

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्ट की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 15.05.2015
Date of Reporting : 16.05.2015

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
39959	1766	41726	50.08	37455	1488	38943	50.08	889.4	34.24

* 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	20.42	18.78		39.20	80.41	79.39	-1.03	118.59	0.00
Haryana	46.77	0.68		47.44	79.84	78.04	-1.81	125.48	0.00
Rajasthan	104.65	0.00	5.61	110.26	73.68	75.12	1.45	185.39	0.00
Delhi	25.13			25.13	67.80	65.16	-2.64	90.29	0.03
UP	132.90	12.80		145.70	123.40	120.13	-3.27	265.83	26.68
Uttarakhand		17.92		17.92	18.76	19.62	0.86	37.54	0.15
HP		18.37		18.37	5.39	6.26	0.87	24.63	0.00
J & K		14.33	0.00	14.33	20.60	22.56	1.96	36.89	7.38
Chandigarh				0.00	5.00	4.76	0.27	4.76	0.00
Total	329.87	82.88	5.61	418.36	474.88	471.04	-3.33	889.40	34.24

* 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	5494	0	-136	489	4956	0	-74	715	5494
Haryana	6452	0	-120	336	5782	0	325	280	6452
Rajasthan	7717	0	-4	595	7626	0	-34	358	8353
Delhi	3896	0	-198	438	3847	0	14	391	4311
UP	11590	1370	496	417	11565	1230	109	1012	11685
Uttarakhand	1770	40	124	194	1396	0	30	76	1770
HP	1035	0	-56	-1218	832	0	53	-1243	1216
J&K	1781	356	114	-356	1290	258	162	-655	1863
Chandigarh	224	0	4	-10	162	0	-8	0	233
Total	39959	1766	223	884	37455	1488	576	933	40621

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

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III. Regional Entities :

A. NTPC	Station/ Constituent	Inst. Capacity	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI Net MU
		(Effective) MW							
	Singrauli STPS (5*200+2*500)	2000	1690	1837	1856	39.64	1652	39.38	0.25
	Rihand I STPS (2*500)	1000	789	801	741	18.14	756	16.61	1.53
	Rihand II STPS (2*500)	1000	677	983	561	15.89	662	14.47	1.43
	Rihand III STPS (2*500)	1000	970	1017	964	21.93	914	20.68	1.25
	Dadri I STPS (4*210)	840	615	422	440	11.50	479	10.60	0.90
	Dadri II STPS (2*490)	980	980	653	655	17.01	709	16.87	0.14
	Unchahar I TPS (2*210)	420	405	263	318	7.00	292	7.89	-0.90
	Unchahar II TPS (2*210)	420	401	231	277	6.20	258	6.99	-0.80
	Unchahar III TPS (1*220)	210	201	125	131	3.34	139	3.55	-0.21
	ISTPP (Jhajjar) (3*500)	1500	1500	620	709	15.23	635	15.68	-0.45
	Dadri GPS (4*130.19+2*154.51)	830	806	266	348	7.63	318	7.58	0.05
	Anta GPS (3*88.71+1*153.2)	419	261	201	191	5.00	208	4.96	0.04
	Auraiya GPS (4*111.19+2*109.30)	663	644	153	159	3.76	157	3.75	0.01
	Dadri Solar	5	1	0	0	0.03	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.03
	Singrauli Solar	15	3	0	0	0.03	1	0.07	-0.04
	KHEP	400	0	0	0	0.00	0	0.00	0.00
	Sub Total (A)	11712	9945	7572	7350	172	7181	169	3
B. NPC	INAPS (2*220)	440	379	426	428	9.29	387	9.10	0.19
	RAPS- B (2*220)	440	371	416	421	8.91	371	7.30	1.61
	RAPS- C (2*220)	440	405	438	443	9.53	397	9.72	-0.19
	Sub Total (B)	1320	1155	1280	1292	27.73	1155	26.12	1.61
C. NHPC	Chamera I HPS (3*180)	540	534	542	540	12.85	535	12.72	0.12
	Chamera II HPS (3*100)	300	300	306	313	7.37	307	7.11	0.25
	Chamera III HPS (3*77)	231	231	240	237	5.63	235	5.49	0.14
	Bairasuil HPS(3*60)	180	179	181	121	3.96	165	3.88	0.08
	Salal-HPS (6*115)	690	661	663	664	15.95	664	15.71	0.24
	Tanakpur-HPS (3*40)	94	54	49	75	1.34	56	1.29	0.05
	Uri-I HPS (4*120)	480	475	479	478	11.65	486	11.29	0.37
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	210	213	143	3.83	160	3.70	0.13
	Dulhasti-HPS (3*130)	390	387	405	397	9.43	393	9.29	0.14
	Sewa-II HPS (3*40)	120	119	130	131	3.07	128	2.83	0.25
	Parbati 3 (4*130)	520	386	261	0	1.99	83	1.85	0.14
	Sub Total (C)	4065	3537	3470	3100	77	3211	75	2
D.SJVNL	NJPC (6*250)	1500	1605	1609	1625	38.53	1606	38.52	0.01
	Rampur HEP (6*68.67)	412	438	446	446	10.73	447	10.51	0.22
	Sub Total (D)	1912	2043	2055	2071	49.27	2053	49.03	0.24
E. THDC	Tehri HPS (4*250)	1000	456	454	152	9.35	389	9.30	0.05
	Koteshwar HPS (4*100)	400	188	304	180	4.52	188	4.50	0.02
	Sub Total (E)	1400	644	758	332	13.86	578	13.80	0.06
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	786	1164	482	19.08	795	18.87	0.21
	Dehar HPS (6*165)	990	598	660	560	14.91	621	14.36	0.55
	Pong HPS (6*66)	396	77	192	66	1.86	77	1.84	0.02
	Sub Total (F)	2900	1461	2016	1108	35.85	1494	35.07	0.77
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	150	101	2.53	105	2.62	-0.09
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1020	1000	22.16	924	23.44	-1.28
	Malana Stg-II HPS (2*50)	100	0	111	75	1.38	57	1.36	0.02
	Shree Cement TPS (2*150)	300	0	265	290	5.93	247	5.91	0.02
	Budhil HPS(IPP)	70	0	68	68	1.42	59	1.43	0.00
	Sub Total (G)	1662	0	1614	1534	33.42	1393	34.75	-1.33
H. Total Regional Entities (A-G)		24972	18785	18764	16787	409.54	17064	403.11	6.43

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	0	3.10	129	
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	90	2.14	89	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	215	377	6.45	269	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura (2*700)	1400	559	362	8.74	364	
	Talwandi Saboo (1*660)	660	0	0	0.00	0	
	Thermal (Total)	4680	1084	829	20.42	851	
	Total Hydro	1148	773	801	18.78	783	
	Total Punjab	5828	1857	1630	39.20	1633	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	452	639	11.44	476	
	DCRTPP (Yamuna nagar) (2*300)	600	483	475	11.55	481	
	Faridabad GPS (NTPC)	432	183	175	4.39	183	
	RGTPP (kheadar) (IPP) (2*600)	1200	380	381	9.28	386	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP) (2*660)	1320	376	377	10.11	421	
	Thermal (Total)	4944	1874	2047	46.77	1949	
	Total Hydro	62	27	25	0.68	28	
	Total Haryana	5006	1901	2072	47.44	1977	
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	532	520	12.86	536
		suratgarh TPS (6*250)	1500	570	569	14.38	599
Chabra TPS (4*250)		1000	448	408	9.95	414	
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	168	140	4.09	170	
RAPS A (NPC) (1*100+1*200)		300	140	143	3.48	145	
Barsingar (NLC) (2*125)		250	185	187	4.30	179	
Giral LTPS (2*125)		250	0	0	0.00	0	
Rajwest LTPS (IPP) (8*135)		1080	679	819	17.60	733	
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0	
Kalisindh Thermal(1*600)		600	450	450	10.72	447	
Kawai(Adani) (2*660)		1320	1186	1201	27.29	1137	
Thermal (Total)		8276	4358	4437	105	4360	
Total Hydro		550	0	0	0.00	0	
Wind power		2798	64	170	5.14	214	
Biomass		99	20	20	0.47	20	
Solar		730	0	0	0.00	0	
Renewable/Others (Total)		3627	84	190	5.61	234	
Total Rajasthan		12453	4442	4627	110.26	4594	
UP		Anpara TPS (3*210+2*500)	1630	1287	1358	31.20	1300
	Obra TPS (2*50+2*94+5*200)	1194	466	319	9.10	379	
	Paricha TPS (2*110+2*220+2*250)	1140	892	372	17.70	738	
	Panki TPS (2*105)	210	113	108	2.40	100	
	Harduaganj TPS (1*60+1*105+2*250)	665	221	212	5.20	217	
	Tanda TPS (NTPC) (4*110)	440	285	370	8.70	363	
	Roza TPS (IPP) (4*300)	1200	837	1080	22.50	938	
	Anpara-C (IPP) (2*600)	1200	1080	1084	25.70	1071	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	227	324	5.70	238	
	Anpara-D	500	106	61	1.80	75	
	Thermal (Total)	8629	5514	5288	130	5417	
	Vishnuparyag HPS (IPP)(including Alaknanda)	400	466	459	11.10	463	
	Other Hydro	527	73	81	1.70	71	
	Cogeneration	981	120	120	2.90	121	
	Total UP	10537	6173	5948	145.70	5608	
	Uttarakhand	Total Hydro	1398	724	730	17.92	747
		Total Uttarakhand	1398	724	730	17.92	747
Delhi	Rajghat TPS (2*67.5)	135	45	47	1.25	52	
	Delhi Gas Turbine (6x30 + 3x34)	282	114	112	2.72	113	
	Praagati Gas Turbine (2x104+ 1x122)	330	271	269	6.66	278	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (6*250)	1370	270	270	6.65	277	
	Badarpur TPS (NTPC) (3*95+2*210)	705	332	390	7.85	327	
	Thermal (Total)	2917	1032	1088	25.13	1047	
	Total Delhi	2917	1032	1088	25.13	1047	
HP	Baspa HPS (IPP) (2*150)	300	240	180	4.65	194	
	Malana HPS (IPP) (2*43)	86	75	47	1.30	54	
	Other Hydro	728	525	520	12.42	518	
	Total HP	1114	840	747	18.37	765	
J & K	Baglihar HPS (IPP) (3*150)	450	440	440	10.56	440	
	Other Hydro/IPP	436	163	145	3.77	157	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	603	585	14.33	597	
Total State Control Area Generation		40347	17572	17427	418.36	16969	
J. Net Inter Regional Exchange (import (+ve)/Export (-ve))			5087	3998	84.38	3516	
Total Regional Availability(Gross)		65319	41422	38213	912.28	37549	

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9578	7787	202.114960	8421
State Control Area Hydro	5684	3040	2969	82.88	2991
Total Regional Hydro	17654	12618	10756	284.99	11412

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	
Vindhyachal B/B	-350	50	50	350	0.71	3.22	-2.51		
Gwalior-Agra (D/C)	1878	928	1878	0	19.09	0.00	19.09		
Zerda-Kankroli	-25	-304	0	373	0.00	6.17	-6.17		
Zerda-Bhinmal	44	-245	67	345	0.00	4.29	-4.29		
Malanpur-Auraiya	-17	-53	0	112	0.00	1.61	-1.61		
Badod-Kota/Morak	11	-67	23	70	0.00	1.37	-1.37		
Mundra-Mohinderghar(HVDC)	2198	2503	2515	0	53.82	0.00	53.82		
Vindhyachal - Rihand	487	431	495	0	10.89	0.00	10.89		
Sub Total WR	4226	3243			84.51	16.67	67.84		
Pusauli Bypass	-365	-414	0	508	0.00	9.45	-9.45		
MZP- GKP (D/C)	234	186	350	0	4.18	0.00	4.18		
Patna-Balia(D/C)	442	400	510	0	9.25	0.00	9.25		
B'Sharif-Balia (D/C)	103	148	255	0	4.06	0.00	4.06		
Pusauli-Balia	243	187	333	0	2.57	0.00	2.57		
Gaya-Fatehpur (765 KV)	0	0	0	0	0.00	0.00	0.00		
Pusauli-Sahupuri	130	184	205	0	3.92	0.00	3.92		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	-38	-38	0	41	0.00	0.85	-0.85		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	112	102	211	18	2.87	0.00	2.87		
Sub Total ER	861	755			26.85	10.31	16.54		
Total IR Exch	5087	3998			111.35	26.97	84.38		

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	
	25.07	1.29	26.36	4.48	-5.88	4.63	0.43	0.75	-0.75

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Incld Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
36.21	53.09	89.30	16.54	67.84	84.38	-19.67	14.75	-4.92

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 - Mahendarnagar	-42	-34	0	42	0	1	-0.90		

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	0.00	2.40	42.41	76.03	16.84	5.34	0.08	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					
50.23	13.02	49.84	1.20	50.01	0.03	0.06	50.19	49.99

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
Gorakhpur	400	415	07:07	393	19:25	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	419	08:05	402	19:34	0.0	0.0	0.0	0.0
Dadri	400	423	05:32	406	11:32	NA	NA	NA	NA
Ballabgarh	400	424	04:03	408	19:35	0.0	0.0	21.1	0.0
Bawana	400	421	06:00	408	19:24	0.0	0.0	0.4	0.0
Bassi	400	422	04:02	401	09:50	0.0	0.0	2.2	0.0
Hissar	400	409	04:01	396	19:36	0.0	0.0	0.0	0.0
Moga	400	420	04:03	406	19:36	0.0	0.0	0.0	0.0
Abdullapur	400	418	05:04	396	19:33	0.0	0.0	0.0	0.0
Nalagarh	400	421	05:02	408	19:27	0.0	0.0	0.5	0.0
Kishenpur	400	423	04:01	407	20:08	0.0	0.0	9.9	0.0
Wagoora	400	415	03:14	388	20:22	0.0	3.7	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	779	08:06	744	19:35	0.0	0.0
Balia	765	777	07:03	742	19:34	0.0	0.0	0.0	0.0
Moga	765	800	04:01	775	19:36	0.0	0.0	0.0	0.0
Agra	765	787	04:04	696	14:08	0.0	0.0	0.0	0.0
Bhiwani	765	800	04:04	775	19:36	0.0	0.0	0.0	0.0
Unnao	765	768	08:05	743	19:34	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	486.43	627.57	481.36	488.47	781.35	654.15
Pong	426.72	384.05	405.39	352.07	403.20	296.79	160.64	129.04
Tehri	829.79	740.04	755.30	87.00	748.70	42.00	755.30	300.00
Koteshwar	612.50	598.50	611.25	5.20	610.90	5.02	300.00	300.00
Chamera-I	760.00	748.75	754.35	0.00	0.00	0.00	327.53	347.76
Rihand	268.22	252.98	840.50	123.70	846.30	199.30	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	523.49	10.78	520.65	5.07	326.21	418.68

* 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	197	518	0	190	299	0	6.17	10.70	16.86
Delhi	469	-78	0	410	38	-10	10.37	1.52	11.90
Haryana	68	212	0	135	201	0	2.01	5.12	7.13
HP	-865	-379	0	-357	-861	0	-12.44	-15.14	-27.58
J&K	-554	-101	0	-341	-15	0	-10.19	-0.26	-10.45
CHD	0	0	0	0	-10	0	0.24	0.02	0.26
Rajasthan	-121	477	2	-117	710	2	-2.85	17.76	14.91
UP	1012	0	0	417	0	0	14.03	0.00	14.03
Uttarakhand	74	3	0	74	120	0	1.76	1.29	3.05
Total	280	651	2	409	483	-8	9.09	21.01	30.10

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	345	190	576	44	0	0
Delhi	489	321	356	-144	0	-10
Haryana	135	64	231	194	0	0
HP	-307	-915	-379	-911	0	0
J&K	-300	-554	59	-127	0	0
CHD	30	0	25	-15	0	0
Rajasthan	-117	-121	915	477	2	2
UP	1038	333	0	0	0	0
Uttarakhand	74	74	127	2	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 15.05.2015 :****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 :**