पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 17.11.2014
Date of Reporting : 18.11.2014

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
37360	1715	39075	50.19	27963	1575	29538	50.17	770.0	51.22

* 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	39.99	6.80		46.79	46.91	49.83	2.92	96.63	0.00
Haryana	50.04	0.49		50.53	49.23	49.13	-0.09	99.67	0.00
Rajasthan	117.22	4.56	3.30	125.09	72.94	73.80	0.86	198.89	0.00
Delhi	22.35			22.35	38.53	37.64	-0.89	59.98	0.00
UP	107.50	3.58	2.40	113.48	100.40	103.04	2.63	216.51	50.47
Uttarakhand		8.55		8.55	23.25	23.41	0.16	31.96	0.72
HP		5.82		5.82	17.47	17.84	0.38	23.66	0.03
J & K		7.61	0.00	7.61	30.46	31.72	1.26	39.33	0.00
Chandigarh				0.00	3.26	3.33	0.07	3.33	0.00
Total	**337.11**	**37.40**	**5.70**	**380.21**	**382.45**	**389.74**	**7.29**	**769.95**	**51.22**

* 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	4742	0	90	-111	3305	0	179	-365	4912
Haryana	5912	0	-20	-605	3120	0	148	-639	5912
Rajasthan	8641	0	-36	714	7633	0	147	944	9344
Delhi	3080	0	-20	-493	1567	0	-136	-807	3080
UP	10072	1615	-8	143	8973	1575	115	76	10160
Uttarakhand	1676	100	17	504	1034	0	-35	428	1683
HP	1238	0	10	7	727	0	-39	422	1288
J&K	1813	0	-53	333	1519	0	49	282	1838
Chandigarh	186	0	-4	0	85	0	1	-31	186
Total	**37360**	**1715**	**-23**	**493**	**27963**	**1575**	**429**	**310**	**37360**

* 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	1727	1841	1785	43.45	1810	40.91	2.54
	Rihand I STPS (2*500)	1000	870	787	900	21.70	904	20.33	1.37
	Rihand II STPS (2*500)	1000	970	865	961	23.48	979	22.32	1.16
	Rihand III STPS (2*500)	1000	965	834	692	21.81	909	20.79	1.02
	Dadri I STPS (4*210)	840	799	764	597	16.76	698	16.59	0.17
	Dadri II STPS (2*490)	980	980	907	694	19.85	827	20.05	-0.20
	Unchahar I TPS (2*210)	420	400	332	309	8.89	370	8.44	0.45
	Unchahar II TPS (2*210)	420	200	155	150	4.33	180	4.00	0.33
	Unchahar III TPS (1*220)	210	200	154	150	4.28	178	3.97	0.31
	ISTPP (Jhajjhar) (3*500)	1500	1500	1130	898	21.31	888	22.82	-1.51
	Dadri GPS (4*130.19+2*154.51)	830	819	397	422	10.07	420	10.11	-0.04
	Anta GPS (3*88.71+1*153.2)	419	375	241	213	5.39	225	5.66	-0.27
	Auraiya GPS (4*111.19+2*109.30)	663	432	294	164	4.86	203	4.91	-0.05
	Dadri Solar	5	0	0	0	0.02	1	0.00	0.02
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Sub Total (A)	**11297**	**10239**	**8701**	**7935**	**206**	**8593**	**201**	**5**
B. NPC	NAPS (2*220)	440	294	328	335	7.03	293	7.06	-0.03
	RAPS- B (2*220)	440	407	450	453	9.80	408	9.77	0.03
	RAPS- C (2*220)	440	410	452	453	9.76	407	9.84	-0.08
	Sub Total (B)	**1320**	**1111**	**1230**	**1241**	**26.59**	**1108**	**26.66**	**-0.08**
C. NHPC	Chamera I HPS (3*180)	540	534	517	0	1.67	70	1.60	0.07
	Chamera II HPS (3*100)	300	233	199	0	1.44	60	1.43	0.02
	Chamera III HPS (3*77)	231	231	228	0	0.75	31	0.75	0.00
	Bairasuil HPS(3*60)	180	142	121	0	0.66	27	0.62	0.04
	Salal-HPS (6*115)	690	145	60	205	3.69	154	3.48	0.21
	Tanakpur-HPS (3*40)	94	38	61	33	0.92	38	0.92	0.00
	Uri-I HPS (4*120)	480	218	219	228	5.32	222	5.24	0.08
	Uri-II HPS (4*60)	240	130	162	140	3.11	130	3.12	0.00
	Dhauliganga-HPS (4*70)	280	207	210	0	1.36	57	1.24	0.12
	Dulhasti-HPS (3*130)	390	387	396	133	4.21	175	4.10	0.11
	Sewa-II HPS (3*40)	120	79	80	0	0.25	11	0.24	0.01
	Parbati 3 (4*130)	520	260	230	0	0.46	19	0.55	-0.10
	Sub Total (C)	**4065**	**2605**	**2483**	**739**	**24**	**993**	**23**	**1**
D.SJVNL	NJPC (6*250)	1500	1605	1605	0	8.46	352	8.50	-0.04
	Rampur HEP (4*68.67)	275	350	298	0	2.29	96	2.25	0.05
	Sub Total (D)	1775	1955	1903	0	10.75	448	10.75	0.00
E. THDC	Tehri HPS (4*250)	1000	1060	1060	0	7.53	314	7.50	0.03
	Koteshwar HPS (4*100)	400	104	200	89	2.51	105	2.50	0.01
	Sub Total (E)	**1400**	**1164**	**1260**	**89**	**10.03**	**418**	**10.00**	**0.03**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	524	1020	341	12.63	526	12.59	0.04
	Dehar HPS (6*165)	990	140	495	0	3.53	147	3.37	0.17
	Pong HPS (6*66)	396	205	318	66	4.78	199	4.91	-0.12
	Sub Total (F)	**2900**	**869**	**1833**	**407**	**20.94**	**873**	**20.86**	**0.08**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	35	0	0.65	27	0.64	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	860	0	4.87	203	4.92	-0.05
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	107	83	2.50	104	2.51	-0.01
	Budhil HPS(IPP)	70	0	69	0	0.18	7	0.18	0.00
	Sub Total (G)	1662	0	1071	83	8.20	342	8.24	-0.04
H. Total Regional Entities (A-G)		**24419**	**17944**	**18480**	**10494**	**306.59**	**12775**	**300.76**	**5.82**

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	160	160	3.68	153
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	90	90	2.21	92
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	371	365	8.93	372
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	707	685	15.67	653
	Talwandi Saboo (1*660)	660	362	364	9.50	396
	Thermal (Total)	**4680**	**1690**	**1664**	**39.99**	**1666**
	Total Hydro	1148	247	181	6.80	283
	Total Punjab	**5828**	**1937**	**1845**	**46.79**	**1950**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	210	205	4.85	202
	DCRTPP (Yamuna nagar) (2*300)	600	274	241	6.01	250
	Faridabad GPS (NTPC)	432	204	204	4.72	197
	RGTPP (khedar) (IPP) (2*600)	1200	1102	745	21.00	875
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	952	385	13.47	561
	Thermal (Total)	**4944**	**2742**	**1780**	**50.04**	**2085**
	Total Hydro	62	18	17	0.49	20
	Total Haryana	**5006**	**2760**	**1797**	**50.53**	**2106**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	787	770	19.64	818
	suratgarh TPS (6*250)	1500	981	979	23.49	979
	Chabra TPS (3*250)	750	420	385	9.31	388
	Dholpur GPS (3*110)	330	102	130	3.09	129
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	177	148	4.62	193
	RAPS A (NPC) (1*100+1*200)	300	122	172	4.30	179
	Barsingsar (NLC) (2*125)	250	93	93	2.05	86
	Giral LTPS (2*125)	250	71	66	1.39	58
	Rajwest LTPS (IPP) (8*135)	1080	718	490	14.89	620
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	380	430	9.65	402
	Kawai(Adani) (2*660)	1320	1100	851	24.79	1033
	Thermal (Total)	**8026**	**4951**	**4514**	**117**	**4884**
	Total Hydro	550	167	111	4.56	190
	Wind power	2798	83	108	2.38	99
	Biomass	99	32	32	0.77	32
	Solar	730	0	0	0.15	6
	Renewable/Others (Total)	3627	115	140	3.30	138
	Total Rajasthan	**12203**	**5233**	**4765**	**125.09**	**5212**
UP	Anpara TPS (3*210+2*500)	1630	473	463	11.70	488
	Obra TPS (2*50+2*94+5*200)	1194	291	288	7.00	292
	Paricha TPS (2*110+2*220+2*250)	1140	823	776	19.00	792
	Panki TPS (2*105)	210	144	104	3.10	129
	Harduaganj TPS (1*60+1*105+2*250)	665	175	196	4.30	179
	Tanda TPS (NTPC) (4*110)	440	274	275	6.80	283
	Roza TPS (IPP) (4*300)	1200	1040	1080	25.10	1046
	Anpara-C (IPP) (2*600)	1200	954	943	23.30	971
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	320	361	7.20	300
	Thermal (Total)	**8129**	**4494**	**4486**	**107.50**	**4479**
	Vishnuparyag HPS (IPP)	400	160	145	2.58	107
	Other Hydro	527	41	37	1.00	42
	Cogeneration	981	100	100	2.40	100
	Total UP	**10037**	**4795**	**4768**	**113.48**	**4621**
Uttarakhand	Total Hydro	1398	525	228	8.55	356
	Total Uttarakhand	**1398**	**525**	**228**	**8.55**	**356**
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	77	80	2.02	84
	Pragati Gas Turbine (2x104+ 1x122)	330	149	147	3.58	149
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	295	271	6.85	285
	Badarpur TPS (NTPC) (3*95+2*210)	705	314	316	9.89	412
	Thermal (Total)	2917	835	814	22.35	931
	Total Delhi	**2917**	**835**	**814**	**22.35**	**931**
HP	Baspa HPS (IPP) (2*150)	300	44	35	1.42	59
	Malana HPS (IPP) (2*43)	86	32	0	0.17	7
	Other Hydro	728	190	169	4.23	176
	Total HP	**1114**	**266**	**204**	**5.82**	**242**
J & K	Baglihar HPS (IPP) (3*150)	450	296	150	5.09	212
	Other Hydro/IPP	436	105	105	2.52	105
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**401**	**255**	**7.61**	317
Total State Control Area Generation		**39597**	**16752**	**14676**	**380.21**	**15735**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**2661**	**3562**	**104.13**	**4339**
Total Regional Availability(Gross)		**64017**	**37893**	**28732**	**790.93**	**32848**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**8373**	**1235**	**71.09**	**2962**
State Control Area Hydro	**5684**	**1665**	**1033**	**37.40**	**1451**
Total Regional Hydro	**17116**	**10038**	**2268**	**108.49**	**4413**

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	-500	-500	0	500	0.00	12.03	-12.03
Gwalior-Agra (D/C)	893	890	2051	0	34.01	0.00	34.01
Zerda-Kankroli	-267	-222	26	279	0.00	4.20	-4.20
Zerda-Bhinmal	-187	-85	193	246	0.00	1.53	-1.53
Malanpur-Auraiya	-112	-139	0	141	0.00	2.74	-2.74
Badod-Kota/Morak	-179	-155	0	269	0.00	4.29	-4.29
Mundra-Mohindergarh(HVDC)	1998	2200	2304	0	52.11	0.00	52.11
Vindhyachal - Rihand	498	295	498	0	10.30	0.00	10.30
Sub Total WR	**2144**	**2284**			**96.42**	**24.79**	**71.63**
Pusauli Bypass	350	200	400	0	7.38	0.00	7.38
MZP- GKP (D/C)	8	184	380	0	4.01	0.00	4.01
Patna-Balia(D/C)	501	664	711	0	15.04	0.00	15.04
B'Sharif-Balia (D/C)	-158	32	30	81	0.50	0.00	0.50
Pusauli-Balia	-149	-94	0	163	0.00	2.74	-2.74
Gaya-Fatehpur (765 Kv)	27	174	374	0	4.92	0.00	4.92
Pusauli-Sahupuri	94	84	166	0	2.78	0.00	2.78
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-34	0	46	0.00	0.67	-0.67
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-121	68	180	121	1.28	0.00	1.28
Sub Total ER	**517**	**1278**			**35.91**	**3.41**	**32.50**
Total IR Exch	**2661**	**3562**			**132.33**	**28.20**	**104.13**

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
18.16	0.86	19.02	6.59	-12.08	7.43	12.36	4.54	-4.54

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
37.57	65.14	102.72	32.50	71.63	104.13	-5.07	6.49	1.41

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	0.12	0.75	9.81	38.86	51.03	18.89	16.77	3.60	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)
50.34	0.00	49.67	18.11	50.03	0.10	0.10	50.31	49.92

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	20:59	403	16:40	0.0	0.0	0.0	0.0
Gorakhpur	400	415	21:54	404	12:46	100.0	100.0	0.0	0.0
Bareilly	400	424	20:55	407	12:24	0.0	0.0	0.0	0.0
Kanpur	400	422	20:52	403	11:10	0.0	0.0	2.3	0.0
Dadri	400	423	20:51	406	12:20	0.0	0.0	7.1	0.0
Ballabhgarh	400	431	20:57	413	11:10	0.0	0.0	58.5	0.7
Bawana	400	430	20:04	407	09:30	0.0	0.0	0.0	0.0
Bassi	400	429	20:29	395	07:47	0.0	0.0	11.3	0.0
Hissar	400	422	21:41	403	09:13	0.0	0.0	1.5	0.0
Moga	400	425	21:44	410	07:09	0.0	0.0	27.1	0.0
Abdullapur	400	428	20:32	396	07:20	0.0	0.0	31.3	0.0
Nalagarh	400	434	21:45	412	11:11	0.0	0.0	62.6	12.4
Kishenpur	400	428	03:23	399	18:21	0.0	0.0	20.8	0.0
Wagoora	400	424	20:10	397	18:20	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	779	20:58	742	11:10	0.0	0.0	0.0	0.0
Balia	765	771	05:03	749	10:38	0.0	0.0	0.0	0.0
Moga	765	806	21:43	776	07:19	0.0	0.0	6.9	0.0
Agra	765	797	20:57	756	11:10	0.0	0.0	0.0	0.0
Bhiwani	765	801	20:40	758	10:50	0.0	0.0	0.0	0.0
Unnao	765	762	21:46	740	09:14	0.0	3.8	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	504.86	1298.95	509.42	1515.08	202.30	394.62
Pong	426.72	384.05	411.66	555.85	418.46	821.34	54.45	306.30
Tehri	829.79	740.04	821.25	1023.40	822.45	1050.00	66.79	165.00
Koteshwar	612.50	598.50	609.23	4.21	610.05	4.50	165.00	166.00
Chamera-I	760.00	748.75	759.50	0.00	0.00	0.00	57.34	45.03
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	510.10	1.77	516.10	2.51	70.71	76.81

*** 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	-382	18	0	-357	246	0	-8.77	4.49	-4.28
Delhi	-777	-15	-14	-597	119	-14	-14.26	0.51	-13.75
Haryana	-774	135	0	-758	153	0	-19.65	2.36	-17.29
HP	422	0	0	397	-390	0	9.47	-2.50	6.97
J&K	282	0	0	333	0	0	6.64	0.54	7.18
CHD	-31	0	0	0	0	0	-0.24	0.14	-0.10
Rajasthan	489	453	2	489	223	2	11.73	12.53	24.26
UP	76	0	0	143	0	0	2.52	0.00	2.52
Uttarakhand	292	136	0	292	212	0	7.02	4.57	11.59
Total	**-404**	**726**	**-12**	**-57**	**562**	**-12**	**-5.53**	**22.63**	**17.10**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-357	-382	321	4	0	0
Delhi	-487	-786	247	-97	-14	-14
Haryana	-758	-978	161	-224	0	0
HP	422	378	66	-713	0	0
J&K	350	236	49	0	0	0
CHD	0	-31	20	0	0	0
Rajasthan	489	489	1073	124	2	2
UP	149	76	0	0	0	0
Uttarakhand	292	292	356	107	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 17.11.2014 :

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 : 17.11.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**