

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 21.05.2013
Date of Reporting : 22.05.2013

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
37109	2410	39519	50.13	37290	1000	38290	50.07	900.6	45.48

* 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:

State	State's Control Area Generation (Net MU)				Drawal Schedule (Net MU)	Actual Drawal (Net MU)	UI (Net MU)	Consumption (Net MU)	Shortages* (MU)
	Thermal	Hydro	Renewable/others \$	Total					
Punjab	45.76	9.66		55.42	98.07	98.73	0.66	154.15	0.08
Haryana	60.60	0.64		61.24	76.04	76.00	-0.04	137.24	0.01
Rajasthan	84.56	0.00	20.42	104.98	65.76	57.53	-8.23	162.51	0.00
Delhi	29.56			29.56	75.88	71.71	-4.17	101.27	0.12
UP	109.30	14.06	8.40	131.77	116.40	115.84	-0.56	247.60	43.42
Uttarakhand		17.63		17.63	19.72	18.73	-0.99	36.36	0.15
HP		21.63		21.63	6.31	3.33	-2.97	24.97	0.00
J & K		13.40	0.00	13.40	20.19	17.11	-3.08	30.51	1.70
Chandigarh				0.00	5.48	6.03	0.55	6.03	0.00
Total	329.79	77.02	28.82	435.63	483.83	465.01	-18.82	900.63	45.48

* Shortage furnished by the respective constituent.\$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

State	Evening Peak (20:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Day Energy MU
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	6384	0	-108	1037	5873	0	-10	1163	32.21
Haryana	5964	0	-230	93	5692	0	0	43	2.12
Rajasthan	6192	0	-1189	820	6897	0	-307	185	14.46
Delhi	4339	0	-109	-284	4075	0	-262	-93	-2.95
UP	9960	2230	2	240	11057	1000	-2	1817	19.03
Uttarakhand	1642	80	-65	415	1454	0	-132	353	7.28
HP	975	0	-299	-842	914	0	-129	-1010	-21.08
J&K	1397	100	-77	-239	1115	0	-216	-295	-6.19
Chandigarh	257	0	0	0	212	0	2	10	0.38
Total	37109	2410	-2076	1239	37290	1000	-1056	2172	45.25

* STOA figures are at sellers boundary & PX figures are at regional boundary.

III. Regional Entities :

Entity	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	
										UI (OG:(+ve), UG: (-ve))
A. NTPC	Singrauli STPS	2000	1733	1863	1181	41.83	1743	41.54	0.29	
	Rihand I STPS	1000	915	917	985	21.37	890	20.98	0.38	
	Rihand II STPS	1000	965	974	1024	22.42	934	21.79	0.63	
	Rihand III STPS	500	474	448	508	10.82	451	10.69	0.13	
	Dadri I STPS	840	807	792	658	16.66	694	17.43	-0.78	
	Dadri II STPS	980	969	912	786	19.41	809	20.18	-0.76	
	Unchahar I TPS	420	398	398	386	8.58	357	8.58	0.00	
	Unchahar II TPS	420	401	343	330	7.76	323	7.64	0.12	
	Unchahar III TPS	210	198	166	154	3.71	155	3.70	0.01	
	ISTPP (Jhajjar)	1500	470	437	338	7.90	329	10.56	-2.66	
	Dadri GPS	830	798	290	323	7.56	315	7.59	-0.03	
	Anta GPS	419	389	307	233	5.39	225	5.38	0.01	
	Auraiva GPS	663	619	148	154	3.44	143	3.56	-0.12	
	Sub Total (A)	10782	9134	7995	7060	176.85	7369	179.63	-2.78	
B. NPC	NAPS	440	303	321	333	7.03	293	7.27	-0.24	
	RAPS- B	440	398	442	445	9.57	399	9.55	0.02	
	RAPS- C	440	430	456	467	9.92	413	10.32	-0.40	
	Sub Total (B)	1320	1131	1219	1245	26.52	1105	27.14	-0.62	
C. NHPC	Chamera I HPS	540	540	540	540	11.48	478	11.11	0.37	
	Chamera II HPS	300	303	301	303	7.24	302	7.25	-0.01	
	Chamera III HPS	231	231	234	232	5.53	230	5.32	0.20	
	Bairasuil HPS	180	182	180	182	3.11	130	3.02	0.09	
	Salal-HPS	690	675	672	672	16.13	672	16.14	-0.01	
	Tanakpur-HPS	94	42	62	29	1.13	47	1.01	0.11	
	Uri-HPS	480	480	479	479	11.46	478	11.56	-0.10	
	Dhauliganga-HPS	280	277	280	200	6.45	269	6.40	0.05	
	Dulhasti-HPS	390	387	408	407	9.27	386	9.41	-0.14	
	Sewa-II HPS	120	119	122	110	2.67	111	2.61	0.06	
	Sub Total (C)	3305	3236	3278	3154	74.45	3102	73.83	0.62	
	D.NJPC	Nathpa Jhakri	1500	1605	1623	1624	38.73	1614	38.52	0.21
		Sub Total (D)	1500	1605	1623	1624	38.73	1614	38.52	0.21
E. THDC	Tehri HPS	1000	470	478	325	9.90	413	10.00	-0.10	
	Koteshwar HPS	400	273	275	85	4.24	177	4.30	-0.06	
	Sub Total (E)	1400	743	753	410	14.14	589	14.30	-0.16	
F. BBMB	Bhakra HPS	1480	716	1195	515	17.57	732	17.17	0.40	
	Dehar HPS	990	578	825	610	14.96	623	13.87	1.09	
	Pong HPS	396	145	292	120	3.54	148	3.49	0.05	
	Sub Total (F)	2866	1439	2312	1245	36.07	1503	34.53	1.54	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	23	19	4.52	188	3.60	0.92	
	KWHEP HPS(IPP)	1000	0	1199	1197	28.41	1184	27.61	0.81	
	Malana Stg-II HPS	100	0	51	71	1.57	65	1.37	0.20	
	Shree Cement TPS	300	0	239	252	6.02	251	5.99	0.03	
	Budhil HPS(IPP)	70	0	69	69	1.50	63	1.34	0.16	
	Sub Total (G)	1662	0	1581	1608	42.03	1751	39.91	2.12	
H. Total Regional Entities (A-G)	22836	17288	18761	16346	408.79	17033	407.86	0.93		

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	1180	1055	26.87	1119	
	Guru Nanak Dev TPS(Bhatinda)	440	225	175	4.54	189	
	Guru Hargobind Singh TPS(L.mbt)	920	688	529	14.36	598	
	Thermal (Total)	2620	2093	1759	45.76	1907	
	Total Hydro	1148	370	355	9.66	403	
	Total Punjab	3768	2463	2114	55.42	2309	
Haryana	Panipat TPS	1367	643	647	15.88	662	
	DCRTPP (Yamuna nagar)	600	281	279	6.62	276	
	Faridabad GPS (NTPC)	432	176	176	4.21	176	
	RGTPP (khedar) (IPP)	1200	1074	1093	23.88	995	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	594	366	10.00	417	
	Thermal (Total)	4944	2768	2561	60.60	2525	
	Total Hydro	62	26	7	0.64	27	
		Total Haryana	5006	2794	2568	61.24	2552
	Rajasthan	kota TPS	1240	1134	1077	26.28	1095
suratgarh TPS		1500	1125	1114	26.78	1116	
Chabra TPS		500	201	204	4.98	207	
Dholpur GPS		330	109	121	2.89	120	
Ramgarh GPS		111	110	69	2.81	117	
RAPS A (NPC)		300	180	180	4.31	180	
Barsingsar (NLC)		250	190	185	4.46	186	
Giral LTPS		250	103	108	2.11	88	
Rajwest LTPS (IPP)		1080	441	454	9.94	414	
VSLP LTPS (IPP)		135	0		0.00	0	
Thermal (Total)		5696	3593	3512	84.56	3523	
Total Hydro		550	0	0	0.00	0	
Wind power		2191	857	1102	18.13	755	
Biomass		91	27	27	0.65	27	
Solar		201	0	0	1.65	69	
		Renewable/Others (Total)	2483	884	1129	20.42	851
		Total Rajasthan	8729	4477	4641	104.98	4374
UP	Anpara TPS	1630	868	867	18.60	775	
	Obra TPS	1288	516	507	11.20	467	
	Paricha TPS	1140	947	691	19.40	808	
	Panki TPS	210	165	155	3.10	129	
	Harduaganj TPS	665	0	0	0.00	0	
	Tanda TPS (NTPC)	440	393	399	9.71	405	
	Roza TPS (IPP)	1200	999	855	22.52	938	
	Anpara-C (IPP)	1200	711	716	16.76	698	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	359	316	8.02	334	
	Thermal (Total)	8223	4958	4506	109.30	4554	
	Vishnuparyag HPS (IPP)	400	436	436	10.04	418	
	Other Hydro	527	150	194	4.02	168	
	Cogeneration	981	350	350	8.40	350	
		Total UP	10131	5894	5486	131.77	5072
Uttarakhand	Total Hydro	1303	749	701	17.63	734	
	Total Uttarakhand	1303	749	701	17.63	734	
Delhi	Rajghat TPS	135	49	49	1.10	46	
	Delhi Gas Turbine	282	151	114	2.98	124	
	Pragati Gas Turbine	330	279	262	6.78	282	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	213	216	5.38	224	
	Badarpur TPS (NTPC)	705	585	580	13.32	555	
	Thermal (Total)	2232	1277	1221	29.56	1232	
		Total Delhi	2232	1277	1221	29.56	1232
HP	Baspa HPS (IPP)	330	331	331	7.70	321	
	Malana HPS (IPP)	86	42	84	1.41	59	
	Other Hydro	589	548	511	12.53	522	
		Total HP	1005	921	926	21.63	901
J & K	Baglihar HPS (IPP)	450	436	434	10.44	435	
	Other Hydro	323	110	128	2.95	123	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	546	562	13.40	558
Total State Control Area Generation		33130	19121	18219	435.63	17733	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1920	3994	81.50	3396	
Total Regional Availability(Gross)		55966	39802	38559	925.92	38162	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	9239	7720	197.89	8246
State Control Area Hydro	5368	2762	2745	77.02	2791
Total Regional Hydro	15731	12001	10465	274.91	11036

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

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	-50	-100	250	200	1.01	1.81	-0.80
Gwalior-Agra (D/C)	629	1498	1563	0	24.89	0.00	24.89
Zerda-Kankroli	-200	-51	17	324	0.00	2.56	-2.56
Zerda-Bhinmal	-179	-23	91	314	0.00	1.54	-1.54
Malanpur-Auraiya	-127	0	0	127	0.00	0.63	-0.63
Badod-Kota/Morak	-134	-13	0	161	0.00	1.39	-1.39
Mundra-Mohindergarh(HVDC)	1434	1435	1437	0	32.94	0.00	32.94
Sub Total WR	1373	2746			58.84	7.93	50.91
Pusauli Bypass	-150	-150	150	0	3.61	0.00	3.61
MZP- GKP (D/C)	250	522	542	42	10.16	0.00	10.16
Patna-Balia(D/C)	352	555	638	0	10.50	0.00	10.50
B'Sharif-Balia (D/C)	65	235	299	0	4.06	0.00	4.06
Pusauli-Balia	-117	-63	0	176	0.00	1.84	-1.84
Gaya-Fatehpur (765 Kv)	28	32	141	0	1.33	0.00	1.33
Pusauli-Sahupuri	155	157	181	0	3.85	0.00	3.85
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	44	0.00	1.07	-1.07
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	547	1248			33.50	2.91	30.60
Total IR Exch	1920	3994			92.34	10.84	81.50

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)		Power Exchange Shdi (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
32.76	0.96	33.71	-2.44	4.91	6.39	0.16	-0.93	0.93

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
36.73	55.93	92.67	30.60	50.91	81.50	-6.14	-5.03	-11.16

VI. Frequency Profile <----- % of Time Frequency ----->

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	0.70	91.90	91.20	36.20	8.10

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.60	23.57	49.65	5.26	49.98	0.19	0.14	50.40	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	409	19:08	401	0:25	0.0	0.0	0.0	0.0
Gorakhpur	400	428	6:05	406	0:00	0.0	0.0	27.2	0.0
Bareilly	400	414	11:08	401	6:00	0.0	0.0	0.0	0.0
Kanpur	400	417	18:34	397	14:57	0.0	0.0	0.0	0.0
Dadri	400	414	23:56	394	15:13	0.0	0.0	0.0	0.0
Ballabgarh	400	426	23:56	398	14:58	0.0	0.0	0.4	0.0
Bawana	400	416	6:01	397	15:28	0.0	0.0	0.0	0.0
Bassi	400	421	18:30	399	23:28	0.0	0.0	0.9	0.0
Hissar	400	409	23:56	391	16:40	0.0	0.0	0.0	0.0
Moga	400	419	23:57	400	15:23	0.0	0.0	0.0	0.0
Abdullapur	400	411	23:56	396	15:44	0.0	0.0	0.0	0.0
Nalagarh	400	416	23:56	397	15:22	0.0	0.0	0.0	0.0
Kishenpur	400	413	23:56	399	15:27	0.0	0.0	0.0	0.0
Wagoora	400	411	3:59	394	7:10	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	766	18:30	726	15:00	0.6	42.0	0.0	0.0
Balia	765	767	6:04	731	0:38	0.0	32.3	0.0	0.0
Moga	765	798	23:56	754	15:15	0.0	0.0	0.0	0.0
Agra	765	781	18:02	745	5:42	0.0	0.0	0.0	0.0
Bhiwani	765	793	13:29	762	5:40	0.0	0.0	0.0	0.0
Unnao	765	758	18:17	730	5:42	0.0	37.1	0.0	0.0

IX. Reservoir Parameters:

Name of Reservoir	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	474.81	350.94	469.80	267.31	732.61	609.21
Pong	426.72	384.05	399.52	209.93	402.36	273.51	43.18	258.65
Tehri	829.79	740.04	754.70	80.00	818.65	982.26	176.57	191.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	270.13	205.92
Rihand	268.22	252.98	256.40	132.50	256.89	152.90	NA	NA
RPS	352.80	343.81	347.18	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.03	NA	NA	NA	NA	NA
RSD	527.91	487.91	507.19	NA	499.87	NA	164.55	182.56

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 21.05.2013 :

1. Hot weather

XIII. Synchronisation of new generating units :

0.00

XIV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

Report for : 21.05.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER