

पावर 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 28.06.2015
Date of Reporting : 29.06.2015

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
43921	1942	45862	49.92	44697	1931	46628	50.07	1030.1	25.92

* 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	86.77	21.48		108.25	114.65	114.18	-0.46	222.44	0.00
Haryana	40.68	0.74		41.43	121.17	120.69	-0.48	162.12	0.00
Rajasthan	94.62	0.00	16.21	110.83	61.24	63.28	2.04	174.11	0.00
Delhi	22.69			22.69	76.81	78.73	1.92	101.42	0.19
UP	129.09	7.70		136.79	127.53	127.69	0.17	264.48	25.41
Uttarakhand		19.76		19.76	17.04	17.91	0.87	37.67	0.32
HP		19.84		19.84	4.46	5.65	1.19	25.49	0.00
J & K		14.97	0.00	14.97	21.42	21.90	0.48	36.87	0.00
Chandigarh				0.00	5.45	5.54	0.27	5.54	0.00
Total	373.85	84.50	16.21	474.56	549.76	555.58	6.00	1030.14	25.92

* 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	9668	0	8	862	9119	0	25	1014	9938
Haryana	7485	0	-57	1109	7156	0	-1	1154	7841
Rajasthan	6912	0	-119	107	7066	0	12	-274	7722
Delhi	4228	0	3	-143	4310	0	226	185	5250
UP	10902	1420	430	547	12508	1620	592	647	12566
Uttarakhand	1676	40	90	131	1570	0	92	70	1739
HP	887	0	63	-1224	979	0	28	-1279	1207
J&K	1927	482	164	-256	1761	311	149	-188	1927
Chandigarh	235	0	-31	0	228	0	10	0	303
Total	43921	1942	552	1132	44697	1931	1132	1331	46187

* 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 1.05

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
	Rihand I STPS (2*500)	1000	826	805	887	18.74	781	18.88	-0.14
	Rihand II STPS (2*500)	1000	937	952	992	19.69	820	20.23	-0.54
	Rihand III STPS (2*500)	1000	938	988	982	19.59	816	20.04	-0.44
	Dadri I STPS (4*210)	840	810	488	470	11.39	475	10.95	0.44
	Dadri II STPS (2*490)	980	975	766	761	17.70	738	18.00	-0.30
	Unchahar I TPS (2*210)	420	402	380	373	8.11	338	8.50	-0.40
	Unchahar II TPS (2*210)	420	400	424	388	7.70	321	8.02	-0.31
	Unchahar III TPS (1*220)	210	200	157	130	3.47	145	3.72	-0.25
	ISTPP (Jhajihar) (3*500)	1500	1000	677	619	14.76	615	15.18	-0.42
	Dadri GPS (4*130.19+2*154.51)	830	800	183	193	4.46	186	4.48	-0.02
	Anta GPS (3*88.71+1*153.2)	419	380	249	214	5.35	223	5.40	-0.05
	Auraiya GPS (4*111.19+2*109.30)	663	634	159	160	3.77	157	3.74	0.02
	Dadri Solar	5	1	0	0	0.03	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.00	0	0.06	-0.06
	Singrauli Solar	15	3	0	0	0.01	0	0.07	-0.06
	KHEP	800	0	781	589	16.60	692	0.00	16.60
	Sub Total (A)	12112	10153	9056	8735	195	8140	181	14
B. NPC	NAPS (2*220)	440	379	399	420	8.86	369	9.10	-0.24
	RAPS- B (2*220)	440	367	410	413	8.82	368	8.81	0.01
	RAPS- C (2*220)	440	400	422	437	9.30	388	9.60	-0.30
	Sub Total (B)	1320	1146	1231	1270	26.98	1124	27.50	-0.52
C. NHPC	Chamera I HPS (3*180)	540	538	550	547	13.08	545	12.91	0.17
	Chamera II HPS (3*100)	300	300	311	311	7.41	309	7.20	0.21
	Chamera III HPS (3*77)	231	229	230	231	5.50	229	5.50	0.00
	Bairasuil HPS(3*60)	180	179	184	126	2.84	118	2.81	0.03
	Salal-HPS (6*115)	690	661	669	671	16.15	673	15.99	0.17
	Tanakpur-HPS (3*40)	94	94	95	94	2.25	94	2.18	0.07
	Uri-I HPS (4*120)	480	475	471	475	11.10	462	11.40	-0.30
	Uri-II HPS (4*60)	240	120	123	122	2.90	121	2.88	0.02
	Dhauliganga-HPS (4*70)	280	280	280	280	6.80	283	6.72	0.08
	Dulhasti-HPS (3*130)	390	80	266	0	1.76	73	1.93	-0.17
	Sewa-II HPS (3*40)	120	119	129	81	2.14	89	2.00	0.14
	Parbati 3 (4*130)	520	390	397	131	4.23	176	4.23	0.01
	Sub Total (C)	4065	3467	3704	3069	76	3174	76	0
D. SJVNL	NJPC (6*250)	1500	1605	1635	1627	38.74	1614	38.52	0.22
	Rampur HEP (6*68.67)	412	375	375	373	8.98	374	9.00	-0.02
	Sub Total (D)	1912	1980	2010	2000	47.72	1988	47.52	0.20
E. THDC	Tehri HPS (4*250)	1000	544	553	0	5.64	235	5.60	0.04
	Koteshwar HPS (4*100)	400	108	202	91	2.65	111	2.60	0.05
	Sub Total (E)	1400	652	755	91	8.30	346	8.20	0.10
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	1127	1326	923	27.15	1131	27.04	0.10
	Dehar HPS (6*165)	990	600	825	560	14.54	606	14.39	0.15
	Pong HPS (6*66)	396	156	318	66	3.77	157	3.74	0.02
	Sub Total (F)	2900	1882	2469	1549	45.45	1894	45.17	0.28
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	231	194	4.48	187	4.50	-0.03
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	1183	27.24	1135	27.71	-0.48
	Malana Stg-II HPS (2*50)	100	0	110	85	1.97	82	1.85	0.11
	Shree Cement TPS (2*150)	300	0	147	295	4.01	167	4.43	-0.42
	Budhil HPS(IPP) (2*35)	70	0	74	74	1.75	73	1.68	0.07
	Sub Total (G)	1662	0	1761	1831	39.44	1643	40.18	-0.73
H. Total Regional Entities (A-G)		25372	19279	20986	18545	439.42	18309	425.18	14.24

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	951	850	21.22	884
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	306	260	6.63	276
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	701	716	15.27	636
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1388	1166	30.67	1278
	Talwandi Saboo (1*660)	660	648	544	12.98	541
	Thermal (Total)	4700	3994	3536	86.77	3615
	Total Hydro	1000	883	932	21.48	895
	Total Punjab	5700	4877	4468	108.25	4511
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	218	216	5.16
DCRTPP (Yamuna nagar) (2*300)		600	274	234	5.61	234
Faridabad GPS (NTPC)		432	300	386	8.19	341
RGTTP (Khedar) (IPP) (2*600)		1200	438	373	10.23	426
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	413	560	11.50	479
Thermal (Total)		4944	1643	1769	40.68	1695
Total Hydro		62	28	33	0.74	31
Total Haryana		5006	1671	1802	41.43	1726
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	770	774	18.65
	suratgarh TPS (6*250)	1500	383	393	9.56	398
	Chabra TPS (4*250)	1000	542	584	13.78	574
	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	164	207	4.76	198
	RAPS A (NPC) (1*100+1*200)	300	136	138	3.36	140
	Barsingar (NLC) (2*125)	250	96	95	2.18	91
	Giral LTPS (2*125)	250	83	76	1.59	66
	Rajwest LTPS (IPP) (8*135)	1080	598	867	18.32	763
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	574	375	10.66	444
	Kawai(Adani) (2*660)	1320	453	480	11.77	490
	Thermal (Total)	8276	3799	3989	95	3942
	Total Hydro	550	0	0	0.00	0
	Wind power	3214	548	737	15.15	631
	Biomass	99	24	24	0.58	24
	Solar	730	2	0	0.48	20
	Renewable/Others (Total)	4043	574	761	16.21	676
	Total Rajasthan	12869	4373	4750	110.83	4618
UP	Anpara TPS (3*210+2*500)	1630	1362	1391	33.00	1375
	Obra TPS (2*50+2*94+5*200)	1194	379	395	9.40	392
	Paricha TPS (2*110+2*220+2*250)	1140	712	732	17.40	725
	Panki TPS (2*105)	210	131	131	3.00	125
	Harduaganj TPS (1*60+1*105+2*250)	665	404	507	11.40	475
	Tanda TPS (NTPC) (4*110)	440	270	380	7.57	315
	Roza TPS (IPP) (4*300)	1200	585	797	15.50	646
	Anpara-C (IPP) (2*600)	1200	720	1062	22.20	925
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	281	403	6.72	280
	Anpara-D(1*500)	500	0	0	0.00	0
	Lalitpur TPS(1*660)	660	0	0	0.00	0
	Thermal (Total)	9289	4844	5798	126	5258
	Vishnuparyag HPS (IPP)(including Alakanada)	730	235	240	5.76	240
	Other Hydro	527	121	196	1.94	81
	Cogeneration	981	120	120	2.90	121
	Total UP	11527	5320	6354	136.79	5460
Uttarakhand	Total Hydro	1398	863	789	19.76	823
	Total Uttarakhand	1398	863	789	19.76	823
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.01	1
	Delhi Gas Turbine (6x30 + 3x34)	282	69	72	1.70	71
	Pragati Gas Turbine (2x104+ 1x122)	330	266	262	6.39	266
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	276	270	6.48	270
	Badarpur TPS (NTPC) (3*95+2*210)	705	382	328	8.12	338
	Thermal (Total)	2917	993	932	22.69	945
	Total Delhi	2917	993	932	22.69	945
HP	Baspa HPS (IPP) (2*100)	300	333	333	7.78	324
	Malana HPS (IPP) (2*43)	86	72	68	1.71	71
	Other Hydro	878	413	516	10.35	431
	Total HP	1264	818	917	19.84	827
J & K	Baglihar HPS (IPP) (3*150)	450	440	440	10.61	442
	Other Hydro/IPP	560	196	190	4.36	182
	Gas/Diesel/Others	190	0	0	0.00	0
	Total J & K	1200	636	630	14.97	624
Total State Control Area Generation		41881	19551	20642	474.56	19534
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5563.38	2864.09	145.28	6053
Total Regional Availability(Gross)		67253	46101	42051	1059.26	43896

IV. Total Hydro Generation:

Regional Entities Hydro	12369	11260	8760	227.91	9496
State Control Area Hydro	5811	3349	3497	84.50	3281
Total Regional Hydro	18180	14609	12257	312.41	12777

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	-350	50	50	-350	0.33	4.01	-3.68
Gwalior-Agra (D/C)	1575	-1826	2137	0	35.87	0.00	35.87
Zerda-Kankroli	-107	-194	0	319	0.00	4.01	-4.01
Zerda-Bhinmal	-97	-217	0	303	0.00	3.70	-3.70
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00
Badod-Kota/Morak	-48	-63	27	56	0.00	0.71	-0.71
Mundra-Mohinderqarh(HVDC)	2298	2297	2307	0	55.63	0.00	55.63
Vindhychal - Rihand	498	455	503	0	10.17	0.00	10.17
Sub Total WR	3769	502			101.99	12.44	89.55
Pusaui Bypass	100	300	300	0	5.61	0.00	5.61
MZP- GKP (D/C)	420	581	762	0	13.84	0.00	13.84
Patna-Balia(D/C)	238	385	412	0	7.23	0.00	7.23
B'Sharif-Balia (D/C)	158	156	274	0	4.32	0.00	4.32
Pusaui-Balia	41	35	88	80	0.18	0.00	0.18
Gaya-Fatehpur (765 Kv)	299	331	465	0	8.37	0.00	8.37
Pusaui-Sahupuri	117	146	146	0	2.82	0.00	2.82
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-40	-36	0	40	0.00	-0.83	0.83
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	212	190	400	0	6.35	0.00	6.35
Barh -GKP (D/C)	249	274	289	0	5.69	0.00	5.69
Sub Total ER	1794	2362			54.89	-0.83	55.73
Total IR Exch	5563	2864			156.88	11.60	145.28

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
35.98	3.65	39.63	5.73	0.43	-0.02	-0.92	0.54	-0.54

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
45.88	96.14	142.02	55.73	89.55	145.28	9.85	-6.59	3.26

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 - Mahendamaragar	-25	-8	0	34	0	1	-0.55

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	1.18	7.53	49.73	68.15	17.89	6.00	0.00	NA

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				
50.27	8.04	49.70	19.49	50.00	0.05	0.07	50.25	49.82

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	402	08:04	395	04:40	0.0	0.0	0.0	0.0
Gorakhpur	400	415	09:05	406	00:34	0.0	0.0	2.3	0.0
Bareilly	400	418	08:00	396	20:00	0.0	0.0	0.0	0.0
Kanpur	400	418	18:04	397	14:33	0.0	0.0	0.0	0.0
Dadri	400	413	05:59	393	21:34	0.0	0.0	0.0	0.0
Ballabgarh	400	420	05:57	399	14:35	0.0	0.0	0.0	0.0
Bawana	400	414	18:00	396	22:06	0.0	0.0	0.0	0.0
Bassi	400	423	04:03	403	22:09	0.0	0.0	7.1	0.0
Hissar	400	409	06:02	388	22:08	0.0	1.4	0.0	0.0
Moga	400	408	05:59	392	22:06	0.0	0.0	0.0	0.0
Abdullapur	400	411	05:57	396	22:07	0.0	0.0	0.0	0.0
Nalagarh	400	415	08:03	403	14:22	0.0	0.0	0.0	0.0
Kishenpur	400	420	06:03	399	20:15	0.0	0.0	0.0	0.0
Wagoora	400	418	06:03	378	20:12	5.6	15.1	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	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Balia	765	780	09:01	746	14:35	0.0	0.0	0.0	0.0
Moga	765	786	06:02	753	22:06	0.0	0.0	0.0	0.0
Agra	765	790	18:02	750	22:17	0.0	0.0	0.0	0.0
Bhiwani	765	794	06:02	759	14:34	0.0	0.0	0.0	0.0
Unnao	765	769	18:02	730	14:34	0.0	21.8	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	488.40	680.71	487.21	644.48	896.62	965.21
Pong	426.72	384.05	406.13	370.28	400.90	237.89	195.33	255.67
Tehri	829.79	740.04	748.70	43.00	747.80	37.00	307.08	191.00
Koteshwar	612.50	598.50	610.10	4.69	610.60	4.95	191.00	176.00
Chamera-I	760.00	748.75	755.53	0.00	0.00	0.00	385.37	354.58
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	522.79	10.72	520.65	10.54	320.86	410.28

* 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	779	235	0	764	98	0	19.95	4.56	24.50
Delhi	251	-40	-25	234	-375	-2	6.36	-4.53	1.83
Haryana	950	204	0	961	149	0	23.28	4.02	27.31
HP	-991	-288	0	-839	-385	0	-21.36	-6.57	-27.93
J&K	-365	177	0	-434	177	0	-10.44	-0.43	-10.87
CHD	0	0	0	0	0	0	0.24	-0.01	0.22
Rajasthan	-464	187	2	-448	553	2	-10.30	13.38	3.07
UP	647	0	0	547	0	0	12.48	0.00	12.48
Uttarakhand	9	39	22	13	118	0	0.39	2.04	2.43
Total	817	515	-1	797	334	0	20.59	12.44	33.03

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1153	687	247	97	0	0
Delhi	385	186	127	-392	0	-25
Haryana	1060	931	210	96	0	0
HP	-839	-991	-190	-486	0	0
J&K	-365	-498	212	-273	0	0
CHD	30	0	20	-20	0	0
Rajasthan	-252	-493	685	187	2	0
UP	825	424	0	0	0	0
Uttarakhand	47	0	118	39	25	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 28.06.2015 :**

Rain & thunderstrom in uttrakhand.

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 :**