

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 29.05.2015
Date of Reporting : 30.05.2015

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
42357	2014	44372	50.04	43249	1981	45230	50.09	1024.9	55.11

* 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	51.44	19.37		70.80	87.22	86.58	-0.64	157.38	0.00
Haryana	48.17	0.59		48.76	100.67	98.55	-2.12	147.31	0.00
Rajasthan	110.47	0.22	16.61	127.30	70.55	73.86	3.31	201.16	0.00
Delhi	24.50			24.50	86.35	85.56	-0.79	110.06	0.07
UP	143.20	16.18		159.38	135.28	138.07	2.79	297.45	45.87
Uttarakhand		21.32		21.32	20.01	19.56	-0.45	40.88	0.09
HP		20.52		20.52	7.01	5.62	-1.39	26.14	0.00
J & K		15.00	0.00	15.00	21.85	23.54	1.69	38.53	9.09
Chandigarh				0.00	6.07	5.95	0.27	5.95	0.00
Total	377.78	93.19	16.61	487.58	535.01	537.29	2.66	1024.87	55.11

* 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	5775	0	-57	286	6698	0	-66	523	7410
Haryana	6713	0	-215	318	6886	0	-49	299	7019
Rajasthan	7978	0	162	491	8039	0	143	472	8921
Delhi	4377	0	-77	585	4734	0	219	685	5320
UP	12445	1510	248	967	12637	1730	232	1244	12783
Uttarakhand	1925	40	42	339	1656	0	47	177	1925
HP	1029	0	-72	-1110	955	0	-29	-994	1212
J&K	1857	464	239	-344	1422	251	-2	-523	1918
Chandigarh	258	0	-5	15	223	0	1	0	302
Total	42357	2014	265	1546	43249	1981	497	1884	44988

UI/OA/PX (OD/Import: (+ve), UD/Export: (-ve))

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

figures may not be at simultaneous hour.

Diversity is 1.04

III. Regional Entities :

Entity	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
				(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1690	1831	1836	40.64	1693	40.17	0.47
	Rihand I STPS (2*500)	1000	450	500	454	11.46	477	10.32	1.14
	Rihand II STPS (2*500)	1000	943	986	907	22.95	956	21.02	1.93
	Rihand III STPS (2*500)	1000	943	942	881	22.50	938	20.92	1.58
	Dadri I STPS (4*210)	840	815	690	755	17.22	717	16.49	0.72
	Dadri II STPS (2*490)	980	980	720	723	17.16	715	17.16	0.00
	Unchahar I TPS (2*210)	420	405	298	379	8.32	346	8.33	-0.02
	Unchahar II TPS (2*210)	420	401	292	352	7.98	332	7.85	0.13
	Unchahar III TPS (1*220)	210	201	154	173	3.94	164	3.88	0.06
	ISTPP (Jhajihar) (3*500)	1500	1000	643	953	15.99	666	16.39	-0.40
	Dadri GPS (4*130.19+2*154.51)	830	807	347	355	8.48	353	8.38	0.10
	Anta GPS (3*88.71+1*153.2)	419	381	212	212	5.39	225	5.17	0.23
	Auraiya GPS (4*111.19+2*109.30)	663	644	152	148	3.53	147	3.52	0.01
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.03
	Singrauli Solar	15	3	0	0	0.07	3	0.07	0.00
	KHEP	400	0	0	0	0.00	0	0.00	0.00
Sub Total (A)	11712	9666	7767	8128	186	7736	180	6	
B. NPC	NAPS (2*220)	440	379	419	424	9.18	382	9.10	0.08
	RAPS- B (2*220)	440	365	408	414	8.82	367	8.76	0.06
	RAPS- C (2*220)	440	380	436	427	9.22	384	9.12	0.10
	Sub Total (B)	1320	1124	1263	1265	27.21	1134	26.98	0.24
C. NHPC	Chamera I HPS (3*180)	540	538	546	545	13.10	546	12.91	0.19
	Chamera II HPS (3*100)	300	300	303	311	7.36	306	7.20	0.16
	Chamera III HPS (3*77)	231	231	236	241	5.67	236	5.55	0.12
	Bairasuil HPS(3*60)	180	179	185	123	3.51	146	3.42	0.09
	Salal-HPS (6*115)	690	661	672	672	16.22	676	15.87	0.35
	Tanakpur-HPS (3*40)	94	63	90	55	1.62	68	1.49	0.13
	Uri-I HPS (4*120)	480	475	479	477	11.63	485	11.40	0.23
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	280	281	234	5.54	231	5.11	0.43
	Dulhasti-HPS (3*130)	390	387	402	408	9.46	394	9.29	0.17
	Sewa-II HPS (3*40)	120	119	126	81	2.08	87	2.01	0.08
	Parbati 3 (4*130)	520	260	263	0	3.23	134	3.15	0.07
	Sub Total (C)	4065	3494	3583	3147	79	3309	77	2
	D. SJVNL	NJPC (6*250)	1500	1605	1612	1416	37.66	1569	37.75
Rampur HEP (6*68.67)		412	442	448	385	10.61	442	10.43	0.18
Sub Total (D)	1912	2047	2060	1801	48.27	2011	48.18	0.09	
E. THDC	Tehri HPS (4*250)	1000	290	299	301	6.78	283	6.70	0.08
	Koteshwar HPS (4*100)	400	134	284	90	3.25	135	3.21	0.04
Sub Total (E)	1400	424	583	391	10.03	418	9.91	0.12	
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	853	1329	633	20.56	857	20.48	0.08
	Dehar HPS (6*165)	990	611	825	495	15.01	625	14.67	0.34
	Pong HPS (6*66)	396	91	198	66	2.21	92	2.19	0.01
	Sub Total (F)	2900	1556	2352	1194	37.77	1574	37.34	0.43
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	209	137	3.83	159	3.56	0.27
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1070	800	21.45	894	21.56	-0.11
	Malana Stg-II HPS (2*50)	100	0	60	55	1.56	65	1.46	0.10
	Shree Cement TPS (2*150)	300	0	281	296	6.46	269	6.48	-0.02
	Budhil HPS(IPP)	70	0	74	74	1.76	73	1.75	0.01
	Sub Total (G)	1662	0	1695	1362	35.06	1461	34.82	0.24
H. Total Regional Entities (A-G)	24972	18310	19303	17289	423.42	17643	414.37	9.05	

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	320	320	8.21	342
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	90	100	2.31	96
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	170	174	4.28	179
	Goindwāl(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	723	1329	27.42	1142
	Talwandi Saboo (1*660)	660	346	507	9.21	384
	Thermal (Total)	4680	1649	2430	51.44	2143
	Total Hydro	1148	811	793	19.37	807
	Total Punjab	5828	2460	3223	70.80	2950
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	528	548	11.90	496
Faridabad GPS (NTPC)		432	168	166	4.33	180
RGTPP (Khedar) (IPP) (2*600)		1200	454	863	11.72	489
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	1005	591	20.22	843
Thermal (Total)		4944	2155	2168	48.17	2007
Total Hydro		62	28	22	0.59	25
Total Haryana		5006	2183	2190	48.76	2032
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	894	869	21.74
	suratgarh TPS (6*250)	1500	396	195	8.68	362
	Chabra TPS (4*250)	1000	390	381	9.13	380
	Dholpur GPS (3*110)	330	0	0	0.00	0
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	119	166	3.00	125
	RAPS A (NPC) (1*100+1*200)	300	137	138	3.41	142
	Barsingar (NLC) (2*125)	250	92	93	2.08	87
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwst LTPS (IPP) (8*135)	1080	823	962	20.75	865
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	713	435	14.84	618
	Kawai(Adani) (2*660)	1320	981	1181	26.85	1119
	Thermal (Total)	8276	4545	4420	110	4603
	Total Hydro	550	0	0	0.22	9
	Wind power	2798	335	549	15.93	664
	Biomass	99	29	29	0.69	29
	Solar	730	0	0	0.00	0
	Renewable/Others (Total)	3627	364	578	16.61	692
	Total Rajasthan	12453	4909	4998	127.30	5304
	UP	Anpara TPS (3*210+2*500)	1630	1434	1251	30.50
Obra TPS (2*50+2*94+5*200)		1194	451	459	10.80	450
Paricha TPS (2*110+2*220+2*250)		1140	781	769	18.00	750
Panki TPS (2*105)		210	135	140	3.30	138
Harduaganj TPS (1*60+1*105+2*250)		665	438	310	9.90	413
Tanda TPS (NTPC) (4*110)		440	385	362	9.10	379
Roza TPS (IPP) (4*300)		1200	1053	1062	25.50	1063
Anpara-C (IPP) (2*600)		1200	540	1076	23.40	975
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	403	404	8.90	371
Anpara-D		500	0	0	0.90	38
Thermal (Total)		8629	5620	5833	140	5846
Vishnuparyag HPS (IPP)(including Alakananada)		400	596	517	13.78	574
Other Hydro		527	77	208	2.40	100
Cogeneration		981	120	120	2.90	121
Total UP		10537	6413	6678	159.38	6067
Uttarakhand	Total Hydro	1398	943	798	21.32	888
	Total Uttarakhand	1398	943	798	21.32	888
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.02	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	71	73	1.72	71
	Pragati Gas Turbine (2x104+ 1x122)	330	279	262	6.49	270
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	322	308	7.28	303
	Badarpur TPS (NTPC) (3*95+2*210)	705	372	337	9.04	377
	Thermal (Total)	2917	1044	980	24.50	1021
	Total Delhi	2917	1044	980	24.50	1021
HP	Baspa HPS (IPP) (2*150)	300	300	330	7.49	312
	Malana HPS (IPP) (2*43)	86	53	33	1.21	50
	Other Hydro	728	483	509	11.82	492
	Total HP	1114	836	872	20.52	855
J & K	Baglihar HPS (IPP) (3*150)	450	450	450	10.80	450
	Other Hydro/IPP	436	185	175	4.20	175
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	635	625	15.00	625
Total State Control Area Generation		40347	19423	20364	487.58	19741
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6132	6336	137.33	5722
Total Regional Availability(Gross)		65319	44858	43989	1048.33	43106

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9917	7526	202.31	8430
State Control Area Hydro	5684	3330	3318	93.19	3309
Total Regional Hydro	17654	13247	10844	295.51	11738

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	-50	200	200	1.71	1.18	0.54
Gwalior-Agra (D/C)	2204	1956	2251	0	42.15	0.00	42.15
Zerda-Kankroli	-54	-167	0	264	0.00	4.36	-4.36
Zerda-Bhinmal	-7	-79	13	206	0.00	2.52	-2.52
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00
Badod-Kota/Morak	-13	35	62	33	0.38	0.00	0.38
Mundra-Mohinderqarh(HVDC)	2397	2403	2406	0	57.58	0.00	57.58
Vindhychal - Rihand	491	504	511	0	11.26	0.00	11.26
Sub Total WR	5068	4602			113.09	8.06	105.03
Pusauli Bypass	400	400	400	0	8.56	0.00	8.56
MZP- GKP (D/C)	55	251	301	98	4.76	0.00	4.76
Patna-Balia(D/C)	424	476	559	0	11.03	0.00	11.03
B'Sharif-Balia (D/C)	-50	37	112	146	0.34	0.00	0.34
Pusauli-Balia	96	239	271	0	1.75	0.00	1.75
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	211	210	211	0	4.16	0.00	4.16
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-40	0	46	0.00	0.95	-0.95
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-32	161	251	180	2.66	0.00	2.66
Sub Total ER	1064	1734			33.25	0.95	32.30
Total IR Exch	6132	6336			146.33	9.01	137.33

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
34.64	1.73	36.37	11.58	-4.21	4.85	3.81	0.79	-0.79

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
53.60	85.72	139.32	32.30	105.03	137.33	-21.30	19.31	-1.99

V(C). Inter National Exchange with Nepal [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	
132 KV Tanakpur - Mahendamagar	25	22	0	34	0	1	-0.54

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	0.94	15.62	63.04	71.99	8.83	2.92	0.67	NA

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev. (Hz)	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
50.28	19.02	49.73	22.13	49.97	0.06	0.07	50.22	49.92

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	405	05:04	398	23:07	0.0	0.0	0.0	0.0
Gorakhpur	400	415	06:02	394	23:15	0.0	0.0	0.0	0.0
Bareilly	400	418	08:00	396	20:00	0.0	0.0	0.0	0.0
Kanpur	400	416	06:00	395	23:06	0.0	0.0	0.0	0.0
Dadri	400	414	06:01	393	23:07	0.0	0.0	0.0	0.0
Ballabgarh	400	420	06:02	395	23:09	0.0	0.0	0.0	0.0
Bawana	400	415	06:01	396	23:06	0.0	0.0	0.0	0.0
Bassi	400	418	06:02	389	23:07	0.0	0.2	0.0	0.0
Hissar	400	407	05:01	386	23:06	0.0	5.1	0.0	0.0
Moga	400	412	05:02	395	10:57	0.0	0.0	0.0	0.0
Abdullapur	400	407	18:05	396	14:55	0.0	1.5	0.0	0.0
Nalagarh	400	416	19:03	396	10:54	0.0	0.0	0.0	0.0
Kishenpur	400	414	04:08	402	22:17	0.0	0.0	0.0	0.0
Wagoora	400	409	03:39	384	21:09	0.0	11.3	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	788	06:02	747	23:09	0.0	0.0	0.0	0.0
Balia	765	772	06:02	737	10:40	0.0	11.0	0.0	0.0
Moga	765	788	05:02	757	23:09	0.0	0.0	0.0	0.0
Agra	765	784	06:04	739	23:09	0.0	0.6	0.0	0.0
Bhiwani	765	789	05:02	756	23:02	0.0	0.0	0.0	0.0
Unnao	765	0	00:00	9999.0	00:00	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 (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	487.77	661.49	479.66	454.47	629.85	710.50
Pong	426.72	384.05	405.68	361.16	402.68	281.22	73.68	152.09
Tehri	829.79	740.04	752.70	68.00	742.80	14.00	179.71	223.00
Koteshwar	612.50	598.50	606.70	3.10	609.72	4.44	223.00	216.00
Chamera-I	760.00	748.75	757.95	0.00	0.00	0.00	362.07	355.03
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	521.72	10.78	520.35	6.59	319.80	420.44

* 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	118	405	0	118	168	0	3.33	7.51	10.84
Delhi	622	84	-20	515	90	-20	13.79	3.88	17.67
Haryana	68	230	0	93	225	0	1.76	4.98	6.74
HP	-792	-202	0	-488	-622	0	-14.45	-9.83	-24.28
J&K	-507	-17	0	-395	52	0	-10.92	0.33	-10.59
CHD	0	0	0	0	15	0	0.24	0.60	0.83
Rajasthan	-121	591	2	-117	606	2	-2.86	14.27	11.42
UP	1244	0	0	967	0	0	24.81	0.00	24.81
Uttarakhand	74	81	22	74	243	22	1.77	4.40	6.16
Total	706	1173	4	766	776	4	17.48	26.12	43.61

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	217	118	595	6	0	0
Delhi	672	475	600	-139	0	-20
Haryana	93	64	250	-29	0	0
HP	-488	-843	-155	-728	0	0
J&K	-355	-545	199	-76	0	0
CHD	30	0	79	0	0	0
Rajasthan	-117	-121	744	-44	2	2
UP	1260	918	0	0	0	0
Uttarakhand	74	74	259	9	22	3

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 29.05.2015 :**
Normal**XIV. Synchronisation of new generating units :****XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**
0.00**XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**