पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 27.08.2014
Date of Reporting : 28.08.2014

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
44601	5572	50173	50.00	45173	3786	48959	49.98	1047.7	130.73

* 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	75.20	21.40		96.60	106.85	107.82	0.97	204.42	12.50
Haryana	98.64	0.57		99.22	90.74	92.26	1.52	191.47	0.00
Rajasthan	120.66	0.00	12.50	133.16	47.51	56.69	9.17	189.84	25.51
Delhi	30.55			30.55	84.08	84.88	0.80	115.42	0.71
UP	116.70	17.30	0.40	134.40	109.53	112.73	3.20	247.13	85.02
Uttarakhand		17.96		17.96	13.88	16.37	2.49	34.32	3.77
HP		24.80		24.80	0.73	1.09	0.37	25.89	1.52
J & K		14.50	0.00	14.50	14.26	18.31	4.04	32.81	1.70
Chandigarh				0.00	5.43	6.41	0.98	6.41	0.00
Total	**441.75**	**96.53**	**12.90**	**551.17**	**472.99**	**496.55**	**23.55**	**1047.72**	**130.73**

* 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	8978	625	-45	1286	8478	0	115	1305	9498
Haryana	8658	21	311	1373	8484	0	-225	1288	8722
Rajasthan	7622	911	407	-895	8623	798	376	-476	8689
Delhi	5016	46	175	722	4572	3	-122	648	5444
UP	9624	3615	-360	227	11371	2985	139	1035	11371
Uttarakhand	1660	210	137	85	1467	0	98	85	1660
HP	1159	45	-29	-1185	982	0	94	-1304	1258
J&K	1590	100	202	-476	965	0	13	-821	1720
Chandigarh	295	0	60	0	231	0	38	0	322
Total	**44601**	**5572**	**858**	**1135**	**45173**	**3786**	**526**	**1759**	**45415**

* 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	2000	1242	1508	1350	29.82	1243	29.82	0.00
	Rihand I STPS	1000	421	457	459	11.03	460	10.10	0.93
	Rihand II STPS	1000	965	1043	1043	24.90	1038	23.15	1.75
	Rihand III STPS	1000	459	508	494	12.12	505	11.00	1.12
	Dadri I STPS	840	813	812	782	20.42	851	19.42	1.00
	Dadri II STPS	980	478	478	454	11.59	483	11.46	0.13
	Unchahar I TPS	420	196	220	216	5.20	217	4.69	0.51
	Unchahar II TPS	420	400	442	440	10.41	434	9.56	0.85
	Unchahar III TPS	210	198	218	216	5.17	216	4.73	0.44
	ISTPP (Jhajjhar)	1500	950	992	965	21.75	906	22.41	-0.66
	Dadri GPS	830	743	735	637	16.56	690	16.27	0.29
	Anta GPS	419	384	384	329	8.74	364	8.76	-0.03
	Auraiya GPS	663	633	297	159	4.50	187	4.29	0.20
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.02	1	0.07	-0.05
	Sub Total (A)	**11297**	**7887**	**8094**	**7544**	**182**	**7594**	**176**	**6**
B. NPC	NAPS	440	267	307	306	6.46	269	6.41	0.05
	RAPS- B	440	201	228	227	4.81	200	4.82	-0.02
	RAPS- C	440	380	408	413	8.80	367	9.12	-0.32
	Sub Total (B)	**1320**	**848**	**943**	**946**	**20.06**	**836**	**20.35**	**-0.29**
C. NHPC	Chamera I HPS	540	534	548	362	6.40	266	6.20	0.20
	Chamera II HPS	300	300	303	305	5.72	238	5.55	0.17
	Chamera III HPS	231	229	234	161	3.93	164	3.85	0.08
	Bairasuil HPS	180	178	122	63	1.91	79	1.82	0.09
	Salal-HPS	690	638	573	670	15.62	651	15.28	0.34
	Tanakpur-HPS	94	82	88	87	2.00	83	1.97	0.03
	Uri-HPS	480	421	409	443	10.52	439	10.12	0.41
	Uri-II HPS	240	230	241	237	5.67	236	5.51	0.15
	Dhauliganga-HPS	280	193	209	209	4.66	194	4.62	0.03
	Dulhasti-HPS	390	386	397	394	9.26	386	9.26	-0.01
	Sewa-II HPS	120	119	130	0	0.77	32	0.65	0.12
	Parbati 3	520	130	132	133	2.79	116	2.73	0.06
	Sub Total ©	**4065**	**3441**	**3387**	**3064**	**69**	**2884**	**68**	**2**
D.SJVNL	NJPC	1500	1605	1605	1605	38.45	1602	38.52	-0.07
	Rampur HEP	275	330	364	358	8.63	360	8.40	0.23
	Sub Total (D)	1775	1935	1969	1963	47.08	1962	46.92	0.16
E. THDC	Tehri HPS	1000	1044	725	509	8.64	360	8.50	0.14
	Koteshwar HPS	400	126	383	94	3.10	129	3.03	0.07
	Sub Total (E)	**1400**	**1170**	**1108**	**603**	**11.74**	**489**	**11.53**	**0.21**
F. BBMB	Bhakra HPS	1514	1221	1340	1089	29.32	1222	29.30	0.02
	Dehar HPS	990	577	495	560	13.74	572	13.84	-0.10
	Pong HPS	396	160	324	126	3.82	159	3.85	-0.03
	Sub Total (F)	**2900**	**1958**	**2159**	**1775**	**46.88**	**1953**	**46.98**	**-0.11**
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	116	68	2.44	102	3.04	-0.59
	KWHEP HPS(IPP)	1000	0	1200	940	25.06	1044	24.30	0.76
	Malana Stg-II HPS	100	0	111	66	1.60	67	1.51	0.08
	Shree Cement TPS	300	0	150	149	3.52	147	3.54	-0.02
	Budhil HPS(IPP)	70	0	64	40	1.04	43	1.09	-0.06
	Sub Total (G)	1662	0	1641	1262	33.65	1402	33.48	0.17
H. Total Regional Entities (A-G)		**24419**	**17238**	**19301**	**17157**	**410.90**	**17121**	**402.60**	**8.30**

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)	1260	1030	850	21.10	879
	Guru Nanak Dev TPS(Bhatinda)	440	448	428	9.40	392
	Guru Hargobind Singh TPS(L.mbt)	920	940	692	19.80	825
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	1400	1211	1175	24.90	1038
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	**4680**	**3629**	**3145**	**75.20**	**3133**
	Total Hydro	1148	892	894	21.40	892
	Total Punjab	**5828**	**4521**	**4039**	**96.60**	**4025**
Haryana	Panipat TPS	1367	1140	1155	26.61	1109
	DCRTPP (Yamuna nagar)	600	541	539	12.69	529
	Faridabad GPS (NTPC)	432	350	183	5.35	223
	RGTPP (khedar) (IPP)	1200	1163	1165	25.92	1080
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1232	1232	28.08	1170
	Thermal (Total)	4944	4426	4274	98.64	4110
	Total Hydro	62	24	24	0.57	24
	Total Haryana	**5006**	**4450**	**4298**	**99.22**	**4134**
Rajasthan	kota TPS	1240	1052	1041	23.78	991
	suratgarh TPS	1500	1101	1053	24.86	1036
	Chabra TPS	750	188	205	4.76	198
	Dholpur GPS	330	111	112	2.77	115
	Ramgarh GPS	271	130	125	3.25	136
	RAPS A (NPC)	300	0	0	0.00	0
	Barsingsar (NLC)	250	179	99	2.99	125
	Giral LTPS	250	68	68	1.37	57
	Rajwest LTPS (IPP)	1080	950	921	22.19	925
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	468	495	11.39	475
	Kawai(Adani)	1320	620	1176	23.30	971
	Thermal (Total)	8026	4867	5295	121	5027
	Total Hydro	550	0	0	0.00	0
	Wind power	2798	429	626	11.35	473
	Biomass	99	32	32	0.78	32
	Solar	730	0	0	0.37	16
	Renewable/Others (Total)	3627	461	658	12.50	521
	Total Rajasthan	**12203**	**5328**	**5953**	**133.16**	**5548**
UP	Anpara TPS	1630	841	852	20.60	858
	Obra TPS	1288	327	470	9.60	400
	Paricha TPS	1140	755	744	18.50	771
	Panki TPS	210	76	131	3.00	125
	Harduaganj TPS	665	432	420	10.10	421
	Tanda TPS (NTPC)	440	366	366	9.00	375
	Roza TPS (IPP)	1200	734	801	19.20	800
	Anpara-C (IPP)	1200	918	905	21.80	908
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	243	203	4.90	204
	Thermal (Total)	8223	4692	4892	116.70	4863
	Vishnuparyag HPS (IPP)	400	436	436	10.50	438
	Other Hydro	527	305	284	6.80	283
	Cogeneration	981	15	15	0.40	17
	Total UP	**10131**	**5448**	**5627**	**134.40**	**5163**
Uttarakhand	Total Hydro	1303	851	749	17.96	748
	Total Uttarakhand	**1303**	**851**	**749**	**17.96**	**748**
Delhi	Rajghat TPS	135	49	47	1.30	54
	Delhi Gas Turbine	282	126	106	3.06	127
	Pragati Gas Turbine	330	283	281	6.92	288
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	475	442	11.96	498
	Badarpur TPS (NTPC)	705	287	249	7.31	305
	Thermal (Total)	2917	1220	1125	30.55	1273
	Total Delhi	**2917**	**1220**	**1125**	**30.55**	**1273**
HP	Baspa HPS (IPP)	300	330	330	7.92	330
	Malana HPS (IPP)	86	64	60	1.40	58
	Other Hydro	728	651	630	15.48	645
	Total HP	**1114**	**1045**	**1020**	**24.80**	**1033**
J & K	Baglihar HPS (IPP)	450	438	436	10.49	437
	Other Hydro/IPP	436	183	187	4.00	167
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**621**	**623**	**14.50**	604
Total State Control Area Generation		**39596**	**23484**	**23434**	**551.17**	**22528**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3855**	**6043**	**125.07**	**5211**
Total Regional Availability(Gross)		**64016**	**46640**	**46634**	**1087.15**	**44860**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**10050**	**8478**	**204.02**	**8501**
State Control Area Hydro	**5589**	**3738**	**3594**	**96.53**	**3585**
Total Regional Hydro	**17021**	**13788**	**12072**	**300.55**	**12085**

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

Element	Peak(20:00 Hrs) MW	Off Peak(03:00 Hrs) MW	Maximum Interchange (MW) Import	Maximum Interchange (MW) Export	Energy (MU) Import	Energy (MU) Export	Net Energy MU
Vindhychal B/B	150	500	500	0	9.36	0.00	9.36
Gwalior-Agra (D/C)	1596	1651	1765	0	34.96	0.00	34.96
Zerda-Kankroli	-129	-44	0	241	0.00	2.70	-2.70
Zerda-Bhinmal	-91	-15	33	245	0.00	1.75	-1.75
Malanpur-Auraiya	-159	-55	0	159	0.00	2.05	-2.05
Badod-Kota/Morak	-50	-52	0	137	0.00	1.98	-1.98
Mundra-Mohindergarh(HVDC)	1001	2001	2005	0	40.91	0.00	40.91
Vindhyachal - Rihand	338	332	342	0	9.82	0.00	9.82
Sub Total WR	**2656**	**4318**			**95.06**	**8.48**	**86.58**
Pusauli Bypass	345	203	384	0	6.29	0.00	6.29
MZP- GKP (D/C)	272	612	708	0	12.02	0.00	12.02
Patna-Balia(D/C)	93	290	343	0	4.54	0.00	4.54
B'Sharif-Balia (D/C)	169	273	386	0	6.25	0.00	6.25
Pusauli-Balia	8	44	53	0	0.46	0.00	0.46
Gaya-Fatehpur (765 Kv)	-7	18	136	56	0.97	0.00	0.97
Pusauli-Sahupuri	140	140	201	0	3.04	0.00	3.04
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-43	-40	0	46	0.00	0.88	-0.88
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	222	185	320	0	5.80	0.00	5.80
Sub Total ER	**1199**	**1725**			**39.37**	**0.88**	**38.49**
Total IR Exch	**3855**	**6043**			**134.43**	**9.36**	**125.07**

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
22.70	3.90	26.60	12.81	2.42	-11.94	3.05	0.00	0.00

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
27.47	59.40	86.87	38.49	86.58	125.07	11.02	27.18	38.20

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	2.64	13.69	42.77	77.25	50.01	6.02	1.19	0.01	NA

<---------- Frequency (Hz) ---------->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz			(Hz)	(Hz)
50.20	6.04	49.57	19.03	49.91	3.07	0.10	50.14	0.00

VII. Voltage profile 400 kV

Station	Voltage Level (kV)	Maximum Voltage(KV)	Maximum Time	Minimum Voltage (KV)	Minimum Time	Voltage (in % of Time) <380 kV	<390 kV	>420 kV	>430 kV
Rihand	400	408	17:02	400	00:19	0.0	0.0	0.0	0.0
Gorakhpur	400	412	18:06	395	14:24	0.0	0.0	0.0	0.0
Bareilly	400	417	18:05	393	12:15	0.0	0.0	0.0	0.0
Kanpur	400	416	06:03	400	12:20	0.0	0.0	0.0	0.0
Dadri	400	412	07:07	393	11:39	0.0	0.0	0.0	0.0
Ballabhgarh	400	418	07:05	397	11:42	0.0	0.0	0.0	0.0
Bawana	400	415	07:02	396	11:39	0.0	0.0	0.0	0.0
Bassi	400	418	23:56	398	11:22	0.0	0.0	0.0	0.0
Hissar	400	407	07:07	389	11:44	0.0	0.5	0.0	0.0
Moga	400	409	06:00	394	11:41	0.0	0.0	0.0	0.0
Abdullapur	400	412	06:08	396	11:43	0.0	0.0	0.0	0.0
Nalagarh	400	415	06:02	397	11:48	0.0	0.0	0.0	0.0
Kishenpur	400	414	06:14	401	14:11	0.0	0.0	0.0	0.0
Wagoora	400	410	05:02	394	19:38	0.0	0.0	0.0	0.0

VIII. Voltage profile 765 kV

Station	Voltage Level (kV)	Maximum Voltage(KV)	Maximum Time	Minimum Voltage (KV)	Minimum Time	Voltage (in % of Time) <728 kV	<742 kV	>800 kV	>820 kV
Fatehpur	765	773	06:05	739	12:21	0.0	0.8	0.0	0.0
Balia	765	771	18:06	744	04:38	0.0	0.0	0.0	0.0
Moga	765	785	07:04	756	11:41	0.0	0.0	0.0	0.0
Agra	765	791	06:04	752	22:15	0.0	0.0	0.0	0.0
Bhiwani	765	792	07:08	755	12:21	0.0	0.0	0.0	0.0
Unnao	765	762	06:05	739	00:23	0.0	0.7	0.0	0.0

IX. Reservior Parameters:

Name of Reservior	Parameters FRL (m)	Parameters MDDL (m)	Present Parameters Level (m)	Present Parameters Energy (MU)	Last Year Level (m)	Last Year Energy (MU)	Last day Inflow (m^3/s)	Last day Usage (m^3/s)
Bhakra	513.59	445.62	509.75	1530.03	510.03	1545.02	841.26	907.38
Pong	426.72	384.05	416.28	730.66	422.19	990.81	216.48	231.35
Tehri	829.79	740.04	813.80	879.00	819.90	1000.00	357.93	197.00
Koteshwar	612.50	598.50	610.74	4.95	609.70	4.44	197.00	205.00
Chamera-I	760.00	748.75	750.70	11.05	0.00	0.00	194.80	173.69
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	0.00	0.00
RPS	352.80	343.81	1155.00	0.00	1156.55	40.32	0.00	0.00
Jawahar Sagar	298.70	295.78	0.00	0.00	1309.90	22.49	0.00	0.00
RSD	527.91	487.91	515.38	11.54	524.13	11.51	246.00	487.00

*** 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	1305	0	0	1288	-2	0	30.78	0.00	30.78
Delhi	322	326	0	432	289	0	9.41	7.78	17.19
Haryana	1300	-12	0	1358	15	0	30.80	-7.33	23.47
HP	-1207	-96	0	-954	-231	0	-24.60	-4.28	-28.88
J&K	-681	-140	0	-436	-39	0	-11.54	-1.97	-13.51
CHD	0	0	0	0	0	0	0.24	0.47	0.70
Rajasthan	-732	256	0	-815	-79	0	-15.92	1.01	-14.91
UP	872	163	0	227	0	0	9.76	1.27	11.03
Uttarakhand	93	-8	0	93	-8	0	2.23	-0.20	2.03
Total	**1271**	**487**	**0**	**1191**	**-56**	**0**	**31.16**	**-3.25**	**27.90**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1318	1245	21	-7	0	0
Delhi	452	297	893	-273	0	-51
Haryana	1401	732	18	-1147	0	0
HP	-929	-1207	-38	-325	0	0
J&K	-377	-681	-39	-191	0	0
CHD	30	0	74	0	0	0
Rajasthan	-221	-835	409	-88	49	0
UP	872	212	308	0	0	0
Uttarakhand	93	93	-8	-8	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 27.08.2014 :

1. Normal weather in NR.

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 : 27.08.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**