

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 30.11.2016

Date of Reporting : 01.12.2016



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
37042	831	37873	50.05	28147	366	28513	50.06	756.27	34.38

* 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	27.75	10.00	1.18	38.92	48.80	48.26	-0.54	87.18	0.00
Haryana	24.12	0.39	0.00	24.51	84.34	87.92	3.58	112.43	0.15
Rajasthan	113.90	3.81	7.61	125.31	71.96	72.57	0.61	197.88	3.78
Delhi	8.82	0.00	0.00	8.82	43.41	43.84	0.43	52.66	0.49
UP	121.74	7.61	0.00	129.35	84.37	82.08	-2.30	211.42	19.36
Uttarakhand	7.99	0.00	0.00	14.36	14.26	16.91	2.65	31.27	1.57
HP	3.80	1.72	0.00	5.52	18.31	18.61	0.29	24.13	0.02
J & K	5.22	0.00	0.00	5.22	34.22	30.83	-3.39	36.05	9.01
Chandigarh	0.00	0.00	0.00	0.00	3.37	3.25	-0.12	3.25	0.00
Total	296.32	38.81	10.50	352.01	403.05	404.26	1.22	756.27	34.38

* Shortage furnished by the respective constituent States 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				Maximum Demand Met (MW) and Time(Hrs)	Shortage (MW)	
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction			
Punjab	4558	0	12	-774	3336	0	34	-444	4588	20:00	0
Haryana	5648	200	-89	-147	3223	0	-12	-223	5648	19:00	200
Rajasthan	8511	67	-49	307	7948	0	61	557	10074	8:00	0
Delhi	2875	0	11	-355	1390	0	-47	-521	2913	11:00	0
UP	10918	110	-510	-197	8997	0	3	124	10918	19:00	110
Uttarakhand	1656	75	63	-49	978	0	-3	224	1679	7:00	0
HP	1186	0	-23	73	729	0	-4	369	1305	8:00	0
J&K	1516	379	-246	602	1463	366	-208	748	1772	7:00	443
Chandigarh	175	0	-26	-30	83	0	1	-30	178	8:00	0
Total	37042	831	-857	-570	28147	366	-174	803	37042	19:00	831

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

III. Regional Entities :

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	Net MU
A. NTPC									
Singrauli STPS (5*200+2*500)	2000	1849	1823	1895	43.74	1822	43.28	0.46	
Rihand I STPS (2*500)	1000	946	1015	748	21.35	889	21.28	0.07	
Rihand II STPS (2*500)	1000	948	1014	767	21.76	907	21.17	0.59	
Rihand III STPS (2*500)	1000	948	1021	752	21.52	897	20.95	0.57	
Dadri I STPS (4*210)	840	815	221	151	4.60	192	4.91	-0.31	
Dadri II STPS (2*490)	980	980	509	353	10.43	435	10.92	-0.49	
Unchahar I TPS (2*210)	420	360	384	270	7.78	324	8.05	-0.27	
Unchahar II TPS (2*210)	420	404	434	285	8.57	357	8.87	-0.29	
Unchahar III TPS (1*210)	210	202	216	149	4.32	180	4.51	-0.20	
ISTPP (Jhajihar) (3*500)	1500	1440	1075	747	20.63	860	21.06	-0.43	
Dadri GPS (4*130.19+2*154.51)	830	742	396	229	6.54	272	7.12	-0.59	
Anta GPS (3*88.71+1*153.2)	419	409	0	0	0.00	0	0.00	0.00	
Auraiya GPS (4*111.19+2*109.30)	663	625	0	0	0.00	0	0.00	0.00	
Dadri Solar(5)	5	1	0	0	0.01	1	0.01	0.00	
Unchahar Solar(10)	10	1	0	0	0.02	1	0.02	-0.01	
Singrauli Solar(15)	15	2	0	0	0.04	2	0.04	-0.01	
KHEP(4*200)	800	865	857	433	3.14	131	2.89	0.26	
Sub Total (A)	12112	11537	8965	6779	174	7268	175	-0.65	
B. NPC									
NAPS (2*220)	440	402	436	445	9.64	402	9.65	0.00	
RAPS- B (2*220)	440	381	424	427	9.14	381	9.14	0.00	
RAPS- C (2*220)	440	220	236	234	5.00	208	5.28	-0.28	
Sub Total (B)	1320	1003	1096	1106	23.79	991	24.07	-0.29	
C. NHPC									
Chamera I HPS (3*180)	540	540	557	0	2.20	92	1.90	0.30	
Chamera II HPS (3*100)	300	201	208	0	1.42	59	1.25	0.17	
Chamera III HPS (3*77)	231	231	151	0	0.73	31	0.69	0.04	
Bairasuli HPS(3*60)	180	120	122	0	0.56	23	0.50	0.06	
Salal-HPS (6*115)	690	98	300	30	2.87	120	2.36	0.52	
Tanakpur-HPS (3*31.4)	94	25	29	32	0.79	33	0.59	0.19	
Uri-I HPS (4*120)	480	79	230	46	2.25	94	1.89	0.36	
Uri-II HPS (4*60)	240	56	120	39	1.45	60	1.35	0.10	
Dhauliganga-HPS (4*70)	280	210	210	0	1.14	48	1.05	0.09	
Dulhasti-HPS (3*130)	390	383	403	0	3.63	151	3.39	0.24	
Sewa-II HPS (3*40)	120	80	61	0	0.20	9	0.25	-0.04	
Parbati 3 (4*130)	520	200	210	0	0.66	27	0.60	0.06	
Sub Total (C)	4065	2222	2601	147	18	746	16	2.07	
D. SJVNL									
NJPC (6*250)	1500	1610	1252	0	8.36	348	8.21	0.15	
Rampur HEP (6*88.67)	412	442	375	0	2.37	99	2.29	0.09	
Sub Total (D)	1912	2052	1627	0	10.73	447	10.49	0.24	
E. THDC									
Tehri HPS (4*250)	1000	1075	1069	0	8.40	350	8.00	0.40	
Koteshwar HPS (4*100)	400	105	201	91	2.64	110	2.54	0.10	
Sub Total (E)	1400	1180	1270	91	11.03	460	10.54	0.49	
F. BBMB									
Bhakra HPS (2*108+3*126+5*157)	1379	567	989	361	13.94	581	13.60	0.34	
Dehar HPS (6*165)	990	148	495	145					

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	210	140	3.68	153
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	0	0	-0.02	-1
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	0	0	-0.12	-5
	Goindwal(GVK) (2*270)	540	0	0	-0.02	-1
	Rajpura (2*700)	1400	660	330	14.49	604
	Talwandi Saboo (3*660)	1980	335	924	9.73	406
	Thermal (Total)	6560	1205	1394	27.75	1156
	Total Hydro	1000	414	371	10.00	417
	Wind Power	0	0	0	0.00	0
	Biomass	288	0	0	0.92	38
	Solar	560	0	0	0.25	11
	Renewable(Total)	848	0	0	1.18	49
	Total Punjab	8408	1619	1765	38.92	1622
	Haryana	Panipat TPS (2*210+2*250)	920	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	555	461	12.58	524
Faridabad GPS (NTPC)(2*137.75+1*156)		432	0	0	0.00	0
RGTPP (khardar) (IPP) (2*600)		1200	0	0	0.00	0
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	567	370	11.54	481
Thermal (Total)		4497	1122	831	24.12	1005
Total Hydro		62	2	9	0.39	16
Wind Power		0	0	0	0.00	0
Biomass		40	0	0	0.00	0
Solar		0	0	0	0.00	0
Renewable(Total)		40	0	0	0.00	0
Total Haryana		4599	1124	840	24.51	1021
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	1160	963	26.51
	suratgarh TPS (6*250)	1500	452	409	10.49	437
	Chabra TPS (4*250)	1000	913	821	21.00	875
	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	149	155	3.84	160
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingsar (NLC) (2*125)	250	221	225	5.25	219
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	830	772	18.78	783
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	551	901	17.27	719
	Kawai(Adani) (2*660)	1320	450	454	10.78	449
	Thermal (Total)	8876	4726	4700	113.90	4746
	Total Hydro	550	169	146	3.81	159
	Wind power	4017	116	319	4.84	202
	Biomass	99	8	8	0.18	8
	Solar	1295	5	0	2.58	108
	Renewable/Others (Total)	5411	129	327	7.61	317
Total Rajasthan	14837	5024	5173	125.31	5221	
UP	Anpara TPS (3*210+2*500)	1630	0	1036	7.87	328
	Obra TPS (2*50+2*94+5*200)	1194	346	306	7.10	296
	Paricha TPS (2*110+2*220+2*250)	1160	778	576	17.37	724
	Panki TPS (2*105)	210	144	135	3.44	143
	Harduaganj TPS (1*60+1*105+2*250)	665	440	315	9.54	397
	Tanda TPS (NTPC) (4*110)	440	287	207	6.28	262
	Roza TPS (IPP) (4*300)	1200	826	567	17.63	735
	Anpara-C (IPP) (2*600)	1200	1081	626	7.95	331
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	404	283	8.59	358
	Anpara-D(2*500)	1000	0	584	3.92	164
	Lalitpur TPS(3*660)	1980	0	0	0.00	0
	Bara(2*660)	1320	591	377	12.85	535
	Thermal (Total)	12449	4897	5012	102.54	4273
	Vishnuparyag HPS (IPP)(4*110)	440	179	98	2.48	104
	Alaknanda(4*82.5)	330	0	0	1.55	65
	Other Hydro	527	254	35	3.57	149
	Cogeneration	981	800	800	19.20	800
	Wind Power	0	0	0	0.00	0
	Biomass	26	0	0	0.00	0
	Solar	102	0	0	0.00	0
	Renewable(Total)	128	0	0	0.00	0
	Total UP	14855	6130	5945	129.35	5389
	Uttarakhand	Other Hydro	1250	559	197	7.99
Total Gas		225	278	236	6.34	264
Wind Power		0	0	0	0.00	0
Biomass		127	0	0	0.00	0
Solar		20	0	0	0.04	2
Small Hydro (< 25 MW)		180	0	0	0.00	0
Renewable(Total)		327	0	0	0.04	2
Total Uttarakhand		1802	837	433	14.36	598
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	63	47	1.54	64
	Pragati Gas Turbine (2x104+ 1x122)	330	137	266	3.57	149
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	298	280	3.71	154
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0
	Thermal (Total)	2917	498	593	8.82	368
	Wind Power	0	0	0	0.00	0
	Biomass	16	0	0	0.00	0
	Solar	2	0	0	0.00	0
Renewable(Total)	18	0	0	0.00	0	
Total Delhi	2935	498	593	8.82	368	

HP	Baspa HPS (IPP) (3*100)	300	0	0	1.40	58
	Malana HPS (IPP) (2*43)	86	0	0	0.32	13
	Other Hydro	372	101	40	2.08	87
	Wind Power	0	0	0	0.00	0
	Biomass	0	0	0	0.00	0
	Solar	0	0	0	0.00	0
	Small Hydro (< 25 MW)	486	80	67	1.72	72
	Renewable(Total)	486	80	67	1.72	72
	Total HP	1244	181	107	5.52	230
	J & K	Baglihar HPS (IPP) (3*150+3*150)	900	102	102	2.45
Other Hydro/IPP(including 98 MW Small Hydro)		308	137	93	2.77	115
Gas/Diesel/Others		190	0	0	0.00	0
Wind Power		0	0	0	0.00	0
Biomass		0	0	0	0.00	0
Solar		0	0	0	0.00	0
Small Hydro (< 25 MW)Included in Other Hydro Above		98	0	0	0.00	0
Renewable(Total)		98	0	0	0.00	0
Total J & K		1398	239	195	5	217
Total State Control Area Generation		50078	15652	15051	352.01	14667
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		5613	7284	172.98	7208	
Total Regional Availability(Gross)	75315	39333	31095	790.72	32947	

IV. Total Hydro Generation:

Regional Entities Hydro	12234	8865	1309	70.48	2937
State Control Area Hydro	7163	2275	1394	40.54	1954
Total Regional Hydro	19397	11140	2703	111.02	4891

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.07	3
State Control Area Renewable	7356	209	394	10.54	439
Total Regional Renewable	7386	209	394	10.61	442

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

Element	Peak(19:00 Hrs) MW	Off Peak(03:00 Hrs) MW	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
			Import	Export	Import	Export	
Vindhyhall(HVDC B/B)	-500	500	500	500	3.81	3.77	0.04
765 KV Gwalior-Agra (D/C)	2354	2218	2808	0	58.52	0.00	58.52
400 KV Zerda-Kankroli	-18	-89	34	-171	0.00	1.85	-1.85
400 KV Zerda-Bhinmal	70	-12	190	154	0.25	0.00	0.25
220 KV Auraiya-Malanpur	-43	-110	0	120	0.00	2.07	-2.07
220 KV Badod-Kota/Morak	-53	-34	0	138	0.00	1.47	-1.47
Mundra-Mohindergarh(HVDC Bipole)	1249	1200	1404	0.00	29.65	0.00	29.65
400 KV RAPP- Sujalpur	-400	-387	559	0	8.91	0.00	8.91
400 KV Vindhyachal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1375	1394	1648	0	35.34	0.00	35.34
Sub Total WR	4034	4680			136.48	9.16	127.32
400 kV Sasaram - Varanasi	59	76	0	82	0.00	0.49	-0.49
400 kV Sasaram - Allahabad	122	135	0	270	0.00	3.61	-3.61
400 KV MZP- GKP (D/C)	-12	527	532	88	5.15	0.00	5.15
400 KV Patna-Balia(D/C) X 2	440	659	979	0	15.45	0.00	15.45
400 KV B'Sharif-Balia (D/C)	142	181	335	0	4.35	0.00	4.35
765 KV Gaya-Balia	337	285	420	0	6.62	0.00	6.62
765 KV Gaya-Varanasi (D/C)	539	613	813	0	15.04	0.00	15.04
220 KV Pusaali-Sahupuri	150	77	241	0	3.21	0.00	3.21
132 KV K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
132 KV Son Ngr-Rihand	0	0	0	0	0.00	0.00	0.00
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	45	112	209	4	2.34	0.00	2.34
400 KV Barh -GKP (D/C)	372	506	570	0	10.50	0.00	10.50
400 kV B'Sharif - Varanasi (D/C)	65	102	225	0	3.02	0.00	3.02
Sub Total ER	2259	3273			65.67	4.10	61.57
+/- 800 KV Biswanath Charialli-Agra	-680	-669	0	683.00	0.00	15.91	-15.91
Sub Total NER	-680	-669			0.00	15.91	-15.91
Total IR Exch	5613	7284			202.15	29.17	172.98

VI(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
50.69	1.24	51.93	-1.97	-12.58	14.30	1.56	0.00	0.00

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER(including NER)	Through WR	Total	Through ER (including NER)	Through WR	Total
64.25	95.23	159.48	45.66	127.32	172.98	-18.59	32.09	13.50

VI(C). Inter National Exchange with Nepal [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(19:00 Hrs) MW	Off Peak(03:00 Hrs) MW	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
			Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	-30	-26	0	33	0	1	-0.69

VII. 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	2.23	10.10	28.16	73.13	62.27	7.62	1.98	0.00	0.00

<----- Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block		Freq Dev Index (% of Time)
Maximum		Minimum					MAX (Hz)	MIN (Hz)	
Freq	Time	Freq	Time						
50.18	6.01	49.54	17.43	49.94	0.131	0.098	0.00	0.00	37.73

VIII(A). Voltage profile 400 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviat
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV	
Rihand	400	411	0:00	402	8:17	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	420	4:01	403	17:39	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	424	2:01	400	12:18	0.0	0.0	15.7	0.0	15.7
Kanpur	400	420	2:01	400	12:18	0.0	0.0	0.0	0.0	0.0
Dadri	400	430	2:01	401	12:10	0.0	0.0	26.5	0.0	26.5
Ballabgarh	400	434	2:02	403	12:18	0.0	0.0	41.0	16.5	41.0
Bawana	400	431	1:00	403	12:12	0.0	0.0	38.6	1.8	38.6
Bassi	400	424	19:43	396	6:15	0.0	0.0	7.1	0.0	7.1
Hissar	400	424	2:02	394	12:19	0.0	0.0	18.5	0.0	18.5
Moga	400	424	0:59	399	12:13	0.0	0.0	22.3	0.0	22.3
Abdullapur	400	428	0:49	398	11:45	0.0	0.0	23.1	0.0	23.1
Nalagarh	400	434	0:52	401	12:19	0.0	0.0	38.5	18.8	38.5
Kishenpur	400	420	1:35	396	11:10	0.0	0.0	0.0	0.0	0.0
Wagoora	400	399	13:01	364	18:15	57.5	84.5	0.0	0.0	57.5
Amritsar	400	433	4:00	406	8:46	0.0	0.0	42.2	13.0	42.2
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	428	0:55	397	11:14	0.0	0.0	46.7	0.0	46.7
Rishikesh	400	422	2:01	393	12:18	0.0	0.0	2.5	0.0	2.5

VIII(B). Voltage profile 765 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviat
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	
Fatehpur	765	776	2:01	745	12:18	0.0	0.0	0.0	0.0	0.0
Balia	765	793	2:00	765	17:40	0.0	0.0	0.0	0.0	0.0
Moga	765	806	21:28	758	12:11	0.0	0.0	5.7	0.0	5.7
Agra	765	792	19:43	753	22:08	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	811	1:59	763	12:12	0.0	0.0	25.9	0.0	25.9
Unnao	765	776	2:01	743	12:18	0.0	0.0	0.0	0.0	0.0
Lucknow	765	805	2:01	771	12:18	0.0	0.0	14.1	0.0	14.1
Meerut	765	810	20:57	761	12:18	0.0	0.0	6.7	0.0	6.7
Jhatikara	765	811	4:00	758	12:18	0.0	0.0	21.5	0.0	21.5
Bareilly 765 kV	765	799	2:00	757	12:18	0.0	0.0	0.0	0.0	0.0
Anta	765	800	21:01	718	14:47	2.5	2.5	0.0	0.0	2.5
Phagi	765	802	3:59	764	11:56	0.0	0.0	5.8	0.0	5.8

Note : '0' in Max / Min Col -> Telemetry Outage

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	495.01	903.28	506.45	1382.01	146.74	429.71
Pong	426.72	384.05	411.67	555.85	415.47	693.24	45.70	297.44
Tehri	829.79	740.04	817.25	947.00	811.90	840.00	42.89	188.00
Koteswar	612.50	598.50	611.09	5.10	610.92	4.95	188.00	173.57
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	54.81	59.20
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	509.46	3.62	506.62	1.39	58.02	130.86

* 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	-447	2	0	-455	-319	0	-13.49	-0.64	-14.14
Delhi	-189	-332	0	-261	-94	0	-7.47	-2.53	-10.01
Haryana	-593	369	0	-327	180	0	-10.16	5.13	-5.03
HP	293	76	0	199	-127	0	7.96	-1.47	6.48
J&K	352	396	0	349	253	0	8.68	4.23	12.92
CHD	-30	0	0	-30	0	0	-0.36	0.00	-0.36
Rajasthan	-7	564	0	-7	314	0	4.42	13.60	18.02
UP	124	0	0	-97	-100	0	-6.81	-1.14	-7.95
Uttarakhand	147	78	0	0	-49	0	1.00	1.03	2.03
Total	-349	1153	0	-629	59	0	-16.24	18.20	1.96

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-447	-717	35	-404	0	0
Delhi	-138	-502	85	-390	0	-10
Haryana	-179	-630	376	-95	0	0
HP	471	199	114	-532	0	0
J&K	410	303	396	-51	0	0
CHD	0	-30	0	0	0	0
Rajasthan	452	-7	1718	25	0	0
UP	151	-773	0	-100	0	0
Uttarakhand	147	0	337	-146	0	0

XI. System Reliability Indices(Violation of TTC and ATC):

(i)%age of times N-1 Criteria was violated in the inter - regional corridors

WR	12.85%
ER	0.00%
Simultaneous	38.89%

(ii)%age of times ATC violated on the inter-regional corridors

WR	41.67%
ER	0.00%
Simultaneous	80.21%

(iii)%age of times Angular Difference on Important Buses was beyond permissible limits(40 deg.)

Rihand - Dadri	0.00%
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XII. Zero Crossing Violations

State	No. of violations(Maximum 8 in a day)	Maximum number of continuous blocks without sign change
Punjab	0	11
Haryana	6	37
Rajasthan	4	26
Delhi	2	13
UP	1	14
Uttarakhand	4	25
HP	1	14
J & K	2	24
Chandigarh	5	29

XIII. System Constraints:**XIV. Grid Disturbance / Any Other Significant Event:****XV. Weather Conditions For 30.11.2016 :**

Normal

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

#REF!

#REF!

XVIII. Tripping of lines in pooling stations :**XIX. Complete generation loss in a generating station :**

Note: Data(regarding drawal,generation, shortage , inter-regional flows and reservoir levels)of the constituents filled in the report are as per last furnished data by the respective state/constituent to NRLDC.

Report for : 30.11.2016

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER