

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पारसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 19.03.2015
Date of Reporting : 20.03.2015

I. Regional Availability/Demand:

Evening Peak (19:00 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
32807	2175	34982	49.96	25836	808	26644	50.10	713.9	31.19

* 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	29.44	5.93		35.36	50.17	50.39	0.22	85.75	0.00
Haryana	32.31	0.46		32.76	65.18	64.58	-0.60	97.34	0.00
Rajasthan	89.08	0.70	3.71	93.49	64.00	66.20	2.20	159.69	0.00
Delhi	17.48			17.48	41.06	41.17	0.11	58.64	0.02
UP	125.10	2.40		127.50	85.87	84.50	-1.36	212.00	24.07
Uttarakhand		9.71		9.71	22.56	24.01	1.44	33.72	0.33
HP		7.92		7.92	15.31	17.07	1.77	25.00	0.00
J & K		9.89	0.00	9.89	29.55	28.52	-1.03	38.41	6.77
Chandigarh				0.00	3.50	3.31	0.27	3.31	0.00
Total	293.40	37.01	3.71	334.12	377.18	379.74	3.02	713.87	31.19

* 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 (19:00 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	4197	0	-54	-203	3019	0	161	-194	4417
Haryana	5081	0	-106	203	2966	0	-66	52	5658
Rajasthan	6890	0	5	543	6019	0	56	732	7377
Delhi	2763	0	-126	-178	1530	0	5	-925	3211
UP	9247	1830	87	153	8750	550	-200	125	9887
Uttarakhand	1663	40	92	482	1206	0	128	308	1674
HP	1058	0	33	-207	795	0	83	48	1340
J&K	1731	305	44	303	1463	258	-13	239	1807
Chandigarh	177	0	-2	0	88	0	-15	0	183
Total	32807	2175	-27	1096	25836	808	139	384	34664

* 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 (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI Net MU
		Singrauli STPS (5*200+2*500)	2000	1455	1588	1407	37.17	1549	34.35
	Rihand I STPS (2*500)	1000	860	936	854	21.66	902	19.87	1.79
	Rihand II STPS (2*500)	1000	470	514	483	11.84	493	10.82	1.02
	Rihand III STPS (2*500)	1000	973	936	773	22.77	949	21.50	1.27
	Dadri I STPS (4*210)	840	815	565	564	15.23	634	14.17	1.06
	Dadri II STPS (2*490)	980	480	370	331	8.82	368	8.60	0.22
	Unchahar I TPS (2*210)	420	405	293	265	8.38	349	8.55	-0.18
	Unchahar II TPS (2*210)	420	403	308	252	7.66	319	8.02	-0.36
	Unchahar III TPS (1*220)	210	201	149	138	4.14	172	4.01	0.13
	ISTPP (Jhajhar) (3*500)	1500	1500	745	680	17.35	723	17.98	-0.63
	Dadri GPS (4*130.19+2*154.51)	830	839	408	421	9.96	415	9.94	0.02
	Anta GPS (3*88.71+1*1153.2)	419	269	254	196	5.10	213	4.69	0.41
	Auraiya GPS (4*111.19+2*109.30)	663	660	160	170	3.95	165	3.94	0.01
	Dadri Solar	5	1	0	0	0.03	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.05	2	0.07	-0.02
	Singrauli Solar	15	3	0	0	0.06	3	0	-0.01
	Sub Total (A)	11312	9335	7226	6534	174	7256	167	8
B. NPC	NAPS (2*220)	440	395	425	436	9.40	392	9.48	-0.08
	RAPS- B (2*220)	440	404	448	431	9.49	395	9.70	-0.21
	RAPS- C (2*220)	440	420	445	454	9.71	404	10.08	-0.37
	Sub Total (B)	1320	1219	1318	1321	28.60	1191	29.26	-0.66
C. NHPC	Chamera I HPS (3*180)	540	534	547	539	13.03	543	12.82	0.22
	Chamera II HPS (3*100)	300	300	306	0	2.53	105	2.90	-0.37
	Chamera III HPS (3*77)	231	231	230	0	1.49	62	1.45	0.04
	Bairasuli HPS(3*60)	180	179	182	121	3.27	136	3.20	0.07
	Salal-HPS (6*115)	690	423	458	459	10.45	435	10.15	0.30
	Tanakpur-HPS (3*40)	94	33	30	31	0.82	34	0.76	0.07
	Uri-I HPS (4*120)	480	462	467	475	11.33	472	11.08	0.25
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	210	210	0	1.33	55	1.26	0.07
	Dulhasti-HPS (3*130)	390	387	404	19	3.09	129	2.90	0.19
	Sewa-II HPS (3*40)	120	122	129	130	3.08	128	2.93	0.15
	Parbati 3 (4*130)	520	260	130	0	0.52	22	0.52	0.00
	Sub Total (C)	4065	3140	3093	1773	51	2123	50	1
D. SJVNL	NJPC (6*250)	1500	1605	1524	0	6.70	279	6.54	0.16
	Rampur HEP (4*68.67)	275	420	432	0	1.87	78	1.83	0.04
	Sub Total (D)	1775	2025	1956	0	8.58	357	8.38	0.20
E. THDC	Tehri HPS (4*250)	1000	582	587	0	6.28	262	6.20	0.08
	Koteshwar HPS (4*100)	400	117	299	90	2.87	120	2.80	0.07
	Sub Total (E)	1400	699	886	90	9.16	381	9.00	0.16
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	422	633	368	10.58	441	10.14	0.44
	Dehar HPS (6*165)	990	263	495	165	6.17	257	6.31	-0.14
	Pong HPS (6*66)	396	6	122	0	0.11	5	0.15	-0.04
	Sub Total (F)	2900	692	1250	533	16.87	703	16.60	0.27
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	103	0	0.31	13	0.29	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	718	0	3.52	147	3.48	0.04
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	148	88	2.91	121	2.92	-0.01
	Budhil HPS(IPP)	70	0	71	0	0.29	12	0.28	0.01
	Sub Total (G)	1662	0	1040	88	7.03	293	6.98	0.06
H. Total Regional Entities (A-G)		24434	17110	16769	10339	295.32	12305	286.78	8.54

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	190	4.22	176
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.04	-2
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	178	160	4.11	171
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	696	345	12.21	509
	Talwandi Saboo (1*660)	660	489	343	8.94	372
	Thermal (Total)	4680	1523	1038	29.44	1227
	Total Hydro	1148	260	228	5.93	247
Total Punjab	5828	1783	1266	35.36	1473	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00	0
	DCRTPP (Yamuna nagar) (2*300)	600	275	235	5.81	242
	Faridabad GPS (NTPC)	432	396	300	7.82	326
	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	844	746	18.68	778
	Thermal (Total)	4944	1515	1281	32.31	1346
	Total Hydro	62	15	15	0.46	19
	Total Haryana	5006	1530	1296	32.76	1365
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	917	715	20.84
suratgarh TPS (6*250)		1500	413	181	8.65	361
Chabra TPS (3*250)		750	628	593	14.74	614
Dholpur GPS (3*110)		330	0	0	0.00	0
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	211	218	5.33	222
RAPS A (NPC) (1*100+1*200)		300	160	176	4.27	178
Barsingar (NLC) (2*125)		250	193	182	4.48	187
Giral LTPS (2*125)		250	80	81	1.59	66
Rajwest LTPS (IPP) (8*135)		1080	828	722	18.06	753
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	0	0	0.00	0
Kawai(Adani) (2*660)		1320	546	480	11.12	463
Thermal (Total)		8026	3976	3348	89	3712
Total Hydro		550	67	0	0.70	29
Wind power		2798	40	238	3.07	128
Biomass		99	26	26	0.62	26
Solar		730	0	0	0.02	1
Renewable/Others (Total)		3627	66	264	3.71	155
Total Rajasthan	12203	4109	3612	93.49	3896	
UP	Anpara TPS (3*210+2*500)	1630	1408	1375	33.30	1388
	Obra TPS (2*50+2*94+5*200)	1194	475	467	11.00	458
	Paricha TPS (2*110+2*220+2*250)	1140	593	637	15.00	625
	Panki TPS (2*105)	210	72	135	2.60	108
	Harduaganj TPS (1*60+1*105+2*250)	665	167	230	5.10	213
	Tanda TPS (NTPC) (4*110)	440	274	391	8.70	363
	Roza TPS (IPP) (4*300)	1200	248	261	5.20	217
	Anpara-C (IPP) (2*600)	1200	1062	1088	25.00	1042
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Thermal (Total)	8129	4299	4584	105.90	4413
	Vishnuparyag HPS (IPP)	400	74	73	0.00	0
	Other Hydro	527	93	48	2.40	100
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5266	5505	127.50	5313
Uttarakhand	Total Hydro	1398	451	381	9.71	405
	Total Uttarakhand	1398	451	381	9.71	405
Delhi	Raighat TPS (2*67.5)	135	43	42	0.88	37
	Delhi Gas Turbine (6x30 + 3x34)	282	81	82	1.92	80
	Pragati Gas Turbine (2x104+ 1x122)	330	153	159	3.77	157
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	314	268	7.34	306
	Badarpur TPS (NTPC) (3*95+2*210)	705	166	166	3.57	149
	Thermal (Total)	2917	757	717	17.48	728
Total Delhi	2917	757	717	17.48	728	
HP	Baspa HPS (IPP) (2*150)	300	0	0	0.84	35
	Malana HPS (IPP) (2*43)	86	39	0	0.25	11
	Other Hydro	728	273	227	6.83	285
	Total HP	1114	312	227	7.92	330
J & K	Baqilhar HPS (IPP) (3*150)	450	442	320	8.43	351
	Other Hydro/IPP	436	65	0	1.46	61
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	507	320	9.89	412
Total State Control Area Generation		39597	14715	13324	334.12	13922
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4945	3064	115.40	4808
Total Regional Availability(Gross)		64032	36429	26727	744.84	31035

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8005	2396	89.38	3724
State Control Area Hydro	5684	1705	1219	37.01	1542
Total Regional Hydro	17116	9710	3615	126.39	5266

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(19:00 Hrs)		Off Peak(03:00 Hrs)		Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	Import	Export	
Vindhychal B/B	200	200	500	0	6.98	0.00	6.98		
Gwalior-Agra (D/C)	1572	871	2020	0	35.45	0.00	35.45		
Zerda-Kankroli	-211	-395	0	409	0.00	6.76	-6.76		
Zerda-Bhinmal	-149	-340	0	372	0.00	5.15	-5.15		
Malanpur-Auraiya	-45	-74	0	78	0.00	1.36	-1.36		
Badod-Kota/Morak	-119	-135	7	70	0.00	2.12	-2.12		
Mundra-Mohindergarh(HVDC)	2501	2302	2505	0	58.31	0.00	58.31		
Vindhychal - Rihand	496	416	505	0	11.53	0.00	11.53		
Sub Total WR	4245	2845			112.27	15.39	96.88		
Pusauli Bypass	200	200	200	0	4.83	0.00	4.83		
MZP- GKP (D/C)	-20	-107	87	171	0.00	1.00	-1.00		
Patna-Balia(D/C)	695	532	784	0	16.03	0.00	16.03		
B'Sharif-Balia (D/C)	-113	-265	0	268	0.00	4.04	-4.04		
Pusauli-Balia	-91	-89	0	119	0.00	0.53	-0.53		
Gaya-Fatehpur (765 Kv)	52	25	243	0	2.81	0.00	2.81		
Pusauli-Sahupuri	147	173	184	0	3.75	0.00	3.75		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	-35	-36	0	-41	0.00	0.90	-0.90		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	-135	-214	33	214	0.00	2.43	-2.43		
Sub Total ER	700	219			27.42	8.90	18.52		
Total IR Exch	4945	3064			139.69	24.29	115.40		

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
24.87	0.18	25.06	3.61	-1.63	3.35	16.15	0.56	-0.56

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
32.58	74.63	107.21	18.52	96.88	115.40	-14.06	22.25	8.18

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	2.20	22.27	38.90	60.38	12.35	5.13	0.25	0.00

←----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.25	17.02	49.72	18.55	49.97	0.08	0.09	50.15	49.89

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	411	01:49	400	08:46	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	431	02:51	403	19:12	0.0	0.0	24.2	0.2
Kanpur	400	428	02:54	404	19:14	0.0	0.0	22.1	0.0
Dadri	400	426	23:24	406	19:17	53.1	53.1	11.5	0.0
Ballabgarh	400	437	01:27	410	19:19	0.0	0.0	56.1	24.2
Bawana	400	433	01:10	408	19:06	0.0	0.0	43.5	8.1
Bassi	400	430	01:26	396	07:31	0.0	0.0	32.8	0.0
Hissar	400	426	01:10	396	06:41	0.0	0.0	19.6	0.0
Moga	400	429	01:11	405	19:11	0.0	0.0	34.5	0.0
Abdullapur	400	430	01:10	396	06:39	0.0	0.0	25.7	0.0
Nalagarh	400	436	21:32	396	10:56	0.0	0.0	44.8	21.9
Kishenpur	400	231	02:32	216	19:23	100.0	100.0	0.0	0.0
Wagoora	400	410	01:14	362	08:10	1.9	13.8	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	782	02:53	743	06:25	0.0	0.0	0.0	0.0
Balia	765	785	02:54	744	19:16	0.0	0.0	0.0	0.0
Moga	765	814	01:10	768	06:43	0.0	0.0	30.3	0.0
Agra	765	796	01:27	751	06:25	0.0	0.0	0.0	0.0
Bhiwani	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Unnao	765	777	02:52	732	19:17	0.0	12.8	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	480.88	481.64	483.98	560.76	191.79	309.30
Pong	426.72	384.05	402.04	266.33	403.27	296.79	168.29	11.58
Tehri	829.79	740.04	777.65	292.00	783.35	363.00	39.90	174.00
Koteshwar	612.50	598.50	610.87	4.95	610.62	4.95	174.00	191.00
Chamera-I	760.00	748.75	756.96	0.00	0.00	0.00	242.78	351.85
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	507.54	3.13	510.34	2.74	371.57	137.76

* NA: Not Available

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

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (19:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	-321	127	0	-282	79	0	-7.01	3.89	-3.13
Delhi	-663	-221	-41	-439	302	-41	-11.25	2.47	-8.78
Haryana	23	29	0	36	167	0	0.04	-0.06	-0.02
HP	162	-114	0	42	-249	0	3.33	-3.81	-0.48
J&K	543	-304	0	317	-14	0	9.71	-3.34	6.37
CHD	0	0	0	0	0	0	0.00	-0.06	-0.06
Rajasthan	0	730	2	0	541	2	0.00	14.76	14.76
UP	125	0	0	153	0	0	2.73	0.00	2.73
Uttarakhand	90	169	49	158	275	49	3.45	7.99	11.44
Total	-41	415	10	-15	1100	10	0.99	21.83	22.83

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-276	-324	368	6	0	0
Delhi	-377	-663	712	-221	-41	-41
Haryana	36	-25	195	-345	0	0
HP	168	42	-25	-599	0	0
J&K	543	317	0	-318	0	0
CHD	0	0	10	-25	0	0
Rajasthan	0	0	732	500	2	2
UP	176	51	0	0	0	0
Uttarakhand	158	90	438	166	49	29

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 19.03.2015 :**

Cloudy/Rainfall in Northern region.

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 :**