पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 26.11.2014
Date of Reporting : 27.11.2014

I. Regional Availability/Demand:

Evening Peak (19:00 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
39042	1310	40352	50.16	29135	1160	30295	50.17	807.2	42.42

* 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	49.82	7.44		57.26	45.48	48.55	3.07	105.81	0.00
Haryana	62.15	0.36		62.51	51.26	51.33	0.07	113.84	0.00
Rajasthan	119.42	4.83	1.43	125.68	74.43	82.04	7.61	207.73	0.00
Delhi	20.93			20.93	39.26	37.69	-1.57	58.61	0.00
UP	125.30	3.50		128.80	91.23	90.70	-0.53	219.50	42.06
Uttarakhand		7.30		7.30	23.75	25.21	1.46	32.51	0.36
HP		5.49		5.49	18.83	19.31	0.48	24.80	0.00
J & K		6.46	0.00	6.46	32.06	34.52	2.46	40.98	0.00
Chandigarh				0.00	3.27	3.39	0.12	3.39	0.00
Total	**377.62**	**35.38**	**1.43**	**414.43**	**379.56**	**392.74**	**13.18**	**807.16**	**42.42**

* 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 (19:00 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	5378	0	-5	-339	3315	0	149	-470	5482
Haryana	6191	0	51	-591	3834	0	-65	-585	6191
Rajasthan	9281	0	278	970	8106	0	254	1003	9806
Delhi	3156	0	60	-276	1418	0	-252	-935	3156
UP	9927	1270	-231	139	8940	1160	24	82	10176
Uttarakhand	1689	40	40	523	1078	0	31	403	1748
HP	1276	0	-15	320	781	0	14	398	1349
J&K	1955	0	37	418	1576	0	83	479	1955
Chandigarh	189	0	-7	0	88	0	0	-30	189
Total	**39042**	**1310**	**208**	**1164**	**29135**	**1160**	**238**	**345**	**39042**

* 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	1480	1511	1647	38.19	1591	35.25	2.94
	Rihand I STPS (2*500)	1000	880	943	885	22.28	928	20.97	1.31
	Rihand II STPS (2*500)	1000	970	1027	915	24.39	1016	23.11	1.29
	Rihand III STPS (2*500)	1000	472	497	431	11.74	489	11.22	0.52
	Dadri I STPS (4*210)	840	788	757	594	15.77	657	15.35	0.42
	Dadri II STPS (2*490)	980	980	962	682	20.73	864	20.90	-0.17
	Unchahar I TPS (2*210)	420	400	424	348	9.72	405	9.21	0.51
	Unchahar II TPS (2*210)	420	400	419	353	9.54	398	8.86	0.68
	Unchahar III TPS (1*220)	210	200	219	148	4.74	197	4.43	0.30
	ISTPP (Jhajjhar) (3*500)	1500	1500	1390	901	24.31	1013	25.88	-1.57
	Dadri GPS (4*130.19+2*154.51)	830	824	377	426	9.32	389	9.20	0.12
	Anta GPS (3*88.71+1*153.2)	419	412	382	251	8.21	342	8.27	-0.06
	Auraiya GPS (4*111.19+2*109.30)	663	438	320	275	7.33	305	7.25	0.08
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Sub Total (A)	**11297**	**9747**	**9228**	**7856**	**206**	**8597**	**200**	**6**
B. NPC	NAPS (2*220)	440	294	332	337	7.08	295	6.95	0.13
	RAPS- B (2*220)	440	408	448	457	9.78	408	9.79	-0.01
	RAPS- C (2*220)	440	440	462	463	9.99	416	10.40	-0.41
	Sub Total (B)	**1320**	**1142**	**1242**	**1257**	**26.85**	**1119**	**27.14**	**-0.29**
C. NHPC	Chamera I HPS (3*180)	540	508	340	0	1.97	82	2.00	-0.03
	Chamera II HPS (3*100)	300	200	200	0	1.42	59	1.40	0.02
	Chamera III HPS (3*77)	231	231	220	0	0.76	32	0.75	0.01
	Bairasuil HPS(3*60)	180	120	60	0	0.62	26	0.56	0.06
	Salal-HPS (6*115)	690	133	228	120	3.42	142	3.18	0.24
	Tanakpur-HPS (3*40)	94	30	55	26	0.77	32	0.72	0.05
	Uri-I HPS (4*120)	480	175	222	111	4.42	184	4.21	0.21
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	208	209	0	1.36	57	1.29	0.07
	Dulhasti-HPS (3*130)	390	387	392	0	3.62	151	3.50	0.12
	Sewa-II HPS (3*40)	120	79	75	0	0.23	10	0.24	-0.01
	Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	**4065**	**2071**	**2001**	**257**	**19**	**774**	**18**	**1**
D.SJVNL	NJPC (6*250)	1500	1605	1270	0	7.91	329	8.00	-0.09
	Rampur HEP (4*68.67)	275	350	297	0	2.03	85	2.17	-0.14
	Sub Total (D)	1775	1955	1567	0	9.94	414	10.17	-0.23
E. THDC	Tehri HPS (4*250)	1000	1060	1040	0	7.55	315	7.50	0.05
	Koteshwar HPS (4*100)	400	104	199	90	2.53	105	2.50	0.03
	Sub Total (E)	**1400**	**1164**	**1239**	**90**	**10.08**	**420**	**10.00**	**0.08**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	551	1031	369	13.90	579	13.22	0.68
	Dehar HPS (6*165)	990	125	165	140	2.99	125	3.01	-0.02
	Pong HPS (6*66)	396	168	318	66	4.06	169	4.02	0.04
	Sub Total (F)	**2900**	**844**	**1514**	**575**	**20.95**	**873**	**20.25**	**0.70**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	45	0	0.60	25	0.59	0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	700	0	4.47	186	4.44	0.03
	Malana Stg-II HPS (2*50)	100	0	0	0	0.06	3	0.05	0.02
	Shree Cement TPS (2*150)	300	0	142	88	2.90	121	2.91	-0.01
	Budhil HPS(IPP)	70	0	35	0	0.14	6	0.14	0.00
	Sub Total (G)	1662	0	921	88	8.17	340	8.12	0.04
H. Total Regional Entities (A-G)		**24419**	**16922**	**17713**	**10123**	**300.89**	**12537**	**293.54**	**7.35**

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	390	160	5.90	246
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	120	90	2.31	96
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	463	370	9.47	394
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	826	690	19.93	830
	Talwandi Saboo (1*660)	660	659	363	12.22	509
	Thermal (Total)	**4680**	**2458**	**1673**	**49.82**	**2076**
	Total Hydro	1148	280	208	7.44	310
	Total Punjab	**5828**	**2738**	**1881**	**57.26**	**2386**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	454	211	9.29	387
	DCRTPP (Yamuna nagar) (2*300)	600	267	239	5.98	249
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	1164	740	21.66	903
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1150	744	25.22	1051
	Thermal (Total)	**4944**	**3035**	**1934**	**62.15**	**2590**
	Total Hydro	62	14	21	0.36	15
	Total Haryana	**5006**	**3049**	**1955**	**62.51**	**2605**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	843	761	19.68	820
	suratgarh TPS (6*250)	1500	951	794	20.35	848
	Chabra TPS (3*250)	750	440	436	11.48	479
	Dholpur GPS (3*110)	330	127	132	3.14	131
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	221	190	5.28	220
	RAPS A (NPC) (1*100+1*200)	300	180	166	4.42	184
	Barsingsar (NLC) (2*125)	250	94	94	2.11	88
	Giral LTPS (2*125)	250	72	86	1.53	64
	Rajwest LTPS (IPP) (8*135)	1080	732	732	17.17	715
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	410	443	9.16	382
	Kawai(Adani) (2*660)	1320	1038	941	25.11	1046
	Thermal (Total)	**8026**	**5108**	**4775**	**119**	**4976**
	Total Hydro	550	250	113	4.83	201
	Wind power	2798	36	83	0.61	25
	Biomass	99	26	26	0.63	26
	Solar	730	0	0	0.20	8
	Renewable/Others (Total)	3627	62	109	1.43	60
	Total Rajasthan	**12203**	**5420**	**4997**	**125.68**	**5237**
UP	Anpara TPS (3*210+2*500)	1630	922	936	22.40	933
	Obra TPS (2*50+2*94+5*200)	1194	451	436	10.60	442
	Paricha TPS (2*110+2*220+2*250)	1140	784	776	18.50	771
	Panki TPS (2*105)	210	149	113	3.20	133
	Harduaganj TPS (1*60+1*105+2*250)	665	460	464	10.60	442
	Tanda TPS (NTPC) (4*110)	440	280	285	7.00	292
	Roza TPS (IPP) (4*300)	1200	783	792	18.70	779
	Anpara-C (IPP) (2*600)	1200	1017	961	23.90	996
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	243	280	5.60	233
	Thermal (Total)	**8129**	**5089**	**5043**	**120.50**	**5021**
	Vishnuparyag HPS (IPP)	400	103	130	2.40	100
	Other Hydro	527	62	32	1.10	46
	Cogeneration	981	200	200	4.80	200
	Total UP	**10037**	**5454**	**5405**	**128.80**	**5267**
Uttarakhand	Total Hydro	1398	531	228	7.30	304
	Total Uttarakhand	**1398**	**531**	**228**	**7.30**	**304**
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.01	0
	Delhi Gas Turbine (6x30 + 3x34)	282	80	80	1.92	80
	Pragati Gas Turbine (2x104+ 1x122)	330	148	154	3.66	152
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	549	513	7.33	305
	Badarpur TPS (NTPC) (3*95+2*210)	705	316	313	8.04	335
	Thermal (Total)	2917	1093	1060	20.93	872
	Total Delhi	**2917**	**1093**	**1060**	**20.93**	**872**
HP	Baspa HPS (IPP) (2*150)	300	32	0	1.24	52
	Malana HPS (IPP) (2*43)	86	68	0	0.25	10
	Other Hydro	728	193	133	4.00	167
	Total HP	**1114**	**293**	**133**	**5.49**	**229**
J & K	Baglihar HPS (IPP) (3*150)	450	296	148	4.60	192
	Other Hydro/IPP	436	97	70	1.86	78
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**393**	**218**	**6.46**	269
Total State Control Area Generation		**39597**	**18971**	**15877**	**414.43**	**17168**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3409**	**4639**	**109.04**	**4543**
Total Regional Availability(Gross)		**64017**	**40093**	**30639**	**824.36**	**34248**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**7066**	**922**	**64.67**	**2695**
State Control Area Hydro	**5684**	**1823**	**953**	**35.38**	**1374**
Total Regional Hydro	**17116**	**8889**	**1875**	**100.05**	**4069**

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(19:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy
	MW	MW	Import	Export	Import	Export	MU
Vindhychal B/B	-100	-300	0	300	0.00	5.53	-5.53
Gwalior-Agra (D/C)	810	1333	1733	0	31.64	0.00	31.64
Zerda-Kankroli	-156	-60	0	156	0.00	2.14	-2.14
Zerda-Bhinmal	-58	51	150	121	0.47	0.00	0.47
Malanpur-Auraiya	-126	-131	0	150	0.00	3.03	-3.03
Badod-Kota/Morak	-92	-47	0	190	0.00	3.53	-3.53
Mundra-Mohindergarh(HVDC)	1899	1899	2103	0	46.38	0.00	46.38
Vindhyachal - Rihand	506	378	513	0	11.08	0.00	11.08
Sub Total WR	**2683**	**3123**			**89.57**	**14.24**	**75.33**
Pusauli Bypass	400	400	400	0	9.60	0.00	9.60
MZP- GKP (D/C)	36	224	310	104	2.98	0.00	2.98
Patna-Balia(D/C)	511	641	739	0	15.31	0.00	15.31
B'Sharif-Balia (D/C)	-131	28	112	131	0.50	0.00	0.50
Pusauli-Balia	-164	-120	0	164	0.00	2.79	-2.79
Gaya-Fatehpur (765 Kv)	42	239	315	0	5.36	0.00	5.36
Pusauli-Sahupuri	144	108	145	0	2.41	0.00	2.41
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-33	0	48	0.00	0.90	-0.90
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-72	29	175	72	1.24	0.00	1.24
Sub Total ER	**726**	**1516**			**37.40**	**3.69**	**33.71**
Total IR Exch	**3409**	**4639**			**126.97**	**17.93**	**109.04**

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
21.21	0.70	21.91	4.67	-14.41	6.05	18.16	4.97	-4.97

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
37.60	65.62	103.22	33.71	75.33	109.04	-3.89	9.71	5.82

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	0.96	8.43	35.81	50.05	19.50	19.84	2.26	NA

<---------- 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)
50.31	17.02	49.73	17.42	50.03	0.09	0.09	50.26	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	411	00:00	402	07:13	0.0	0.0	0.0	0.0
Gorakhpur	400	411	20:57	396	17:41	0.0	0.0	0.0	0.0
Bareilly	400	422	21:00	396	14:52	0.0	0.0	0.3	0.0
Kanpur	400	419	05:03	402	10:37	0.0	0.0	0.0	0.0
Dadri	400	420	01:58	403	09:56	0.0	0.0	0.0	0.0
Ballabhgarh	400	428	04:02	408	09:35	0.0	0.0	34.6	0.0
Bawana	400	426	04:17	407	10:34	0.0	0.0	32.3	0.0
Bassi	400	425	20:32	392	07:09	0.0	0.0	7.2	0.0
Hissar	400	415	04:17	395	10:52	0.0	0.0	0.0	0.0
Moga	400	423	04:16	402	07:31	0.0	0.0	8.8	0.0
Abdullapur	400	425	04:16	396	11:46	0.0	0.0	18.5	0.0
Nalagarh	400	426	20:58	400	16:29	0.0	0.0	16.9	0.0
Kishenpur	400	428	04:16	391	18:26	0.0	0.0	19.5	0.0
Wagoora	400	408	04:16	363	18:26	21.6	47.5	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	775	20:59	740	09:28	0.0	1.3	0.0	0.0
Balia	765	770	05:03	746	10:38	0.0	0.0	0.0	0.0
Moga	765	801	04:16	764	07:31	0.0	0.0	0.5	0.0
Agra	765	793	05:02	756	10:35	0.0	0.0	0.0	0.0
Bhiwani	765	807	20:58	772	07:11	0.0	0.0	17.5	0.0
Unnao	765	759	05:02	732	10:42	0.0	29.7	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	503.72	1258.87	508.44	1470.42	144.59	402.69
Pong	426.72	384.05	410.67	514.41	417.49	781.19	64.99	260.80
Tehri	829.79	740.04	819.10	982.26	821.05	1023.00	63.68	168.00
Koteshwar	612.50	598.50	609.82	4.44	610.00	4.60	168.00	168.00
Chamera-I	760.00	748.75	759.53	0.00	0.00	0.00	51.47	53.23
Rihand	268.22	252.98	853.30	309.60	858.40	397.40	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	509.58	1.86	515.25	3.04	54.14	87.24

*** NA: Not Available**

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

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (19:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	-482	12	0	-457	118	0	-11.17	1.41	-9.76
Delhi	-901	-20	-14	-595	333	-14	-14.99	2.26	-12.73
Haryana	-749	164	0	-733	142	0	-19.10	3.39	-15.71
HP	423	-25	0	399	-79	0	9.51	-2.11	7.40
J&K	406	74	0	335	83	0	7.50	2.19	9.69
CHD	-30	0	0	0	0	0	-0.24	0.08	-0.16
Rajasthan	491	511	2	491	477	2	11.78	12.55	24.33
UP	82	0	0	139	0	0	2.68	0.00	2.68
Uttarakhand	196	207	0	196	327	0	4.70	7.35	12.05
Total	**-565**	**922**	**-12**	**-225**	**1401**	**-12**	**-9.33**	**27.12**	**17.79**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-457	-482	264	0	0	0
Delhi	-485	-901	401	-61	-14	-14
Haryana	-733	-952	166	103	0	0
HP	423	379	46	-669	0	0
J&K	406	237	147	34	0	0
CHD	0	-30	20	0	0	0
Rajasthan	491	491	968	206	2	2
UP	154	82	0	0	0	0
Uttarakhand	196	196	435	207	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 26.11.2014 :

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 : 26.11.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**