

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पब्लिसिड की पूर्ण स्वामित्व प्राप्त सार्वजनिक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 31.07.2015
Date of Reporting : 01.08.2015

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
43802	2036	45838	49.97	41541	1948	43489	50.12	1009.4	48.10

* 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	69.91	22.15		92.06	129.79	129.18	-0.61	221.24	0.00
Haryana	48.35	0.66		49.01	123.55	122.95	-0.59	171.96	0.00
Rajasthan	50.88	5.58	23.22	79.68	45.09	44.32	-0.77	124.00	0.00
Delhi	11.84			11.84	82.79	81.48	-1.32	93.32	0.02
UP	138.30	12.10		150.40	138.85	142.24	3.39	292.64	40.04
Uttarakhand		23.10		23.10	16.23	16.81	0.58	39.91	0.00
HP		25.41		25.41	0.60	1.03	0.43	26.43	0.00
J & K		14.09	0.00	14.09	19.94	19.71	-0.23	33.80	8.04
Chandigarh				0.00	6.47	6.06	0.27	6.06	0.00
Total	319.28	103.08	23.22	445.58	563.30	563.79	1.16	1009.37	48.10

* 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	9229	0	-13	1467	9279	0	6	1640	9596
Haryana	8013	0	-28	1574	7267	0	135	1573	8253
Rajasthan	5673	0	-94	-85	4922	-85	20	-393	6162
Delhi	4024	0	-62	156	3711	0	80	108	4362
UP	11931	1610	179	648	12541	1770	204	1069	13373
Uttarakhand	1855	0	133	-57	1637	0	66	-57	1855
HP	1100	0	-15	-1362	947	0	-15	-1540	1274
J&K	1704	426	113	-400	1009	178	-204	-757	1860
Chandigarh	272	0	-15	0	228	0	-31	-15	298
Total	43802	2036	199	1941	41541	1948	262	1628	44902

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

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 [OG:(+ve), UG: (-ve)]	
									Net MU	Net MU
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1841	2057	1601	45.22	1884	41.46		3.76
	Rihand I STPS (2*500)	1000	899	991	872	22.15	923	20.39		1.76
	Rihand II STPS (2*500)	1000	0	0	0	0.00	0	0.00		0.00
	Rihand III STPS (2*500)	1000	953	963	836	21.70	904	20.66		1.04
	Dadri I STPS (4*210)	840	810	452	519	11.93	497	11.63		0.30
	Dadri II STPS (2*490)	980	975	785	676	17.05	710	16.94		0.11
	Unchahar I TPS (2*210)	420	400	322	284	8.08	337	7.95		0.13
	Unchahar II TPS (2*210)	420	400	330	284	6.93	289	7.03		-0.10
	Unchahar III TPS (1*220)	210	200	150	138	3.41	142	3.47		-0.06
	ISTPP (Jhajjar) (3*500)	1500	1435	752	647	14.02	584	14.39		-0.38
	Dadri GPS (4*130.19+2*154.51)	830	800	189	157	4.45	186	4.71		-0.26
	Anta GPS (3*88.71+1*153.2)	419	396	-2	-1	0.00	0	0.00		0.00
	Auraiya GPS (4*111.19+2*109.30)	663	638	0	0	0.00	0	0.00		0.00
	Dadri Solar	5	1	0	0	0.02	1	0.02		-0.01
	Unchahar Solar	10	3	0	0	0.02	1	0.06		-0.04
Singrauli Solar	15	3	0	0	0.04	1	0.07		-0.04	
KHEP	800	820	824	819	19.81	825	19.68		0.13	
Sub Total (A)	12112	10574	7814	6832	175	7284	168		6	
B. NPC	NAPS (2*220)	440	376	421	420	9.12	380	9.02		0.09
	RAPS- B (2*220)	440	388	438	437	9.36	390	9.31		0.04
	RAPS- C (2*220)	440	375	405	407	8.74	364	9.00		-0.27
	Sub Total (B)	1320	1139	1264	1264	27.21	1134	27.34		-0.13
C. NHPC	Chamera I HPS (3*180)	540	539	554	548	13.17	549	12.94		0.24
	Chamera II HPS (3*100)	300	217	205	302	5.21	217	5.27		-0.06
	Chamera III HPS (3*77)	231	229	237	234	5.61	234	5.50		0.11
	Bairasuli HPS (3*60)	180	179	176	124	3.30	138	3.22		0.08
	Salal-HPS (6*115)	690	553	574	573	13.83	576	13.26		0.56
	Tanakpur-HPS (3*40)	94	86	91	95	2.10	88	2.07		0.03
	Uri-I HPS (4*120)	480	475	466	473	11.49	479	11.40		0.09
	Uri-II HPS (4*60)	240	171	183	183	4.13	172	4.10		0.04
	Dhauliganga-HPS (4*70)	280	268	283	280	6.53	272	6.45		0.08
	Dulhasti-HPS (3*130)	390	279	267	262	6.69	279	6.68		0.00
	Sewa-II HPS (3*40)	120	119	129	125	2.99	124	2.86		0.13
	Parbati 3 (4*130)	520	390	398	132	5.34	222	5.30		0.04
	Sub Total (C)	4065	3505	3562	3329	80	3349	79		1
	D. SJVNL	NJPC (6*250)	1500	1605	1626	1601	38.44	1602	38.52	
Rampur HEP (6*68.67)		412	428	429	427	10.35	431	10.27		0.08
Sub Total (D)		1912	2033	2055	2028	48.78	2033	48.79		-0.01
E. THDC	Tehri HPS (4*250)	1000	904	909	909	17.62	734	17.50		0.12
	Koteshwar HPS (4*100)	400	272	403	378	6.54	273	6.54		0.01
	Sub Total (E)	1400	1176	1312	1287	24.16	1007	24.04		0.13
F. BBMB	Bhakra HPS (3*108+2*126+5*157)	1361	1262	1454	1448	30.69	1279	30.29		0.39
	Dehar HPS (6*165)	990	619	660	600	14.92	622	14.85		0.07
	Pong HPS (6*66)	396	304	384	384	7.35	306	7.31		0.04
	Sub Total (F)	2747	2185	2498	2432	52.95	2206	52.45		0.50
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	229	230	4.60	192	4.90		-0.30
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	1200	28.63	1193	28.50		0.12
	Malana Stg-II HPS (2*50)	100	0	111	111	2.62	109	2.46		0.15
	Shree Cement TPS (2*150)	300	0	274	297	6.85	285	7.09		-0.24
	Budhil HPS(IPP) (2*35)	70	0	76	74	1.77	74	1.75		0.02
Sub Total (G)	1662	0	1890	1912	44.47	1853	44.71		-0.24	
H. Total Regional Entities (A-G)	25219	20612	20394	19084	452.78	18866	444.82		7.96	

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	1080	1080	25.12	1047	
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	170	170	3.90	163	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	599	627	13.11	546	
	Goindwal(GVK)	0	0	0	0.00	0	
	Rajpura (2*700)	1400	941	710	20.43	851	
	Talwandi Saboo (1*660)	660	347	348	7.35	306	
	Thermal (Total)	4700	3137	2935	69.91	2913	
	Total Hydro	1000	921	931	22.15	923	
	Total Punjab	5700	4058	3866	92.06	3836	
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	464	443	10.25	427
DCRTPP (Yamuna nagar) (2*300)		600	538	478	11.65	485	
Faridabad GPS (NTPC)		432	0	0	0.00	0	
RGTPP (khedar) (IPP) (2*600)		1200	552	381	9.80	408	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP) (2*660)		1320	688	685	16.66	694	
Thermal (Total)		4944	2242	1987	48.35	2015	
Total Hydro		62	29	27	0.66	27	
Total Haryana		5006	2271	2014	49.01	2042	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	254	240	5.38	224
		suratgarh TPS (6*250)	1500	190	192	4.39	183
		Chabra TPS (4*250)	1000	136	0	2.74	114
		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	21	60	1.27	53	
	RAPS A (NPC) (1*100+1*200)	300	184	181	4.19	175	
	Barsingsar (NLC) (2*125)	250	96	96	2.22	93	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	399	382	8.91	371	
	V/S LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	473	375	11.27	470	
	Kawai(Adani) (2*660)	1320	447	436	10.50	438	
	Thermal (Total)	8876	2200	1962	51	2120	
	Total Hydro	550	225	225	5.58	232	
	Wind power	3214	840	1134	21.85	910	
	Biomass	99	25	25	0.61	25	
	Solar	730	0	0	0.77	32	
	Renewable/Others (Total)	4043	865	1159	23.22	967	
	Total Rajasthan	13469	3290	3346	79.68	3320	
	UP	Anpara TPS (3*210+2*500)	1630	1390	925	30.40	1267
Obra TPS (2*50+2*94+5*200)		1194	398	430	9.70	404	
Panicha TPS (2*110+2*220+2*250)		1140	563	757	16.90	704	
Panki TPS (2*105)		210	59	54	1.30	54	
Harduaganj TPS (1*60+1*105+2*250)		665	531	525	12.60	525	
Tanda TPS (NTPC) (4*110)		440	363	359	8.90	371	
Roza TPS (IPP) (4*300)		1200	829	829	19.70	821	
Anpara-C (IPP) (2*600)		1200	1047	1080	25.50	1063	
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	405	403	8.60	358	
Anpara-D(1*500)		500	0	0	0.00	0	
Lalitpur TPS(1*660)		660	0	195	3.50	146	
Thermal (Total)		9289	5585	5557	137	5713	
Vishnuparyag HPS (IPP)(including Alakanada)		730	321	322	7.70	321	
Other Hydro		527	116	245	4.40	183	
Cogeneration		981	50	50	1.20	50	
Total UP		11527	6072	6174	150.40	5946	
Uttarakhand		Total Hydro	1398	967	961	23.10	963
	Total Uttarakhand	1398	967	961	23.10	963	
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	71	71	1.69	71	
	Pragati Gas Turbine (2x104+ 1x122)	330	131	126	3.13	130	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	0	0	0.00	0	
	Badarpur TPS (NTPC) (3*95+2*210)	705	322	328	7.02	293	
	Thermal (Total)	2917	524	525	11.84	493	
	Total Delhi	2917	524	525	11.84	493	
HP	Baspa HPS (IPP) (3*100)	300	333	333	7.68	320	
	Malana HPS (IPP) (2*43)	86	103	103	2.46	102	
	Other Hydro	878	647	645	15.28	636	
	Total HP	1264	1083	1081	25.41	1059	
J & K	Baqilhar HPS (IPP) (3*150)	450	450	450	10.80	450	
	Other Hydro/IPP	560	165	120	3.29	137	
	Gas/Diesel/Others	190	0	0	0.00	0	
	Total J & K	1200	615	570	14.09	587	
Total State Control Area Generation		42481	18880	18537	445.58	18245	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6529	5405	138.18	5758	
Total Regional Availability(Gross)		67700	45803	43026	1036.54	42868	

IV. Total Hydro Generation:

Regional Entities Hydro	12216	11790	11436	261.94	10914
State Control Area Hydro	5811	3956	4040	103.08	3974
Total Regional Hydro	18027	15746	15476	365.02	14888

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	Import	Export	
Vindhyachal(HVDC B/B)	500	200	0	500	7.46	0.00	7.46		
765 KV Gwalior-Agra (D/C)	2104	1629	2286	0	41.30	0.00	41.30		
400 KV Zerda-Kankroli	-127	-222	0	256	0.00	4.24	-4.24		
400 KV Zerda-Bhinmal	-191	-281	0	313	0.00	5.26	-5.26		
220 KV Auraiya-Malanpur	-24	-31	0	17	0.00	0.49	-0.49		
220 KV Badod-Kota/Morak	-3	-50	54	63	0.00	0.33	-0.33		
Mundra-Mohinderqarh(HVDC Bipole)	2198	2203	2504	0	54.68	0.00	54.68		
400 KV Vindhyachal - Rihand	505	420	508	0	9.57	0.00	9.57		
Sub Total WR	4962	3868			113.01	10.33	102.68		
Pusaull Bypass/HVDC	200	400	400	0	6.31	0.00	6.31		
400 KV MZP- GKP (D/C)	300	326	580	0	9.04	0.00	9.04		
400 KV Patna-Balia(D/C) X 2	198	231	292	0	5.15	0.00	5.15		
400 KV B'Sharif-Balia (D/C)	77	97	265	0	2.96	0.00	2.96		
765 KV Pusaull-Balia	49	135	195	88	1.36	0.00	1.36		
765 KV Gaya-Fatehpur	253	64	253	0	3.43	0.00	3.43		
220 KV Pusaull-Sahupuri	159	182	219	0	2.14	0.00	2.14		
132 KV Knasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
132 KV Son Ngr-Rihand	-26	-34	0	36	0.00	0.53	-0.53		
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
765 KV Sasaram - Fatehpur	118	-66	131	106	0.97	0.00	0.97		
400 KV Barh -GKP (D/C)	239	202	252	0	4.68	0.00	4.68		
Sub Total ER	1567	1537			36.03	0.53	35.50		
Total IR Exch	6529	5405			149.04	10.86	138.18		

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
33.77	3.13	36.90	10.09	8.30	-1.65	-0.81	2.07	-2.07

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
47.40	91.92	139.32	35.50	102.68	138.18	-11.90	10.76	-1.14

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	Import	Export	
132 KV Tanakpur - Mahendarnagar	-17	-32	0	-32	0	-1	0.57		

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	0.20	1.97	10.56	52.72	73.01	13.82	2.28	0.41	0.00

←----- Frequency (Hz) ----->				Average Frequency	Frequency Variation	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz	Index		(Hz)	(Hz)
50.24	18.04	49.66	19.13	49.99	0.05	0.07	50.21	49.86

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	405	05:51	397	00:11	0.0	0.0	0.0	0.0
Gorakhpur	400	415	07:01	397	19:14	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	414	05:08	201	18:11	35.2	35.2	0.0	0.0
Dadri	400	413	07:01	398	14:39	0.4	0.4	0.0	0.0
Ballabgarh	400	420	05:23	404	11:25	0.0	0.0	0.0	0.0
Bawana	400	414	07:01	353	08:29	0.0	0.0	0.0	0.0
Bassi	400	430	04:00	409	19:39	0.0	0.0	55.0	0.0
Hissar	400	408	05:05	395	14:38	0.0	0.0	0.0	0.0
Moga	400	404	03:50	392	14:39	0.0	0.0	0.0	0.0
Abdullapur	400	405	07:01	390	18:54	0.0	0.0	0.0	0.0
Nalagarh	400	407	05:07	394	14:32	0.0	0.0	0.0	0.0
Kishenpur	400	410	04:00	400	20:09	0.0	0.0	0.0	0.0
Wagoora	400	404	03:17	386	20:10	0.0	4.2	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	778	17:03	751	19:19	0.0	0.0	0.0	0.0
Balia	765	757	00:00	757	00:00	0.0	0.0	0.0	0.0
Moga	765	777	05:06	747	14:40	0.0	0.0	0.0	0.0
Agra	765	784	05:07	753	19:22	0.0	0.0	0.0	0.0
Bhiwani	765	788	05:08	761	11:27	0.0	0.0	0.0	0.0
Unnao	765	755	08:03	734	00:24	0.0	13.7	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	502.70	1205.87	502.55	1205.87	1490.00	1014.31
Pong	426.72	384.05	415.87	705.67	406.81	387.88	1030.05	442.31
Tehri	829.79	740.04	793.70	509.00	791.70	480.00	577.32	447.00
Koteshwar	612.50	598.50	610.20	4.44	610.59	4.95	447.00	431.04
Chamera-I	760.00	748.75	757.38	0.00	0.00	0.00	443.81	356.68
Rihand	268.22	252.98	848.00	224.00	837.10	82.20	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	522.88	10.79	519.99	11.48	531.59	420.58

* 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	1368	272	0	1316	150	0	34.00	4.99	38.99
Delhi	258	-148	-2	339	-183	0	7.93	-1.73	6.20
Haryana	1326	247	0	1360	214	0	32.36	2.72	35.08
HP	-1333	-206	0	-1092	-270	0	-27.88	-5.85	-33.73
J&K	-686	-70	0	-439	40	0	-12.08	-1.03	-13.11
CHD	0	-15	0	0	0	0	0.24	-0.01	0.23
Rajasthan	-498	103	2	-494	409	0	-11.93	7.15	-4.78
UP	1069	0	0	648	0	0	15.87	0.00	15.87
Uttarakhand	-57	0	0	-57	0	0	-1.36	0.01	-1.35
Total	1446	182	0	1581	360	0	37.14	6.25	43.38

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1656	1257	272	150	0	0
Delhi	601	65	345	-358	0	-2
Haryana	1401	1315	247	-167	0	0
HP	-1080	-1333	-206	-371	0	0
J&K	-433	-686	40	-121	0	0
CHD	29	0	29	-30	0	0
Rajasthan	-494	-498	553	-169	2	0
UP	1069	454	0	0	0	0
Uttarakhand	-57	-57	11	0	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 31.07.2015 :**

Normal/ Scattered rain in rajasthan

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

1) LALITPUR 765/220kV ICT-II FIRST TIME CHARGED FROM 220kV SIDE AT NO LOAD ON 31.07.2017 AT 17.43 HRS.

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