

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 19.04.2012
Date of Reporting : 20.04.2012

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Demand Met	Off Peak (03:00 Hrs) MW			Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)		Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
31663	3441	35103	49.81	26977	1085.42	28062	49.93	666.6	46.39

* 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	51.71	7.89		59.60	42.02	39.39	-2.63	99.00	1.80
Haryana	49.65	0.58		50.23	27.40	30.31	2.92	80.54	12.77
Rajasthan	79.64	0.02	14.21	93.87	30.61	38.36	7.76	132.23	2.57
Delhi	27.98			27.98	49.94	39.61	-10.33	67.59	0.06
UP	100.58	7.32	9.60	117.49	78.66	81.61	2.95	199.10	24.63
Uttarakhand		9.44		9.44	10.93	17.24	6.31	26.68	3.26
HP		13.77		13.77	10.12	13.11	2.98	26.87	0.11
J & K		11.62	0.00	11.62	13.14	18.85	5.71	30.47	1.20
Chandigarh				0.00	3.94	4.10	0.16	4.10	0.00
Total	309.55	50.63	23.81	384.00	266.75	282.58	15.83	666.57	46.39

* 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	4749	0	-52	-141	3879	0	-323	-94	-2.95
Haryana	3473	1571	167	47	3532	25	280	47	1.12
Rajasthan	5969	0	88	-416	5283	11	614	-366	-9.03
Delhi	3562	0	-346	488	2351	0	-820	245	9.43
UP	10222	1470	1108	465	8832	1050	327	265	7.36
Uttarakhand	1049	300	-19	47	1069	0	394	47	1.14
HP	988	0	1	-355	775	0	134	59	-3.63
J&K	1460	100	84	-323	1136	0	244	-323	-7.75
Chandigarh	192	0	-52	27	119	0	-3	0	0.61
Total	31663	3441	979	-160	26977	1085.42	848	-119	-3.70

* 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
A. NTPC	Singrauli STPS	2000	1460	1590	1590	35.31	1471	35.04	0.27
	Rihand I STPS	1000	330	524	985	7.66	319	7.92	-0.26
	Rihand II STPS	1000	975	1036	1047	23.60	983	23.40	0.20
	Dadri I STPS	840	590	656	649	14.27	594	14.03	0.23
	Dadri II STPS	980	470	503	513	11.34	472	11.12	0.22
	Unchahar I TPS	440	400	440	438	9.58	399	9.60	-0.02
	Unchahar II TPS	440	200	221	220	4.87	203	4.80	0.07
	Unchahar III TPS	210	199	218	218	4.82	201	4.78	0.04
	ISTPP (Jhajjar)	1000	3	0	0	0.60	25	0.08	0.52
	Dadri GPS	830	801	676	547	15.51	646	15.40	0.10
	Anta GPS	419	390	252	178	5.41	225	4.96	0.45
	Auraiya GPS	663	616	308	320	7.22	301	7.34	-0.12
	Sub Total (A)	9822	6434	6424	6705	140.16	5840	138.47	1.70
	B. NPC	NAPS	440	268	304	310	6.42	268	6.43
RAPS- B		440	383	419	423	9.12	380	9.19	-0.07
RAPS- C		440	416	464	461	10.05	419	9.98	0.06
Sub Total (B)		1320	1067	1187	1194	25.59	1066	25.61	-0.02
C. NHPC	Chamera I HPS	540	534	540	0	6.42	268	5.71	0.71
	Chamera II HPS	300	297	291	0	3.48	145	3.40	0.08
	Bairasuil HPS	180	182	179	120	3.24	135	2.97	0.27
	Salal-HPS	690	295	483	265	7.00	292	7.16	-0.16
	Tanakpur-HPS	94	28	32	21	0.66	27	0.61	0.04
	Uri-HPS	480	478	480	480	11.63	484	11.60	0.02
	Dhauliganga-HPS	280	255	206	0	1.41	59	1.34	0.07
	Dulhasti-HPS	390	388	413	0	5.14	214	4.38	0.76
	Sewa-II HPS	120	80	85	33	1.95	81	1.75	0.20
	Sub Total (C)	3074	2537	2709	919	40.92	1705	38.92	2.00
D. NJPC	Nathpa Jhakri	1500	1600	1611	0	10.48	437	9.00	1.48
	Sub Total (D)	1500	1600	1611	0	10.48	437	9.00	1.48
E. THDC	Tehri HPS	1000	495	362	0	6.65	277	6.50	0.15
	Koteshwar HPS	300	300	304	0	3.13	130	3.00	0.13
	Sub Total (E)	1300	795	666	0	9.78	408	9.50	0.28
F. BBMB	Bhakra HPS	1480	388	586	372	9.61	400	9.32	0.29
	Dehar HPS	990	232	660	145	5.71	238	5.56	0.15
	Pong HPS	396	6	120	0	0.18	8	0.15	0.03
	Sub Total (F)	2866	626	1366	517	15.50	646	15.03	0.47
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	75	0	0.93	39	1.23	-0.31
	KWHEP HPS(IPP)	1000	0	665	150	5.34	222	5.28	0.06
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	300	0	282	265	6.62	276	5.09	1.53
	Sub Total (G)	1592	0	1022	415	12.88	537	11.60	1.29
H. Total Regional Entities (A-G)	21475	13059	14985	9750	255.32	10638	248.13	7.19	

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	1250	1250	27.44	1143	
	Guru Nanak Dev TPS(Bhatinda)	440	105	105	3.04	127	
	Guru Hargobind Singh TPS(L.mbt)	920	962	965	21.23	885	
	Thermal (Total)	2620	2317	2320	51.71	2155	
	Total Hydro	1148	406	108	7.89	329	
	Total Punjab	3768	2723	2428	59.60	2484	
Haryana	Panipat TPS	1360	605	843	16.75	698	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	414	397	9.59	400	
	RGTPP (kheldar) (IPP)	1200	794	940	23.31	971	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	660	0	0	0.00	0	
	Thermal (Total)	4277	1813	2180	49.65	2069	
	Total Hydro	62	12	10	0.58	24	
	Total Haryana	4339	1825	2190	50.23	2093	
Rajasthan	kota TPS	1240	1169	1158	27.67	1153	
	suratgarh TPS	1500	1142	1361	31.59	1316	
	Chabra TPS	500	395	388	8.35	348	
	Dholpur GPS	330	148	150	3.54	147	
	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	40	49	0.85	36	
	Rajwest LTPS (IPP)	540	345	230	7.64	318	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5156	3239	3336	79.64	3318	
	Total Hydro	550	0	0	0.02	1	
	Wind power	1843	814	237	13.23	551	
	Biomass	91	48	48	0.98	41	
	Solar	128	0	0	0.00	0	
	Renewable/Others (Total)	1934	862	285	14.21	592	
	Total Rajasthan	7640	4101	3621	93.87	3911	
	UP	Anpara TPS	1630	1226	1233	26.40	1100
		Obra TPS	1382	468	490	11.70	488
Paricha TPS		640	376	390	9.20	383	
Panki TPS		210	162	131	3.40	142	
Harduaganj TPS		415	192	167	4.20	175	
Tanda TPS (NTPC)		440	192	190	4.76	198	
Roza TPS (IPP)		1200	1102	1125	24.69	1029	
Anpara-C (IPP)		1200	506	495	10.73	447	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	176	356	5.51	229	
Thermal (Total)		7567	4400	4577	100.58	4191	
Vishnuparyag HPS (IPP)		400	114	109	2.52	105	
Other Hydro		527	248	0	4.79	200	
Cogeneration		981	400	400	9.60	400	
Total UP		9475	5162	5086	117.49	4790	
Uttarakhand	Total Hydro	1303	501	293	9.44	393	
	Total Uttarakhand	1303	501	293	9.44	393	
Delhi	Rajghat TPS	135	104	99	2.72	113	
	Delhi Gas Turbine	282	189	157	4.23	176	
	Pragati Gas Turbine	330	290	300	7.23	301	
	Rithala GPS	108	33	36	0.85	36	
	Bawana GPS	440	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	605	585	12.96	540	
	Thermal (Total)	2000	1221	1177	27.98	1166	
	Total Delhi	2000	1221	1177	27.98	1166	
HP	Baspa HPS (IPP)	330	0	0	1.17	49	
	Malana HPS (IPP)	101	67	0	4.84	202	
	Other Hydro	571	275	219	7.76	323	
	Total HP	1002	342	219	14	574	
J & K	Baglihar HPS (IPP)	450	360	356	8.61	359	
	Other Hydro	323	120	128	3.01	125	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	480	484	11.62	484	
Total State Control Area Generation		30483	16355	15498	384.00	15895	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2077	2529	57.54	2397	
Total Regional Availability(Gross)		51958	33417	27777	696.85	28930	

IV. Total Hydro Generation:

Regional Entities Hydro	10033	7092	1586	82.95	3456
State Control Area Hydro	5365	1989	1114	48.11	2005
Total Regional Hydro	15397	9081	2700	131.06	5461

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	100	-200	200	100	0.71	1.02	-0.31
Gwalior-Agra (D/C)	628	598	1360	0	20.82	0.00	20.82
Zerda-Kankroli	-15	-100	123	143	0.00	0.11	-0.11
Zerda-Bhinmal	-65	145	232	191	0.33	0.00	0.33
Malanpur-Auraiya	-28	23	0	108	0.00	0.76	-0.76
Badod-Kota/Morak	-30	49	60	111	0.00	0.17	-0.17
Sub Total WR	590	515			21.85	2.06	19.79
Pusauli Bypass	-200	-27	225	200	0.72	1.55	-0.83
MZP- GKP (D/C)	540	766	846	0	13.51	0.00	13.51
Patna-Balia(D/C)	303	527	600	0	7.73	0.00	7.73
B'Sharif-Balia (D/C)	339	271	532	0	7.24	0.00	7.24
Barh - Balia(D/C)	304	324	368	0	7.10	0.00	7.10
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	195	127	201	0	3.95	0.00	3.95
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	1487	2014			40.34	2.60	37.74
Total IR Exch	2077	2529			62.19	4.66	57.54

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
26.23	0.97	27.20	-6.32	2.29	0.68	3.51	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
23.23	6.79	30.02	37.74	19.79	57.54	14.51	13.01	27.52

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	0.90	14.60	50.40	85.10	49.30	3.60	0.30

<----- Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.30	18.02	49.08	19.07	49.69	1.32	0.18	50.06	0.00

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	412	11:59	402	00:06	0.0	0.0	0.0	0.0
Gorakhpur	400	436	09:54	403	21:34	0.0	0.0	51.8	17.5
Bareilly	400	420	06:39	391	19:07	0.0	0.0	0.0	0.0
Kanpur	400	419	09:54	395	19:07	0.0	0.0	0.0	0.0
Dadri	400	416	13:08	398	19:05	0.0	0.0	0.0	0.0
Ballabgarh	400	420	06:37	400	19:04	0.0	0.0	0.0	0.0
Bawana	400	420	13:03	401	19:04	0.0	0.0	0.0	0.0
Bassi	400	426	22:44	400	19:07	0.0	0.0	12.9	0.0
Hissar	400	415	13:07	396	19:08	0.0	0.0	0.0	0.0
Moga	400	421	02:53	406	19:07	0.0	0.0	2.2	0.0
Abdullapur	400	428	23:13	409	19:25	0.0	0.0	23.1	0.0
Nalagarh	400	429	02:59	407	19:07	0.0	0.0	42.5	0.0
Kishenpur	400	422	02:54	400	20:09	0.0	0.0	1.4	0.0
Wagoora	400	408	02:51	382	20:11	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	474.40	345.29	484.17	560.76	238.71	205.14
Pong	426.72	384.05	403.18	296.79	410.56	514.41	53.72	11.40
Tehri	829.79	740.04	760.50	128.60	818.65	982.26	76.81	128.00
Koteshwar	612.50	598.50	610.70	4.69	NA	NA	208.00	208.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	156.88	177.11
Rihand	268.22	252.98	258.81	241.10	254.93	73.80	NA	NA
RPS	352.80	343.81	347.65	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.16	NA	NA	NA	NA	NA
RSD	527.91	487.91	496.40	NA	506.75	NA	211.98	226.36

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 19.04.2012 :

1. Normal weather in Northern region.

XII. Synchronisation of new generating units :

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

1. 1000 MVA ICT II (765/400 kV) 1st time charged from 400 kV side at Bhiwani At 00.47 hrs of 20.04.2012.
2. 80X3 Bus reactor (765 kV) 1st time time charge at Bhiwani(PG) at 02.18 hrs of 20.04.2012.

XIV. Tripping of lines in pooling stations :

XV. Complete generation loss in a generating station :

Report for : 19.04.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER