	1.60	67
Cogeneration		981	200	200	4.80	200
Total UP		10537	6396	6425	148.20	5729
Uttarakhand	Total Hydro	1398	643	576	15.14	631
	Total Uttarakhand	1398	643	576	15.14	631
Delhi	Rajghat TPS (2*67.5)	135	53	54	0.84	35
	Delhi Gas Turbine (6x30 + 3x34)	282	141	143	3.32	138
	Prahati Gas Turbine (2x104+ 1x122)	330	288	283	6.88	287
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	286	298	6.93	289
	Badarpur TPS (NTPC) (3*95+2*210)	705	316	325	6.17	257
	Thermal (Total)	2917	1085	1104	24.13	1006
	Total Delhi	2917	1085	1104	24.13	1006
HP	Baspa HPS (IPP) (2*150)	300	267	247	5.63	234
	Malana HPS (IPP) (2*43)	86	97	90	1.86	78
	Other Hydro	728	509	524	12.42	517
	Total HP	1114	873	861	19.91	829
J & K	Baglihar HPS (IPP) (3*150)	450	440	440	10.56	440
	Other Hydro/IPP	436	132	137	3.27	136
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	572	577	13.83	576
Total State Control Area Generation		40347	19102	19478	451.52	18367
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4824	5491	127.65	5319
Total Regional Availability(Gross)		65319	42938	42154	1006.18	41478

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9424	7868	205.040196	8543
State Control Area Hydro	5684	2655	2665	74.84	2672
Total Regional Hydro	17654	12079	10533	279.88	11216

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	Import	Export	
	Vindhyachal B/B	100	-100	450	500	1.02	4.30	-3.27	
Gwalior-Agra (D/C)	1917	2135	2370	0	50.18	0.00	50.18		
Zerda-Kankroli	-172	-228	0	302	0.00	5.43	-5.43		
Zerda-Bhinmal	-125	-185	0	249	0.00	3.31	-3.31		
Malanpur-Auraiya	-60	-36	0	60	0.00	0.62	-0.62		
Badod-Kota/Morak	13	-4	25	-33	0.00	-0.28	0.28		
Mundra-Mohindergarh(HVDC)	2502	2503	2508	0	59.53	0.00	59.53		
Vindhyachal - Rihand	464	400	500	0	10.45	0.00	10.45		
Sub Total WR	4639	4485			121.18	13.37	107.81		
Pusauli Bypass	-590	-421	0	590	0.00	10.82	-10.82		
MZP- GKP (D/C)	16	288	378	9	4.19	0.00	4.19		
Patna-Balia(D/C)	312	445	497	0	10.46	0.00	10.46		
B'Sharif-Balia (D/C)	-14	77	125	18	1.64	0.00	1.64		
Pusauli-Balia	9	128	182	0	1.38	0.00	1.38		
Gaya-Fatehpur (765 Kv)	169	196	242	0	4.90	0.00	4.90		
Pusauli-Sahupuri	133	156	214	0	4.17	0.00	4.17		
K'nasa-Sahupuri	0	0	0	162	0.00	0.00	0.00		
Son Ngr-Rihand	-36	-31	0	38	0.00	0.76	-0.76		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	186	168	257	0	4.69	0.00	4.69		
Sub Total ER	185	1006			31.42	11.58	19.84		
Total IR Exch	4824	5491			152.60	24.96	127.65		

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)			Power Exchange Shdl (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR	
29.43	1.12	30.55	0.54	5.45	16.73	1.80	0.93	-0.93	
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	
48.76	87.57	136.32	19.84	107.81	127.65	-28.91	20.24	-8.68	

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	Import	Export	
	132 KV Tanakpur - Mahendarnagar	-42	-38	0	42	0	1	-0.92	

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	0.30	2.65	18.45	57.76	62.66	12.43	4.78	1.74	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					
50.34	18.03	49.65	18.57	49.98	0.09	0.09	50.28	49.91

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	400	12:40	0.0	0.0
Gorakhpur	400	415	06:33	395	22:37	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	413	07:05	398	22:50	0.0	0.0	0.0	0.0
Dadri	400	415	06:04	398	22:43	0.0	0.0	0.0	0.0
Ballabgarh	400	420	07:06	400	22:48	0.0	0.0	0.0	0.0
Bawana	400	411	07:00	396	22:30	0.0	0.0	0.0	0.0
Bassi	400	416	05:03	395	09:41	0.0	0.0	0.0	0.0
Hissar	400	402	06:03	387	22:09	0.0	7.3	0.0	0.0
Moga	400	408	07:03	393	09:31	0.0	0.0	0.0	0.0
Abdullapur	400	413	06:07	396	22:36	0.0	0.0	0.0	0.0
Nalagarh	400	410	07:04	395	09:31	0.0	0.0	0.0	0.0
Kishenpur	400	414	02:59	401	20:25	0.0	0.0	0.0	0.0
Wagoora	400	412	02:59	378	20:30	1.8	12.9	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	776	07:05	744	22:51	0.0	0.0
Balia	765	769	07:04	738	22:31	0.0	5.8	0.0	0.0
Moga	765	777	07:06	3	17:39	1.7	1.7	0.0	0.0
Agra	765	781	07:03	751	10:14	0.0	0.0	0.0	0.0
Bhiwani	765	786	09:00	753	14:00	0.0	0.0	0.0	0.0
Unnao	765	758	07:10	730	22:49	0.0	55.0	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	485.51	602.35	481.85	503.43	733.92	497.13
Pong	426.72	384.05	405.44	352.07	403.08	288.96	285.28	300.50
Tehri	829.79	740.04	758.35	106.00	753.30	70.05	161.62	249.00
Koteswar	612.50	598.50	610.90	5.02	610.27	4.69	249.00	272.00
Chamera-I	760.00	748.75	759.13	0.00	0.00	0.00	431.16	354.63
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	522.80	4.61	519.33	3.09	324.96	191.53

* 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	320	942	0	318	775	0	7.67	21.78	29.45
Delhi	387	-25	-36	541	-25	0	10.10	1.71	11.81
Haryana	78	183	0	145	169	0	2.24	4.22	6.46
HP	-940	-384	0	-383	-712	0	-13.64	-13.31	-26.95
J&K	-466	-91	0	-303	0	0	-8.71	-0.26	-8.97
CHD	0	0	0	0	10	0	0.24	0.23	0.47
Rajasthan	-121	741	2	-117	834	2	-2.85	17.93	15.08
UP	1081	589	0	403	0	0	14.12	3.14	17.26
Uttarakhand	74	178	49	74	296	43	1.77	5.93	7.70
Total	413	2132	15	678	1348	45	10.93	41.38	52.31

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	320	318	1032	756	0	0
Delhi	546	306	487	-35	0	-36
Haryana	145	74	191	77	0	0
HP	-383	-940	-374	-838	0	0
J&K	-263	-466	74	-98	0	0
CHD	30	0	39	0	0	0
Rajasthan	-117	-121	991	610	2	2
UP	1114	339	589	0	0	0
Uttarakhand	74	74	297	171	49	43

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 09.05.2015 :**

Normal

XIV. Synchronisation of new generating units :**XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus //substation :**

765 kV Meerut-Moga first time charged at 01:52 hrs on 10-05-2015

315 MVA ICT-3 (new) at Bareilly (UP) started taking load from 14:00 hrs on 09-05-2015

XVI. Tripping of lines in pooling stations :**XVII. Complete generation loss in a generating station :**