पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 18.12.2014
Date of Reporting : 19.12.2014

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
38952	1779	40731	49.97	28767	1286	30052	50.25	801.2	46.85

* 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	43.76	7.19		50.95	40.34	40.36	0.02	91.31	0.00
Haryana	51.40	0.43		51.83	58.91	58.07	-0.84	109.90	0.25
Rajasthan	114.47	4.62	3.32	122.42	81.47	85.35	3.88	207.76	0.00
Delhi	18.40			18.40	44.14	45.00	0.85	63.40	0.00
UP	141.33	3.86		145.20	81.96	77.96	-4.00	223.15	38.35
Uttarakhand		7.25		7.25	25.53	27.28	1.75	34.53	0.15
HP		4.43		4.43	20.58	20.54	-0.04	24.97	0.71
J & K		5.47	0.00	5.47	33.29	36.69	3.39	42.16	7.40
Chandigarh				0.00	3.48	3.99	0.27	3.99	0.00
Total	**369.37**	**33.24**	**3.32**	**405.94**	**389.70**	**395.22**	**5.28**	**801.16**	**46.85**

* 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	4777	0	-107	-434	3006	0	-6	-393	4816
Haryana	5773	0	314	-932	3492	0	-369	-877	5773
Rajasthan	9595	0	436	711	7925	0	179	1478	9595
Delhi	3191	77	36	-130	1575	0	-103	-721	3435
UP	10511	1325	-248	111	9035	980	51	73	10511
Uttarakhand	1719	0	27	530	1157	0	46	430	1750
HP	1246	36	-52	408	791	7	19	410	1316
J&K	1935	341	169	462	1694	299	58	634	1935
Chandigarh	205	0	13	0	91	0	1	-31	220
Total	**38952**	**1779**	**587**	**726**	**28767**	**1286**	**-124**	**1003**	**38952**

* 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	1450	1564	1549	35.00	1458	34.76	0.24
	Rihand I STPS (2*500)	1000	862	950	868	21.20	883	19.85	1.35
	Rihand II STPS (2*500)	1000	945	1053	786	22.70	946	21.27	1.43
	Rihand III STPS (2*500)	1000	954	1010	771	22.40	933	21.13	1.27
	Dadri I STPS (4*210)	840	615	490	401	13.00	542	12.33	0.67
	Dadri II STPS (2*490)	980	980	922	674	20.80	867	20.37	0.43
	Unchahar I TPS (2*210)	420	406	436	315	9.40	392	8.76	0.64
	Unchahar II TPS (2*210)	420	405	443	296	9.50	396	8.79	0.71
	Unchahar III TPS (1*220)	210	202	219	138	4.60	192	4.33	0.27
	ISTPP (Jhajjhar) (3*500)	1500	1208	1084	848	23.53	981	24.01	-0.48
	Dadri GPS (4*130.19+2*154.51)	830	825	348	414	8.20	342	8.24	-0.04
	Anta GPS (3*88.71+1*153.2)	419	425	238	237	5.60	233	5.65	-0.05
	Auraiya GPS (4*111.19+2*109.30)	663	664	303	319	7.40	308	7.40	0.00
	Dadri Solar	5	1	0	0	0.01	0	0.02	-0.01
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Sub Total (A)	**11297**	**9946**	**9060**	**7616**	**203**	**8474**	**197**	**6**
B. NPC	NAPS (2*220)	440	295	335	336	7.16	298	7.08	0.08
	RAPS- B (2*220)	440	414	460	458	9.95	415	9.94	0.01
	RAPS- C (2*220)	440	219	239	239	5.07	211	5.26	-0.19
	Sub Total (B)	**1320**	**928**	**1034**	**1033**	**22.18**	**924**	**22.27**	**-0.09**
C. NHPC	Chamera I HPS (3*180)	540	356	362	0	2.01	84	1.90	0.11
	Chamera II HPS (3*100)	300	300	306	0	1.34	56	1.25	0.09
	Chamera III HPS (3*77)	231	231	155	0	0.75	31	0.69	0.06
	Bairasuil HPS(3*60)	180	179	180	0	0.51	21	0.48	0.04
	Salal-HPS (6*115)	690	117	220	120	2.98	124	2.81	0.17
	Tanakpur-HPS (3*40)	94	31	45	29	0.83	34	0.75	0.08
	Uri-I HPS (4*120)	480	118	211	81	3.01	125	2.83	0.18
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	138	140	0	1.12	47	1.00	0.12
	Dulhasti-HPS (3*130)	390	387	395	0	3.03	126	2.90	0.13
	Sewa-II HPS (3*40)	120	119	82	0	0.37	15	0.36	0.01
	Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	**4065**	**1976**	**2096**	**230**	**16**	**664**	**15**	**1**
D.SJVNL	NJPC (6*250)	1500	1605	1587	0	7.51	313	7.24	0.27
	Rampur HEP (4*68.67)	275	420	390	0	2.12	88	2.02	0.10
	Sub Total (D)	1775	2025	1977	0	9.63	401	9.26	0.37
E. THDC	Tehri HPS (4*250)	1000	1060	792	0	7.30	304	7.20	0.10
	Koteshwar HPS (4*100)	400	104	201	90	2.55	106	2.50	0.05
	Sub Total (E)	**1400**	**1164**	**993**	**90**	**9.85**	**410**	**9.70**	**0.15**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	526	1092	356	12.63	526	12.63	-0.01
	Dehar HPS (6*165)	990	124	165	0	3.15	131	2.99	0.16
	Pong HPS (6*66)	396	210	324	66	4.96	207	5.05	-0.08
	Sub Total (F)	**2900**	**861**	**1581**	**422**	**20.74**	**864**	**20.66**	**0.07**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.46	19	0.42	0.04
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	670	0	4.15	173	3.96	0.18
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	289	211	6.40	267	6.46	-0.06
	Budhil HPS(IPP)	70	0	0	0	0.11	5	0.11	0.00
	Sub Total (G)	1662	0	959	211	11.12	463	10.95	0.16
H. Total Regional Entities (A-G)		**24419**	**16899**	**17700**	**9602**	**292.82**	**12201**	**284.80**	**8.03**

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	625	375	11.46	477
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	115	115	2.37	99
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	463	346	9.12	380
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	695	353	13.08	545
	Talwandi Saboo (1*660)	660	407	340	7.73	322
	Thermal (Total)	**4680**	**2305**	**1529**	**43.76**	**1823**
	Total Hydro	1148	322	198	7.19	300
	Total Punjab	**5828**	**2627**	**1727**	**50.95**	**2123**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	891	663	19.44	810
	DCRTPP (Yamuna nagar) (2*300)	600	279	248	6.35	264
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	584	366	12.78	533
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	559	362	12.83	535
	Thermal (Total)	**4944**	**2313**	**1639**	**51.40**	**2142**
	Total Hydro	62	13	18	0.43	18
	Total Haryana	**5006**	**2326**	**1657**	**51.83**	**2159**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	844	977	22.74	948
	suratgarh TPS (6*250)	1500	1403	1186	30.89	1287
	Chabra TPS (3*250)	750	561	595	13.33	555
	Dholpur GPS (3*110)	330	132	119	3.16	132
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	78	168	3.61	150
	RAPS A (NPC) (1*100+1*200)	300	150	153	4.15	173
	Barsingsar (NLC) (2*125)	250	183	183	4.31	180
	Giral LTPS (2*125)	250	42	72	1.15	48
	Rajwest LTPS (IPP) (8*135)	1080	733	589	18.82	784
	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	560	473	12.31	513
	Thermal (Total)	**8026**	**4686**	**4515**	**114**	**4770**
	Total Hydro	550	277	114	4.62	192
	Wind power	2798	94	67	2.32	97
	Biomass	99	32	32	0.78	32
	Solar	730	2	0	0.23	9
	Renewable/Others (Total)	3627	128	99	3.32	138
	Total Rajasthan	**12203**	**5091**	**4728**	**122.42**	**5101**
UP	Anpara TPS (3*210+2*500)	1630	1375	1398	33.10	1379
	Obra TPS (2*50+2*94+5*200)	1194	308	307	7.50	313
	Paricha TPS (2*110+2*220+2*250)	1140	733	644	17.50	729
	Panki TPS (2*105)	210	36	41	1.00	42
	Harduaganj TPS (1*60+1*105+2*250)	665	490	468	11.50	479
	Tanda TPS (NTPC) (4*110)	440	287	225	6.45	269
	Roza TPS (IPP) (4*300)	1200	1053	765	20.46	853
	Anpara-C (IPP) (2*600)	1200	1034	1017	24.62	1026
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Thermal (Total)	**8129**	**5316**	**4865**	**122.13**	**5089**
	Vishnuparyag HPS (IPP)	400	88	84	2.04	85
	Other Hydro	527	61	138	1.82	76
	Cogeneration	981	800	800	19.20	800
	Total UP	**10037**	**6265**	**5887**	**145.20**	**5965**
Uttarakhand	Total Hydro	1398	445	232	7.25	302
	Total Uttarakhand	**1398**	**445**	**232**	**7.25**	**302**
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	82	82	1.94	81
	Pragati Gas Turbine (2x104+ 1x122)	330	155	159	3.79	158
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	341	240	7.12	297
	Badarpur TPS (NTPC) (3*95+2*210)	705	218	217	5.54	231
	Thermal (Total)	2917	796	698	18.40	767
	Total Delhi	**2917**	**796**	**698**	**18.40**	**767**
HP	Baspa HPS (IPP) (2*150)	300	30	0	1.10	46
	Malana HPS (IPP) (2*43)	86	0	0	0.00	0
	Other Hydro	728	170	106	3.33	139
	Total HP	**1114**	**200**	**106**	**4.43**	**185**
J & K	Baglihar HPS (IPP) (3*150)	450	268	120	3.90	163
	Other Hydro/IPP	436	87	73	1.57	65
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**355**	**193**	**5.47**	228
Total State Control Area Generation		**39597**	**18105**	**15228**	**405.94**	**16829**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**5161**	**5001**	**134.28**	**5595**
Total Regional Availability(Gross)		**64017**	**40966**	**29831**	**833.04**	**34625**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**7317**	**742**	**60.76**	**2532**
State Control Area Hydro	**5684**	**1673**	**999**	**33.24**	**1300**
Total Regional Hydro	**17116**	**8990**	**1741**	**94.00**	**3832**

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	-150	200	400	150	4.06	0.38	3.68
Gwalior-Agra (D/C)	1839	1797	2155	0	44.38	0.00	44.38
Zerda-Kankroli	26	-80	35	125	0.00	0.87	-0.87
Zerda-Bhinmal	132	22	202	79	1.60	0.00	1.60
Malanpur-Auraiya	-60	-45	0	90	0.00	1.57	-1.57
Badod-Kota/Morak	21	-65	13	69	0.00	1.47	-1.47
Mundra-Mohindergarh(HVDC)	2302	2299	2305	0	55.46	0.00	55.46
Vindhyachal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	**4110**	**4128**			**105.50**	**4.29**	**101.21**
Pusauli Bypass	425	425	425	0	10.31	0.00	10.31
MZP- GKP (D/C)	-66	-50	264	20	2.24	0.00	2.24
Patna-Balia(D/C)	596	561	731	0	16.03	0.00	16.03
B'Sharif-Balia (D/C)	50	65	199	0	0.42	0.00	0.42
Pusauli-Balia	-230	-191	0	251	0.00	4.29	-4.29
Gaya-Fatehpur (765 Kv)	191	104	388	0	5.78	0.00	5.78
Pusauli-Sahupuri	155	83	179	0	3.20	0.00	3.20
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-36	0	44	0.00	0.86	-0.86
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-30	-88	166	105	0.24	0.00	0.24
Sub Total ER	**1051**	**873**			**38.22**	**5.15**	**33.06**
Total IR Exch	**5161**	**5001**			**143.72**	**9.45**	**134.28**

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
24.97	0.37	25.35	9.31	-6.64	7.37	13.97	2.29	-2.29

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
44.32	82.16	126.48	33.06	101.21	134.28	-11.25	19.05	7.80

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	0.80	7.74	29.90	57.89	41.69	13.50	12.27	2.64	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)
50.29	3.01	49.66	7.36	49.97	0.15	0.12	50.28	49.84

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	01:52	402	22:06	0.0	0.0	0.0	0.0
Gorakhpur	400	411	21:36	404	12:02	1.4	1.4	0.0	0.0
Bareilly	400	422	00:01	402	17:41	0.0	0.0	1.6	0.0
Kanpur	400	420	03:01	401	17:40	0.0	0.0	0.0	0.0
Dadri	400	422	03:00	405	17:43	0.1	0.1	7.3	0.0
Ballabhgarh	400	428	02:57	408	15:41	0.0	0.0	37.5	0.0
Bawana	400	427	03:04	410	14:41	0.0	0.0	41.1	0.0
Bassi	400	426	05:01	392	09:11	0.0	0.0	32.7	0.0
Hissar	400	416	00:00	399	09:09	0.0	0.0	0.0	0.0
Moga	400	423	00:00	346	12:33	0.2	0.3	10.9	0.0
Abdullapur	400	423	00:00	396	14:42	0.0	0.0	11.7	0.0
Nalagarh	400	428	21:19	408	17:41	0.0	0.0	20.6	0.0
Kishenpur	400	429	13:07	395	18:37	0.0	0.0	2.9	0.0
Wagoora	400	408	12:08	392	18:10	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	777	03:01	741	09:10	0.0	1.3	0.0	0.0
Balia	765	778	00:00	726	10:23	1.4	10.0	0.0	0.0
Moga	765	800	00:00	767	09:11	0.0	0.0	0.0	0.0
Agra	765	793	03:01	752	09:14	0.0	0.0	0.0	0.0
Bhiwani	765	806	01:53	768	09:12	0.0	0.0	7.0	0.0
Unnao	765	763	23:56	726	10:11	0.3	37.4	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	500.00	1088.42	504.44	1285.56	115.96	370.75
Pong	426.72	384.05	407.51	416.46	414.00	633.63	85.01	338.39
Tehri	829.79	740.04	814.05	882.26	817.05	942.25	47.89	166.00
Koteshwar	612.50	598.50	609.61	4.96	609.50	4.44	166.00	169.00
Chamera-I	760.00	748.75	759.14	0.00	0.00	0.00	49.54	53.93
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	508.05	2.03	512.86	3.11	70.79	94.26

*** 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	-416	23	0	-436	2	0	-11.06	0.59	-10.47
Delhi	-653	-38	-31	-472	357	-15	-11.47	3.57	-7.90
Haryana	-1043	166	0	-1027	95	0	-26.35	2.24	-24.11
HP	477	-68	0	448	-40	0	12.08	-3.04	9.03
J&K	634	0	0	413	50	0	11.87	0.97	12.83
CHD	-31	0	0	0	0	0	-0.24	0.22	-0.03
Rajasthan	850	626	2	801	-91	0	23.57	10.11	33.68
UP	73	0	0	111	0	0	1.46	0.00	1.46
Uttarakhand	214	181	35	214	306	10	5.14	9.15	14.29
Total	**106**	**890**	**6**	**52**	**680**	**-5**	**4.99**	**23.80**	**28.79**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-416	-511	232	0	0	0
Delhi	-279	-653	382	-66	-15	-31
Haryana	-1027	-1212	168	-497	0	0
HP	543	428	0	-534	0	0
J&K	634	413	130	-195	0	0
CHD	0	-31	29	0	0	0
Rajasthan	1208	801	628	-308	2	0
UP	116	9	0	0	0	0
Uttarakhand	214	214	475	161	35	8

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 18.12.2014 :

Light Fog

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 : 18.12.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**