

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 23.05.2015
Date of Reporting : 24.05.2015

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
40557	1059	41616	50.16	41137	1983	43120	50.09	975.2	44.74

* 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	45.10	18.17		63.27	92.89	91.69	-1.20	154.96	0.00
Haryana	49.50	0.68		50.18	89.60	89.36	-0.24	139.55	0.00
Rajasthan	99.64	0.00	19.42	119.06	69.62	70.42	0.80	189.48	0.00
Delhi	22.66			22.66	82.52	79.83	-2.69	102.49	0.14
UP	125.82	15.91		141.73	141.21	141.51	0.30	283.24	36.79
Uttarakhand		19.24		19.24	19.54	18.43	-1.11	37.68	0.60
HP		21.75		21.75	4.48	4.40	-0.08	26.15	0.00
J & K		14.61	0.00	14.61	21.38	21.44	0.06	36.05	7.21
Chandigarh				0.00	5.52	5.61	0.27	5.61	0.00
Total	342.73	90.36	19.42	452.50	526.76	522.69	-3.89	975.19	44.74

* 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	6538	0	-197	407	6081	0	61	688	7414
Haryana	6159	0	-310	302	6342	0	-30	285	6753
Rajasthan	7617	0	-60	518	7687	0	-64	340	8704
Delhi	4204	0	-40	438	4568	0	14	601	4964
UP	11614	650	-8	949	12363	1720	130	1169	12568
Uttarakhand	1551	75	-174	210	1604	0	-23	75	1717
HP	999	6	-29	-1205	962	0	-23	-1346	1231
J&K	1642	328	186	-337	1316	263	-60	-583	1792
Chandigarh	234	0	-12	10	212	0	3	0	289
Total	40557	1059	-645	1292	41137	1983	9	1230	42704

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

Diversity is 1.06

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	1680	1825	1843	43.41	1809	40.19	3.22
	Rihand I STPS (2*500)	1000	463	511	445	11.70	488	10.79	0.91
	Rihand II STPS (2*500)	1000	951	989	1039	23.46	978	21.84	1.62
	Rihand III STPS (2*500)	1000	952	1007	1011	22.81	950	21.74	1.07
	Dadri I STPS (4*210)	840	815	580	680	16.21	675	15.61	0.59
	Dadri II STPS (2*490)	980	980	684	678	16.89	704	16.96	-0.07
	Unchahar I TPS (2*210)	420	405	343	313	8.27	344	9.31	-1.04
	Unchahar II TPS (2*210)	420	401	277	287	7.78	324	8.66	-0.88
	Unchahar III TPS (1*220)	210	144	135	133	2.43	101	3.05	-0.62
	ISTPP (Jhajjar) (3*500)	1500	1500	637	640	14.86	619	14.95	-0.08
	Dadri GPS (4*130.19+2*154.51)	830	806	364	353	8.66	361	8.86	-0.21
	Anta GPS (3*88.71+1*153.2)	419	381	216	211	5.49	229	5.43	0.06
	Auraiva GPS (4*111.19+2*109.30)	663	643	150	157	3.67	153	3.72	-0.05
	Dadri Solar	5	0	0	0	0.00	0	0.00	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.03
	Singrauli Solar	15	3	0	0	0.07	3	0.05	0.02
	KHEP	400	0	0	0	0.00	0	0.00	0.00
	Sub Total (A)	11712	10126	7718	7790	186	7739	181	5
B. NPC	INAPS (2*220)	440	381	410	435	9.15	381	9.14	0.01
	RAPS- B (2*220)	440	420	417	434	9.19	383	10.08	-0.89
	RAPS- C (2*220)	440	400	430	441	9.33	389	9.59	-0.27
	Sub Total (B)	1320	1201	1257	1310	27.67	1153	28.82	-1.15
C. NHPC	Chamera I HPS (3*180)	540	540	547	546	13.10	546	12.96	0.15
	Chamera II HPS (3*100)	300	300	306	314	7.38	307	7.20	0.18
	Chamera III HPS (3*77)	231	231	234	234	5.62	234	5.55	0.07
	Bairasul HPS(3*60)	180	179	184	124	3.94	164	3.90	0.04
	Salal-HPS (6*115)	690	666	673	673	16.22	676	15.97	0.25
	Tanakpur-HPS (3*40)	94	63	71	61	1.63	68	1.50	0.13
	Uri-I HPS (4*120)	480	475	476	476	11.60	483	11.40	0.20
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	210	215	214	3.97	165	4.70	-0.73
	Dulhasti-HPS (3*130)	390	387	405	400	9.43	393	9.29	0.14
	Sewa-II HPS (3*40)	120	119	122	118	2.86	119	2.86	0.00
	Parbati 3 (4*130)	520	260	265	0	3.85	160	3.84	0.02
	Sub Total (C)	4065	3430	3498	3159	80	3317	79	0
D.SJVNL	NJPC (6*250)	1500	1605	1629	1628	38.78	1616	38.51	0.27
	Rampur HEP (6*68.67)	412	438	447	447	10.77	449	10.51	0.25
	Sub Total (D)	1912	2043	2076	2075	49.55	2064	49.03	0.52
E. THDC	Tehri HPS (4*250)	1000	290	290	260	6.45	269	6.39	0.06
	Koteshwar HPS (4*100)	400	146	291	100	3.37	141	3.50	-0.13
	Sub Total (E)	1400	436	581	360	9.82	409	9.89	-0.07
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	845	1168	649	20.42	851	20.27	0.14
	Dehar HPS (6*165)	990	605	825	495	14.88	620	14.51	0.37
	Pong HPS (6*66)	396	51	192	0	1.22	51	1.22	0.01
	Sub Total (F)	2900	1500	2185	1144	36.52	1522	36.00	0.52
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	149	222	4.31	180	4.62	-0.32
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1170	1170	27.63	1151	28.08	-0.45
	Malana Stg-II HPS (2*50)	100	0	110	60	1.69	71	1.59	0.10
	Shree Cement TPS (2*150)	300	0	245	293	6.09	254	6.19	-0.10
	Budhil HPS(IPP)	70	0	72	72	1.73	72	1.70	0.02
	Sub Total (G)	1662	0	1746	1818	41.46	1727	42.19	-0.73
H. Total Regional Entities (A-G)		24972	18736	19061	17656	430.35	17931	426.31	4.04

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	420	8.41	350
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	110	120	2.44	102
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	173	212	4.21	175
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1366	705	25.30	1054
	Talwandi Saboo (1*660)	660	337	0	4.74	198
	Thermal (Total)	4680	2306	1457	45.10	1879
	Total Hydro	1148	763	767	18.17	757
	Total Punjab	5828	3069	2224	63.27	2636
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	248	557	8.18	341
Faridabad GPS (NTPC)		432	174	166	4.48	187
RGTPP (kheadar) (IPP) (2*600)		1200	744	996	19.31	805
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	812	568	17.53	731
Thermal (Total)		4944	1978	2287	49.50	2063
Total Hydro		62	27	29	0.68	28
Total Haryana		5006	2005	2316	50.18	2091
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	689	694	16.45
	suratgarh TPS (6*250)	1500	373	380	9.20	383
	Chabra TPS (4*250)	1000	586	568	13.38	558
	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	186	181	4.60	192
	RAPS A (NPC) (1*100+1*200)	300	133	140	3.41	142
	Barsingar (NLC) (2*125)	250	66	66	1.49	62
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	674	698	16.44	685
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	440	440	10.81	450
	Kawai(Adani) (2*660)	1320	958	912	23.87	994
	Thermal (Total)	8276	4105	4079	100	4152
	Total Hydro	550	0	0	0.00	0
	Wind power	2798	735	1164	18.72	780
	Biomass	99	25	25	0.59	25
	Solar	730	0	0	0.11	4
	Renewable/Others (Total)	3627	760	1189	19.42	809
	Total Rajasthan	12453	4865	5268	119.06	4961
	UP	Anpara TPS (3*210+2*500)	1630	1303	1331	31.10
Obra TPS (2*50+2*94+5*200)		1194	296	427	9.10	379
Paricha TPS (2*110+2*220+2*250)		1140	857	838	19.80	825
Panki TPS (2*105)		210	135	131	3.10	129
Harduaganj TPS (1*60+1*105+2*250)		665	374	214	6.90	288
Tanda TPS (NTPC) (4*110)		440	280	290	7.05	294
Roza TPS (IPP) (4*300)		1200	1089	1062	25.58	1066
Anpara-C (IPP) (2*600)		1200	549	547	13.00	542
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	324	324	7.30	304
Anpara-D		500	0	0	0.00	0
Thermal (Total)		8629	5207	5164	123	5122
Vishnuparyag HPS (IPP)(including Alaknanda)		400	596	596	13.78	574
Other Hydro		527	121	69	2.12	88
Cogeneration		981	120	120	2.90	121
Total UP		10537	6044	5949	141.73	5331
Uttarakhand		Total Hydro	1398	799	806	19.24
	Total Uttarakhand	1398	799	806	19.24	802
Delhi	Rajghat TPS (2*67.5)	135	-1	-1	-0.01	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	69	106	2.24	93
	Praagati Gas Turbine (2x104+ 1x122)	330	276	274	6.64	277
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	285	284	6.69	279
	Badarpur TPS (NTPC) (3*95+2*210)	705	330	331	7.11	296
	Thermal (Total)	2917	959	994	22.66	944
	Total Delhi	2917	959	994	22.66	944
HP	Baspa HPS (IPP) (2*150)	300	303	333	7.75	323
	Malana HPS (IPP) (2*43)	86	45	91	1.60	67
	Other Hydro	728	516	514	12.40	517
	Total HP	1114	864	938	21.75	906
J & K	Baglihar HPS (IPP) (3*150)	450	442	442	10.60	442
	Other Hydro/IPP	436	171	168	4.01	167
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	613	610	14.61	609
Total State Control Area Generation		40347	19218	19105	452.50	18280
J. Net Inter Regional Exchange (import +ve)/Export (-ve)			4752.92	5064.22	117.48	4895
Total Regional Availability(Gross)		65319	43032	41825	1000.33	41106

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9769	8191	209.127254	8714
State Control Area Hydro	5684	3187	3219	90.36	3191
Total Regional Hydro	17654	12956	11410	299.48	11904

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	-350	0	350	0.00	7.88	-7.88		
Gwalior-Agra (D/C)	1466	1800	2026	0	37.51	0.00	37.51		
Zerda-Kankroli	-121	-198	0	286	0.00	4.13	-4.13		
Zerda-Bhinmal	-106	-161	13	264	0.00	2.94	-2.94		
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00		
Badod-Kota/Morak	-63	-48	17	81	0.00	0.78	-0.78		
Mundra-Mohinderghar(HVDC)	2496	2496	2506	0	60.28	0.00	60.28		
Vindhychal - Rihand	409	388	497	0	9.42	0.00	9.42		
Sub Total WR	3781	3927			107.20	15.73	91.47		
Pusauli Bypass	-39	-261	100	347	0.12	4.15	-4.04		
MZP- GKP (D/C)	284	335	490	0	7.62	0.00	7.62		
Patna-Balia(D/C)	344	410	486	0	9.61	0.00	9.61		
B'Sharif-Balia (D/C)	54	150	181	0	2.57	0.00	2.57		
Pusauli-Balia	166	200	300	0	2.47	0.00	2.47		
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00		
Pusauli-Sahupuri	140	150	200	0	3.98	0.00	3.98		
K'nasa-Sahupuri	0	0	0	0	0.96	0.00	0.96		
Son Ngr-Rihand	-33	-40	0	40	0.00	0.81	-0.81		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	56	193	234	101	3.64	0.00	3.64		
Sub Total ER	972	1137			30.97	4.96	26.01		
Total IR Exch	4753	5064			138.17	20.69	117.48		

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	
	34.09	1.51	35.60	11.05	-6.32	-2.34	-1.65	0.67	-0.67

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
44.98	74.84	119.82	26.01	91.47	117.48	-18.97	16.63	-2.35

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	-7	-21	0	23	0	0	-0.40		

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	6.68	48.24	73.53	13.96	5.28	0.58	NA

Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev. (Hz)	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time				(Hz)	(Hz)
50.31	18.04	49.82	14.39	50.00	0.05	0.07	50.25	49.96

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	407	07:43	398	23:04	0.0	0.0
Gorakhpur	400	415	05:14	394	17:28	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	415	05:07	397	14:57	0.0	0.0	0.0	0.0
Dadri	400	413	05:10	397	14:40	0.0	0.0	0.0	0.0
Ballabgarh	400	420	05:10	400	14:43	0.0	0.0	0.0	0.0
Bawana	400	414	05:07	399	14:43	0.0	0.0	0.0	0.0
Bassi	400	418	04:06	393	23:09	0.0	0.0	0.0	0.0
Hissar	400	403	05:13	386	23:31	0.0	3.9	0.0	0.0
Moga	400	410	05:17	397	10:45	0.0	0.0	0.0	0.0
Abdullapur	400	409	18:04	396	11:53	0.0	0.7	0.0	0.0
Nalagarh	400	412	05:17	396	10:50	0.0	0.0	0.0	0.0
Kishenpur	400	415	02:44	402	21:04	0.0	0.0	0.0	0.0
Wagoora	400	411	03:01	381	21:05	0.0	6.4	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	784	05:06	745	14:47	0.0	0.0
Balia	765	769	05:14	741	14:57	0.0	0.1	0.0	0.0
Moga	765	784	05:06	760	10:56	0.0	0.0	0.0	0.0
Agra	765	784	18:04	746	23:13	0.0	0.0	0.0	0.0
Bhiwani	765	786	05:03	762	14:41	0.0	0.0	0.0	0.0
Unnao	765	758	00:00	754	11:02	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	487.48	652.97	480.03	461.24	863.04	703.98
Pong	426.72	384.05	405.60	361.16	403.17	296.79	211.36	84.67
Tehri	829.79	740.04	753.65	74.00	744.75	21.50	145.26	210.00
Koteshwar	612.50	598.50	606.55	2.88	610.59	4.86	210.00	224.00
Chamera-I	760.00	748.75	758.25	0.00	0.00	0.00	404.26	355.00
Rihand	268.22	252.98	840.30	121.20	844.50	175.00	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	522.57	10.72	520.24	5.75	322.96	420.97

* 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	129	559	0	121	286	0	3.04	10.48	13.52
Delhi	670	-66	-3	514	-76	0	14.03	-0.26	13.77
Haryana	68	217	0	93	208	0	1.76	3.73	5.49
HP	-863	-483	0	-610	-595	0	-16.67	-12.93	-29.60
J&K	-558	-25	0	-396	59	0	-11.17	0.19	-10.99
CHD	0	0	0	0	10	0	0.24	0.31	0.55
Rajasthan	-121	459	2	-113	628	2	-2.83	15.60	12.77
UP	1169	0	0	949	0	0	24.05	0.00	24.05
Uttarakhand	74	2	0	74	137	0	1.77	1.18	2.95
Total	568	663	-1	632	658	2	14.22	18.30	32.52

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	129	121	589	97	0	0
Delhi	721	475	365	-352	0	-3
Haryana	93	64	223	-220	0	0
HP	-610	-965	-368	-733	0	0
J&K	-355	-558	174	-51	0	0
CHD	30	0	44	0	0	0
Rajasthan	-113	-121	810	372	2	2
UP	1195	896	0	0	0	0
Uttarakhand	74	74	140	2	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 23.05.2015 :****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 :**