

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.04.2012
Date of Reporting : 23.04.2012

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
29369	1350	30719	50.10	27928	650	28578	49.89	659.3	24.39

* 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	40.89	2.98		43.87	46.67	49.36	2.69	93.23	4.25
Haryana	58.18	0.70		58.88	37.22	29.76	-7.46	88.64	0.55
Rajasthan	78.91	0.00	5.41	84.33	35.28	47.19	11.91	131.52	0.00
Delhi	31.78			31.78	43.88	36.81	-7.07	68.58	0.04
UP	102.31	6.49	9.60	118.40	80.69	79.42	-1.27	197.82	15.31
Uttarakhand		12.11		12.11	11.39	14.54	3.15	26.66	2.18
HP		10.70		10.70	12.55	10.25	-2.31	20.94	0.17
J & K		13.51	0.00	13.51	15.70	14.87	-0.83	28.38	1.90
Chandigarh				0.00	4.39	3.58	-0.81	3.58	0.00
Total	312.06	46.49	15.01	373.57	287.78	285.78	-2.00	659.34	24.39

* 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	3945	450	307	-94	4017	0	82	-94	-2.24
Haryana	4305	0	-227	54	3920	0	31	54	1.30
Rajasthan	5721	0	299	-366	5330	0	416	-366	-8.78
Delhi	3169	0	-229	306	2581	0	-302	108	5.51
UP	8485	650	-42	465	8980	650	541	265	7.36
Uttarakhand	1178	150	12	98	1144	0	344	98	2.36
HP	904	0	-232	-743	744	0	-93	-42	-6.82
J&K	1486	100	2	-356	1083	0	120	-356	-8.55
Chandigarh	176	0	-46	27	129	0	4	0	0.61
Total	29369	1350	-156	-609	27928	650	1143	-332	-9.25

* 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)	UI [OG:(+ve), UG: (-ve)]	
								Schedule Net MU	UI Net MU
A. NTPC	Singrauli STPS	2000	1458	1589	1584	35.12	1463	35.00	0.12
	Rihand I STPS	1000	472	520	521	10.94	456	10.87	0.07
	Rihand II STPS	1000	975	1040	1050	22.65	944	22.56	0.10
	Dadri I STPS	840	803	625	864	14.60	608	13.99	0.61
	Dadri II STPS	980	470	458	510	10.18	424	10.63	-0.45
	Unchahar I TPS	440	395	431	440	9.12	380	9.21	-0.09
	Unchahar II TPS	440	201	213	221	4.42	184	4.56	-0.15
	Unchahar III TPS	210	200	218	220	4.50	187	4.58	-0.09
	ISTPP (Jhajjar)	1000	876	780	759	16.21	675	15.68	0.52
	Dadri GPS	830	803	642	649	13.65	569	13.73	-0.08
	Anta GPS	419	390	200	181	4.57	190	4.59	-0.02
	Auraiya GPS	663	618	278	258	6.08	253	5.91	0.17
	Sub Total (A)	9822	7661	6994	7257	152.03	6335	151.31	0.72
	B. NPC	NAPS	440	267	300	306	6.46	269	6.41
RAPS- B		440	379	423	431	9.12	380	9.10	0.02
RAPS- C		440	418	480	473	10.07	419	10.03	0.04
Sub Total (B)		1320	1064	1203	1210	25.64	1068	25.54	0.11
C. NHPC	Chamera I HPS	540	534	540	0	6.45	269	7.06	-0.61
	Chamera II HPS	300	297	295	0	4.79	200	4.82	-0.03
	Bairasuil HPS	180	182	182	180	3.96	165	4.00	-0.04
	Salal-HPS	690	445	465	363	12.02	501	9.95	2.07
	Tanakpur-HPS	94	30	38	30	0.73	30	0.69	0.04
	Uri-HPS	480	476	480	480	11.55	481	11.63	-0.08
	Dhauliganga-HPS	280	277	278	0	1.64	68	1.68	-0.04
	Dulhasti-HPS	390	388	414	122	7.42	309	7.77	-0.35
	Sewa-II HPS	120	80	85	84	1.90	79	1.94	-0.05
	Sub Total (C)	3074	2709	2777	1259	50.45	2102	49.55	0.90
D. NJPC	Nathpa Jhakri	1500	1600	1617	0	13.99	583	13.60	0.39
	Sub Total (D)	1500	1600	1617	0	13.99	583	13.60	0.39
E. THDC	Tehri HPS	1000	490	490	0	6.87	286	7.00	-0.13
	Koteshwar HPS	300	300	304	0	2.88	120	2.80	0.08
	Sub Total (E)	1300	790	794	0	9.75	406	9.80	-0.05
F. BBMB	Bhakra HPS	1480	351	470	320	8.63	360	8.43	0.20
	Dehar HPS	990	401	660	165	10.47	436	9.62	0.86
	Pong HPS	396	6	120	0	0.18	8	0.15	0.03
	Sub Total (F)	2866	758	1250	485	19.28	803	18.19	1.09
	G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	105	0	0.71	30	0.59
KWHEP HPS(IPP)		1000	0	600	155	7.49	312	6.29	1.20
Malana Stg-II HPS		100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS		300	0	140	146	3.36	140	3.30	0.06
Sub Total (G)		1592	0	845	301	11.56	481	10.17	1.39
H. Total Regional Entities (A-G)	21475	14582	15480	10512	282.71	11779	278.16	4.54	

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	1040	1040	22.27	928	
	Guru Nanak Dev TPS(Bhatinda)	440	218	218	4.75	198	
	Guru Hargobind Singh TPS(L.mbt)	920	434	743	13.88	578	
	Thermal (Total)	2620	1692	2001	40.89	1704	
	Total Hydro	1148	65	164	2.98	124	
	Total Punjab	3768	1757	2165	43.87	1828	
Haryana	Panipat TPS	1360	1071	1068	24.94	1039	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	393	395	8.24	343	
	RGTPP (kheldar) (IPP)	1200	1106	1076	24.99	1041	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	660	0	0	0.00	0	
	Thermal (Total)	4277	2570	2539	58.18	2424	
	Total Hydro	62	14	16	0.70	29	
	Total Haryana	4339	2584	2555	58.88	2453	
Rajasthan	kota TPS	1240	1065	1162	26.88	1120	
	suratgarh TPS	1500	1183	1347	30.62	1276	
	Chabra TPS	500	398	418	9.78	408	
	Dholpur GPS	330	91	95	2.28	95	
	Ramgarh GPS	111	0	0	0.00	0	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingsar (NLC) IPP	250	0	0	0.00	0	
	Giral LTPS	250	46	50	0.86	36	
	Rajwest LTPS (IPP)	540	349	465	8.50	354	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5156	3132	3537	78.91	3288	
	Total Hydro	550	0	0	0.00	0	
	Wind power	1843	157	237	4.30	179	
	Biomass	91	47	47	1.12	46	
	Solar	128	0	0	0.00	0	
	Renewable/Others (Total)	1934	204	284	5.41	226	
	Total Rajasthan	7640	3336	3821	84.33	3514	
	UP	Anpara TPS	1630	1218	1244	29.00	1208
		Obra TPS	1382	473	473	11.40	475
Paricha TPS		640	386	391	9.30	388	
Panki TPS		210	144	135	3.20	133	
Harduaganj TPS		415	267	262	6.20	258	
Tanda TPS (NTPC)		440	185	188	4.66	194	
Roza TPS (IPP)		1200	820	1127	22.53	939	
Anpara-C (IPP)		1200	356	495	10.40	434	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	240	241	5.61	234	
Thermal (Total)		7567	4089	4556	102.31	4263	
Vishnuparyag HPS (IPP)		400	119	124	2.75	115	
Other Hydro		527	135	0	3.74	156	
Cogeneration		981	400	400	9.60	400	
Total UP		9475	4743	5080	118.40	4819	
Uttarakhand		Total Hydro	1303	551	422	12.11	505
	Total Uttarakhand	1303	551	422	12.11	505	
Delhi	Rajghat TPS	135	103	102	2.46	102	
	Delhi Gas Turbine	282	196	191	4.42	184	
	Pragati Gas Turbine	330	299	299	7.09	295	
	Rithala GPS	108	33	35	0.79	33	
	Bawana GPS	440	229	58	5.66	236	
	Badarpur TPS (NTPC)	705	550	485	11.36	473	
	Thermal (Total)	2000	1410	1345	31.78	1324	
	Total Delhi	2000	1410	1345	31.78	1324	
HP	Baspa HPS (IPP)	330	30	30	1.40	58	
	Malana HPS (IPP)	101	69	18	0.66	27	
	Other Hydro	571	357	352	8.64	360	
	Total HP	1002	456	400	11	446	
J & K	Baglihar HPS (IPP)	450	440	382	10.50	437	
	Other Hydro	323	120	128	3.01	125	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	560	510	13.51	563	
Total State Control Area Generation		30483	15397	16298	373.57	15451	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1288	3045	35.82	1492	
Total Regional Availability(Gross)		51958	32165	29855	692.09	28722	

IV. Total Hydro Generation:

Regional Entities Hydro	10033	7143	1899	101.67	4236
State Control Area Hydro	5365	1781	1512	43.74	1822
Total Regional Hydro	15397	8924	3411	145.41	6059

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	150	-50	300	50	1.22	0.96	0.26
Gwalior-Agra (D/C)	499	1011	1090	0	15.07	0.00	15.07
Zerda-Kankroli	30	69	90	233	0.00	1.39	-1.39
Zerda-Bhinmal	76	125	226	173	0.19	0.00	0.19
Malanpur-Auraiya	-71	27	27	119	0.00	0.86	-0.86
Badod-Kota/Morak	52	36	63	97	0.13	0.00	0.13
Sub Total WR	736	1218			16.61	3.21	13.40
Pusauli Bypass	-352	-37	44	419	0.03	4.01	-3.99
MZP- GKP (D/C)	238	589	642	0	8.84	0.00	8.84
Patna-Balia(D/C)	311	502	535	0	7.55	0.00	7.55
B'Sharif-Balia (D/C)	181	604	614	0	7.38	0.00	7.38
Barh - Balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Balia	0	0	0	0	0.00	0.00	0.00
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	168	143	189	0	3.59	0.00	3.59
K'nasa-Sahupuri	48	60	60	0	0.10	0.00	0.10
Son Ngr-Rihand	-42	-34	0	49	0.00	1.05	-1.05
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	552	1827			27.48	5.06	22.42
Total IR Exch	1288	3045			44.09	8.27	35.82

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

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
25.59	1.06	26.65	-14.32	5.90	1.11	3.72	1.68	-1.68

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
15.13	6.59	21.72	22.42	13.40	35.82	7.29	6.81	14.10

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	0.50	8.90	91.20	72.80	39.60	8.30

<----- Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
50.46	17.44	49.26	19.13	49.95	0.35	0.18	50.49	49.72

VII. Voltage profile

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	416	09:03	404	23:34	0.0	0.0	0.0	0.0
Gorakhpur	400	433	09:03	394	23:34	0.0	0.0	45.1	8.6
Bareilly	400	428	08:04	393	00:09	0.0	0.0	14.3	0.0
Kanpur	400	423	08:01	400	00:12	0.0	0.0	5.6	0.0
Dadri	400	424	08:04	407	00:12	0.0	0.0	7.7	0.0
Ballabgarh	400	428	08:16	409	00:11	0.0	0.0	19.1	0.0
Bawana	400	427	08:03	407	00:09	0.0	0.0	17.0	0.0
Bassi	400	428	09:02	408	05:44	0.0	0.0	13.9	0.0
Hissar	400	418	17:16	401	00:10	0.0	0.0	0.0	0.0
Moga	400	425	17:03	408	19:42	0.0	0.0	16.3	0.0
Abdullapur	400	428	08:06	406	08:58	0.1	0.1	40.1	0.0
Nalagarh	400	427	03:09	411	19:13	0.0	0.0	35.3	0.0
Kishenpur	400	419	03:11	398	19:45	0.0	0.0	0.0	0.0
Wagoora	400	408	03:47	382	19:42	0.0	15.3	0.0	0.0

VIII. 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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	474.45	345.61	484.04	506.76	341.87	278.50
Pong	426.72	384.05	403.27	296.79	41.75	524.54	64.19	11.55
Tehri	829.79	740.04	769.00	113.04	818.65	982.26	94.90	216.00
Koteshwar	612.50	598.50	610.20	4.89	NA	NA	215.00	191.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	NA	NA
Rihand	268.22	252.98	258.56	228.60	254.90	72.60	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	496.21	NA	508.20	NA	160.67	41.85

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 22.04.2012 :

1. Dust storm in some parts of Delhi, Haryana and J & K.

XII. Synchronisation of new generating units :

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

XIV. Tripping of lines in pooling stations :

XV. Complete generation loss in a generating station :

Report for : 22.04.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER