

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड
(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)
उत्तरी क्षेत्रीय भार प्रेषण केंद्र



Power Supply Position in Northern Region for 29.11.2011
Date of Reporting : 30.11.2011

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
30384	2566	32950	49.88	24300	650	24950	50.00	647.3	37.53

* Half hourly (two 15 minutes block--one block each before and after the designated time) average frequency

II. A. State's Load Energy 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	29.56	10.96		40.52	29.81	31.27	1.46	71.79	4.30
Haryana	63.89	0.80		64.68	25.63	28.43	2.80	93.11	4.39
Rajasthan	81.18	5.04	9.09	95.30	51.26	57.22	5.96	152.52	1.75
Delhi	25.19			25.19	35.50	30.87	-4.63	56.07	0.16
UP	99.32	4.85	12.00	116.18	77.25	70.72	-6.53	186.90	24.17
Uttarakhand		8.82		8.82	14.81	17.42	2.61	26.24	1.04
HP		5.67		5.67	15.55	16.85	1.31	22.52	0.03
J & K		6.43	0.00	6.43	21.98	28.33	6.35	34.76	1.70
Chandigarh				0.00	3.55	3.35	-0.20	3.35	0.00
Total	299.14	42.56	21.09	362.79	275.32	284.47	9.14	647.25	37.53

* Shortage furnished by the respective constituent.

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	
Punjab	4189	600	-204	-364	2887	0	-173	-537	-7.91
Haryana	4210	554	41	-94	3193	0	-273	-107	-2.64
Rajasthan	6704	0	648	409	6471	0	697	534	14.26
Delhi	2993	2	-82	-410	1386	0	-318	-675	-11.91
UP	8019	1150	-842	124	7349	650	-317	124	2.98
Uttarakhand	1270	160	-53	194	929	0	158	194	4.65
HP	1189	0	-244	-318	702	0	219	4	-2.64
J&K	1629	100	57	99	1296	0	280	168	3.39
Chandigarh	181	0	-27	0	87	0	-6	-30	-0.24
Total	30384	2566	-706	-360	24300	650	267	-326	-0.06

* 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 (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI Net MU
	Rihand I STPS	1000	817	993	872	19.79	825	19.50	0.29
	Rihand II STPS	1000	977	1044	1039	23.68	987	23.34	0.34
	Dadri I STPS	840	514	429	459	11.51	480	11.65	-0.14
	Dadri II STPS	980	922	977	717	21.47	895	21.53	-0.06
	Unchahar I TPS	440	385	440	416	9.12	380	9.06	0.06
	Unchahar II TPS	440	385	438	413	9.15	381	9.05	0.10
	Unchahar III TPS	210	193	225	215	4.60	192	4.55	0.05
	ISTPP (Jhajjhar)	1000	475	516	488	11.32	472	11.26	0.05
	Dadri GPS	830	814	710	587	15.53	647	15.51	0.02
	Anta GPS	419	417	348	290	7.81	325	7.65	0.16
	Auraiya GPS	663	636	462	356	10.25	427	9.96	0.30
	Sub Total (A)	9822	8456	8654	7911	190.80	7950	189.16	1.64
B. NPC	NAPS	440	205	239	242	4.95	206	4.92	0.03
	RAPS- B	440	229	394	234	6.26	261	5.49	0.77
	RAPS- C	440	420	467	476	10.13	422	10.08	0.05
	Sub Total (B)	1320	854	1100	952	21.34	889	20.49	0.85
C. NHPC	Chamera I HPS	540	534	360	0	3.36	140	3.40	-0.04
	Chamera II HPS	300	297	217	0	1.48	62	1.51	-0.03
	Bairasuil HPS	180	120	20	0	0.52	22	0.55	-0.02
	Salal-HPS	690	142	230	60	2.86	119	3.36	-0.50
	Tanakpur-HPS	94	38	51	28	0.96	40	1.02	-0.06
	Uri-HPS	480	121	210	103	3.02	126	2.83	0.19
	Dhauliganga-HPS	280	277	211	0	1.19	50	1.18	0.01
	Dulhasi-HPS	390	388	326	0	3.68	154	3.94	-0.26
	Sewa-II HPS	120	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	3074	1916	1625	191	17.08	711	17.79	-0.71
D. NJPC	Nathpa Jhakri	1500	1600	1586	0	9.28	387	9.00	0.28
	Sub Total (D)	1500	1600	1586	0	9.28	387	9.00	0.28
E. THDC	Tehri HPS	1000	672	1038	0	0.55	23	5.50	-4.95
	Koteshwar HPS	200	68	169	0	1.50	63	1.50	0.00
	Sub Total (E)	1200	740	1207	0	2.06	86	7.00	-4.94
F. BBMB	Bhakra HPS	1480	704	1064	492	17.42	726	16.89	0.53
	Dehar HPS	990	156	495	0	4.06	169	3.76	0.31
	Pong HPS	396	250	306	186	6.30	263	6.00	0.30
	Sub Total (F)	2866	1110	1865	678	27.78	1158	26.65	1.13
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.46	19	0.44	0.01
	KWHEP HPS(IPP)	1000	0	220	125	5.70	238	5.22	0.48
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	128	139	2.80	117	2.55	0.25
	Sub Total (G)	1442	0	348	264	8.96	373	8.22	0.74
H. Total Regional Entities (A-G)		21225	14677	16385	9996	277.29	11554	278.30	-1.01

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	870	22.81	951	
	Guru Nanak Dev TPS(Bhatinda)	440	215	215	4.61	192	
	Guru Hargobind Singh TPS(L.mbt)	920	959	842	2.14	89	
	Thermal (Total)	2620	2224	1927	29.56	1232	
	Total Hydro	1148	280	275	10.96	457	
	Total Punjab	3768	2504	2202	40.52	1688	
Haryana	Panipat TPS	1360	1105	1118	27.00	1125	
	DCRTPP (Yamuna nagar)	600	270	266	6.43	268	
	Faridabad GPS (NTPC)	432	437	374	9.35	389	
	RGTPP (khedar) (IPP)	1200	795	825	21.12	880	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Thermal (Total)	3617	2607	2583	63.89	2662	
	Total Hydro	62	26	35	0.80	33	
		Total Haryana	3679	2633	2618	64.68	2695
Rajasthan	kota TPS	1240	1162	1155	27.44	1144	
	suratgarh TPS	1500	1148	1140	27.29	1137	
	Chabra TPS	500	350	409	8.53	356	
	Dholpur GPS	330	252	249	6.13	255	
	Ramgarh GPS	113	65	65	1.65	69	
	RAPS A (NPC)	300	176	180	4.41	184	
	Barsingsar (NLC)	250	0	0	0.00	0	
	Giral LTPS (IPP)	250	0	0	0.00	0	
	Rajwst LTPS (IPP)	540	240	344	5.73	239	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5158	3393	3542	81.18	3382	
	Total Hydro	550	160	174	5.04	210	
	Wind power	1294	196	123	3.44	143	
	Biomass	71	31	31	0.61	26	
	Solar	50	0	0	0.00	0	
	Renewable/Others (Total)	1365	227	154	9.09	379	
		Total Rajasthan	7073	3780	3870	95.30	3971
UP	Anpara TPS	1630	1493	1544	32.40	1350	
	Obra TPS	1442	605	612	12.90	538	
	Paricha TPS	640	405	412	8.70	363	
	Panki TPS	210	207	195	4.10	171	
	Harduaganj TPS	415	224	220	4.70	196	
	Tanda TPS (NTPC)	440	394	321	9.45	394	
	Roza TPS (IPP)	600	567	464	13.30	554	
	Anpara-C (IPP)	1200	558	405	11.99	500	
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	83	80	1.79	75	
	Thermal (Total)	6757	4536	4253	99.32	4139	
	Vishnuparyag HPS (IPP)	400	128	119	2.94	122	
	Other Hydro	527	72	0	1.91	80	
	Cogeneration	951	500	500	12.00	500	
		Total UP	8635	5236	4872	116.18	4718
	Uttarakhand	Total Hydro	1303	494	218	8.82	367
Total Uttarakhand		1303	494	218	8.82	367	
Delhi	Raighat TPS	135	101	99	2.69	112	
	Delhi Gas Turbine	282	158	149	4.10	171	
	Pragati Gas Turbine	330	306	298	7.49	312	
	Rithala GPS	108	16	29	0.52	22	
	Bawana GPS	440	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	500	415	10.40	433	
	Thermal (Total)	2000	1081	990	25.19	1050	
	Total Delhi	2000	1081	990	25.19	1050	
HP	Baspa HPS (IPP)	330	0	0	1.48	62	
	Malana HPS (IPP)	101	0	0	0.33	14	
	Other Hydro	571	201	72	3.86	161	
	Total HP	1002	201	72	6	236	
J & K	Baglihar HPS (IPP)	450	294	147	4.70	196	
	Other Hydro	323	54	100	1.73	72	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	348	247	6.43	268	
Total State Control Area Generation		28416	16277	15089	362.79	14994	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			-12	1019	24.77	1032	
Total Regional Availability(Gross)		49641	32650	26104	664.85	27580	

IV. Total Hydro Generation:

Regional Entities Hydro	10083	6631	1133	65.15	2715
State Control Area Hydro	5365	1581	1021	39.62	1651
Total Regional Hydro	15447	8212	2154	104.77	4366

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	-400	0	500	0.00	10.30	-10.30
Gwalior-Agra (D/C)	-206	349	784	206	8.85	0.00	8.85
Zerda-Kankroli	-147	-86	6	184	0.00	2.53	-2.53
Zerda-Bhinmal	-53	52	162	108	0.55	0.00	0.55
Malanpur-Auraiya	-167	-145	0	227	0.00	3.74	-3.74
Badod-Kota/Morak	-47	-68	0	118	0.00	0.16	-0.16
Sub Total WR	-1120	-298			9.39	16.73	-7.33
Pusauli Bypass	300	250	350	0	7.03	0.00	7.03
MZP- GKP (D/C)	280	460	690	0	11.09	0.00	11.09
Patna-Balia(D/C)	172	319	444	0	6.70	0.00	6.70
B'Sharif-Balia (D/C)	21	233	343	0	4.56	0.00	4.56
Barh - balia(D/C)	208	0	251	0	0.55	0.00	0.55
Pusauli-Sahupuri	159	91	179	0	3.10	0.00	3.10
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-36	0	48	0.00	0.93	-0.93
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1108	1317			33.04	0.93	32.11
Total IR Exch	-12	1019			42.43	17.66	24.77

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
16.85	0.75	17.59	7.68	-6.25	-0.85	3.43	3.72	-3.72

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
28.14	-12.02	16.13	32.11	-7.33	24.77	3.96	4.68	8.65

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	0.30	5.20	36.40	94.70	63.50	9.60	0.10

<----- 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				
50.22	21.47	49.04	17.39	49.77	0.83	0.17	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	405	20:19	400	12:11	0.0	0.0	0.0	0.0
Gorakhpur	400	421	16:05	411	12:13	0.0	0.0	0.5	0.0
Bareilly	400	425	20:56	398	12:34	0.0	0.0	7.7	0.0
Kanpur	400	418	20:58	400	10:36	0.0	0.0	0.0	0.0
Dadri	400	419	20:58	401	11:13	0.0	0.0	0.0	0.0
Ballabgarh	400	421	20:57	401	10:37	0.0	0.0	0.2	0.0
Bawana	400	420	20:58	403	11:12	0.0	0.0	0.0	0.0
Bassi	400	423	20:42	398	18:28	0.0	0.0	4.2	0.0
Hissar	400	413	20:54	393	12:04	0.0	0.0	0.0	0.0
Moga	400	414	20:55	395	10:52	0.0	0.0	0.0	0.0
Abdullapur	400	422	20:55	403	10:36	0.0	0.0	1.8	0.0
Nalagarh	400	404	12:11	403	11:07	0.0	0.0	0.0	0.0
Kishenpur	400	402	17:25	387	19:13	0.0	4.4	0.0	0.0
Wagoora	400	387	13:01	361	19:17	72.5	100.0	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	507.27	1411.35	509.31	1515.08	201.07	477.59
Pong	426.72	384.05	417.55	781.19	420.27	902.94	55.76	372.62
Tehri	829.79	740.04	816.40	922.25	818.65	982.26	73.33	120.00
Koteshwar	612.50	598.50	600.60	0.80	NA	NA	120.00	100.00
Chamera-I	760.00	748.75	752.20	8.45	752.95	8.80	51.52	85.00
Rihand	268.22	252.98	264.44	192.00	257.68	187.00	NA	NA
RPS	352.80	343.81	350.66	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.73	NA	NA	NA	NA	NA
RSD	527.91	487.91	518.41	NA	518.92	NA	65.10	171.51

* NA: Not Available
IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 29.11.2011 :
1.Normal

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 : 29.11.2011

पारी प्रमारी अभियंता / SHIFT CHARGE ENGINEER