

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 29.03.2014
Date of Reporting : 30.03.2014

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
31403	2045	33448	49.94	27925	735	28660	50.07	731.4	36.45

* 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	39.55	8.41		47.97	41.29	41.29	0.00	89.26	0.00
Haryana	33.63	0.54		34.17	56.07	54.42	-1.65	88.59	0.64
Rajasthan	93.16	0.57	6.37	100.10	70.93	71.20	0.27	171.30	0.00
Delhi	15.88			15.88	45.61	44.38	-1.23	60.26	0.07
UP	111.59	2.33	14.40	128.32	101.70	98.93	-2.77	227.25	26.23
Uttarakhand		9.38		9.38	21.51	22.24	0.74	31.62	7.81
HP		11.24		11.24	13.60	13.12	-0.48	24.35	0.00
J & K		11.88	0.00	11.88	25.19	23.61	-1.58	35.48	1.70
Chandigarh				0.00	3.33	3.26	-0.07	3.26	0.00
Total	293.80	44.34	20.77	358.92	379.22	372.45	-6.78	731.36	36.45

* 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	
Punjab	4008	0	5	-522	3266	0	53	-316	-8.43	
Haryana	4722	57	16	174	2796	0	-120	-180	-3.36	
Rajasthan	6690	0	34	905	6432	0	44	976	22.68	
Delhi	3064	42	109	-792	1784	0	-106	-1149	-21.41	
UP	8715	1771	-299	862	10028	735	287	637	16.75	
Uttarakhand	1504	75	137	346	1171	0	56	338	9.47	
HP	917	0	-17	-145	816	0	9	-20	-0.59	
J&K	1616	100	-53	109	1543	0	27	228	3.97	
Chandigarh	168	0	-22	0	89	0	-6	0	0.00	
Total	31403	2045	-90	937	27925	735	244	514	19.06	

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

III. Regional Entities :

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

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	1514	1635	1516	35.04	1460	34.81	0.23
Rihand I STPS	1000	945	856	800	20.55	856	19.81	0.74
Rihand II STPS	1000	975	952	878	21.95	915	21.69	0.26
Rihand III STPS	1000	834	763	757	17.15	715	16.86	0.29
Dadri I STPS	840	815	625	599	14.24	593	14.81	-0.57
Dadri II STPS	980	980	723	705	17.41	726	18.00	-0.59
Unchahar I TPS	420	408	339	332	7.52	313	7.54	-0.02
Unchahar II TPS	420	235	172	317	4.13	172	4.13	0.00
Unchahar III TPS	210	203	178	154	3.62	151	3.62	0.00
ISTPP (Jhajjhar)	1500	1500	298	376	8.19	341	7.88	0.32
Dadri GPS	830	818	381	386	8.90	371	8.94	-0.04
Anta GPS	419	276	204	189	4.84	202	4.56	0.28
Auraiya GPS	663	655	152	155	3.52	147	3.53	-0.01
Sub Total (A)	11282	10159	7277.77	7163.74	167.06	6961	166.18	0.88
B. NPC								
NAPS	440	287	320	330	6.86	286	6.00	0.86
RAPS- B	440	411	454	457	9.89	412	9.86	0.03
RAPS- C	440	430	467	474	10.13	422	10.32	-0.19
Sub Total (B)	1320	1128	1241	1261	26.89	1120	26.18	0.70
C. NHPC								
Chamera I HPS	540	540	540	0	7.51	313	7.50	0.01
Chamera II HPS	300	242	205	70	3.24	135	3.20	0.04
Chamera III HPS	231	231	224	0	1.76	73	1.70	0.06
Bairasuil HPS	180	122	122	122	2.96	123	2.93	0.03
Salal-HPS	690	469	480	450	11.38	474	11.27	0.11
Tanakpur-HPS	94	16	32	15	0.40	17	0.39	0.02
Uri-HPS	480	475	464	478	11.47	478	11.40	0.07
Uri-II HPS	240	120	120	123	2.92	121	2.88	0.04
Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
Dulhasti-HPS	390	387	401	0	3.46	144	3.40	0.06
Sewa-II HPS	120	122	128	127	3.01	125	2.93	0.08
Parbati 3	260	0	0	0	0.00	0	0.00	0.00
Sub Total (C)	3805	2724	2716	1385	48	2004	48	1
D.NJPC								
Nathpa Jhakri	1500	1605	799	155	8.49	354	8.29	0.21
Sub Total (D)	1500	1605	799	155	8.49	354	8.29	0.21
E. THDC								
Tehri HPS	1000	585	591	0	7.58	316	7.50	0.08
Koteshwar HPS	400	138	303	91	3.12	130	3.10	0.02
Sub Total (E)	1400	723	894	91	10.70	446	10.60	0.10
F. BBMB								
Bhakra HPS	1497	428	1007	383	10.54	439	10.26	0.28
Dehar HPS	990	435	495	420	11.15	465	10.43	0.72
Pong HPS	396	187	306	63	4.67	195	4.48	0.19
Sub Total (F)	2883	1049	1808	866	26.36	1098	25.18	1.18
G. IPP(s)/JV(s)								
ADHPL HPS(IPP)	192	0	0	0	0.36	15	0.35	0.01
KWHEP HPS(IPP)	1000	0	170	0	4.45	185	4.44	0.01
Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS	300	0	261	225	6.22	259	6.20	0.02
Budhil HPS(IPP)	70	0	35	0	0.03	1	0.27	-0.25
Sub Total (G)	1662	0	466	225	11.06	461	11.26	-0.20
H. Total Regional Entities (A-G)	23852	17388	15202	11147	298.66	12444	295.27	3.39

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	810	870	18.64	776	
	Guru Nanak Dev TPS(Bhatinda)	440	90	90	1.95	81	
	Guru Hargobind Singh TPS(L.mbt)	920	502	482	12.24	510	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura	700	277	276	6.73	281	
	Talwandi Saboo	660	0	0	0.00	0	
	Thermal (Total)	3980	1679	1718	39.55	1648	
	Total Hydro	1148	291	386	8.41	351	
	Total Punjab	5128	1970	2104	47.97	1999	
Haryana	Panipat TPS	1367	220	211	5.08	212	
	DCRTPP (Yamuna nagar)	600	543	495	11.98	499	
	Faridabad GPS (NTPC)	432	281	279	6.89	287	
	RGTPP (kheadar) (IPP)	1200	0	0	0.00	0	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	534	369	9.68	403	
	Thermal (Total)	4944	1578	1354	33.63	1401	
	Total Hydro	62	20	20	0.54	23	
	Total Haryana	5006	1598	1374	34.17	1424	
	Rajasthan	kota TPS	1240	1137	1098	26.38	1099
suratgarh TPS		1500	1125	1138	26.23	1093	
Chabra TPS		750	364	332	8.51	354	
Dholpur GPS		330	87	123	2.41	100	
Ramgarh GPS		221	125	4	1.76	73	
RAPS A (NPC)		300	175	175	4.08	170	
Barsingsar (NLC)		250	96	95	2.19	91	
Giral LTPS		250	62	69	1.38	57	
Rajwest LTPS (IPP)		1080	240	239	5.55	231	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Kalisindh Thermal		600	0	0	0.00	0	
Kawai(Adani)		1320	616	624	14.69	612	
Thermal (Total)		7976	4027	3897	93.16	3882	
Total Hydro		550	22	24	0.57	24	
Wind power		2191	153	346	5.35	223	
Biomass		91	21	21	0.50	21	
Solar		201	5	0	0.52	22	
Renewable/Others (Total)		2483	174	367	6.37	265	
Total Rajasthan		11009	4223	4288	100.10	4171	
UP	Anpara TPS	1630	1607	1609	34.50	1438	
	Obra TPS	1288	321	354	7.30	304	
	Paricha TPS	1140	582	774	15.60	650	
	Panki TPS	210	75	80	1.60	67	
	Harduaganj TPS	665	388	419	9.00	375	
	Tanda TPS (NTPC)	440	308	400	8.31	346	
	Roza TPS (IPP)	1200	671	767	18.34	764	
	Anpara-C (IPP)	1200	351	534	10.70	446	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	280	280	6.23	260	
	Thermal (Total)	8223	4583	5217	111.59	4649	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	85	85	2.33	97	
	Cogeneration	981	600	600	14.40	600	
	Total UP	10131	5268	5902	128.32	5347	
	Uttarakhand	Total Hydro	1303	448	323	9.38	391
		Total Uttarakhand	1303	448	323	9.38	391
Delhi	Rajghat TPS	135	0	0	0.00	0	
	Delhi Gas Turbine	282	77	80	1.84	77	
	Pragati Gas Turbine	330	289	265	6.47	269	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	1370	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	345	350	7.57	316	
	Thermal (Total)	2917	711	695	15.88	661	
	Total Delhi	2917	711	695	15.88	661	
HP	Baspa HPS (IPP)	330	30	0	1.04	43	
	Malana HPS (IPP)	86	10	0	0.44	18	
	Other Hydro	589	405	359	9.76	407	
	Total HP	1005	445	359	11.24	468	
J & K	Baglihar HPS (IPP)	450	440	376	9.58	399	
	Other Hydro	397	73	132	2.30	96	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1056	513	508	11.88	495	
Total State Control Area Generation		37555	15176	15553	358.92	14955	
J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))			4411	3234	99.80	4158	
Total Regional Availability(Gross)		61407	34789	29934	757.37	31557	

IV. Total Hydro Generation:

Regional Entities Hydro	10880	6387	2497	98.47	4103
State Control Area Hydro	5442	1824	1705	44.34	1848
Total Regional Hydro	16322	8211	4202	142.81	5950

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	100	500	0	8.15	0.00	8.15
Gwallor-Agra (D/C)	1558	1487	1927	0	35.16	0.00	35.16
Zerda-Kankroli	-185	-289	0	329	0.00	5.27	-5.27
Zerda-Bhinmal	-102	-191	53	283	0.00	2.69	-2.69
Malanpur-Auraiya	-72	-40	0	91	0.00	1.37	-1.37
Badod-Kota/Morak	-41	-106	0	126	0.00	0.78	-0.78
Mundra-Mohinderghar(HVDC)	2000	1999	2005	0	48.36	0.00	48.36
Sub Total WR	3658	2960			91.67	10.11	81.55
Pusauli Bypass	300	300	300	0	7.27	0.00	7.27
MZP- GKP (D/C)	112	52	280	0	2.57	0.00	2.57
Patna-Balia(D/C)	220	169	409	0	5.90	0.00	5.90
B'Sharif-Balia (D/C)	104	47	261	0	2.71	0.00	2.71
Pusauli-Balia	-114	-88	0	-127	0.00	2.01	-2.01
Gaya-Fatehpur (765 Kv)	-20	-150	108	150	0.00	0.58	-0.58
Pusauli-Sahupuri	165	139	168	0	3.30	0.00	3.30
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-28	-25	0	32	0.00	0.60	-0.60
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	14	-170	182	170	0.00	0.31	-0.31
Sub Total ER	753	274			21.75	3.50	18.25
Total IR Exch	4411	3234			113.41	13.61	99.80

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
24.67	0.19	24.86	2.59	6.96	1.77	-0.97	0.00	0.00
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
29.22	68.73	97.96	18.25	81.55	99.80	-10.98	12.82	1.84

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

<49.2	<49.7	<49.8	<49.9	<50.0	49.9-50.05	50.05-50.10	>50.10	>50.20	>50.50
0.00	0.65	3.70	22.24	61.52	57.13	10.22	10.41	1.05	0.00

<----- 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				
50.31	18.02	49.65	9.10	49.97	0.10	0.10	50.23	49.87

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	408	01:05	401	19:09	0.0	0.0	0.0	0.0
Gorakhpur	400	436	15:02	410	22:41	0.0	0.0	71.1	11.5
Bareilly	400	421	03:01	402	21:33	0.0	0.0	0.1	0.0
Kanpur	400	417	01:59	400	19:12	0.0	0.0	0.0	0.0
Dadri	400	426	03:01	406	19:12	0.0	0.0	22.7	0.0
Ballabgarh	400	434	03:00	412	19:10	0.0	0.0	60.8	15.5
Bawana	400	432	01:59	410	19:10	0.0	0.0	47.3	5.8
Bassi	400	430	05:03	407	10:36	0.0	0.0	28.9	0.0
Hissar	400	422	02:31	401	06:14	0.0	0.0	4.0	0.0
Moga	400	425	02:31	402	19:09	0.0	0.0	17.9	0.0
Abdullapur	400	427	00:46	409	10:16	0.0	0.0	28.3	0.0
Nalagarh	400	429	02:00	409	09:13	0.0	0.0	29.8	0.0
Kishenpur	400	415	02:21	393	19:09	0.0	0.0	0.0	0.0
Wagoora	400	397	04:11	360	19:29	42.1	82.2	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	772	15:30	724	21:26	0.0	0.0	0.0	0.0
Balia	765	775	15:01	730	22:40	0.0	8.2	0.0	0.0
Moga	765	806	03:01	763	19:13	0.0	0.0	7.4	0.0
Agra	765	803	03:01	763	10:24	0.0	0.0	2.7	0.0
Bhiwani	765	817	03:02	775	06:24	0.0	0.0	25.5	0.0
Unnao	765	755	05:09	728	19:13	0.0	45.0	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	482.47	519.70	480.90	481.64	275.13	420.02
Pong	426.72	384.05	402.72	281.22	400.18	223.85	155.52	229.25
Tehri	829.79	740.04	788.45	425.58	818.65	982.26	48.18	195.00
Koteshwar	612.50	598.50	610.35	4.69	609.60	4.21	195.00	198.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	81.53	107.03
Rihand	268.22	252.98	259.45	274.80	258.99	250.70	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	508.60	144.00	508.99	144.00	105.85	120.77

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 29.03.2014 :
Scattered rain

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 :
Vishnuprayag (400MW) and Dhauliganga (280MW) are out of operation since 16.06.2013.
Civil construction is in progress for rectification of the major damages in Plants/Dam caused due to flood
Vishnuprayag and Dhauliganga expected by April, 2014 .

Report for : 29.03.2014

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER