

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पारसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 19.01.2015
Date of Reporting : 20.01.2015

I. Regional Availability/Demand:

Demand Met	Evening Peak (19:00 Hrs) MW			Off Peak (03:00 Hrs) MW			Day Energy (Net MU)		
	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
38835	2223	41057	50.02	28279	774	29054	50.13	818.6	53.41

* 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	42.84	7.72		50.56	37.11	38.30	1.19	88.86	0.00
Haryana	67.54	0.40		67.94	44.82	43.00	-1.82	110.94	0.00
Rajasthan	126.40	5.21	5.71	137.32	71.20	71.93	0.73	209.25	0.00
Delhi	19.07			19.07	47.50	47.80	0.30	66.86	0.92
UP	156.00	4.20		160.20	76.20	75.62	-0.58	235.82	44.28
Uttarakhand		9.54		9.54	25.73	26.58	0.85	36.12	0.73
HP		4.14		4.14	20.45	20.28	-0.18	24.42	0.04
J & K		4.41	0.00	4.41	35.27	37.79	2.52	42.20	7.45
Chandigarh				0.00	3.80	4.12	0.27	4.12	0.00
Total	411.84	35.63	5.71	453.19	362.08	365.41	3.28	818.60	53.41

* 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 (19:00 Hrs) MW				Off Peak (03:00 Hrs) MW				# Max(hourly) Demand Met of Day (MW)
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	4815	0	77	-371	2798	0	134	-353	4855
Haryana	6114	0	84	-847	3427	0	-10	-884	6114
Rajasthan	9046	0	102	937	7606	0	109	1019	10144
Delhi	3307	0	5	-139	1538	0	37	-911	3936
UP	10280	1800	-364	94	9398	480	-164	52	10553
Uttarakhand	1838	75	14	692	1076	0	-48	453	1838
HP	1254	0	-8	402	673	0	-40	452	1314
J&K	1970	348	163	627	1668	294	106	679	1970
Chandigarh	210	0	0	15	96	0	10	-31	234
Total	38835	2223	73	1411	28279	774	135	476	38835

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

figures may not be at simultaneous hour.

Diversity is 1.05

III. Regional Entities :

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 (5*200+2*500)	2000	1438	1581	1530	34.29	1429	34.31	-0.02
Rihand I STPS (2*500)	1000	872	852	917	22.20	925	20.59	1.61
Rihand II STPS (2*500)	1000	903	960	811	22.35	931	20.94	1.42
Rihand III STPS (2*500)	1000	473	496	404	11.41	475	10.60	0.81
Dadri I STPS (4*210)	840	815	785	611	17.48	728	16.48	1.00
Dadri II STPS (2*490)	980	980	806	742	20.90	871	20.52	0.38
Unchahar I TPS (2*210)	420	391	389	292	9.26	386	8.81	0.45
Unchahar II TPS (2*210)	420	391	408	300	9.15	381	8.39	0.76
Unchahar III TPS (1*220)	210	196	173	140	4.47	186	4.17	0.29
I-STPP (Jhajjar) (3*500)	1500	1500	1081	892	21.48	895	22.71	-1.23
Dadri GPS (4*130.19+2*154.51)	830	849	357	389	9.20	384	9.36	-0.16
Anta GPS (3*88.71+1*153.2)	419	426	229	240	6.02	251	6.07	-0.05
Auraiya GPS (4*111.19+2*109.30)	663	678	168	173	4.02	168	4.00	0.02
Dadri Solar	5	1	0	0	0.01	0	0.02	-0.01
Unchahar Solar	10	3	0	0	0.02	1	0.06	-0.04
Singrauli Solar	15	1	0	0	0.00	0	0	-0.03
Sub Total (A)	11312	9916	8285	7441	192	8011	187	5
B. NPC								
NAPS (2*220)	440	387	387	387	9.29	387	9.29	0.00
RAPS- B (2*220)	440	395	460	461	9.93	414	9.48	0.45
RAPS- C (2*220)	440	197	219	145	4.11	171	4.74	-0.62
Sub Total (B)	1320	979	1066	993	23.33	972	23.51	-0.17
C. NHPC								
Chamera I HPS (3*180)	540	534	138	0	1.69	71	1.60	0.09
Chamera II HPS (3*100)	300	300	311	0	1.05	44	1.00	0.05
Chamera III HPS (3*77)	231	172	221	0	0.55	23	0.50	0.05
Bairasuli HPS(3*60)	180	120	120	0	0.42	17	0.37	0.05
Salal-HPS (6*115)	690	82	224	64	2.03	85	1.97	0.07
Tanakpur-HPS (3*40)	94	28	24	28	0.66	28	0.66	0.00
Uri-I HPS (4*120)	480	94	206	19	2.43	101	2.27	0.17
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	58	140	0	0.69	29	0.69	0.00
Dulhasti-HPS (3*130)	390	303	274	0	2.43	101	2.30	0.13
Sewa-II HPS (3*40)	120	119	120	0	0.36	15	0.36	0.00
Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
Sub Total (C)	4065	1810	1777	111	12	513	12	1
D. SJVNL								
NJPC (6*250)	1500	1605	1083	0	6.04	251	6.00	0.03
Rampur HEP (4*68.67)	275	370	287	0	1.63	68	1.67	-0.05
Sub Total (D)	1775	1975	1370	0	7.66	319	7.68	-0.02
E. THDC								
Tehri HPS (4*250)	1000	980	989	0	9.22	384	9.10	0.12
Koteshwar HPS (4*100)	400	134	297	92	3.23	135	3.20	0.03
Sub Total (E)	1400	1114	1286	92	12.45	519	12.30	0.15
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	565	1092	338	13.71	571	13.56	0.15
Dehar HPS (6*165)	990	123	330	0	2.91	121	2.95	-0.04
Pong HPS (6*66)	396	186	312	0	4.39	183	4.47	-0.08
Sub Total (F)	2900	874	1734	338	21.00	875	20.98	0.02
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.36	15	0.35	0.01
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	792	0	3.28	137	3.23	0.05
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	273	146	5.52	230	5.50	0.02
Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
Sub Total (G)	1662	0	1065	146	9.16	382	9.08	0.08
H. Total Regional Entities (A-G)	24434	16668	16583	9121	278.18	11591	272.31	5.88

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) (6*210)	1260	630	480	12.75	531
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	110	80	2.25	94
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	255	170	5.09	212
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	693	340	12.77	532
	Talwandi Saboo (1*660)	660	358	328	9.98	416
	Thermal (Total)	4680	2046	1398	42.84	1785
	Total Hydro	1148	508	146	7.72	322
Total Punjab	5828	2554	1544	50.56	2107	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	461	436	10.66	444
	DCRTPP (Yamuna nagar) (2*300)	600	513	479	12.15	506
	Faridabad GPS (NTPC)	432	411	345	8.86	369
	RGTPP (khedar) (IPP) (2*600)	1200	1163	737	22.38	932
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	627	386	13.50	562
	Thermal (Total)	4944	3175	2383	67.54	2814
	Total Hydro	62	10	18	0.40	17
	Total Haryana	5006	3185	2401	67.94	2831
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1050	1030	25.68
suratgarh TPS (6*250)		1500	1180	1136	29.37	1224
Chabra TPS (3*250)		750	650	603	14.94	623
Dholpur GPS (3*110)		330	101	112	2.54	106
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	223	166	4.54	189
RAPS A (NPC) (1*100+1*200)		300	149	180	4.13	172
Barsingsar (NLC) (2*125)		250	192	191	4.29	179
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	734	732	16.85	702
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	0	0	0.00	0
Kawai(Adani) (2*660)		1320	1102	879	24.05	1002
Thermal (Total)		8026	5381	5029	126	5267
Total Hydro		550	215	212	5.21	217
Wind power		2798	175	137	5.12	213
Biomass		99	17	17	0.42	17
Solar		730	0	0	0.18	8
Renewable/Others (Total)		3627	192	154	5.71	238
Total Rajasthan		12203	5788	5395	137.32	5722
UP		Anpara TPS (3*210+2*500)	1630	1403	1283	32.40
	Obra TPS (2*50+2*94+5*200)	1194	347	346	8.30	346
	Paricha TPS (2*110+2*220+2*250)	1140	784	783	19.00	792
	Panki TPS (2*105)	210	0	0	0.00	0
	Harduaganj TPS (1*60+1*105+2*250)	665	459	484	11.20	467
	Tanda TPS (NTPC) (4*110)	440	391	369	9.30	388
	Roza TPS (IPP) (4*300)	1200	1013	860	23.40	975
	Anpara-C (IPP) (2*600)	1200	988	1053	24.70	1029
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	354	279	8.50	354
	Thermal (Total)	8129	5739	5457	136.80	5700
	Vishnuparyag HPS (IPP)	400	66	67	1.60	67
	Other Hydro	527	89	25	2.60	108
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	6694	6349	160.20	6608
	Uttarakhand	Total Hydro	1398	580	337	9.54
Total Uttarakhand		1398	580	337	9.54	398
Delhi	Raighat TPS (2*67.5)	135	45	39	1.03	43
	Delhi Gas Turbine (6x30 + 3x34)	282	157	160	3.80	158
	Pragati Gas Turbine (2x104+ 1x122)	330	108	0	1.52	63
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	57	288	4.56	190
	Badarpur TPS (NTPC) (3*95+2*210)	705	381	331	8.16	340
	Thermal (Total)	2917	748	818	19.07	795
Total Delhi	2917	748	818	19.07	795	
HP	Baspa HPS (IPP) (2*150)	300	56	0	0.97	40
	Malana HPS (IPP) (2*43)	86	0	0	0.21	9
	Other Hydro	728	136	63	2.97	124
	Total HP	1114	192	63	4.14	172
J & K	Baqilhar HPS (IPP) (3*150)	450	150	120	3.28	137
	Other Hydro/IPP	436	79	20	1.14	47
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	229	140	4.41	184
Total State Control Area Generation		39597	19970	17047	453.19	18816
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3912.89	2782.16	120.44	5018
Total Regional Availability(Gross)		64032	40466	28950	851.81	35425

IV. Total Hydro Generation:

Regional Entities Hydro	11432	6959	541	57.07	2378
State Control Area Hydro	5684	1823	941	35.63	1418
Total Regional Hydro	17116	8782	1482	92.70	3796

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	-250	-250	50	250	0.08	5.40	-5.32
Gwalior-Agra (D/C)	863	528	1947	0	37.78	0.00	37.78
Zerda-Kankroli	-66	-182	64	236	0.00	1.09	-1.09
Zerda-Bhinmal	1	-91	174	133	1.08	0.00	1.08
Malanpur-Auraiya	-45	-40	0	65	0.00	1.00	-1.00
Badod-Kota/Morak	-10	-101	1	111	0.00	1.20	-1.20
Mundra-Mohindergarh(HVDC)	1797	1598	2004	0	42.82	0.00	42.82
Vindhychal - Rihand	505	482	514	0	12.01	0.00	12.01
Sub Total WR	2795	1944			93.77	8.69	85.08
Pusauli Bypass	100	100	100	0	2.44	0.00	2.44
MZP- GKP (D/C)	-44	-13	230	69	0.92	0.00	0.92
Patna-Balia(D/C)	708	611	931	0	17.99	0.00	17.99
B'Sharif-Balia (D/C)	-106	-135	106	153	0.00	1.39	-1.39
Pusauli-Balia	-42	-59	98	59	0.02	0.00	0.02
Gaya-Fatehpur (765 Kv)	336	223	605	0	9.44	0.00	9.44
Pusauli-Sahupuri	122	137	168	0	3.07	0.00	3.07
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-49	-40	0	49	0.00	0.89	-0.89
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	93	15	380	0	3.76	0.00	3.76
Sub Total ER	1118	838			37.64	2.28	35.36
Total IR Exch	3913	2782			131.41	10.97	120.44

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
27.11	0.22	27.34	10.41	-5.57	9.76	16.41	0.22	-0.22

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
47.72	65.93	113.65	35.36	85.08	120.44	-12.36	19.15	6.78

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	>50.20	>50.50
0.00	0.49	4.98	25.52	60.01	51.90	15.89	5.81	0.91	NA

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				
50.30	00:28:48	49.66	09:07:12	49.97	0.11	0.10	50.21	49.84

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	412	23:48	403	09:55	0.0	0.0	0.0	0.0
Gorakhpur	400	411	04:02	390	08:45	0.0	0.0	0.0	0.0
Bareilly	400	423	17:47	400	12:37	0.0	0.0	16.4	0.0
Kanpur	400	422	23:59	400	08:47	0.0	0.0	1.0	0.0
Dadri	400	421	02:56	401	12:34	0.0	0.0	0.9	0.0
Ballabgarh	400	429	03:00	406	10:36	0.0	0.0	54.8	0.0
Bawana	400	426	02:56	408	10:33	0.0	0.0	47.0	0.0
Bassi	400	432	05:02	399	11:18	0.0	0.0	45.3	0.6
Hissar	400	418	20:58	399	10:33	0.0	0.0	0.0	0.0
Moga	400	422	20:57	403	10:35	0.0	0.0	3.9	0.0
Abdullapur	400	428	16:48	396	10:34	0.0	0.0	34.0	0.0
Nalagarh	400	432	21:19	414	06:07	0.0	0.0	58.2	0.7
Kishenpur	400	414	03:01	392	10:35	0.0	0.0	0.0	0.0
Wagoora	400	395	18:01	363	10:35	46.1	96.4	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	782	20:29	736	10:36	0.0	9.6	0.0	0.0
Balia	765	786	23:55	749	08:22	0.0	0.0	0.0	0.0
Moga	765	800	21:54	765	10:35	0.0	0.0	0.0	0.0
Agra	765	797	23:58	752	12:33	0.0	0.0	0.0	0.0
Bhiwani	765	806	17:04	768	12:35	0.0	0.0	11.6	0.0
Unnao	765	770	23:57	735	08:50	0.0	14.3	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	494.27	880.64	497.99	1018.16	119.13	415.80
Pong	426.72	384.05	402.87	288.96	409.54	484.26	63.88	311.37
Tehri	829.79	740.04	802.80	665.65	805.20	704.59	36.38	222.00
Koteshwar	612.50	598.50	609.31	4.11	610.09	4.69	222.00	214.00
Chamera-I	760.00	748.75	759.13	0.00	0.00	0.00	41.29	45.68
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	0.00	0.00
RPS	352.80	343.81	0.00	0.00	0.00	0.00	0.00	0.00
Jawahar Sagar	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	503.39	3.04	509.71	2.46	45.75	145.37

* NA: Not Available

X(A). Short-Term Open Access Details:

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (19:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	-410	56	0	-379	8	0	-8.62	1.26	-7.37
Delhi	-891	-10	-10	-489	355	-5	-10.96	4.19	-6.77
Haryana	-986	102	0	-939	92	0	-24.00	-0.07	-24.07
HP	533	-81	0	504	-101	0	13.48	-3.00	10.48
J&K	684	-5	0	486	141	0	13.20	2.08	15.28
CHD	-31	0	0	0	15	0	-0.25	0.61	0.36
Rajasthan	487	530	2	487	449	2	15.66	15.76	31.42
UP	52	0	0	94	0	0	-1.87	0.00	-1.87
Uttarakhand	270	146	37	291	368	33	6.76	8.99	15.75
Total	-291	739	29	55	1326	29	3.40	29.81	33.22

X(B). Short-Term Open Access Details:

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-328	-410	267	0	0	0
Delhi	21	-891	559	-10	-5	-20
Haryana	-939	-1098	126	-466	0	0
HP	605	479	10	-592	0	0
J&K	684	438	227	-57	0	0
CHD	0	-31	68	0	0	0
Rajasthan	843	487	1383	410	2	2
UP	133	-394	0	0	0	0
Uttarakhand	291	270	459	123	49	33

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 19.01.2015 :**

Fog observed in most parts of NR.

XIV. Synchronisation of new generating units :

0.00

XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**