

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायुक्त कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 18.04.2015
Date of Reporting : 19.04.2015

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
34773	3073	37847	50.05	30881	1527	32409	50.14	764.7	58.83

* 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	21.39	4.92		26.31	64.66	64.67	0.01	90.98	1.39
Haryana	26.38	0.71		27.09	73.76	74.69	0.93	101.78	0.00
Rajasthan	99.52	0.00	11.97	111.49	57.05	57.83	0.78	169.32	0.00
Delhi	16.00			16.00	55.86	57.10	1.24	73.10	0.23
UP	118.45	7.67		126.12	101.43	103.99	2.56	230.11	48.94
Uttarakhand		10.47		10.47	21.28	23.60	2.32	34.07	0.88
HP		12.49		12.49	11.63	12.14	0.51	24.63	0.00
J & K		13.52	0.00	13.52	22.79	23.47	0.68	36.99	7.40
Chandigarh				0.00	3.64	3.74	0.27	3.74	0.00
Total	281.74	49.78	11.97	343.49	412.10	421.23	9.30	764.72	58.83

* 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	3914	125	-8	-148	3635	0	-31	341	4184
Haryana	5840	0	36	509	3617	0	71	5	5840
Rajasthan	7313	0	-38	386	7071	0	18	530	7689
Delhi	3483	0	16	103	2487	0	45	-325	3541
UP	9563	2540	-60	218	10392	1240	142	176	10569
Uttarakhand	1702	75	158	376	1286	0	50	332	1702
HP	1095	0	-41	-566	848	0	195	-159	1254
J&K	1667	333	13	-136	1436	287	12	-121	1796
Chandigarh	196	0	12	-10	110	0	3	0	196
Total	34773	3073	88	731	30881	1527	506	780	35540

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

Diversity is 1.03

III. Regional Entities :

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
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1730	1870	1861	43.74	1823	40.97	2.77
	Rihand I STPS (2*500)	1000	835	890	876	20.30	846	18.93	1.37
	Rihand II STPS (2*500)	1000	475	493	428	11.34	473	10.51	0.83
	Rihand III STPS (2*500)	1000	941	1002	1002	22.15	923	21.47	0.68
	Dadri I STPS (4*210)	840	615	559	428	12.60	525	11.60	0.99
	Dadri II STPS (2*490)	980	980	733	677	18.06	753	18.32	-0.26
	Unchahar I TPS (2*210)	420	405	343	297	8.18	341	9.11	-0.93
	Unchahar II TPS (2*210)	420	401	331	312	7.75	323	8.44	-0.69
	Unchahar III TPS (1*220)	210	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajjar) (3*500)	1500	1500	947	614	14.79	616	15.74	-0.95
	Dadri GPS (4*130.19+2*154.51)	830	817	374	398	9.21	384	9.48	-0.28
	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	656	156	163	3.76	157	3.99	-0.23
	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	0.04	2	0.07	-0.03
	KHEP	400	0	0	0	0.00	0	0.00	0.00
Sub Total (A)	11712	9754	7698	7056	172	7166	169	3	
B. NPC	NAPS (2*220)	440	205	217	219	4.68	195	4.92	-0.24
	RAPS- B (2*220)	440	190	202	207	4.37	182	4.56	-0.19
	RAPS- C (2*220)	440	420	440	445	9.49	395	10.08	-0.59
	Sub Total (B)	1320	815	859	871	18.54	772	19.56	-1.03
C. NHPC	Chamera I HPS (3*180)	540	534	541	352	11.39	474	11.30	0.08
	Chamera II HPS (3*100)	300	300	307	199	6.23	260	6.16	0.07
	Chamera III HPS (3*77)	231	231	225	78	3.72	155	3.68	0.04
	Bairasuil HPS(3*60)	180	138	120	120	3.07	128	3.10	-0.02
	Salal-HPS (6*115)	690	588	668	654	14.21	592	14.23	-0.02
	Tanakpur-HPS (3*40)	94	43	39	49	1.09	45	1.03	0.06
	Uri-I HPS (4*120)	480	475	477	476	11.62	484	11.40	0.22
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	140	139	0	2.43	101	2.38	0.05
	Dulhasti-HPS (3*130)	390	387	406	132	8.22	342	8.00	0.22
	Sewa-II HPS (3*40)	120	119	129	130	3.07	128	2.86	0.21
	Parbati 3 (4*130)	520	390	128	0	1.32	55	1.30	0.02
	Sub Total (C)	4065	3346	3179	2189	66	2765	65	1
D.SJVNL	NJPC (6*250)	1500	1605	1376	158	13.68	570	13.57	0.11
	Rampur HEP (6*68.67)	412	430	441	87	3.85	160	3.78	0.07
	Sub Total (D)	1912	2035	1817	245	17.52	730	17.35	0.18
E. THDC	Tehri HPS (4*250)	1000	522	523	0	6.94	289	6.90	0.04
	Koteswar HPS (4*100)	400	129	301	90	3.10	129	3.10	0.00
	Sub Total (E)	1400	651	824	90	10.03	418	10.00	0.03
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	341	796	301	8.15	340	8.18	-0.03
	Dehar HPS (6*165)	990	480	495	495	11.63	484	11.52	0.11
	Pong HPS (6*66)	396	24	184	0	0.55	23	0.57	-0.03
	Sub Total (F)	2900	845	1475	796	20.33	847	20.27	0.05
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	28	21	1.11	46	1.10	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	880	150	7.06	294	7.20	-0.14
	Malana Stg-II HPS (2*50)	100	0	25	25	0.72	30	0.69	0.03
	Shree Cement TPS (2*150)	300	0	295	262	6.62	276	6.66	-0.04
	Budhil HPS(IPP)	70	0	69	69	0.92	38	0.98	-0.06
	Sub Total (G)	1662	0	1297	527	16.43	684	16.62	-0.19
H. Total Regional Entities (A-G)	24972	17446	17149	11773	321.18	13383	317.98	3.20	

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	210	160	4.08	170	
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.05	-2	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	0	172	1.53	64	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura (2*700)	1400	696	352	11.39	475	
	Talwandi Saboo (1*660)	660	0	340	4.45	185	
	Thermal (Total)	4680	906	1024	21.39	891	
	Total Hydro	1148	405	105	4.92	205	
	Total Punjab	5828	1311	1129	26.31	1096	
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00	0
DCRTPP (Yamuna nagar) (2*300)		600	268	236	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	1121	738	20.57	857	
Thermal (Total)		4944	1389	974	26.38	1099	
Total Hydro		62	25	25	0.71	30	
Total Haryana		5006	1414	999	27.09	1129	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	878	690	18.63	776
		suratgarh TPS (6*250)	1500	407	380	9.47	394
		Chabra TPS (4*250)	1000	601	592	14.42	601
	Dholpur GPS (3*110)	330	120	110	2.91	121	
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	136	140	2.61	109	
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0	
	Barsingsar (NLC) (2*125)	250	97	96	2.10	87	
	Giral LTPS (2*125)	250	77	70	1.80	75	
	Rajwest LTPS (IPP) (8*135)	1080	763	826	18.96	790	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(1*600)	600	147	123	3.41	142	
	Kawai(Adani) (2*660)	1320	1123	1170	25.22	1051	
	Thermal (Total)	8276	4349	4197	100	4147	
	Total Hydro	550	0	0	0.00	0	
	Wind power	2798	69	801	11.11	463	
	Biomass	99	35	35	0.83	35	
	Solar	730	0	0	0.04	2	
	Renewable/Others (Total)	3627	104	836	11.97	499	
	Total Rajasthan	12453	4453	5033	111.49	4645	
	UP	Anpara TPS (3*210+2*500)	1630	1193	1158	28.70	1196
Obra TPS (2*50+2*94+5*200)		1194	478	438	11.20	467	
Paricha TPS (2*110+2*220+2*250)		1140	0	882	12.40	517	
Panki TPS (2*105)		210	131	45	2.00	83	
Harduaganj TPS (1*60+1*105+2*250)		665	227	223	5.20	217	
Tanda TPS (NTPC) (4*110)		440	390	390	9.26	386	
Roza TPS (IPP) (4*300)		1200	810	828	18.57	774	
Anpara-C (IPP) (2*600)		1200	545	1089	19.13	797	
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	0	0	0.00	4436	
Anpara-D		500	0	0	0.00	0	
Thermal (Total)		8629	3774	5053	106	8871	
Vishnuparyag HPS (IPP)		400	138	128	3.12	130	
Other Hydro		527	293	213	4.55	189	
Cogeneration		981	500	500	12.00	500	
Total UP		10537	4705	5894	126.12	9561	
Uttarakhand	Total Hydro	1398	469	451	10.47	436	
	Total Uttarakhand	1398	469	451	10.47	436	
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.02	-1	
	Delhi Gas Turbine (6x30 + 3x34)	282	72	79	1.81	76	
	Pragati Gas Turbine (2x104+ 1x122)	330	144	149	3.64	152	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (6*250)	1370	295	304	6.77	282	
	Badarpur TPS (NTPC) (3*95+2*210)	705	187	171	3.80	158	
	Thermal (Total)	2917	699	703	16.00	667	
	Total Delhi	2917	699	703	16.00	667	
HP	Baspa HPS (IPP) (2*150)	300	95	32	1.53	64	
	Malana HPS (IPP) (2*43)	86	45	22	0.86	36	
	Other Hydro	728	424	404	10.10	421	
	Total HP	1114	564	458	12.49	520	
J & K	Baglihar HPS (IPP) (3*150)	450	440	440	10.56	440	
	Other Hydro/IPP	436	122	135	2.96	123	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	562	575	13.52	563	
Total State Control Area Generation		40347	14177	15242	343.49	18618	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4631	4928	126.54	5273	
Total Regional Availability(Gross)		65319	35956	31943	791.21	37273	

IV. Total Hydro Generation:

Regional Entities Hydro	11969	8227	3515	123.125898	5130
State Control Area Hydro	5684	2318	1827	49.78	1944
Total Regional Hydro	17654	10545	5342	172.90	7074

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	300	50	500	200	3.38	0.41	2.96
Gwalior-Agra (D/C)	1826	1621	2297	0	42.17	0.00	42.17
Zerda-Kankroli	-84	-281	0	285	0.00	5.38	-5.38
Zerda-Bhinmal	-29	-249	18	267	0.00	4.10	-4.10
Malanpur-Auraiya	-78	-44	0	99	0.00	1.07	-1.07
Badod-Kota/Morak	3	-34	56	-64	0.15	0.00	0.15
Mundra-Mohindergarh(HVDC)	2301	2502	2506	0	60.25	0.00	60.25
Vindhychal - Rihand	0	482	514	0	9.38	0.00	9.38
Sub Total WR	4239	4047			115.33	10.96	104.37
Pusauli Bypass	400	300	400	0	8.68	0.00	8.68
MZP- GKP (D/C)	38	170	265	85	3.51	0.00	3.51
Patna-Balia(D/C)	104	305	367	0	6.13	0.00	6.13
B'Sharif-Balia (D/C)	-220	-81	0	220	0.00	1.81	-1.81
Pusauli-Balia	-114	-16	0	114	0.00	0.24	-0.24
Gaya-Fatehpur (765 Kv)	119	106	319	0	3.60	0.00	3.60
Pusauli-Sahupuri	134	194	194	0	3.96	0.00	3.96
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-40	0	46	0.00	0.82	-0.82
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-29	-57	113	140	0.00	0.83	-0.83
Sub Total ER	392	881			25.86	3.69	22.17
Total IR Exch	4631	4928			141.20	14.66	126.54

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
26.52	0.65	27.17	0.50	-1.75	6.53	3.37	0.77	-0.77

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
34.96	75.77	110.73	22.17	104.37	126.54	-12.79	28.60	15.81

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	0.29	7.67	38.18	57.49	22.97	10.69	1.33	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					
50.25	7.05	49.78	18.41	50.02	0.06	0.08	50.25	49.93

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	403	00:00	0.0	0.0	0.0	0.0
Gorakhpur	400	415	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly	400	418	04:25	399	19:00	0.0	0.0	0.0	0.0
Kanpur	400	417	05:02	400	19:08	0.0	0.0	0.0	0.0
Dadri	400	422	03:39	403	19:07	0.0	0.0	8.0	0.0
Ballabgarh	400	428	03:01	404	19:08	0.0	0.0	27.2	0.0
Bawana	400	426	03:39	402	19:09	0.0	0.0	15.7	0.0
Bassi	400	424	03:59	402	09:33	0.0	0.0	7.6	0.0
Hissar	400	419	03:03	392	19:24	0.0	0.0	0.0	0.0
Moga	400	424	02:41	401	19:23	0.0	0.0	13.4	0.0
Abdullapur	400	429	02:46	396	19:25	0.0	0.0	28.7	0.0
Nalagarh	400	432	01:22	405	19:25	0.0	0.0	51.4	7.7
Kishenpur	400	424	02:44	401	20:06	0.0	0.0	13.9	0.0
Wagooora	400	414	03:38	381	20:11	0.0	17.8	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	773	08:01	741	19:09	0.0	0.1	0.0	0.0
Balia	765	772	17:25	750	20:06	0.0	0.0	0.0	0.0
Moga	765	806	03:23	760	19:24	0.0	0.0	10.7	0.0
Agra	765	788	03:56	752	19:25	0.0	0.0	0.0	0.0
Bhiwani	765	806	03:00	761	19:09	0.0	0.0	12.5	0.0
Unnao	765	762	05:02	742	19:09	0.0	0.0	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	482.36	519.70	482.50	519.70	434.10	239.70
Pong	426.72	384.05	404.26	320.26	402.23	273.51	191.85	39.11
Tehri	829.79	740.04	766.40	175.00	766.55	177.00	95.57	207.00
Koteswar	612.50	598.50	611.70	5.20	611.06	4.69	207.00	205.00
Chamera-I	760.00	748.75	757.12	0.00	0.00	0.00	292.56	308.39
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	517.10	2.82	515.95	1.07	248.36	127.65

* 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	496	0	-155	7	0	-3.71	8.53	4.82
Delhi	-197	-87	-41	-97	200	0	-3.08	1.87	-1.21
Haryana	366	-361	0	362	147	0	8.73	-4.13	4.60
HP	99	-258	0	-104	-462	0	1.15	-6.82	-5.66
J&K	-70	-51	0	-121	-15	0	-2.40	-0.52	-2.91
CHD	0	0	0	0	-10	0	0.00	-0.13	-0.13
Rajasthan	-125	653	2	-121	505	2	-2.94	12.92	9.98
UP	176	0	0	218	0	0	4.53	0.00	4.53
Uttarakhand	0	300	31	0	376	0	0.00	8.11	8.11
Total	94	693	-7	-18	747	2	2.29	19.84	22.13

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-155	-155	497	7	0	0
Delhi	-97	-197	236	-92	0	-41
Haryana	366	362	183	-582	0	0
HP	99	-104	-79	-623	0	0
J&K	-70	-121	84	-101	0	0
CHD	0	0	0	-20	0	0
Rajasthan	-121	-125	655	224	2	2
UP	223	156	0	0	0	0
Uttarakhand	0	0	414	108	31	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 18.04.2015 :**

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 :**