

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 21.12.2011
Date of Reporting : 22.12.2011

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
30027	4651	34678	49.78	24490	650	25140	50.10	673.3	65.87

* 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 (Net MU)	Actual Drawal (Net MU)	UI (Net MU)	Consumption (Net MU)	Shortages* (MU)
	Thermal	Hydro	Renewable/others \$	Total					
Punjab	48.93	12.80		61.74	25.36	27.57	2.21	89.31	4.45
Haryana	52.69	0.57		53.26	26.31	31.62	5.31	84.88	16.04
Rajasthan	86.23	4.89	16.76	107.88	49.98	51.26	1.28	159.14	1.69
Delhi	24.52			24.52	40.77	38.05	-2.72	62.57	0.48
UP	78.80	6.20	15.60	100.60	79.61	86.24	6.63	186.84	39.70
Uttarakhand		10.09		10.09	16.39	17.99	1.61	28.08	1.16
HP		5.21		5.21	16.94	18.49	1.55	23.69	0.47
J & K		5.50	0.00	5.50	22.96	29.60	6.63	35.09	1.90
Chandigarh				0.00	3.41	3.65	0.24	3.65	0.00
Total	291.17	45.26	32.36	368.79	281.73	304.47	22.74	673.26	65.87

* 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				Day Energy MU	
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction	STOA/PX transaction
Punjab	4308	600	-35	-403	3128	0	-59	-901		-11.18
Haryana	3691	1105	55	-56	3282	0	219	-70		-1.61
Rajasthan	6463	503	154	431	6136	0	-135	546		14.72
Delhi	3163	93	-121	-122	1413	0	-85	-398		-4.87
UP	7978	2170	-181	267	7268	650	205	267		6.41
Uttarakhand	1333	80	-82	332	972	0	92	277		7.09
HP	1180	0	-153	8	760	0	153	237		3.70
J&K	1715	100	89	216	1436	0	318	254		5.92
Chandigarh	197	0	5	0	96	0	-3	-30		-0.24
Total	30027	4651	-270	674	24490	650	704	182		19.93

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

III. Regional Entities :

UI [OG:(+ve), UG:(-ve)]

Entity	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
				(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
A. NTPC	Singrauli STPS	2000	1735	1855	1867	42.21	1759	41.64	0.57
	Rihand I STPS	1000	866	977	900	21.04	877	20.79	0.24
	Rihand II STPS	1000	977	1043	1037	23.68	986	23.45	0.23
	Dadri I STPS	840	793	869	637	18.02	751	17.80	0.22
	Dadri II STPS	980	967	1027	770	22.32	930	22.30	0.02
	Unchahar I TPS	440	296	317	297	7.12	297	6.98	0.14
	Unchahar II TPS	440	295	309	294	6.99	291	6.84	0.15
	Unchahar III TPS	210	146	156	152	3.52	147	3.41	0.10
	ISTPP (Jhajjar)	1000	475	500	478	10.06	419	10.88	-0.82
	Dadri GPS	830	839	819	530	18.00	750	17.98	0.02
	Anta GPS	419	278	269	236	6.40	267	6.17	0.23
	Auraiya GPS	663	653	634	416	13.51	563	13.63	-0.12
	Sub Total (A)	9822	8320	8775	7614	192.85	8035	191.87	0.98
	B. NPC	NAPS	440	222	256	262	5.28	220	5.33
RAPS- B		440	419	461	463	10.03	418	10.06	-0.03
RAPS- C		440	420	471	476	10.12	422	10.08	0.04
Sub Total (B)		1320	1061	1188	1201	25.42	1059	25.46	-0.04
C. NHPC	Chamera I HPS	540	0	0	0	0.00	0	0.00	0.00
	Chamera II HPS	300	297	197	0	1.33	55	1.36	-0.03
	Bairasuil HPS	180	179	120	0	0.49	20	0.46	0.03
	Salal-HPS	690	110	222	30	2.54	106	2.61	-0.06
	Tanakpur-HPS	94	33	44	28	0.74	31	0.77	-0.02
	Uri-HPS	480	130	151	45	3.10	129	3.07	0.04
	Dhauliganga-HPS	280	210	208	0	1.11	46	0.94	0.18
	Dulhasti-HPS	390	275	406	0	2.99	125	2.91	0.08
	Sewa-II HPS	120	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	3074	1233	1348	103	12.31	513	12.10	0.21
	D. NJPC	Nathpa Jhakri	1500	956	912	0	7.24	302	7.36
Sub Total (D)		1500	956	912	0	7.24	302	7.36	-0.12
E. THDC	Tehri HPS	1000	1040	750	0	6.49	270	8.00	-1.51
	Koteshwar HPS	200	90	102	0	1.55	65	1.60	-0.05
	Sub Total (E)	1200	1130	852	0	8.04	335	9.60	-1.56
F. BBMB	Bhakra HPS	1480	663	944	630	16.38	683	15.90	0.48
	Dehar HPS	990	128	495	0	3.14	131	3.06	0.08
	Pong HPS	396	196	306	126	5.05	210	4.71	0.34
	Sub Total (F)	2866	986	1745	756	24.57	1024	23.67	0.90
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.34	14	0.32	0.01
	KWHEP HPS(IPP)	1000	0	270	0	4.30	179	3.96	0.34
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	130	137	3.30	137	2.85	0.45
Sub Total (G)	1442	0	400	137	7.93	331	7.13	0.80	
H. Total Regional Entities (A-G)	21225	13686	15220	9811	278.37	11599	277.19	1.18	

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	1050	1050	23.01	959	
	Guru Nanak Dev TPS(Bhatinda)	440	215	215	4.61	192	
	Guru Hargobind Singh TPS(L.mbt)	920	960	959	21.31	888	
	Thermal (Total)	2620	2225	2224	48.93	2039	
	Total Hydro	1148	556	274	12.80	534	
	Total Punjab	3768	2781	2498	61.74	2572	
Haryana	Panipat TPS	1360	1052	1060	25.64	1069	
	DCRTPP (Yamuna nagar)	600	271	270	6.61	275	
	Faridabad GPS (NTPC)	432	428	441	10.55	440	
	RGTPP (khedar) (IPP)	1200	426	228	9.89	412	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Thermal (Total)	3617	2177	1999	52.69	2195	
	Total Hydro	62	18	21	0.57	24	
		Total Haryana	3679	2195	2020	53.26	2219
Rajasthan	kota TPS	1240	1176	1169	27.62	1151	
	suratgarh TPS	1500	919	1154	24.76	1032	
	Chabra TPS	500	440	425	10.06	419	
	Dholpur GPS	330	224	225	5.30	221	
	Ramgarh GPS	113	65	65	1.68	70	
	RAPS A (NPC)	300	177	180	4.45	185	
	Barsingsar (NLC)	250	100	125	2.66	111	
	Giral LTPS (IPP)	250	44	45	1.06	44	
	Rajwest LTPS (IPP)	540	345	352	8.66	361	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5158	3490	3740	86.23	3593	
	Total Hydro	550	159	180	4.89	204	
	Wind power	1294	472	424	10.98	458	
	Biomass	71	30	30	0.73	30	
	Solar	50	0	0	0.17	7	
	Renewable/Others (Total)	1365	502	454	16.76	698	
		Total Rajasthan	7073	4151	4374	107.88	4495
UP	Anpara TPS	1630	1505	1560	32.40	1350	
	Obra TPS	1442	663	649	14.00	583	
	Paricha TPS	640	213	233	4.80	200	
	Panki TPS	210	150	185	3.70	154	
	Harduaganj TPS	415	48	44	0.90	38	
	Tanda TPS (NTPC)	440	401	402	9.72	405	
	Roza TPS (IPP)	600	505	491	11.60	483	
	Anpara-C (IPP)	1200	0	0	0.00	0	
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	78	79	1.68	70	
	Thermal (Total)	6757	3563	3643	78.80	3283	
	Vishnuparyag HPS (IPP)	400	99	94	2.31	96	
	Other Hydro	527	267	39	3.90	162	
	Cogeneration	951	650	650	15.60	650	
		Total UP	8635	4579	4426	100.60	4096
	Uttarakhand	Total Hydro	1303	575	286	10.09	420
Total Uttarakhand		1303	575	286	10.09	420	
Delhi	Rajghat TPS	135	92	94	2.50	104	
	Delhi Gas Turbine	282	157	150	4.29	179	
	Praagati Gas Turbine	330	307	267	7.57	316	
	Rithala GPS	108	0	0	0.00	0	
	Bawana GPS	440	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	465	395	10.15	423	
	Thermal (Total)	2000	1021	906	24.52	1022	
	Total Delhi	2000	1021	906	24.52	1022	
HP	Baspa HPS (IPP)	330	0	0	1.32	55	
	Malana HPS (IPP)	101	38	0	0.27	11	
	Other Hydro	571	211	100	3.62	151	
	Total HP	1002	249	100	5	217	
J & K	Baglihar HPS (IPP)	450	260	132	3.96	165	
	Other Hydro	323	54	100	1.54	64	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	314	232	5.50	229	
Total State Control Area Generation		28416	15865	14842	368.79	15270	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			746	1399	40.73	1697	
Total Regional Availability(Gross)		49641	31831	26052	687.89	28566	

IV. Total Hydro Generation:

Regional Entities Hydro	10083	5257	996	60.10	2504
State Control Area Hydro	5365	2138	1132	42.95	1790
Total Regional Hydro	15447	7395	2128	103.05	4294

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 MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	-500	-200	0	500	0.00	6.18	-6.18
Gwalior-Agra (D/C)	519	677	1013	0	18.27	0.00	18.27
Zerda-Kankroli	-62	-42	118	107	0.00	0.18	-0.18
Zerda-Bhinmal	2	46	0	164	1.80	0.00	1.80
Malanpur-Auraiya	-143	-81	0	152	0.00	2.08	-2.08
Badod-Kota/Morak	-112	-105	0	102	0.00	1.65	-1.65
Sub Total WR	-296	295			20.07	10.09	9.98
Pusauli Bypass	300	300	300	0	6.17	0.00	6.17
MZP- GKP (D/C)	240	200	500	0	8.22	0.00	8.22
Patna-Balia(D/C)	250	252	545	0	7.82	0.00	7.82
B'Sharif-Balia (D/C)	149	291	461	0	6.94	0.00	6.94
Barh - balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	133	95	165	0	2.32	0.00	2.32
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-30	-34	0	48	0.00	0.71	-0.71
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1042	1104			31.47	0.71	30.76
Total IR Exch	746	1399			51.54	10.81	40.73

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
11.42	0.52	11.94	13.81	8.17	-2.85	1.43	2.82	-2.82

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
25.72	1.61	27.32	30.76	9.98	40.73	5.04	8.37	13.41

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	0.60	2.90	21.60	57.50	78.10	42.20	5.40	0.30

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)
50.29	5.07	48.92	18.10	49.66	1.64	0.22	50.12	49.32

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	408	00:45	400	10:58	0.0	0.0	0.0	0.0
Gorakhpur	400	427	17:31	411	15:21	0.0	0.0	45.6	0.0
Bareilly	400	426	21:34	397	11:12	0.0	0.0	14.2	0.0
Kanpur	400	421	04:03	399	12:21	0.0	0.0	0.2	0.0
Dadri	400	420	04:00	400	11:09	0.0	0.0	0.0	0.0
Ballabgarh	400	423	20:58	400	11:11	0.0	0.0	4.4	0.0
Bawana	400	422	04:00	400	11:07	0.0	0.0	5.5	0.0
Bassi	400	421	18:28	390	06:29	0.0	0.0	0.4	0.0
Hissar	400	416	20:58	392	12:23	0.0	0.0	0.0	0.0
Moga	400	422	20:58	397	12:22	0.0	0.0	1.2	0.0
Abdullapur	400	422	04:03	401	11:11	0.0	0.0	6.9	0.0
Nalagarh	400	428	21:33	404	12:23	0.0	0.0	18.7	0.0
Kishenpur	400	413	05:06	386	12:23	0.0	4.7	0.0	0.0
Wagoora	400	390	04:05	358	15:06	72.3	99.9	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 (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	504.38	1285.56	505.68	1339.30	182.90	466.29
Pong	426.72	384.05	415.06	680.86	418.23	807.91	51.00	289.06
Tehri	829.79	740.04	812.40	850.25	818.65	982.26	68.80	149.00
Koteshwar	612.50	598.50	607.25	3.32	NA	NA	149.00	146.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	42.61	0.00
Rihand	268.22	252.98	263.96	542.00	257.56	181.70	NA	NA
RPS	352.80	343.81	350.41	NA	NA	NA	NA	234.69
Jawahar Sagar	298.70	295.78	297.73	NA	NA	NA	NA	243.47
RSD	527.91	487.91	514.04	NA	515.83	NA	75.63	117.85

* NA: Not Available
IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 21.12.2011 :
1. Fog in Haryana / Punjab/ NCR/ U.P.

XII. Synchronisation of new generating units :

XIII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus //substation :
1: 400kV Uri stage-2 - Wagoora line & Uri stage-1 - Uri stage-2 interconnector first time test charged at
19.55 hrs of dt. 21.12.2011.

XIV. Tripping of lines in pooling stations :

XV. Complete generation loss in a generating station :

Report for : 21.12.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER