

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 17.04.2015
Date of Reporting : 18.04.2015

I. Regional Availability/Demand:

Evening Peak (20:00 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
35862	2954	38816	0.00	29496	1579	31076	50.14	764.0	40.56

* 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	24.61	3.95		28.56	62.74	62.92	0.18	91.48	0.00
Haryana	26.17	0.69		26.86	72.83	72.46	-0.37	99.32	0.00
Rajasthan	97.90	0.01	10.72	108.63	57.54	57.83	0.29	166.46	0.00
Delhi	17.63			17.63	55.80	57.79	1.99	75.42	0.01
UP	128.43	7.32		135.75	96.61	96.23	-0.38	231.98	32.20
Uttarakhand		11.00		11.00	20.65	22.89	2.24	33.89	0.94
HP		12.59		12.59	11.28	12.05	0.77	24.64	0.00
J & K		12.45	0.00	12.45	24.32	24.60	0.29	37.06	7.41
Chandigarh				0.00	3.65	3.77	0.27	3.77	0.00
Total	294.73	48.00	10.72	353.45	405.41	410.54	5.28	763.99	40.56

* 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				# Max(hourly) Demand Met of Day (MW)
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	4523	0	6	-62	3457	0	-56	345	4523
Haryana	5826	0	-24	531	3270	0	71	321	5826
Rajasthan	7134	0	165	749	6538	0	78	431	7540
Delhi	3540	0	8	53	2476	0	108	-223	3595
UP	10061	2435	-91	218	10152	1300	188	176	10470
Uttarakhand	1629	150	102	416	1274	0	101	337	1629
HP	1105	0	-62	-589	822	0	4	-129	1271
J&K	1845	369	158	-136	1397	279	-76	-121	1845
Chandigarh	198	0	19	-10	111	0	-12	0	198
Total	35862	2954	281	1171	29496	1579	405	1137	36283

!! STOA figures are at sellers boundary & PX figures are at regional boundary. # figures may not be at simultaneous hour.

Diversity is 1.02

III. Regional Entities :

A. NTPC	Station/ Constituent	Inst. Capacity	Declared	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
		(Effective) MW	Capacity(MW)	(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
	Singrauli STPS (5*200+2*500)	2000	1730	1850	1686	43.97	1832	41.03	2.94
	Rihand I STPS (2*500)	1000	843	868	826	21.36	890	19.55	1.81
	Rihand II STPS (2*500)	1000	475	517	484	11.85	494	10.88	0.97
	Rihand III STPS (2*500)	1000	941	958	1004	22.37	932	21.19	1.18
	Dadri I STPS (4*210)	840	615	528	428	12.18	507	11.85	0.33
	Dadri II STPS (2*490)	980	980	662	661	17.06	711	17.07	-0.01
	Unchahar I TPS (2*210)	420	405	316	293	8.00	334	9.08	-1.07
	Unchahar II TPS (2*210)	420	401	318	251	7.53	314	8.23	-0.70
	Unchahar III TPS (1*220)	210	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajjar) (3*500)	1500	1500	673	626	14.51	605	15.30	-0.79
	Dadri GPS (4*130.19+2*154.51)	830	822	383	412	9.32	388	9.34	-0.02
	Anta GPS (3*88.71+1*153.2)	419	393	0	0	0.00	0	0.00	0.00
	Auraiya GPS (4*111.19+2*109.30)	663	652	143	164	3.76	157	3.79	-0.03
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.04	2	0.06	-0.03
	Singrauli Solar	15	3	0	0	0.01	0	0.07	-0.06
	KHEP	400	0	0	0	0.00	0	0.00	0.00
	Sub Total (A)	11712	9763	7216	6835	172	7166	167	5
B. NPC	NAAPS (2*220)	440	280	217	224	4.67	194	6.73	-2.06
	RAPS- B (2*220)	440	190	214	226	4.51	188	9.41	-4.90
	RAPS- C (2*220)	440	420	441	446	9.57	399	10.08	-0.51
	Sub Total (B)	1320	890	872	896	18.75	781	26.22	-7.47
C. NHPC	Chamera I HPS (3*180)	540	534	543	0	9.32	388	9.21	0.11
	Chamera II HPS (3*100)	300	300	302	203	6.07	253	6.00	0.07
	Chamera III HPS (3*77)	231	231	230	74	3.78	157	3.70	0.08
	Bairasuil HPS(3*60)	180	179	180	120	3.55	148	3.53	0.01
	Salal-HPS (6*115)	690	636	658	640	15.73	655	15.28	0.45
	Tanakpur-HPS (3*40)	94	42	39	50	1.06	44	1.00	0.06
	Uri-I HPS (4*120)	480	463	473	473	11.34	472	11.12	0.22
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	140	140	0	2.08	87	2.09	-0.01
	Dulhasti-HPS (3*130)	390	387	407	405	9.59	399	9.29	0.30
	Sewa-II HPS (3*40)	120	119	129	126	3.08	128	2.86	0.22
	Parbati 3 (4*130)	520	390	151	0	1.75	73	1.69	0.06
	Sub Total (C)	4065	3421	3251	2091	67	2806	66	2
D.SJVNL	NJPC (6*250)	1500	1605	1590	305	14.29	595	13.93	0.36
	Rampur HEP (6*68.67)	412	430	388	87	3.93	164	3.90	0.03
	Sub Total (D)	1912	2035	1978	392	18.22	759	17.83	0.39
E. THDC	Tehri HPS (4*250)	1000	525	526	0	7.16	298	7.10	0.06
	Koteswar HPS (4*100)	400	129	360	90	3.14	131	3.10	0.04
	Sub Total (E)	1400	654	886	90	10.30	429	10.20	0.10
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	337	728	325	7.92	330	8.10	-0.18
	Dehar HPS (6*165)	990	480	495	495	11.68	487	11.52	0.16
	Pong HPS (6*66)	396	6	123	0	0.14	6	0.16	-0.01
	Sub Total (F)	2900	824	1346	820	19.74	823	19.77	-0.03
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	105	27	1.10	46	1.11	0.00
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	880	150	7.10	296	7.20	-0.10
	Malana Stg-II HPS (2*50)	100	0	50	0	0.57	24	0.69	-0.13
	Shree Cement TPS (2*150)	300	0	295	259	6.62	276	6.58	0.04
	Budhil HPS(IPP)	70	0	70	74	0.82	34	0.91	-0.09
	Sub Total (G)	1662	0	1401	510	16.21	676	16.48	-0.27
H. Total Regional Entities (A-G)		24972	17587	16949	11634	322.53	13439	323.72	-1.19

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) (6*210)	1260	160	160	3.74	156	
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.06	-3	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	167	0	1.25	52	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura (2*700)	1400	592	356	10.87	453	
	Talwandi Saboo (1*660)	660	556	345	8.82	367	
	Thermal (Total)	4680	1475	861	24.61	1025	
	Total Hydro	1148	180	210	3.95	164	
	Total Punjab	5828	1655	1071	28.56	1190	
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00	0
DCRTPP (Yamuna nagar) (2*300)		600	244	237	5.81	242	
Faridabad GPS (NTPC)		432	0	0	0.00	0	
RGTPP (khedar) (IPP) (2*600)		1200	0	0	0.00	0	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP) (2*660)		1320	809	738	20.36	848	
Thermal (Total)		4944	1053	975	26.17	1090	
Total Hydro		62	25	24	0.69	29	
Total Haryana		5006	1078	999	26.86	1119	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	710	561	16.44	685
		suratgarh TPS (6*250)	1500	429	298	8.40	350
	Chabra TPS (4*250)	1000	540	558	14.16	590	
	Dholpur GPS (3*110)	330	125	111	2.94	122	
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	140	182	3.99	166	
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0	
	Barsingsar (NLC) (2*125)	250	99	175	3.39	141	
	Giral LTPS (2*125)	250	70	89	1.83	76	
	Rajwest LTPS (IPP) (8*135)	1080	595	846	19.80	825	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(1*600)	600	99	0	0.34	14	
	Kawai(Adani) (2*660)	1320	980	883	26.62	1109	
	Thermal (Total)	8276	3787	3703	98	4079	
	Total Hydro	550	0	0	0.01	0	
	Wind power	2798	319	565	9.80	408	
	Biomass	99	36	36	0.85	36	
	Solar	730	0	0	0.07	3	
	Renewable/Others (Total)	3627	355	601	10.72	447	
	Total Rajasthan	12453	4142	4304	108.63	4526	
	UP	Anpara TPS (3*210+2*500)	1630	1234	1207	29.00	1208
Obra TPS (2*50+2*94+5*200)		1194	440	429	10.40	433	
Paricha TPS (2*110+2*220+2*250)		1140	860	851	19.80	825	
Panki TPS (2*105)		210	0	131	1.70	71	
Harduaganj TPS (1*60+1*105+2*250)		665	223	217	5.10	213	
Tanda TPS (NTPC) (4*110)		440	276	400	8.24	343	
Roza TPS (IPP) (4*300)		1200	572	820	16.15	673	
Anpara-C (IPP) (2*600)		1200	1096	1093	26.04	1085	
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	0	0	0.00	4851	
Anpara-D		500	0	0	0.00	0	
Thermal (Total)		8629	4701	5148	116	9702	
Vishnuparyag HPS (IPP)		400	128	123	2.99	125	
Other Hydro		527	297	186	4.32	180	
Cogeneration		981	500	500	12.00	500	
Total UP		10537	5626	5957	135.75	10383	
Uttarakhand	Total Hydro	1398	465	458	11.00	458	
	Total Uttarakhand	1398	465	458	11.00	458	
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.03	-1	
	Delhi Gas Turbine (6x30 + 3x34)	282	78	81	1.85	77	
	Pragati Gas Turbine (2x104+ 1x122)	330	153	153	3.64	152	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (6*250)	1370	307	268	6.90	288	
	Badarpur TPS (NTPC) (3*95+2*210)	705	179	182	5.26	219	
	Thermal (Total)	2917	717	684	17.63	734	
	Total Delhi	2917	717	684	17.63	734	
HP	Baspa HPS (IPP) (2*150)	300	39	66	1.68	70	
	Malana HPS (IPP) (2*43)	86	45	44	0.88	37	
	Other Hydro	728	435	414	10.03	418	
	Total HP	1114	519	524	12.59	524	
J & K	Baglihar HPS (IPP) (3*150)	450	450	450	10.35	431	
	Other Hydro/IPP	436	90	92	2.10	88	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	540	542	12.45	519	
Total State Control Area Generation		40347	14742	14539	353.45	19454	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3875.21	3408.13	112.95	4706	
Total Regional Availability(Gross)		65319	35566	29581	788.93	37599	

IV. Total Hydro Generation:

Regional Entities Hydro	11969	8496	3571	124.365749	5182
State Control Area Hydro	5684	2026	1944	48.00	1875
Total Regional Hydro	17654	10522	5515	172.36	7057

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	-50	150	150	50	1.93	0.19	1.74
Gwalior-Agra (D/C)	1887	1583	2031	0	41.17	0.00	41.17
Zerda-Kankroli	-46	-268	0	309	0.00	4.82	-4.82
Zerda-Bhinmal	-5	-235	21	279	0.00	3.79	-3.79
Malanpur-Auraiya	-36	0	0	57	0.00	0.83	-0.83
Badod-Kota/Morak	36	-52	36	69	0.00	0.48	-0.48
Mundra-Mohindergarh(HVDC)	2200	2100	2506	0	52.34	0.00	52.34
Vindhychal - Rihand	-490	-470	514	0	11.83	0.00	11.83
Sub Total WR	3496	2808			107.26	10.10	97.16
Pusauli Bypass	300	400	400	0	7.50	0.00	7.50
MZP- GKP (D/C)	-9	31	118	31	0.26	0.00	0.26
Patna-Balia(D/C)	188	289	377	0	6.86	0.00	6.86
B'Sharif-Balia (D/C)	-215	-119	0	215	0.00	2.65	-2.65
Pusauli-Balia	-33	46	92	43	0.39	0.00	0.39
Gaya-Fatehpur (765 Kv)	83	16	184	0	2.58	0.00	2.58
Pusauli-Sahupuri	222	171	174	0	3.79	0.00	3.79
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-42	0	47	0.00	0.93	-0.93
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-117	-192	0	192	0.00	2.01	-2.01
Sub Total ER	379	600			21.38	5.59	15.79
Total IR Exch	3875	3408			128.64	15.69	112.95

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
24.14	0.56	24.70	1.03	-1.62	9.67	2.32	0.80	-0.80

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
36.20	66.95	103.15	15.79	97.16	112.95	-20.41	30.21	9.80

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	0.00	0.06	7.84	42.16	62.58	20.36	7.53	1.81	NA

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					
50.34	13.04	49.78	0.06	50.01	0.06	0.07	50.32	0

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	403	00:00	398	19:08	0.0	0.0	0.0	0.0
Gorakhpur	400	415	01:00	406	11:51	0.0	0.0	0.0	0.0
Bareilly	400	420	03:02	399	19:14	0.0	0.0	0.0	0.0
Kanpur	400	419	03:01	398	19:23	0.0	0.0	0.0	0.0
Dadri	400	425	03:02	404	19:08	0.0	0.0	13.8	0.0
Ballabgarh	400	432	03:03	404	19:22	0.0	0.0	44.4	1.8
Bawana	400	429	03:01	403	19:23	0.0	0.0	49.3	0.0
Bassi	400	429	03:02	256	18:35	37.5	37.5	23.4	0.0
Hissar	400	423	03:01	393	19:22	0.0	0.0	6.7	0.0
Moga	400	425	03:04	401	19:21	0.0	0.0	14.3	0.0
Abdullapur	400	431	03:02	396	19:22	0.0	0.0	55.6	0.5
Nalagarh	400	434	03:02	408	19:09	0.0	0.0	86.6	9.9
Kishenpur	400	423	03:00	396	19:20	0.0	0.0	5.5	0.0
Wagooora	400	416	03:02	374	19:45	13.4	19.8	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	777	03:02	739	19:23	0.0	1.2	0.0	0.0
Balia	765	778	17:17	751	18:53	0.0	0.0	0.0	0.0
Moga	765	808	03:02	760	19:26	0.0	0.0	12.4	0.0
Agra	765	793	03:03	744	19:26	0.0	0.0	0.0	0.0
Bhiwani	765	812	02:59	764	19:23	0.0	0.0	16.7	0.0
Unnao	765	763	04:05	736	19:12	0.0	4.6	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	482.19	511.55	482.41	519.70	428.09	230.90
Pong	426.72	384.05	404.17	320.26	402.21	273.51	227.47	11.55
Tehri	829.79	740.04	766.85	180.91	767.20	182.00	89.07	213.00
Koteshwar	612.50	598.50	611.60	4.95	611.06	5.22	213.00	208.00
Chamera-I	760.00	748.75	757.30	0.00	0.00	0.00	287.80	252.62
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	516.85	1.91	515.72	2.81	273.37	85.51

* NA: Not Available

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

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (20:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	-155	497	2	-155	92	0	-3.71	9.94	6.23
Delhi	-146	-36	-41	-97	151	0	-2.88	1.36	-1.51
Haryana	380	-60	1	376	154	1	9.06	-2.76	6.30
HP	99	-228	0	-104	-485	0	1.15	-8.24	-7.09
J&K	-70	-51	0	-121	-15	0	-2.40	-0.56	-2.96
CHD	0	0	0	0	-10	0	0.00	-0.07	-0.07
Rajasthan	-125	554	2	-101	849	2	-2.81	14.27	11.46
UP	176	0	0	218	0	0	4.53	0.00	4.53
Uttarakhand	0	306	31	0	416	0	0.00	7.92	7.92
Total	159	982	-4	16	1152	3	2.95	21.86	24.80

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-155	-155	508	71	2	0
Delhi	-97	-197	237	-57	0	-41
Haryana	380	376	182	-575	1	1
HP	99	-104	-185	-651	0	0
J&K	-70	-121	59	-116	0	0
CHD	0	0	0	-15	0	0
Rajasthan	-101	-125	877	473	2	2
UP	223	156	0	0	0	0
Uttarakhand	0	0	417	208	33	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 17.04.2015 :**

Normal

XIV. Synchronisation of new generating units :**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 :**