पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 29.09.2014
Date of Reporting : 30.09.2014

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
42451	3733	46184	50.07	38599	2575	41174	50.00	924.6	97.24

* 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	65.31	14.87		80.18	84.15	83.68	-0.46	163.86	0.00
Haryana	81.89	0.73		82.62	71.14	71.10	-0.04	153.72	7.17
Rajasthan	116.30	1.17	17.66	135.12	62.43	62.91	0.48	198.03	6.12
Delhi	18.08			18.08	71.40	69.69	-1.71	87.77	0.53
UP	123.00	14.00	0.36	137.36	92.15	93.63	1.48	230.99	79.95
Uttarakhand		15.18		15.18	15.13	16.10	0.97	31.28	3.24
HP		15.26		15.26	8.22	8.88	0.67	24.14	0.24
J & K		10.48	0.00	10.48	17.62	19.42	1.80	29.89	0.00
Chandigarh				0.00	4.37	4.93	0.57	4.93	0.00
Total	**404.58**	**71.68**	**18.02**	**494.28**	**426.60**	**430.34**	**3.74**	**924.62**	**97.24**

* 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	7714	0	42	681	6828	0	-48	790	7714
Haryana	6981	788	-86	842	6563	0	62	927	7131
Rajasthan	8886	0	1	203	8328	0	-65	677	9188
Delhi	4286	15	-162	347	3653	0	-80	17	4475
UP	9689	2785	-490	-396	10064	2575	96	805	10443
Uttarakhand	1658	145	249	45	1266	0	49	221	1658
HP	1190	0	26	-796	782	0	-26	-272	1231
J&K	1808	0	291	-308	957	0	-14	-557	1808
Chandigarh	240	0	-8	0	159	0	7	0	244
Total	**42451**	**3733**	**-138**	**616**	**38599**	**2575**	**-19**	**2608**	**42451**

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

Diversity is 1.03

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	1513	1815	1410	36.52	1522	36.30	0.22
	Rihand I STPS (2*500)	1000	810	943	823	21.50	896	19.41	2.09
	Rihand II STPS (2*500)	1000	950	1046	1032	24.82	1034	22.78	2.05
	Rihand III STPS (2*500)	1000	953	1019	1011	24.29	1012	22.82	1.47
	Dadri I STPS (4*210)	840	600	652	631	15.44	643	14.39	1.05
	Dadri II STPS (2*490)	980	975	1021	940	23.79	991	23.33	0.46
	Unchahar I TPS (2*210)	420	195	221	214	5.26	219	4.66	0.60
	Unchahar II TPS (2*210)	420	400	439	438	10.53	439	9.55	0.98
	Unchahar III TPS (1*220)	210	198	219	215	5.20	217	4.74	0.46
	ISTPP (Jhajjhar) (3*500)	1500	847	968	933	19.06	794	20.34	-1.28
	Dadri GPS (4*130.19+2*154.51)	830	785	322	275	7.65	319	7.58	0.07
	Anta GPS (3*88.71+1*153.2)	419	393	212	211	5.43	226	5.10	0.32
	Auraiya GPS (4*111.19+2*109.30)	663	477	151	155	3.67	153	3.48	0.19
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.02	1	0.07	-0.05
	Sub Total (A)	**11297**	**9100**	**9028**	**8288**	**203**	**8466**	**195**	**9**
B. NPC	NAPS (2*220)	440	273	310	317	6.56	273	6.55	0.00
	RAPS- B (2*220)	440	395	431	438	9.39	391	9.48	-0.10
	RAPS- C (2*220)	440	0	0	0	-0.25	-10	0.00	-0.25
	Sub Total (B)	**1320**	**668**	**741**	**755**	**15.70**	**654**	**16.03**	**-0.34**
C. NHPC	Chamera I HPS (3*180)	540	534	538	0	4.84	202	4.80	0.04
	Chamera II HPS (3*100)	300	300	310	102	3.61	151	3.50	0.11
	Chamera III HPS (3*77)	231	229	233	79	2.55	106	2.45	0.10
	Bairasuil HPS(3*60)	180	120	120	20	1.37	57	1.25	0.12
	Salal-HPS (6*115)	690	380	468	349	9.89	412	9.12	0.77
	Tanakpur-HPS (3*40)	94	84	75	93	2.13	89	2.02	0.11
	Uri-I HPS (4*120)	480	424	469	352	10.74	448	10.18	0.57
	Uri-II HPS (4*60)	240	231	238	232	5.61	234	5.53	0.07
	Dhauliganga-HPS (4*70)	280	127	211	144	3.16	132	3.04	0.12
	Dulhasti-HPS (3*130)	390	387	401	398	9.41	392	9.28	0.13
	Sewa-II HPS (3*40)	120	119	130	0	0.64	27	0.50	0.14
	Parbati 3 (4*130)	520	130	132	0	1.46	61	1.43	0.03
	Sub Total ©	**4065**	**3064**	**3326**	**1768**	**55**	**2309**	**53**	**2**
D.SJVNL	NJPC (6*250)	1500	1605	1613	432	19.17	799	18.79	0.37
	Rampur HEP (4*68.67)	275	168	220	105	4.10	171	4.06	0.05
	Sub Total (D)	1775	1773	1833	537	23.27	970	22.85	0.42
E. THDC	Tehri HPS (4*250)	1000	1060	1058	0	5.10	212	5.00	0.10
	Koteshwar HPS (4*100)	400	91	101	0	1.75	73	1.75	0.00
	Sub Total (E)	**1400**	**1151**	**1159**	**0**	**6.85**	**285**	**6.75**	**0.10**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	938	1336	807	22.52	938	22.51	0.01
	Dehar HPS (6*165)	990	347	825	280	8.57	357	8.32	0.25
	Pong HPS (6*66)	396	271	384	258	6.63	276	6.51	0.11
	Sub Total (F)	**2900**	**1556**	**2545**	**1345**	**37.72**	**1572**	**37.34**	**0.38**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	65	65	1.55	64	1.52	0.03
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	900	280	10.49	437	9.86	0.64
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	298	298	7.10	296	7.10	0.00
	Budhil HPS(IPP)	70	0	28	25	0.63	26	0.59	0.04
	Sub Total (G)	1662	0	1291	668	19.77	824	19.07	0.70
H. Total Regional Entities (A-G)		**24419**	**17312**	**19923**	**13361**	**361.91**	**15079**	**349.69**	**12.21**

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	640	650	14.76	615
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	250	260	5.69	237
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	554	668	13.00	542
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1384	1385	31.86	1327
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	**4680**	**2828**	**2963**	**65.31**	**2721**
	Total Hydro	1148	758	573	14.87	619
	Total Punjab	**5828**	**3586**	**3536**	**80.18**	**3341**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	1063	1045	24.20	1008
	DCRTPP (Yamuna nagar) (2*300)	600	233	273	5.97	249
	Faridabad GPS (NTPC)	432	168	181	4.09	170
	RGTPP (khedar) (IPP) (2*600)	1200	1050	928	22.74	947
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	934	1146	24.89	1037
	Thermal (Total)	**4944**	**3448**	**3573**	**81.89**	**3412**
	Total Hydro	62	29	30	0.73	31
	Total Haryana	**5006**	**3477**	**3603**	**82.62**	**3442**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	946	947	21.53	897
	suratgarh TPS (6*250)	1500	1367	1230	31.41	1309
	Chabra TPS (3*250)	750	632	621	14.92	622
	Dholpur GPS (3*110)	330	138	115	2.96	123
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	146	73	2.88	120
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingsar (NLC) (2*125)	250	201	204	4.65	194
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	950	950	23.68	987
	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	568	601	14.28	595
	Thermal (Total)	**8026**	**4948**	**4741**	**116**	**4846**
	Total Hydro	550	129	24	1.17	49
	Wind power	2798	583	627	16.21	675
	Biomass	99	38	38	0.92	38
	Solar	730	0	0	0.54	22
	Renewable/Others (Total)	3627	621	665	17.66	736
	Total Rajasthan	**12203**	**5698**	**5430**	**135.12**	**5630**
UP	Anpara TPS (3*210+2*500)	1630	788	856	20.00	833
	Obra TPS (2*50+2*94+5*200)	1194	384	506	10.40	433
	Paricha TPS (2*110+2*220+2*250)	1140	615	636	14.80	617
	Panki TPS (2*105)	210	77	59	1.70	71
	Harduaganj TPS (1*60+1*105+2*250)	665	419	463	10.90	454
	Tanda TPS (NTPC) (4*110)	440	273	180	6.60	275
	Roza TPS (IPP) (4*300)	1200	1107	1107	26.50	1104
	Anpara-C (IPP) (2*600)	1200	990	997	23.80	992
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	401	322	8.30	346
	Thermal (Total)	**8129**	**5054**	**5126**	**123.00**	**5125**
	Vishnuparyag HPS (IPP)	400	377	366	8.40	350
	Other Hydro	527	220	218	5.60	233
	Cogeneration	981	15	15	0.36	15
	Total UP	**10037**	**5666**	**5725**	**137.36**	**5373**
Uttarakhand	Total Hydro	1398	678	586	15.18	633
	Total Uttarakhand	**1398**	**678**	**586**	**15.18**	**633**
Delhi	Rajghat TPS (2*67.5)	135	38	42	0.92	38
	Delhi Gas Turbine (6x30 + 3x34)	282	102	108	2.51	104
	Pragati Gas Turbine (2x104+ 1x122)	330	294	273	6.79	283
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	291	283	7.05	294
	Badarpur TPS (NTPC) (3*95+2*210)	705	348	305	0.82	34
	Thermal (Total)	2917	1073	1011	18.08	753
	Total Delhi	**2917**	**1073**	**1011**	**18.08**	**753**
HP	Baspa HPS (IPP) (2*150)	300	180	170	4.15	173
	Malana HPS (IPP) (2*43)	86	33	31	0.78	32
	Other Hydro	728	442	378	10.33	430
	Total HP	**1114**	**655**	**579**	**15.26**	**636**
J & K	Baglihar HPS (IPP) (3*150)	450	436	436	10.48	437
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**436**	**436**	**10.48**	437
Total State Control Area Generation		**39597**	**21269**	**20906**	**494.28**	**20245**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**2042**	**5786**	**97.62**	**4068**
Total Regional Availability(Gross)		**64017**	**43234**	**40053**	**953.81**	**39392**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**9828**	**3995**	**135.28**	**5637**
State Control Area Hydro	**5684**	**2905**	**2446**	**71.68**	**2637**
Total Regional Hydro	**17116**	**12733**	**6441**	**206.97**	**8274**

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	-500	-300	0	-500	0.00	10.79	-10.79
Gwalior-Agra (D/C)	227	1459	1502	0	19.51	0.00	19.51
Zerda-Kankroli	-223	-188	0	364	0.00	5.46	-5.46
Zerda-Bhinmal	-277	-11	29	341	0.00	3.61	-3.61
Malanpur-Auraiya	-57	-40	0	69	0.00	1.16	-1.16
Badod-Kota/Morak	-75	-80	0	134	0.00	2.10	-2.10
Mundra-Mohindergarh(HVDC)	1398	2002	2004	0	42.90	0.00	42.90
Vindhyachal - Rihand	482	441	489	0	11.03	0.00	11.03
Sub Total WR	**975**	**3283**			**73.44**	**23.12**	**50.33**
Pusauli Bypass	400	400	400	0	9.69	0.00	9.69
MZP- GKP (D/C)	150	850	910	0	13.22	0.00	13.22
Patna-Balia(D/C)	115	281	316	0	4.58	0.00	4.58
B'Sharif-Balia (D/C)	173	330	440	0	7.18	0.00	7.18
Pusauli-Balia	-63	-55	0	90	0.00	1.13	-1.13
Gaya-Fatehpur (765 Kv)	152	358	427	0	7.19	0.00	7.19
Pusauli-Sahupuri	167	182	204	0	3.80	0.00	3.80
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-38	-36	0	40	0.00	0.82	-0.82
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	11	193	271	46	3.58	0.00	3.58
Sub Total ER	**1067**	**2503**			**49.24**	**1.94**	**47.30**
Total IR Exch	**2042**	**5786**			**122.68**	**25.06**	**97.62**

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
26.35	3.92	30.26	12.37	2.17	1.20	7.64	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
43.83	49.75	93.58	47.30	50.33	97.62	3.47	0.57	4.04

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	13.23	37.95	72.44	94.75	25.59	1.82	0.15	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)
50.11	20.05	49.43	9.26	49.83	0.44	0.12	50.14	0.00

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	410	00:00	407	09:44	72.8	72.8	0.0	0.0
Gorakhpur	400	408	17:04	392	03:24	0.0	0.0	0.0	0.0
Bareilly	400	413	16:32	394	10:43	0.0	0.0	0.0	0.0
Kanpur	400	414	17:04	399	10:43	0.0	0.0	0.0	0.0
Dadri	400	412	05:01	394	10:40	0.0	0.0	0.0	0.0
Ballabhgarh	400	419	05:02	400	10:38	0.0	0.0	0.0	0.0
Bawana	400	414	05:02	398	10:37	0.8	0.8	0.0	0.0
Bassi	400	427	04:02	398	10:38	0.0	0.0	8.6	0.0
Hissar	400	407	05:01	392	10:43	0.0	0.0	0.0	0.0
Moga	400	411	05:02	396	10:44	0.0	0.0	0.0	0.0
Abdullapur	400	421	06:02	396	18:36	0.0	0.0	0.1	0.0
Nalagarh	400	423	05:01	407	16:17	0.0	0.0	11.8	0.0
Kishenpur	400	222	02:49	213	19:26	100.0	100.0	0.0	0.0
Wagoora	400	412	02:48	391	19:24	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	0	00:00	0	00:00	100.0	100.0	0.0	0.0
Balia	765	761	20:03	0	16:53	0.2	12.0	0.0	0.0
Moga	765	781	05:02	753	10:43	0.0	0.0	0.0	0.0
Agra	765	786	18:01	748	10:46	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	759	18:03	735	10:44	0.0	1.2	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	510.64	1575.10	511.16	1605.30	414.84	668.31
Pong	426.72	384.05	416.46	730.66	422.94	1030.89	169.33	399.83
Tehri	829.79	740.04	823.90	1086.79	824.60	1099.00	153.84	111.00
Koteshwar	612.50	598.50	608.93	4.21	610.00	4.60	111.00	116.00
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	0.00	0.00
Rihand	268.22	252.98	856.80	369.40	855.30	343.60	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	515.29	4.56	518.90	3.13	165.31	199.97

*** 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	790	0	0	681	0	0	17.68	0.00	17.68
Delhi	65	-13	-35	369	-22	0	6.06	-0.11	5.95
Haryana	914	14	0	830	12	0	21.43	-0.51	20.91
HP	-553	281	0	-589	-208	0	-12.41	1.21	-11.20
J&K	-539	-18	0	-336	28	0	-9.23	0.42	-8.81
CHD	0	0	0	0	0	0	0.07	0.06	0.13
Rajasthan	153	524	0	237	-34	0	4.33	3.92	8.25
UP	52	718	34	-396	0	0	-7.00	7.43	0.43
Uttarakhand	32	189	0	32	13	0	0.77	2.56	3.33
Total	**914**	**1695**	**-1**	**828**	**-212**	**0**	**21.71**	**14.96**	**36.67**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	790	681	0	0	0	0
Delhi	487	55	351	-355	0	-35
Haryana	914	830	14	-191	0	0
HP	-194	-690	281	-251	0	0
J&K	-336	-539	180	-18	0	0
CHD	15	0	49	0	0	0
Rajasthan	237	142	1094	-38	0	0
UP	52	-524	1262	0	34	0
Uttarakhand	32	32	230	5	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 29.09.2014 :

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 : 29.09.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**