पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 18.09.2014
Date of Reporting : 19.09.2014

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
43080	3937	47016	50.04	38716	2920	41636	49.99	949.5	126.73

* 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:

UI [OD:(+ve), UD: (-ve)]

State	State's Control Area Generation (Net MU)				Drawal Schedule	Actual Drawal	UI	Consumption	Shortages *
	Thermal	Hydro	Renewable/others $	Total	(Net MU)	(Net MU)	(Net MU)	(Net MU)	(MU)
Punjab	80.62	16.11		96.73	82.73	83.63	0.90	180.36	33.50
Haryana	80.48	0.63		81.10	82.95	82.79	-0.16	163.90	0.10
Rajasthan	103.08	1.48	19.72	124.28	54.37	55.51	1.15	179.80	0.24
Delhi	26.74			26.74	73.47	74.65	1.18	101.39	0.08
UP	117.50	17.40	0.40	135.30	88.88	94.25	5.36	229.55	91.04
Uttarakhand		18.70		18.70	14.77	16.49	1.73	35.19	1.77
HP		20.57		20.57	6.17	6.46	0.29	27.03	0.00
J & K		10.50	0.00	10.50	15.13	16.37	1.24	26.87	0.00
Chandigarh				0.00	4.24	5.45	1.21	5.45	0.00
Total	**408.42**	**85.39**	**20.12**	**513.93**	**422.70**	**435.59**	**12.89**	**949.52**	**126.73**

* Shortage furnished by the respective constituent.$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

UI/OA/PX [OD/Import: (+ve), UD/Export: (-ve)

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	8552	0	3	837	7398	0	149	943	8606
Haryana	7992	149	-28	1587	6783	0	182	1736	8039
Rajasthan	7988	0	-103	234	6969	0	-15	501	7990
Delhi	4583	0	88	752	3787	0	-71	252	4846
UP	9442	3550	-61	-400	10490	2920	140	1582	11095
Uttarakhand	1633	235	74	104	1306	0	53	169	1645
HP	1230	3	-50	-846	967	0	95	-676	1286
J&K	1397	0	53	-270	836	0	22	-617	1436
Chandigarh	263	0	35	0	181	0	37	0	271
Total	**43080**	**3937**	**11**	**1999**	**38716**	**2920**	**592**	**3889**	**43080**

* 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 :

UI [OG:(+ve), UG: (-ve)]

	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	1177	1215	1436	31.32	1305	28.24	3.08
	Rihand I STPS (2*500)	1000	418	460	460	10.99	458	10.00	0.98
	Rihand II STPS (2*500)	1000	950	1032	1034	26.44	1102	22.69	3.75
	Rihand III STPS (2*500)	1000	460	500	503	11.91	496	10.99	0.92
	Dadri I STPS (4*210)	840	698	859	603	17.10	712	16.64	0.46
	Dadri II STPS (2*490)	980	480	506	450	11.72	488	11.49	0.23
	Unchahar I TPS (2*210)	420	199	213	215	5.18	216	4.74	0.44
	Unchahar II TPS (2*210)	420	359	439	259	8.21	342	8.48	-0.28
	Unchahar III TPS (1*220)	210	198	218	211	5.11	213	4.66	0.45
	ISTPP (Jhajjhar) (3*500)	1500	960	980	905	21.20	883	22.83	-1.63
	Dadri GPS (4*130.19+2*154.51)	830	766	179	187	4.25	177	4.26	-0.01
	Anta GPS (3*88.71+1*153.2)	419	393	246	254	5.81	242	5.58	0.23
	Auraiya GPS (4*111.19+2*109.30)	663	478	153	154	3.66	153	3.52	0.14
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Sub Total (A)	**11297**	**7539**	**7000**	**6671**	**163**	**6789**	**154**	**9**
B. NPC	NAPS (2*220)	440	275	307	316	6.56	273	6.60	-0.04
	RAPS- B (2*220)	440	394	435	441	9.43	393	9.46	-0.03
	RAPS- C (2*220)	440	175	184	186	3.85	160	4.20	-0.35
	Sub Total (B)	**1320**	**844**	**926**	**943**	**19.84**	**827**	**20.26**	**-0.42**
C. NHPC	Chamera I HPS (3*180)	540	534	54612	0	5.07	211	4.90	0.17
	Chamera II HPS (3*100)	300	300	308	103	4.79	200	4.70	0.09
	Chamera III HPS (3*77)	231	229	235	79	3.51	146	3.40	0.11
	Bairasuil HPS(3*60)	180	0	0	0	0.00	0	0.00	0.00
	Salal-HPS (6*115)	690	571	673	563	14.17	590	13.67	0.49
	Tanakpur-HPS (3*40)	94	87	90	88	0.21	9	2.08	-1.87
	Uri-I HPS (4*120)	480	397	451	430	9.99	416	9.42	0.57
	Uri-II HPS (4*60)	240	185	234	177	4.64	193	4.49	0.16
	Dhauliganga-HPS (4*70)	280	185	210	209	4.49	187	4.45	0.04
	Dulhasti-HPS (3*130)	390	387	399	396	9.38	391	9.28	0.10
	Sewa-II HPS (3*40)	120	119	130	81	1.64	68	1.50	0.14
	Parbati 3 (4*130)	520	130	132	0	1.97	82	1.95	0.02
	Sub Total ©	**4065**	**3123**	**57474**	**2125**	**60**	**2494**	**60**	**0**
D.SJVNL	NJPC (6*250)	1500	1605	1615	714	24.86	1036	24.27	0.59
	Rampur HEP (4*68.67)	275	236	370	189	5.97	249	5.68	0.29
	Sub Total (D)	1775	1841	1985	903	30.83	1284	29.94	0.88
E. THDC	Tehri HPS (4*250)	1000	1060	1007	0	5.26	219	5.20	0.06
	Koteshwar HPS (4*100)	400	91	101	90	1.76	73	1.75	0.01
	Sub Total (E)	**1400**	**1151**	**1108**	**90**	**7.02**	**292**	**6.95**	**0.07**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	772	1336	501	18.48	770	18.52	-0.05
	Dehar HPS (6*165)	990	458	825	435	11.46	477	10.99	0.47
	Pong HPS (6*66)	396	28	192	0	0.72	30	0.68	0.04
	Sub Total (F)	**2900**	**1258**	**2353**	**936**	**30.65**	**1277**	**30.19**	**0.46**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	150	74	2.10	87	1.89	0.21
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1040	450	13.80	575	13.08	0.72
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	148	149	3.53	147	3.53	0.00
	Budhil HPS(IPP)	70	0	34	34	0.79	33	0.73	0.06
	Sub Total (G)	1662	0	1372	707	20.22	842	19.22	1.00
H. Total Regional Entities (A-G)		**24419**	**15757**	**72218**	**12374**	**331.35**	**13806**	**320.61**	**10.74**

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	1110	815	21.78	907
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	306	297	6.90	287
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	938	828	20.33	847
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1386	1386	31.63	1318
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	**4680**	**3740**	**3326**	**80.62**	**3359**
	Total Hydro	1148	755	649	16.11	671
	Total Punjab	**5828**	**4495**	**3975**	**96.73**	**4031**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	838	799	18.56	773
	DCRTPP (Yamuna nagar) (2*300)	600	545	467	11.65	486
	Faridabad GPS (NTPC)	432	192	0	2.04	85
	RGTPP (khedar) (IPP) (2*600)	1200	1125	896	21.83	910
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1232	1084	26.39	1100
	Thermal (Total)	**4944**	**3932**	**3246**	**80.48**	**3353**
	Total Hydro	62	29	26	0.63	26
	Total Haryana	**5006**	**3961**	**3272**	**81.10**	**3379**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	971	939	22.10	921
	suratgarh TPS (6*250)	1500	1331	1349	30.64	1277
	Chabra TPS (3*250)	750	430	417	10.30	429
	Dholpur GPS (3*110)	330	118	104	2.78	116
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	117	99	3.39	141
	RAPS A (NPC) (1*100+1*200)	300	160	0	1.59	66
	Barsingsar (NLC) (2*125)	250	97	98	2.20	92
	Giral LTPS (2*125)	250	0	39	0.38	16
	Rajwest LTPS (IPP) (8*135)	1080	832	832	20.72	864
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	0	0	0.00	0
	Kawai(Adani) (2*660)	1320	595	0	8.98	374
	Thermal (Total)	**8026**	**4651**	**3877**	**103**	**4295**
	Total Hydro	550	154	46	1.48	62
	Wind power	2798	588	948	18.35	765
	Biomass	99	33	33	0.79	33
	Solar	730	0	0	0.58	24
	Renewable/Others (Total)	3627	621	981	19.72	822
	Total Rajasthan	**12203**	**5426**	**4904**	**124.28**	**5178**
UP	Anpara TPS (3*210+2*500)	1630	900	902	21.90	913
	Obra TPS (2*50+2*94+5*200)	1194	338	340	8.50	354
	Paricha TPS (2*110+2*220+2*250)	1140	608	626	14.10	588
	Panki TPS (2*105)	210	117	131	2.80	117
	Harduaganj TPS (1*60+1*105+2*250)	665	455	483	10.90	454
	Tanda TPS (NTPC) (4*110)	440	233	231	5.80	242
	Roza TPS (IPP) (4*300)	1200	1108	1098	26.40	1100
	Anpara-C (IPP) (2*600)	1200	902	909	21.70	904
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	232	233	5.40	225
	Thermal (Total)	**8129**	**4893**	**4953**	**117.50**	**4896**
	Vishnuparyag HPS (IPP)	400	436	436	10.50	438
	Other Hydro	527	294	289	6.90	288
	Cogeneration	981	15	15	0.40	17
	Total UP	**10037**	**5638**	**5693**	**135.30**	**5200**
Uttarakhand	Total Hydro	1398	858	687	18.70	779
	Total Uttarakhand	**1398**	**858**	**687**	**18.70**	**779**
Delhi	Rajghat TPS (2*67.5)	135	88	83	1.95	81
	Delhi Gas Turbine (6x30 + 3x34)	282	146	149	3.40	142
	Pragati Gas Turbine (2x104+ 1x122)	330	290	293	6.82	284
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	297	278	6.96	290
	Badarpur TPS (NTPC) (3*95+2*210)	705	315	306	7.62	318
	Thermal (Total)	2917	1136	1109	26.74	1114
	Total Delhi	**2917**	**1136**	**1109**	**26.74**	**1114**
HP	Baspa HPS (IPP) (2*150)	300	274	245	5.62	234
	Malana HPS (IPP) (2*43)	86	50	48	1.19	50
	Other Hydro	728	519	586	13.76	573
	Total HP	**1114**	**843**	**879**	**20.57**	**857**
J & K	Baglihar HPS (IPP) (3*150)	450	438	438	10.50	438
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**438**	**438**	**10.50**	438
Total State Control Area Generation		**39597**	**22795**	**20957**	**513.93**	**20976**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4052**	**6991**	**121.47**	**5061**
Total Regional Availability(Gross)		**64017**	**99065**	**40322**	**966.75**	**39844**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**64110**	**4578**	**144.25**	**6010**
State Control Area Hydro	**5684**	**3371**	**3014**	**85.39**	**3120**
Total Regional Hydro	**17116**	**67481**	**7592**	**229.64**	**9131**

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
	MW	MW	Import	Export	Import	Export	MU
Vindhychal B/B	200	300	300	200	2.90	1.80	1.10
Gwalior-Agra (D/C)	964	2006	2039	0	33.33	0.00	33.33
Zerda-Kankroli	-238	-37	0	244	0.00	3.65	-3.65
Zerda-Bhinmal	-226	-62	0	272	0.00	3.50	-3.50
Malanpur-Auraiya	82	44	0	85	0.00	1.54	-1.54
Badod-Kota/Morak	-58	10	10	70	0.00	0.50	-0.50
Mundra-Mohindergarh(HVDC)	2000	1998	2007	0	48.37	0.00	48.37
Vindhyachal - Rihand	509	487	509	12	11.73	0.00	11.73
Sub Total WR	**3233**	**4746**			**96.33**	**10.97**	**85.35**
Pusauli Bypass	400	400	400	0	9.70	0.00	9.70
MZP- GKP (D/C)	186	616	622	0	9.00	0.00	9.00
Patna-Balia(D/C)	83	563	563	0	6.72	0.00	6.72
B'Sharif-Balia (D/C)	16	400	400	0	5.34	0.00	5.34
Pusauli-Balia	-102	-9	0	102	0.00	1.24	-1.24
Gaya-Fatehpur (765 Kv)	69	217	297	0	3.91	0.00	3.91
Pusauli-Sahupuri	143	19	165	0	2.40	0.00	2.40
K'nasa-Sahupuri	0	0	0	0	0.96	0.00	0.96
Son Ngr-Rihand	43	48	0	48	0.00	1.02	-1.02
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-19	-9	92	110	0.33	0.00	0.33
Sub Total ER	**819**	**2245**			**38.37**	**2.26**	**36.12**
Total IR Exch	**4052**	**6991**			**134.70**	**13.23**	**121.47**

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
26.10	3.73	29.82	13.88	22.81	0.60	20.72	0.00	0.00

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
44.30	73.14	117.44	36.12	85.35	121.47	-8.18	12.21	4.03

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	1.25	7.43	34.44	76.94	59.79	4.24	1.02	0.00	0.00

<---------- Frequency (Hz) ---------->				Average	Frequency	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum		Frequency	Variation		MAX	MIN
Freq	Time	Freq	Time	Hz	Index		(Hz)	(Hz)
50.20	18.01	49.57	19.08	49.93	0.13	0.09	50.21	49.81

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	411	13:01	406	00:07	0.0	0.0	0.0	0.0
Gorakhpur	400	413	08:58	392	04:38	0.0	0.0	0.0	0.0
Bareilly	400	414	18:03	398	01:32	0.0	0.0	0.0	0.0
Kanpur	400	417	13:19	401	19:07	0.0	0.0	0.0	0.0
Dadri	400	413	06:01	397	11:39	0.0	0.0	0.0	0.0
Ballabhgarh	400	418	06:03	402	11:38	0.0	0.0	0.0	0.0
Bawana	400	412	06:00	398	19:07	0.0	0.0	0.0	0.0
Bassi	400	427	18:01	407	10:14	0.0	0.0	7.9	0.0
Hissar	400	406	18:01	390	19:07	0.0	0.0	0.0	0.0
Moga	400	409	03:40	396	19:07	0.0	0.0	0.0	0.0
Abdullapur	400	415	06:07	396	19:05	0.0	0.0	0.0	0.0
Nalagarh	400	420	03:43	404	19:05	0.0	0.0	0.0	0.0
Kishenpur	400	413	04:00	401	19:05	0.0	0.0	0.0	0.0
Wagoora	400	414	03:44	397	19:08	0.0	0.0	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	778	09:01	744	19:06	0.0	0.0	0.0	0.0
Balia	765	762	20:46	740	19:07	0.0	1.4	0.0	0.0
Moga	765	788	17:59	759	19:07	0.0	0.0	0.0	0.0
Agra	765	796	18:01	759	19:09	0.0	0.0	0.0	0.0
Bhiwani	765	791	18:03	762	19:08	0.0	0.0	0.0	0.0
Unnao	765	750	13:07	736	14:49	0.0	52.3	0.0	0.0

IX. Reservior Parameters:

Name of Reservior	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	511.58	1620.46	511.57	1620.46	509.48	515.00
Pong	426.72	384.05	416.87	755.83	423.68	1066.19	154.21	42.62
Tehri	829.79	740.04	821.45	1030.00	822.40	1052.00	200.59	115.00
Koteshwar	612.50	598.50	612.01	5.73	610.90	4.95	115.00	117.00
Chamera-I	760.00	748.75	756.07	13.81	0.00	0.00	164.11	137.72
Rihand	268.22	252.98	856.90	371.10	854.50	329.80	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	517.27	108.23	520.54	76.10	185.56	459.69

*** 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	887	57	0	837	0	0	20.49	0.27	20.76
Delhi	164	118	-30	369	393	-10	9.58	6.94	16.52
Haryana	1628	108	0	1561	26	0	38.85	0.37	39.22
HP	-627	-49	0	-612	-234	0	-14.33	-0.23	-14.57
J&K	-538	-78	0	-336	66	0	-9.35	-1.08	-10.43
CHD	0	0	0	0	0	0	0.07	0.24	0.31
Rajasthan	181	318	2	264	-30	0	5.13	4.34	9.47
UP	70	1484	27	-406	0	6	-6.97	10.77	3.81
Uttarakhand	85	84	0	85	19	0	2.03	2.46	4.49
Total	**1848**	**2043**	**-1**	**1762**	**240**	**-4**	**45.51**	**24.07**	**69.58**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	887	837	59	0	0	0
Delhi	787	164	667	-92	0	-30
Haryana	1644	1561	109	-401	0	0
HP	-523	-713	189	-234	0	0
J&K	-336	-538	66	-83	0	0
CHD	15	0	59	0	0	0
Rajasthan	264	177	369	-38	2	0
UP	70	-513	1526	0	34	0
Uttarakhand	85	85	196	14	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 18.09.2014 :

XIV. Synchronisation of new generating units :
0.00

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

XVI. Tripping of lines in pooling stations :

XVII. Complete generation loss in a generating station :

Report for : 18.09.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**