

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 22.11.2016

Date of Reporting : 23.11.2016



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
38060	1624	39684	50.05	28093	361	28454	50.06	801.71	19.07

* 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	35.90	7.66	0.98	44.54	47.65	48.93	1.28	93.47	0.00
Haryana	22.43	0.41	0.00	22.84	83.64	83.64	0.00	106.47	0.00
Rajasthan	100.97	4.47	6.34	111.78	83.78	86.10	2.32	197.89	7.61
Delhi	14.62		0.00	14.62	39.89	40.88	0.98	55.49	0.00
UP	161.71	6.72	0.00	168.43	86.45	84.29	-2.16	252.71	1.98
Uttarakhand		7.83	0.00	14.28	17.67	17.01	-0.66	31.29	0.00
HP		3.84	1.74	5.58	18.04	18.45	0.41	24.03	0.21
J & K		5.61	0.00	5.61	34.01	31.49	-2.52	37.10	9.28
Chandigarh				0.00	3.26	3.26	0.00	3.26	0.00
Total	335.62	36.55	9.05	387.66	414.40	414.05	-0.35	801.71	19.07

* Shortage furnished by the respective constituent's 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				Maximum Demand Met (MW) and Time(Hrs)	Shortage (MW)	
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction			
Punjab	4778	0	-88	-456	2815	0	11	-455	4778	19:00	0
Haryana	5863	0	30	40	3013	0	-148	-228	5863	19:00	0
Rajasthan	8333	1059	259	702	7496	0	138	947	9646	9:00	321
Delhi	2893	0	92	-227	1431	0	116	-788	2975	11:00	0
UP	11480	140	-408	-49	9967	0	-51	119	12217	7:00	5
Uttarakhand	1613	0	-232	193	1086	0	33	267	1658	7:00	0
HP	1227	0	-51	3	754	0	36	403	1370	8:00	0
J&K	1700	425	-157	332	1445	361	-156	355	1700	19:00	425
Chandigarh	173	0	-19	-30	86	0	-4	-30	174	8:00	0
Total	38060	1624	-574	508	28093	361	-25	590	38060	19:00	1624

* 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	1698	1657	1901	40.84	1702	40.43	0.41	
Rihand I STPS (2*500)	1000	943	1021	846	21.36	890	21.49	-0.13	
Rihand II STPS (2*500)	1000	950	987	814	21.79	908	21.37	0.42	
Rihand III STPS (2*500)	1000	950	1018	756	21.43	893	21.20	0.23	
Dadri I STPS (4*210)	840	815	213	159	4.04	168	4.17	-0.13	
Dadri II STPS (2*490)	980	832	0	369	7.58	316	8.78	-1.20	
Unchahar I TPS (2*210)	420	360	361	261	7.26	302	7.86	-0.61	
Unchahar II TPS (2*210)	420	404	415	300	8.04	335	8.62	-0.58	
Unchahar III TPS (1*210)	210	202	198	140	6.70	279	4.25	2.45	
ISTPP (Jhajjar) (3*500)	1500	960	483	323	9.48	395	9.75	-0.27	
Dadri GPS (4*130.19+2*154.51)	830	805	360	335	8.23	343	8.82	-0.59	
Anta GPS (3*88.71+1*153.2)	419	409	0	0	0.00	0	0.21	-0.21	
Auraiya GPS (4*111.19+2*109.30)	663	624	0	0	0.00	0	0.00	0.00	
Dadri Solar(5)	5	1	0	0	0.00	0	0.02	-0.02	
Unchahar Solar(10)	10	2	0	0	0.00	0	0.04	-0.04	
Singrauli Solar(15)	15	2	0	0	0.00	0	0.05	-0.05	
KHEP(4*200)	800	862	600	0	2.97	124	2.60	0.37	
Sub Total (A)	12112	10819	7313	6204	160	6655	160	0.06	
B. NPC									
NAPS (2*220)	440	408	445	445	9.72	405	9.79	-0.07	
RAPS- B (2*220)	440	382	425	427	9.17	382	9.17	0.00	
RAPS- C (2*220)	440	220	235	235	4.98	207	5.28	-0.30	
Sub Total (B)	1320	1010	1105	1107	23.87	994	24.24	-0.37	
C. NHPC									
Chamera I HPS (3*180)	540	540	240	0	2.06	86	1.80	0.26	
Chamera II HPS (3*100)	300	201	209	0	1.47	61	1.30	0.17	
Chamera III HPS (3*77)	231	231	150	0	0.75	31	0.70	0.05	
Bairasuli HPS(3*60)	180	120	121	0	0.52	22	0.49	0.04	
Salal-HPS (6*115)	690	115	310	122	3.17	132	2.76	0.42	
Tanakpur-HPS (3*31.4)	94	28	33	34	0.84	35	0.66	0.18	
Uri-I HPS (4*120)	480	77	121	24	2.04	85	1.84	0.20	
Uri-II HPS (4*60)	240	54	40	80	1.38	58	1.31	0.07	
Dhauliganga-HPS (4*70)	280	210	212	0	1.24	52	1.16	0.08	
Dulhasi-HPS (3*130)	390	383	392	0	3.99	166	3.70	0.29	
Sewa-II HPS (3*40)	120	80	72	0	0.21	9	0.25	-0.04	
Parbati 3 (4*130)	520	200	125	0	0.62	26	0.57	0.05	
Sub Total (C)	4065	2238	2025	260	18	762	17	1.75	
D.SJVNL									
NJPC (6*250)	1500	1605	1613	0	8.71	363	8.56	0.15	
Rampur HEP (6*68.67)	412	341	437	0	2.32	97	2.25	0.07	
Sub Total (D)	1912	1946	2050	0	11.04	460	10.81	0.23	
E. THDC									
Tehri HPS (4*250)	1000	1075	1053	0	6.72	280	6.50	0.22	
Koteshwar HPS (4*100)	400	96	101	93	2.36	98	2.30	0.06	
Sub Total (E)	1400	1171	1154	93	9.09	379	8.80	0.29	
F. BBMB									
Bhakra HPS (2*108+3*126+5*157)	1379	545	1010	391	13.28	553	13.09	0.19	
Dehar HPS (6*165)	990	159	495	145	3.87	161	3.82	0.06	
Pong HPS (6*66)	396	153	330	66	3.64	152	3.67	-0.03	
Sub Total (F)	2765	857	1835	602	20.79	866	20.57	0.22	
G. IPP(s)/JV(s)									
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	49	0	0.45	19	0.46	-0.02	
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	750	0	4.85	202	4.54	0.31	
Malana Stg-II HPS (2*50)	100	0	0	0	0.30	12	0.29	0.01	
Shree Cement TPS (2*150)	300	0	0	0	0.00	0	0.00	0.00	
Budhil HPS(IPP) (2*35)	70	0	0	0	0.24	10	0.23	0.02	
Sub Total (G)	1662	0	799	0	5.84	243	5.52	0.32	
H. Total Regional Entities (A-G)	25237	18041	16281	8267	248.61	10359	246.12	2.49	

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	0	0	0.00	0
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	0	0	0.00	0
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	0	0	0.00	0
	Goindwal(GVK) (2*270)	540	0	0	0.00	0
	Rajpura (2*700)	1400	660	330	13.94	581
	Talwandi Saboo (3*660)	1980	1228	616	21.96	915
	Thermal (Total)	6560	1888	946	35.90	1496
	Total Hydro	1000	316	316	7.66	319
	Wind Power	0	0	0	0.00	0
	Biomass	288	30	30	0.73	30
	Solar	560	0	0	0.25	11
	Renewable(Total)	848	30	30	0.98	41
	Total Punjab	8408	2234	1292	44.54	1856
	Haryana	Panipat TPS (2*210+2*250)	920	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	552	462	11.80	492
Faridabad GPS (NTPC)(2*137.75+1*156)		432	0	0	0.00	0
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	550	369	10.63	443
Thermal (Total)		4497	1102	831	22.43	934
Total Hydro		62	5	23	0.41	17
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	1107	854	22.84	951
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	1136	1146	27.37
	suratgarh TPS (6*250)	1500	451	451	10.67	445
	Chabra TPS (4*250)	1000	908	679	19.58	816
	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	153	156	3.94	164
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingsar (NLC) (2*125)	250	114	112	2.56	107
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	835	841	19.93	831
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	112	0	3.87	161
	Kawai(Adani) (2*660)	1320	412	624	13.06	544
	Thermal (Total)	8876	4121	4009	100.97	4207
	Total Hydro	550	170	212	4.47	186
	Wind power	4017	70	210	2.88	120
	Biomass	99	14	14	0.33	14
	Solar	1295	0	0	3.13	131
	Renewable/Others (Total)	5411	84	224	6.34	264
Total Rajasthan	14837	4375	4445	111.78	4658	
UP	Anpara TPS (3*210+2*500)	1630	1157	1183	28.24	1177
	Obra TPS (2*50+2*94+5*200)	1194	306	301	7.08	295
	Paricha TPS (2*110+2*220+2*250)	1160	578	583	14.89	620
	Panki TPS (2*105)	210	50	68	1.40	58
	Harduaganj TPS (1*60+1*105+2*250)	665	323	311	8.21	342
	Tanda TPS (NTPC) (4*110)	440	292	206	6.27	261
	Roza TPS (IPP) (4*300)	1200	824	568	17.67	736
	Anpara-C (IPP) (2*600)	1200	1080	954	23.97	999
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	282	281	6.87	286
	Anpara-D(2*500)	1000	461	426	10.65	444
	Lalitpur TPS(3*660)	1980	362	359	8.53	356
	Bara(2*660)	1320	520	572	13.54	564
	Thermal (Total)	12449	6235	5812	147.31	6138
	Vishnuparyag HPS (IPP)(4*110)	440	112	102	2.54	106
	Alaknada(4*82.5)	330	80	75	1.63	68
	Other Hydro	527	58	53	2.54	106
	Cogeneration	981	600	600	14.40	600
	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	7085	6642	168.43	7018	
Uttarakhand	Other Hydro	1250	375	235	7.83	326
	Total Gas	225	249	282	6.39	266
	Wind Power	0	0	0	0.00	0
	Biomass	127	0	0	0.00	0
	Solar	20	0	0	0.05	2
	Small Hydro (< 25 MW)	180	0	0	0.00	0
	Renewable(Total)	327	0	0	0.05	2
	Total Uttarakhand	1802	624	517	14.28	595
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	77	76	1.91	79
	Pragati Gas Turbine (2x104+ 1x122)	330	267	265	6.51	271
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	291	280	6.20	259
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0
	Thermal (Total)	2917	635	621	14.62	609
	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	635	621	14.62	609	

HP	Baspa HPS (IPP) (3*100)	300	26	0	1.40	58
	Malana HPS (IPP) (2*43)	86	39	0	0.35	15
	Other Hydro	372	92	37	2.09	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	79	68	1.74	72
	Renewable(Total)	486	79	68	1.74	72
	Total HP	1244	235	105	5.58	232
	J & K	Baglihar HPS (IPP) (3*150+3*150)	900	201	88	2.84
Other Hydro/IPP(including 98 MW Small Hydro)		308	138	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	339	181	6	234	
Total State Control Area Generation		50078	16634	14657	387.66	16152
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6664	6736	191.03	7960
Total Regional Availability(Gross)		75315	39578	29660	827.30	34471

IV. Total Hydro Generation:

Regional Entities Hydro	12234	8463	956	67.75	2823
State Control Area Hydro	7163	1939	1584	38.28	1863
Total Regional Hydro	19397	10402	2540	106.03	4686

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.00	0
State Control Area Renewable	7356	193	323	9.10	379
Total Regional Renewable	7386	193	323	9.10	379

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	
Vindhyachal(HVDC B/B)	-250	-400	0	400	7.77	7.77	-7.77
765 KV Gwalior-Agra (D/C)	1495	1904	2366	0	48.36	0.00	48.36
400 KV Zerda-Kankroli	0	-43	111	140	0.00	0.16	-0.16
400 KV Zerda-Bhinmal	-49	28	288	138	0.78	0.00	0.78
220 KV Auraiya-Malanpur	-105	-95	0	119	0.00	2.17	-2.17
220 KV Badod-Kota/Morak	-54	-88	18	90	0.00	1.57	-1.57
Mundra-Mohindergarh(HVDC Bipole)	2199	1172	2206	0.00	40.93	0.00	40.93
400 KV RAPP-C-Sujalpur	319	180	400	0	7.00	0.00	7.00
400 KV Vindhyachal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1340	1552	1887	0	38.66	0.00	38.66
Sub Total WR	4895	4210			135.73	11.67	124.06
400 kV Sasaram - Varanasi	145	147	160	0	4.86	0.00	4.86
400 kV Sasaram - Allahabad	-76	-2	23	76	0.00	0.04	-0.04
400 KV MZP- GKP (D/C)	-124	172	261	124	3.24	0.00	3.24
400 KV Patna-Balia(D/C) X 2	296	353	628	0	10.83	0.00	10.83
400 KV B'Sharif-Balia (D/C)	6	108	191	0	2.90	0.00	2.90
765 KV Gaya-Balia	176	280	345	0	6.70	0.00	6.70
765 KV Gaya-Varanasi (D/C)	303	405	722	0	12.40	0.00	12.40
220 KV Pusaali-Sahupuri	160	204	207	0	4.18	0.00	4.18
132 KV K'nasa-Sahupuri	-26	-20	0	28	0.00	0.49	-0.49
132 KV Son Ngr-Rihand	-26	-35	0	40	0.00	0.82	-0.82
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-198	-154	109	198	0.00	1.97	-1.97
400 KV Barh -GKP (D/C)	340	364	450	0	9.22	0.00	9.22
400 kV B'Sharif - Varanasi (D/C)	116	34	118	116	0.05	0.00	0.05
Sub Total ER	1092	1856			54.38	3.32	51.06
+/- 800 KV BiswanathCharialli-Agra	677	670	682	0.00	15.92	0.00	15.92
Sub Total NER	677	670			15.92	0.00	15.92
Total IR Exch	6664	6736			206.02	14.99	191.03

VI(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
49.71	1.17	50.88	0.70	-10.36	15.13	19.47	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
66.71	121.55	188.27	66.97	124.06	191.03	0.26	2.51	2.77

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	0	0	0	28	0	0	-0.10

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	0.00	0.16	8.65	58.00	75.71	12.27	3.46	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	5.03	49.79	15.43	49.99	0.043	0.064	0.00	0.00	24.29

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	496.28	948.89	507.34	1411.35	195.67	382.79
Pong	426.72	384.05	412.38	577.87	416.59	743.22	63.06	233.22
Tehri	829.79	740.04	819.05	987.27	813.50	872.26	42.86	150.00
Koteswar	612.50	598.50	609.99	4.95	610.61	4.95	150.00	155.68
Chamera-I	760.00	748.75	759.56	0.00	0.00	0.00	52.80	55.44
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	510.50	2.87	506.53	2.49	43.60	122.57

* 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	-456	1	0	-456	0	0	-13.56	0.01	-13.56
Delhi	-210	-578	0	-232	5	0	-6.82	-2.15	-8.96
Haryana	-596	368	0	-311	350	0	-9.91	9.00	-0.91
HP	292	112	0	198	-195	0	7.73	-1.22	6.52
J&K	355	0	0	332	0	0	8.67	-0.10	8.57
CHD	-30	0	0	-30	0	0	-0.36	0.00	-0.36
Rajasthan	-7	954	0	-7	709	0	5.86	28.18	34.04
UP	119	0	0	-49	0	0	-6.23	-0.72	-6.96
Uttarakhand	146	121	0	146	47	0	3.71	3.37	7.07
Total	-388	978	0	-408	916	0	-10.91	36.35	25.44

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-456	-719	1	0	0	0
Delhi	-109	-423	332	-578	0	0
Haryana	-182	-629	403	242	0	0
HP	439	198	112	-512	0	0
J&K	413	306	0	-15	0	0
CHD	0	-30	0	0	0	0
Rajasthan	659	-7	2250	508	0	0
UP	161	-747	0	-100	0	0
Uttarakhand	182	146	293	6	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	0.00%
ER	0.00%
Simultaneous	0.00%

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

WR	0.00%
ER	0.00%
Simultaneous	1.74%

(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	4	41
Haryana	1	13
Rajasthan	2	13
Delhi	2	16
UP	2	16
Uttarakhand	5	60
HP	2	17
J & K	5	40
Chandigarh	5	38

XIII. System Constraints:**XIV. Grid Disturbance / Any Other Significant Event:****XV. Weather Conditions For 22.11.2016 :**
Normal**XVI. Synchronisation of new generating units :****XVII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus /substation :**
400 KV Bays no. 410 and 413 of Malerkotla 2 and 1 at Amritsar first time charged at 1354 Hrs and 1351 Hrs of 22.11.2016.**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.