

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 26.06.2015
Date of Reporting : 27.06.2015

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
42351	2421	44773	50.03	38610	964	39574	50.11	969.4	42.46

* 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	67.48	19.00		86.48	114.91	115.78	0.88	202.26	0.00
Haryana	30.91	0.66		31.57	126.87	125.44	-1.43	157.01	3.88
Rajasthan	82.74	0.00	21.41	104.15	55.21	55.75	0.54	159.90	0.00
Delhi	19.20			19.20	76.67	76.59	-0.07	95.79	0.14
UP	124.80	5.20		130.00	123.26	124.29	1.03	254.29	27.43
Uttarakhand		10.85		10.85	18.46	21.83	3.38	32.68	2.32
HP		21.13		21.13	3.10	3.72	0.62	24.85	0.02
J & K		15.24	0.00	15.24	21.41	21.69	0.28	36.93	8.68
Chandigarh				0.00	5.89	5.71	0.27	5.71	0.00
Total	325.12	72.08	21.41	418.61	545.77	550.81	5.49	969.42	42.46

* 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	9011	0	-115	1155	7644	0	-95	1346	9534
Haryana	6828	59	-18	1224	6239	0	129	1169	7184
Rajasthan	6468	0	36	42	6465	0	-126	-237	7319
Delhi	4320	2	-21	253	3612	0	168	145	4775
UP	11148	1700	168	633	10601	660	128	701	12046
Uttarakhand	1520	185	94	33	1241	0	142	35	1520
HP	908	0	-68	-1288	886	0	4	-1306	1204
J&K	1902	476	146	-259	1721	304	7	-45	1905
Chandigarh	246	0	-12	0	200	0	-7	0	288
Total	42351	2421	209	1794	38610	964	351	1808	44603

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

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

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	1755	1891	1695	42.16	1757	39.01	3.16
	Rihand I STPS (2*500)	1000	536	747	394	12.74	531	11.48	1.26
	Rihand II STPS (2*500)	1000	958	996	874	20.83	868	20.04	0.79
	Rihand III STPS (2*500)	1000	954	1012	721	19.57	815	19.09	0.48
	Dadri I STPS (4*210)	840	815	454	545	12.09	504	11.66	0.43
	Dadri II STPS (2*490)	980	975	697	679	16.47	686	16.59	-0.12
	Unchahar I TPS (2*210)	420	402	405	275	7.29	304	7.91	-0.62
	Unchahar II TPS (2*210)	420	400	420	243	7.14	298	7.78	-0.64
	Unchahar III TPS (1*220)	210	200	209	124	3.58	149	3.92	-0.34
	ISTPP (Jhajihar) (3*500)	1500	1000	934	631	15.43	643	15.87	-0.44
	Dadri GPS (4*130.19+2*154.51)	830	799	149	174	3.99	166	4.02	-0.03
	Anta GPS (3*88.71+1*153.2)	419	379	243	218	5.26	219	5.40	-0.14
	Auraiya GPS (4*111.19+2*109.30)	663	631	154	157	3.73	155	3.76	-0.03
	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	0.07	3	0.07	0.00
KHEP	800	0	781	589	16.60	692	0.00	16.60	
Sub Total (A)	12112	9811	9092	7319	187	7792	167	20	
B. NPC	NAPS (2*220)	440	371	408	430	9.10	379	8.90	0.19
	RAPS- B (2*220)	440	367	411	416	8.83	368	8.81	0.02
	RAPS- C (2*220)	440	405	428	435	9.29	387	9.72	-0.43
	Sub Total (B)	1320	1143	1247	1281	27.21	1134	27.43	-0.22
C. NHPC	Chamera I HPS (3*180)	540	537	555	546	13.08	545	12.89	0.19
	Chamera II HPS (3*100)	300	300	313	310	7.39	308	7.20	0.19
	Chamera III HPS (3*77)	231	229	232	231	5.50	229	5.50	0.00
	Bairasuil HPS(3*60)	180	179	182	124	3.23	134	3.19	0.03
	Salal-HPS (6*115)	690	661	671	671	16.18	674	15.87	0.31
	Tanakpur-HPS (3*40)	94	32	0	93	0.64	27	0.83	-0.19
	Uri-I HPS (4*120)	480	475	472	477	11.54	481	11.40	0.14
	Uri-II HPS (4*60)	240	119	122	122	2.88	120	2.87	0.01
	Dhauliganga-HPS (4*70)	280	20	0	0	0.44	18	0.60	-0.16
	Dulhasti-HPS (3*130)	390	386	395	392	9.31	388	9.26	0.04
	Sewa-II HPS (3*40)	120	122	130	129	3.00	125	2.93	0.07
	Parbati 3 (4*130)	520	390	397	131	3.73	155	3.71	0.02
	Sub Total (C)	4065	3452	3469	3226	77	3204	76	1
	D. SJVNL	NJPC (6*250)	1500	1605	1605	1605	38.66	1611	38.52
Rampur HEP (6*68.67)		412	375	377	377	9.01	375	9.00	0.01
Sub Total (D)		1912	1980	1982	1982	47.67	1986	47.52	0.15
E. THDC	Tehri HPS (4*250)	1000	516	527	254	8.03	335	8.00	0.03
	Koteshwar HPS (4*100)	400	200	202	200	4.76	198	4.80	-0.04
	Sub Total (E)	1400	716	729	454	12.79	533	12.80	-0.01
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	1117	1175	923	26.73	1114	26.81	-0.08
	Dehar HPS (6*165)	990	608	825	560	14.86	619	14.58	0.28
	Pong HPS (6*66)	396	133	258	66	3.24	135	3.20	0.03
	Sub Total (F)	2900	1858	2258	1549	44.83	1868	44.59	0.24
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	230	202	4.75	198	5.35	-0.60
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	1200	28.64	1193	28.51	0.13
	Malana Stg-II HPS (2*50)	100	0	86	111	2.11	88	2.04	0.07
	Shree Cement TPS (2*150)	300	0	212	296	5.87	244	6.04	-0.17
	Budhil HPS(IPP) (2*35)	70	0	73	73	1.76	74	1.68	0.09
	Sub Total (G)	1662	0	1802	1881	43.13	1797	43.62	-0.49
H. Total Regional Entities (A-G)	25372	18960	20578	17691	439.55	18315	418.88	20.68	

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	640	660	15.38	641
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	260	250	6.51	271
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	618	433	11.72	488
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1031	709	24.77	1032
	Talwandi Saboo (1*660)	660	631	323	9.10	379
	Thermal (Total)	4700	3180	2375	67.48	2811
	Total Hydro	1000	872	737	19.00	792
	Total Punjab	5700	4052	3112	86.48	3603
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	237	225	5.78	241
Faridabad GPS (NTPC)		432	375	166	5.64	235
RGTTP (Khedar) (IPP) (2*600)		1200	0	0	1.19	50
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	562	742	18.30	763
Thermal (Total)		4944	1174	1133	30.91	1288
Total Hydro		62	29	21	0.66	28
Total Haryana		5006	1203	1154	31.57	1315
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	612	607	14.64
	suratgarh TPS (6*250)	1500	368	370	8.88	370
	Chabra TPS (4*250)	1000	536	541	12.86	536
	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	200	209	4.96	207
	RAPS A (NPC) (1*100+1*200)	300	137	138	3.38	141
	Barsingar (NLC) (2*125)	250	95	95	2.22	92
	Giral LTPS (2*125)	250	64	93	1.30	54
	Rajwest LTPS (IPP) (8*135)	1080	555	580	13.76	573
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	451	445	10.31	430
	Kawai(Adani) (2*660)	1320	437	431	10.44	435
	Thermal (Total)	8276	3455	3509	83	3448
	Total Hydro	550	0	0	0.00	0
	Wind power	3214	564	788	18.09	754
	Biomass	99	20	20	0.47	20
	Solar	730	0	0	2.86	119
	Renewable/Others (Total)	4043	584	808	21.41	892
	Total Rajasthan	12869	4039	4317	104.15	4340
	UP	Anpara TPS (3*210+2*500)	1630	1340	1258	30.70
Obra TPS (2*50+2*94+5*200)		1194	403	379	9.30	388
Paricha TPS (2*110+2*220+2*250)		1140	711	718	17.40	725
Panki TPS (2*105)		210	135	140	3.20	133
Harduaganj TPS (1*60+1*105+2*250)		665	448	427	10.70	446
Tanda TPS (NTPC) (4*110)		440	275	210	5.50	229
Roza TPS (IPP) (4*300)		1200	693	567	14.70	613
Anpara-C (IPP) (2*600)		1200	1055	1067	24.00	1000
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	281	281	6.40	267
Anpara-D(1*500)		500	0	0	0.00	0
Lalitpur TPS(1*660)		660	0	0	0.00	0
Thermal (Total)		9289	5341	5047	122	5079
Vishnuparyag HPS (IPP)(including Alakanada)		730	240	108	3.70	154
Other Hydro		527	45	71	1.50	63
Cogeneration		981	120	120	2.90	121
Total UP		11527	5746	5346	130.00	5263
Uttarakhand		Total Hydro	1398	618	491	10.85
	Total Uttarakhand	1398	618	491	10.85	452
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	67	49	1.16	48
	Pragati Gas Turbine (2x104+ 1x122)	330	264	149	4.67	195
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	271	268	6.47	270
	Badarpur TPS (NTPC) (3*95+2*210)	705	324	325	6.90	287
	Thermal (Total)	2917	926	791	19.20	800
	Total Delhi	2917	926	791	19.20	800
HP	Baspa HPS (IPP) (2*100)	300	306	337	7.57	315
	Malana HPS (IPP) (2*43)	86	84	95	2.08	87
	Other Hydro	878	476	483	11.48	478
	Total HP	1264	866	915	21.13	880
J & K	Baglihar HPS (IPP) (3*150)	450	450	450	10.80	450
	Other Hydro/IPP	560	198	186	4.44	185
	Gas/Diesel/Others	190	0	0	0.00	0
	Total J & K	1200	648	636	15.24	635
Total State Control Area Generation		41881	18098	16762	418.61	17288
J. Net Inter Regional Exchange [import (+ve)/Export (-ve)]			6446	5237	142.55	5940
Total Regional Availability(Gross)		67253	45122	39690	1000.72	41543

IV. Total Hydro Generation:

Regional Entities Hydro	12369	10734	9312	234.30	9762
State Control Area Hydro	5811	3078	2871	72.08	2849
Total Regional Hydro	18180	13812	12183	306.37	12611

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	200	50	200	0	2.79	0.00	2.79
Gwalior-Agra (D/C)	1993	1621	2115	0	38.88	0.00	38.88
Zerda-Kankroli	-1	-141	6	277	0.00	2.43	-2.43
Zerda-Bhinmal	-10	-180	21	310	0.00	2.79	-2.79
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00
Badod-Kota/Morak	-10	-52	41	96	0.00	0.48	-0.48
Mundra-Mohinderqarh(HVDC)	2297	2097	2505	0	53.10	0.00	53.10
Vindhychal - Rihand	467	444	499	0	11.31	0.00	11.31
Sub Total WR	4936	3839			106.07	5.70	100.38
Pusauli Bypass	300	300	300	0	7.35	0.00	7.35
MZP- GKP (D/C)	338	354	692	0	11.22	0.00	11.22
Patna-Balia(D/C)	213	198	309	0	5.96	0.00	5.96
B'Sharif-Balia (D/C)	64	94	235	0	3.45	0.00	3.45
Pusauli-Balia	89	89	269	0	1.68	0.00	1.68
Gaya-Fatehpur (765 Kv)	0	-3	175	4	0.42	0.00	0.42
Pusauli-Sahupuri	150	168	170	0	3.38	0.00	3.38
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-38	0	40	0.00	0.83	-0.83
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	124	-9	357	9	3.52	0.00	3.52
Barh -GKP (D/C)	268	245	333	0	6.03	0.00	6.03
Sub Total ER	1510	1398			43.00	0.83	42.18
Total IR Exch	6446	5237			149.07	6.52	142.55

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
37.02	3.93	40.95	13.98	1.21	-0.11	0.00	0.58	-0.58

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
55.39	89.17	144.56	42.18	100.38	142.55	-13.22	11.21	-2.01

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 - Mahendamaagar	-27	-17	0	27	0	0	-0.39

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	0.27	1.17	5.59	37.03	64.35	20.37	8.62	1.67	NA

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz	(Hz)	(Hz)		
50.27	10.02	49.56	19.15	50.02	0.06	0.08	50.27	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	404	05:25	395	20:00	0.0	0.0	0.0	0.0
Gorakhpur	400	415	05:13	401	14:49	0.0	0.0	0.0	0.0
Bareilly	400	418	08:00	396	20:00	0.0	0.0	4.9	0.0
Kanpur	400	417	05:04	394	14:46	0.0	0.0	0.0	0.0
Dadri	400	416	05:12	394	14:35	0.0	0.0	0.0	0.0
Ballabhgarh	400	423	05:34	397	14:37	0.0	0.0	7.2	0.0
Bawana	400	419	05:12	397	14:35	0.0	0.0	0.0	0.0
Bassi	400	425	04:01	406	14:44	0.0	0.0	17.3	0.0
Hissar	400	411	06:01	386	14:42	0.0	4.1	0.0	0.0
Moga	400	405	18:00	394	14:34	0.0	0.0	0.0	0.0
Abdullapur	400	416	05:20	396	14:36	0.0	0.0	0.0	0.0
Nalagarh	400	418	03:51	400	14:34	0.0	0.0	0.0	0.0
Kishenpur	400	416	05:02	400	20:05	0.0	0.0	0.0	0.0
Wagoora	400	412	05:51	380	20:05	0.0	13.4	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	774	04:19	742	09:41	0.0	0.0	0.0	0.0
Balia	765	772	05:12	738	19:15	0.0	1.1	0.0	0.0
Moga	765	780	18:00	754	14:42	0.0	0.0	0.0	0.0
Agra	765	786	04:07	745	14:43	0.0	0.0	0.0	0.0
Bhiwani	765	798	05:13	759	14:29	0.0	0.0	0.0	0.0
Unnao	765	774	06:01	728	14:44	0.0	33.4	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	488.44	680.71	486.96	644.48	1185.31	955.41
Pong	426.72	384.05	406.14	370.28	401.17	244.95	455.62	220.33
Tehri	829.79	740.04	747.35	36.27	748.10	39.27	824.61	274.00
Koteshwar	612.50	598.50	610.18	4.65	610.24	4.69	274.00	316.00
Chamera-I	760.00	748.75	755.05	0.00	0.00	0.00	416.92	354.46
Rihand	268.22	252.98	837.20	83.40	840.00	117.50	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	523.03	9.44	520.94	10.48	703.81	379.39

* 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	975	370	0	964	191	0	24.21	6.98	31.18
Delhi	243	-96	-2	274	-19	-2	7.22	-1.07	6.15
Haryana	1010	159	0	1007	217	0	24.48	4.66	29.14
HP	-991	-315	0	-839	-449	0	-21.36	-7.70	-29.06
J&K	-340	296	0	-434	175	0	-10.36	0.21	-10.16
CHD	0	0	0	0	0	0	0.24	0.09	0.33
Rajasthan	-375	136	2	-380	420	2	-8.65	11.26	2.62
UP	701	0	0	633	0	0	13.81	0.00	13.81
Uttarakhand	35	0	0	33	0	0	0.94	0.00	0.94
Total	1258	551	0	1259	535	0	30.52	14.44	44.96

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1270	926	388	191	0	0
Delhi	432	199	252	-192	-2	-2
Haryana	1099	995	250	-42	0	0
HP	-839	-991	-213	-474	0	0
J&K	-340	-498	296	-152	0	0
CHD	30	0	25	0	0	0
Rajasthan	-243	-398	675	40	2	2
UP	906	452	0	0	0	0
Uttarakhand	74	28	0	0	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 26.06.2015 :**

Normal

XIV. Synchronisation of new generating units :**XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**

220 kV PSEB Bays- No 5 & 6 at PG Moga first time charged at 17.47 & 18.35 Hrs respectively

XVI. Tripping of lines in pooling stations :**XVII. Complete generation loss in a generating station :**