पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 17.12.2014
Date of Reporting : 18.12.2014

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
38113	2213	40326	50.14	28072	1287	29359	50.15	788.6	46.63

* 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	37.12	8.73		45.85	42.17	43.44	1.27	89.29	0.00
Haryana	55.50	0.44		55.95	56.18	56.92	0.74	112.86	0.14
Rajasthan	113.15	4.71	3.86	121.71	76.75	80.27	3.52	201.99	0.00
Delhi	17.31			17.31	43.14	44.53	1.39	61.83	0.00
UP	133.41	3.59		137.00	81.94	80.84	-1.10	217.84	38.11
Uttarakhand		7.39		7.39	24.74	26.50	1.76	33.89	0.19
HP		4.41		4.41	21.02	20.45	-0.57	24.87	0.79
J & K		5.47	0.00	5.47	33.49	36.66	3.18	42.14	7.40
Chandigarh				0.00	3.47	3.86	0.27	3.86	0.00
Total	**356.49**	**34.74**	**3.86**	**395.09**	**382.90**	**393.48**	**10.46**	**788.56**	**46.63**

* 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	4842	0	69	-435	2846	0	-38	-308	4842
Haryana	5473	528	27	-914	3872	0	36	-877	5783
Rajasthan	9270	0	84	790	7630	0	207	1342	9270
Delhi	3047	0	-82	-155	1582	0	-34	-694	3387
UP	10376	1320	-13	111	8473	980	-16	73	10376
Uttarakhand	1801	0	110	460	1100	0	30	429	1801
HP	1241	37	-56	448	780	7	-5	410	1298
J&K	1861	328	54	493	1699	300	66	634	1912
Chandigarh	202	0	9	0	91	0	10	-31	220
Total	**38113**	**2213**	**202**	**798**	**28072**	**1287**	**255**	**978**	**38113**

* 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	1560	1531	34.91	1454	34.32	0.59
	Rihand I STPS (2*500)	1000	856	860	815	20.60	858	18.86	1.74
	Rihand II STPS (2*500)	1000	970	954	786	23.10	963	21.34	1.76
	Rihand III STPS (2*500)	1000	975	967	793	22.30	929	20.95	1.35
	Dadri I STPS (4*210)	840	615	437	409	12.00	500	11.25	0.75
	Dadri II STPS (2*490)	980	980	868	664	19.70	821	19.12	0.58
	Unchahar I TPS (2*210)	420	406	428	310	9.70	404	9.10	0.60
	Unchahar II TPS (2*210)	420	406	439	291	9.40	392	8.75	0.65
	Unchahar III TPS (1*220)	210	202	211	145	4.70	196	4.37	0.33
	ISTPP (Jhajjhar) (3*500)	1500	1459	1186	869	23.51	980	25.27	-1.76
	Dadri GPS (4*130.19+2*154.51)	830	825	361	420	9.20	383	9.21	-0.01
	Anta GPS (3*88.71+1*153.2)	419	415	243	206	5.90	246	5.92	-0.02
	Auraiya GPS (4*111.19+2*109.30)	663	524	348	303	7.50	313	7.79	-0.29
	Dadri Solar	5	1	0	0	0.02	1	0.02	-0.01
	Unchahar Solar	10	3	0	0	0.04	2	0.07	-0.03
	Sub Total (A)	**11297**	**10088**	**8862**	**7542**	**203**	**8440**	**196**	**6**
B. NPC	NAPS (2*220)	440	294	329	335	7.09	296	7.06	0.04
	RAPS- B (2*220)	440	413	457	459	9.94	414	9.91	0.03
	RAPS- C (2*220)	440	220	239	238	5.07	211	5.28	-0.21
	Sub Total (B)	**1320**	**927**	**1025**	**1032**	**22.10**	**921**	**22.25**	**-0.15**
C. NHPC	Chamera I HPS (3*180)	540	356	365	0	2.16	90	2.05	0.11
	Chamera II HPS (3*100)	300	300	205	0	1.19	50	1.10	0.09
	Chamera III HPS (3*77)	231	231	158	0	0.72	30	0.69	0.03
	Bairasuil HPS(3*60)	180	179	120	0	0.59	25	0.55	0.04
	Salal-HPS (6*115)	690	121	227	135	3.01	126	2.79	0.22
	Tanakpur-HPS (3*40)	94	36	59	42	0.93	39	0.86	0.07
	Uri-I HPS (4*120)	480	117	210	83	3.07	128	2.81	0.26
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	138	141	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	79	80	0	0.25	11	0.24	0.01
	Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	**4065**	**1943**	**1959**	**260**	**16**	**670**	**15**	**1**
D.SJVNL	NJPC (6*250)	1500	1605	1564	0	7.26	303	7.09	0.17
	Rampur HEP (4*68.67)	275	420	439	0	1.97	82	1.98	-0.01
	Sub Total (D)	1775	2025	2003	0	9.23	385	9.07	0.16
E. THDC	Tehri HPS (4*250)	1000	828	795	0	7.10	296	7.00	0.10
	Koteshwar HPS (4*100)	400	104	201	90	2.56	107	2.50	0.06
	Sub Total (E)	**1400**	**932**	**996**	**90**	**9.66**	**402**	**9.50**	**0.16**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	526	1058	356	12.69	529	12.63	0.06
	Dehar HPS (6*165)	990	148	165	140	3.52	147	3.56	-0.04
	Pong HPS (6*66)	396	233	324	60	5.55	231	5.58	-0.04
	Sub Total (F)	**2900**	**907**	**1547**	**556**	**21.76**	**906**	**21.77**	**-0.02**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.46	19	0.44	0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	622	0	4.16	173	3.84	0.32
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	287	218	6.38	266	6.25	0.13
	Budhil HPS(IPP)	70	0	0	0	0.11	5	0.11	0.00
	Sub Total (G)	1662	0	909	218	11.11	463	10.64	0.47
H. Total Regional Entities (A-G)		**24419**	**16822**	**17301**	**9697**	**292.50**	**12188**	**284.56**	**7.94**

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	420	330	8.66	361
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	115	115	2.41	101
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	254	171	5.39	224
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	696	359	13.23	551
	Talwandi Saboo (1*660)	660	351	347	7.43	310
	Thermal (Total)	**4680**	**1836**	**1322**	**37.12**	**1547**
	Total Hydro	1148	553	159	8.73	364
	Total Punjab	**5828**	**2389**	**1481**	**45.85**	**1911**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	716	661	16.34	681
	DCRTPP (Yamuna nagar) (2*300)	600	268	232	6.15	256
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	586	374	12.14	506
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	702	744	20.87	870
	Thermal (Total)	**4944**	**2272**	**2011**	**55.50**	**2313**
	Total Hydro	62	17	21	0.44	18
	Total Haryana	**5006**	**2289**	**2032**	**55.95**	**2331**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1034	959	23.34	973
	suratgarh TPS (6*250)	1500	1399	1192	30.65	1277
	Chabra TPS (3*250)	750	639	554	14.81	617
	Dholpur GPS (3*110)	330	133	110	3.10	129
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	133	62	2.87	120
	RAPS A (NPC) (1*100+1*200)	300	151	151	4.13	172
	Barsingsar (NLC) (2*125)	250	183	158	4.21	175
	Giral LTPS (2*125)	250	76	83	1.51	63
	Rajwest LTPS (IPP) (8*135)	1080	730	674	16.96	707
	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	577	467	11.56	482
	Thermal (Total)	**8026**	**5055**	**4410**	**113**	**4715**
	Total Hydro	550	208	107	4.71	196
	Wind power	2798	67	148	2.82	118
	Biomass	99	27	27	0.65	27
	Solar	730	0	0	0.38	16
	Renewable/Others (Total)	3627	94	175	3.86	161
	Total Rajasthan	**12203**	**5357**	**4692**	**121.71**	**5071**
UP	Anpara TPS (3*210+2*500)	1630	1363	1370	32.20	1342
	Obra TPS (2*50+2*94+5*200)	1194	307	237	6.60	275
	Paricha TPS (2*110+2*220+2*250)	1140	616	532	13.60	567
	Panki TPS (2*105)	210	45	99	1.60	67
	Harduaganj TPS (1*60+1*105+2*250)	665	493	463	11.40	475
	Tanda TPS (NTPC) (4*110)	440	285	220	6.36	265
	Roza TPS (IPP) (4*300)	1200	765	761	18.32	763
	Anpara-C (IPP) (2*600)	1200	1035	855	24.13	1005
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Thermal (Total)	**8129**	**4909**	**4537**	**114.21**	**4759**
	Vishnuparyag HPS (IPP)	400	89	86	2.09	87
	Other Hydro	527	109	24	1.50	62
	Cogeneration	981	800	800	19.20	800
	Total UP	**10037**	**5907**	**5447**	**137.00**	**5621**
Uttarakhand	Total Hydro	1398	452	232	7.39	308
	Total Uttarakhand	**1398**	**452**	**232**	**7.39**	**308**
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	82	41	1.22	51
	Pragati Gas Turbine (2x104+ 1x122)	330	156	158	3.79	158
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	317	242	6.95	289
	Badarpur TPS (NTPC) (3*95+2*210)	705	216	216	5.34	223
	Thermal (Total)	2917	771	657	17.31	721
	Total Delhi	**2917**	**771**	**657**	**17.31**	**721**
HP	Baspa HPS (IPP) (2*150)	300	30	0	1.17	49
	Malana HPS (IPP) (2*43)	86	0	0	0.00	0
	Other Hydro	728	151	100	3.24	135
	Total HP	**1114**	**181**	**100**	**4.41**	**184**
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**	**17701**	**14834**	**395.09**	**16375**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4777.96**	**4574.14**	**133.10**	**5546**
Total Regional Availability(Gross)		**64017**	**39780**	**29105**	**820.69**	**34108**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**7127**	**906**	**61.35**	**2556**
State Control Area Hydro	**5684**	**1875**	**836**	**34.74**	**1360**
Total Regional Hydro	**17116**	**9002**	**1742**	**96.09**	**3917**

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	50	250	500	0	4.95	0.00	4.95
Gwalior-Agra (D/C)	1566	1694	2143	0	43.91	0.00	43.91
Zerda-Kankroli	-55	-151	35	151	0.00	1.31	-1.31
Zerda-Bhinmal	39	-48	169	83	1.13	0.00	1.13
Malanpur-Auraiya	-80	-50	0	85	0.00	1.52	-1.52
Badod-Kota/Morak	-36	-84	0	115	0.00	2.00	-2.00
Mundra-Mohindergarh(HVDC)	2297	2298	2305	0	55.57	0.00	55.57
Vindhyachal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	**3781**	**3909**			**105.56**	**4.83**	**100.73**
Pusauli Bypass	425	425	425	0	10.39	0.00	10.39
MZP- GKP (D/C)	28	-94	244	44	2.43	0.00	2.43
Patna-Balia(D/C)	706	381	886	0	14.98	0.00	14.98
B'Sharif-Balia (D/C)	-7	6	207	29	1.22	0.00	1.22
Pusauli-Balia	-183	-169	0	216	0.00	3.80	-3.80
Gaya-Fatehpur (765 Kv)	89	122	358	0	5.38	0.00	5.38
Pusauli-Sahupuri	98	119	152	0	2.66	0.00	2.66
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	-44	0.00	0.85	-0.85
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-123	-85	123	-123	0.00	0.04	-0.04
Sub Total ER	**997**	**665**			**37.06**	**4.69**	**32.37**
Total IR Exch	**4778**	**4574**			**142.61**	**9.52**	**133.10**

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
26.53	0.55	27.09	6.91	-6.64	5.95	16.70	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
42.24	77.56	119.80	32.37	100.73	133.10	-9.87	23.17	13.30

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	0.71	5.70	30.08	68.11	53.07	10.14	6.15	0.56	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)
50.27	21.57	49.61	7.38	49.95	3.01	0.10	50.24	49.81

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	414	03:03	406	07:32	0.0	0.0	0.0	0.0
Gorakhpur	400	414	03:01	402	14:33	22.0	22.0	0.0	0.0
Bareilly	400	423	03:01	412	11:19	0.0	0.0	10.4	0.0
Kanpur	400	422	03:02	400	09:32	0.0	0.0	1.2	0.0
Dadri	400	423	03:00	404	09:20	0.0	0.0	8.8	0.0
Ballabhgarh	400	430	03:02	405	09:32	0.0	0.0	37.1	0.0
Bawana	400	427	03:01	407	09:28	0.0	0.0	38.2	0.0
Bassi	400	426	05:02	392	09:28	0.0	0.0	13.0	0.0
Hissar	400	417	21:53	396	09:28	0.0	0.0	0.0	0.0
Moga	400	425	21:50	403	09:41	0.0	0.0	24.6	0.0
Abdullapur	400	424	21:55	396	18:05	0.0	0.0	5.6	0.0
Nalagarh	400	427	05:02	408	07:22	0.0	0.0	26.2	0.0
Kishenpur	400	421	02:31	396	17:51	0.0	0.0	1.8	0.0
Wagoora	400	411	02:40	392	16:35	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	778	03:03	740	09:33	0.0	0.4	0.0	0.0
Balia	765	786	05:05	747	17:52	0.0	0.0	0.0	0.0
Moga	765	804	21:55	762	09:33	0.0	0.0	1.3	0.0
Agra	765	792	03:01	750	09:21	0.0	0.0	0.0	0.0
Bhiwani	765	806	21:54	762	09:33	0.0	0.0	5.2	0.0
Unnao	765	763	05:04	724	12:38	1.5	52.6	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	500.14	1101.35	504.64	1298.95	143.06	370.78
Pong	426.72	384.05	407.64	416.46	414.18	644.91	96.93	374.43
Tehri	829.79	740.04	814.30	888.00	817.30	948.00	48.09	161.00
Koteshwar	612.50	598.50	609.57	4.44	610.15	4.69	161.00	170.00
Chamera-I	760.00	748.75	759.19	0.00	0.00	0.00	52.89	58.17
Rihand	268.22	252.98	853.20	307.90	856.90	371.10	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	508.16	3.48	513.00	2.49	61.78	133.16

*** 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	108	0	-436	1	0	-11.06	1.19	-9.87
Delhi	-653	-10	-31	-472	332	-15	-11.37	3.79	-7.58
Haryana	-1043	166	0	-1027	113	0	-26.35	3.09	-23.26
HP	477	-68	0	448	0	0	12.08	-2.56	9.51
J&K	634	0	0	413	81	0	11.77	1.05	12.82
CHD	-31	0	0	0	0	0	-0.24	0.32	0.08
Rajasthan	752	587	2	704	84	2	21.22	9.29	30.51
UP	73	0	0	111	0	0	1.43	0.00	1.43
Uttarakhand	214	199	16	214	245	1	5.14	8.75	13.90
Total	**9**	**982**	**-13**	**-46**	**856**	**-12**	**2.61**	**24.91**	**27.52**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-416	-511	265	0	0	0
Delhi	-279	-653	442	-62	-15	-31
Haryana	-1027	-1212	167	93	0	0
HP	543	428	10	-524	0	0
J&K	634	413	130	-119	0	0
CHD	0	-31	39	0	0	0
Rajasthan	1110	704	628	-446	2	2
UP	116	9	0	0	0	0
Uttarakhand	214	214	507	177	16	1

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 17.12.2014 :

Normal weather

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 : 17.12.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**