पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 27.09.2014
Date of Reporting : 28.09.2014

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
43562	2618	46180	50.04	39392	4502	43894	49.96	929.8	92.65

* 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	68.79	13.43		82.22	83.97	83.89	-0.07	166.11	0.00
Haryana	93.56	0.71		94.27	71.30	69.96	-1.35	164.23	0.00
Rajasthan	117.76	0.91	15.43	134.10	58.40	65.78	7.38	199.88	8.22
Delhi	17.62			17.62	70.60	68.28	-2.32	85.90	0.05
UP	112.30	15.00	0.36	127.66	102.12	105.60	3.48	233.26	80.30
Uttarakhand		15.99		15.99	14.77	16.34	1.57	32.33	4.09
HP		1.55		1.55	7.83	9.78	1.94	11.32	0.00
J & K		12.27	0.00	12.27	16.95	19.74	2.79	32.01	0.00
Chandigarh				0.00	4.18	4.80	0.61	4.80	0.00
Total	**410.02**	**59.86**	**15.79**	**485.67**	**430.12**	**444.15**	**14.04**	**929.82**	**92.65**

* 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	7806	0	23	749	6946	0	-83	798	7894
Haryana	7636	0	-28	1042	6721	0	162	1132	7636
Rajasthan	8909	73	378	241	8210	282	424	203	8909
Delhi	4244	0	-168	458	3649	0	-115	203	4349
UP	10199	2335	83	-430	10456	4220	150	1306	11381
Uttarakhand	1534	210	37	47	1356	0	131	200	1560
HP	1223	0	86	-703	865	0	52	-368	1255
J&K	1773	0	294	-210	1026	0	87	-556	1773
Chandigarh	238	0	3	0	163	0	15	0	239
Total	**43562**	**2618**	**708**	**1196**	**39392**	**4502**	**823**	**2918**	**43562**

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

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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	1455	1683	1422	38.19	1591	34.91	3.28
	Rihand I STPS (2*500)	1000	471	684	445	12.78	533	11.30	1.48
	Rihand II STPS (2*500)	1000	950	1038	1044	24.81	1034	22.80	2.01
	Rihand III STPS (2*500)	1000	955	1003	1007	23.87	995	22.92	0.95
	Dadri I STPS (4*210)	840	600	622	621	15.04	627	14.29	0.75
	Dadri II STPS (2*490)	980	975	996	999	23.13	964	23.33	-0.20
	Unchahar I TPS (2*210)	420	199	220	219	5.26	219	4.78	0.48
	Unchahar II TPS (2*210)	420	400	439	436	10.56	440	9.60	0.96
	Unchahar III TPS (1*220)	210	198	218	216	5.20	217	4.75	0.45
	ISTPP (Jhajjhar) (3*500)	1500	990	937	955	21.76	907	23.75	-1.99
	Dadri GPS (4*130.19+2*154.51)	830	770	234	399	8.20	342	8.20	0.01
	Anta GPS (3*88.71+1*153.2)	419	393	254	0	2.02	84	2.14	-0.12
	Auraiya GPS (4*111.19+2*109.30)	663	478	151	155	3.67	153	3.52	0.14
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.04	2	0.07	-0.03
	Sub Total (A)	**11297**	**8838**	**8479**	**7918**	**195**	**8106**	**186**	**8**
B. NPC	NAPS (2*220)	440	277	309	315	6.55	273	6.65	-0.10
	RAPS- B (2*220)	440	395	430	435	9.23	385	9.48	-0.25
	RAPS- C (2*220)	440	154	162	164	3.36	140	3.71	-0.35
	Sub Total (B)	**1320**	**826**	**901**	**914**	**19.13**	**797**	**19.83**	**-0.70**
C. NHPC	Chamera I HPS (3*180)	540	534	536	0	6.37	266	6.20	0.17
	Chamera II HPS (3*100)	300	300	33	33	3.03	126	3.24	-0.21
	Chamera III HPS (3*77)	231	229	233	78	2.53	105	2.45	0.08
	Bairasuil HPS(3*60)	180	118	120	0	1.37	57	1.25	0.12
	Salal-HPS (6*115)	690	440	626	450	11.17	465	10.57	0.60
	Tanakpur-HPS (3*40)	94	89	74	94	2.16	90	2.14	0.02
	Uri-I HPS (4*120)	480	436	467	451	10.91	455	10.48	0.44
	Uri-II HPS (4*60)	240	231	240	239	5.65	235	5.54	0.10
	Dhauliganga-HPS (4*70)	280	131	209	140	3.18	133	3.14	0.04
	Dulhasti-HPS (3*130)	390	387	398	397	9.36	390	9.28	0.09
	Sewa-II HPS (3*40)	120	119	130	0	0.72	30	0.60	0.12
	Parbati 3 (4*130)	520	130	130	0	1.41	59	1.40	0.01
	Sub Total ©	**4065**	**3144**	**3196**	**1882**	**58**	**2411**	**56**	**2**
D.SJVNL	NJPC (6*250)	1500	1605	1605	500	18.80	783	18.56	0.24
	Rampur HEP (4*68.67)	275	168	280	100	3.98	166	4.02	-0.04
	Sub Total (D)	1775	1773	1885	600	22.78	949	22.58	0.20
E. THDC	Tehri HPS (4*250)	1000	1060	1007	0	4.55	190	4.50	0.05
	Koteshwar HPS (4*100)	400	91	101	0	1.77	74	1.75	0.02
	Sub Total (E)	**1400**	**1151**	**1108**	**0**	**6.32**	**263**	**6.25**	**0.07**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	954	1339	806	22.84	952	22.90	-0.06
	Dehar HPS (6*165)	990	346	660	280	8.36	348	8.29	0.06
	Pong HPS (6*66)	396	204	384	132	4.96	207	4.90	0.06
	Sub Total (F)	**2900**	**1504**	**2383**	**1218**	**36.16**	**1507**	**36.10**	**0.06**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	101	66	1.57	66	1.59	-0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1051	260	10.51	438	10.30	0.20
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	296	297	7.02	292	7.00	0.01
	Budhil HPS(IPP)	70	0	28	20	0.59	25	0.57	0.02
	Sub Total (G)	1662	0	1476	643	19.68	820	19.47	0.22
H. Total Regional Entities (A-G)		**24419**	**17236**	**19428**	**13175**	**356.49**	**14854**	**346.88**	**9.60**

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	990	990	22.10	921
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	290	260	5.94	248
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	524	530	11.94	498
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1385	1347	28.80	1200
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	**4680**	**3189**	**3127**	**68.79**	**2866**
	Total Hydro	1148	572	578	13.43	560
	Total Punjab	**5828**	**3761**	**3705**	**82.22**	**3426**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	1119	1123	25.32	1055
	DCRTPP (Yamuna nagar) (2*300)	600	528	501	12.07	503
	Faridabad GPS (NTPC)	432	166	190	4.37	182
	RGTPP (khedar) (IPP) (2*600)	1200	1114	1112	25.64	1068
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1187	983	26.16	1090
	Thermal (Total)	**4944**	**4114**	**3909**	**93.56**	**3898**
	Total Hydro	62	31	30	0.71	30
	Total Haryana	**5006**	**4145**	**3939**	**94.27**	**3928**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	960	953	22.15	923
	suratgarh TPS (6*250)	1500	1356	1328	31.83	1326
	Chabra TPS (3*250)	750	613	655	15.53	647
	Dholpur GPS (3*110)	330	111	116	2.76	115
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	70	62	1.77	74
	RAPS A (NPC) (1*100+1*200)	300	165	0	1.25	52
	Barsingsar (NLC) (2*125)	250	204	202	4.62	193
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	950	950	23.41	976
	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	606	623	14.43	601
	Thermal (Total)	**8026**	**5035**	**4889**	**118**	**4907**
	Total Hydro	550	68	24	0.91	38
	Wind power	2798	443	597	14.32	597
	Biomass	99	31	31	0.75	31
	Solar	730	0	0	0.36	15
	Renewable/Others (Total)	3627	474	628	15.43	643
	Total Rajasthan	**12203**	**5577**	**5541**	**134.10**	**5587**
UP	Anpara TPS (3*210+2*500)	1630	759	800	18.70	779
	Obra TPS (2*50+2*94+5*200)	1194	321	320	7.30	304
	Paricha TPS (2*110+2*220+2*250)	1140	550	568	13.40	558
	Panki TPS (2*105)	210	72	72	1.70	71
	Harduaganj TPS (1*60+1*105+2*250)	665	417	212	7.70	321
	Tanda TPS (NTPC) (4*110)	440	262	272	6.60	275
	Roza TPS (IPP) (4*300)	1200	1098	1121	26.50	1104
	Anpara-C (IPP) (2*600)	1200	997	905	22.90	954
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	320	322	7.50	313
	Thermal (Total)	**8129**	**4796**	**4592**	**112.30**	**4679**
	Vishnuparyag HPS (IPP)	400	436	406	9.30	388
	Other Hydro	527	263	196	5.70	238
	Cogeneration	981	15	15	0.36	15
	Total UP	**10037**	**5510**	**5209**	**127.66**	**4932**
Uttarakhand	Total Hydro	1398	776	621	15.99	666
	Total Uttarakhand	**1398**	**776**	**621**	**15.99**	**666**
Delhi	Rajghat TPS (2*67.5)	135	40	34	0.77	32
	Delhi Gas Turbine (6x30 + 3x34)	282	106	107	2.50	104
	Pragati Gas Turbine (2x104+ 1x122)	330	268	264	6.47	269
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	302	297	7.11	296
	Badarpur TPS (NTPC) (3*95+2*210)	705	316	313	0.78	32
	Thermal (Total)	2917	1032	1015	17.62	734
	Total Delhi	**2917**	**1032**	**1015**	**17.62**	**734**
HP	Baspa HPS (IPP) (2*150)	300	79	119	0.41	17
	Malana HPS (IPP) (2*43)	86	41	37	0.09	4
	Other Hydro	728	422	407	1.05	44
	Total HP	**1114**	**542**	**563**	**1.55**	**64**
J & K	Baglihar HPS (IPP) (3*150)	450	436	436	10.47	436
	Other Hydro/IPP	436	75	75	1.80	75
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**511**	**511**	**12.27**	511
Total State Control Area Generation		**39597**	**21854**	**21104**	**485.67**	**19849**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3829**	**6822**	**158.14**	**6589**
Total Regional Availability(Gross)		**64017**	**45111**	**41101**	**1000.30**	**41292**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**9724**	**4026**	**135.20**	**5634**
State Control Area Hydro	**5684**	**2763**	**2523**	**59.86**	**2106**
Total Regional Hydro	**17116**	**12487**	**6549**	**195.06**	**7740**

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	50	100	300	0.13	3.50	-3.36
Gwalior-Agra (D/C)	869	1739	1874	0	31.22	0.00	31.22
Zerda-Kankroli	-141	-40	0	284	0.00	3.73	-3.73
Zerda-Bhinmal	-135	-24	-15	297	0.00	3.16	-3.16
Malanpur-Auraiya	110	91	0	0	0.00	2.53	-2.53
Badod-Kota/Morak	-47	7	16	84	0.00	1.06	-1.06
Mundra-Mohindergarh(HVDC)	1697	1698	1705	0	41.13	0.00	41.13
Vindhyachal - Rihand	0	484	492	0	0.00	0.00	0.00
Sub Total WR	**2553**	**4005**			**72.49**	**13.98**	**58.51**
Pusauli Bypass	400	400	400	0	9.72	0.00	9.72
MZP- GKP (D/C)	340	896	896	0	14.61	0.00	14.61
Patna-Balia(D/C)	109	427	440	0	7.26	0.00	7.26
B'Sharif-Balia (D/C)	180	406	424	0	7.36	0.00	7.36
Pusauli-Balia	-67	-27	0	76	0.00	1.29	-1.29
Gaya-Fatehpur (765 Kv)	157	412	488	0	7.83	0.00	7.83
Pusauli-Sahupuri	173	100	173	0	3.17	0.00	3.17
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-28	-46	0	0	47.00	0.90	46.10
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	12	249	371	66	4.88	0.00	4.88
Sub Total ER	**1276**	**2817**			**101.82**	**2.19**	**99.63**
Total IR Exch	**3829**	**6822**			**174.31**	**16.17**	**158.14**

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
24.64	3.94	28.58	13.01	6.19	6.71	6.37	0.00	0.00

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
48.30	50.46	98.77	99.63	58.51	158.14	51.33	8.05	59.37

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	2.23	19.49	58.19	84.68	33.92	4.75	3.07	0.25	0.00

<---------- Frequency (Hz) ---------->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz			(Hz)	(Hz)
50.26	18.03	49.64	0.22	49.89	0.23	0.10	50.17	49.79

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	412	02:04	404	03:46	88.3	88.3	0.0	0.0
Gorakhpur	400	408	18:03	385	03:53	0.0	5.7	0.0	0.0
Bareilly	400	412	00:03	398	03:54	0.0	0.0	0.0	0.0
Kanpur	400	415	01:58	401	09:43	0.0	0.0	0.0	0.0
Dadri	400	410	04:18	391	09:23	0.0	0.0	0.0	0.0
Ballabhgarh	400	416	01:57	402	09:42	0.0	0.0	0.0	0.0
Bawana	400	411	03:30	400	09:39	8.9	8.9	0.0	0.0
Bassi	400	426	02:01	261	21:00	40.4	40.4	2.0	0.0
Hissar	400	405	18:02	392	11:56	0.0	0.0	0.0	0.0
Moga	400	408	18:02	397	09:40	0.0	0.0	0.0	0.0
Abdullapur	400	415	03:29	396	09:35	36.5	36.5	0.0	0.0
Nalagarh	400	421	03:31	406	19:00	0.0	0.0	0.3	0.0
Kishenpur	400	219	02:58	212	18:59	100.0	100.0	0.0	0.0
Wagoora	400	407	23:43	385	19:46	0.0	4.3	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	761	21:26	732	02:34	0.0	14.8	0.0	0.0
Moga	765	777	18:04	755	09:43	0.0	0.0	0.0	0.0
Agra	765	788	01:59	758	09:44	0.0	0.0	0.0	0.0
Bhiwani	765	0	00:00	0	00:00	100.0	100.0	0.0	0.0
Unnao	765	762	18:04	738	03:56	0.0	2.7	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	510.91	1590.18	511.18	1605.30	421.84	680.82
Pong	426.72	384.05	416.65	743.22	422.98	1035.89	127.28	298.40
Tehri	829.79	740.04	823.55	1075.00	824.20	1089.00	170.74	99.00
Koteshwar	612.50	598.50	609.68	4.40	610.15	4.69	99.00	117.00
Chamera-I	760.00	748.75	755.22	0.00	0.00	0.00	135.00	172.92
Rihand	268.22	252.98	857.10	374.60	855.40	345.30	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	515.33	4.52	518.84	6.47	156.31	197.51

*** 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	798	0	0	749	0	0	18.37	0.00	18.37
Delhi	66	158	-20	329	150	-20	5.93	4.68	10.61
Haryana	1112	21	0	1028	14	0	26.18	-2.79	23.39
HP	-561	193	0	-546	-157	0	-12.88	0.64	-12.24
J&K	-538	-18	0	-336	125	0	-9.22	0.53	-8.69
CHD	0	0	0	0	0	0	0.07	0.00	0.07
Rajasthan	174	29	0	258	-16	0	5.11	1.17	6.28
UP	74	1212	20	-449	0	20	-7.24	12.06	4.82
Uttarakhand	32	168	0	32	15	0	0.77	2.54	3.31
Total	**1157**	**1761**	**-1**	**1066**	**130**	**-1**	**27.10**	**18.83**	**45.93**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	798	749	0	0	0	0
Delhi	488	30	516	-129	0	-20
Haryana	1112	1028	21	-692	0	0
HP	-460	-636	193	-233	0	0
J&K	-336	-538	126	-23	0	0
CHD	15	0	0	0	0	0
Rajasthan	258	174	670	-42	0	0
UP	74	-565	1518	0	20	0
Uttarakhand	32	32	221	11	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 27.09.2014 :

Normal

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 : 27.09.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**