

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 24.11.2016

Date of Reporting : 25.11.2016



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
39506	445	39951	50.05	28822	356	29178	50.06	818.58	28.32

* 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:

UI (OD:(+ve), UD: (-ve))

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	37.07	7.72	1.26	46.05	48.22	48.86	0.65	94.91	0.00
Haryana	22.46	0.43	0.00	22.89	86.32	84.16	-2.15	107.06	0.00
Rajasthan	104.94	4.35	5.58	114.87	83.99	85.34	1.35	200.21	1.89
Delhi	15.20	0.00	0.00	15.20	41.21	41.52	0.31	56.72	0.01
UP	164.15	7.50	0.00	171.65	90.67	90.51	-0.16	262.15	17.05
Uttarakhand		7.81	0.00	14.35	17.69	17.78	0.10	32.13	0.00
HP		3.78	1.77	5.56	18.77	19.14	0.37	24.70	0.00
J & K		5.64	0.00	5.64	36.18	31.88	-4.30	37.52	9.38
Chandigarh				0.00	3.16	3.19	0.03	3.19	0.00
Total	343.82	37.23	8.62	396.20	426.19	422.38	-3.81	818.58	28.32

* Shortage furnished by the respective constituent's Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

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

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	4940	0	-291	-456	3085	0	29	-455	4940	19:00	0
Haryana	5916	0	-132	38	3061	0	-39	-236	5916	19:00	0
Rajasthan	9040	0	59	526	7911	0	218	1081	9798	8:00	453
Delhi	2997	0	90	-237	1459	0	45	-700	3036	11:00	0
UP	11783	0	-110	-44	9910	0	-64	130	12018	7:00	0
Uttarakhand	1646	0	-237	248	1103	0	9	215	1759	18:00	0
HP	1232	0	-29	126	784	0	-34	428	1346	8:00	0
J&K	1779	445	-205	332	1424	356	-261	355	1779	19:00	445
Chandigarh	173	0	-24	-30	85	0	8	-30	180	9:00	0
Total	39506	445	-879	504	28822	356	-89	787	39506	19:00	445

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

Diversity is 1.03

UI (OD:(+ve), UG: (-ve))

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	1768	2004	1742	42.54	1772	42.17	0.36	
Rihand I STPS (2*500)	1000	943	1011	830	21.12	880	21.85	-0.74	
Rihand II STPS (2*500)	1000	950	949	862	22.31	930	22.22	0.09	
Rihand III STPS (2*500)	1000	950	1020	836	22.23	926	22.29	-0.06	
Dadri I STPS (4*210)	840	815	170	137	4.40	183	4.63	-0.23	
Dadri II STPS (2*490)	980	490	336	340	8.83	368	9.35	-0.52	
Unchahar I TPS (2*210)	420	360	289	313	7.47	311	8.37	-0.90	
Unchahar II TPS (2*210)	420	404	323	287	7.79	324	8.58	-0.80	
Unchahar III TPS (1*210)	210	202	158	133	3.71	155	4.16	-0.45	
ISTPP (Jhajjar) (3*500)	1500	1440	789	604	16.84	702	17.19	-0.34	
Dadri GPS (4*130.19+2*154.51)	830	808	278	336	7.78	324	8.34	-0.56	
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	624	0	0	0.00	0	0.00	0.00	
Dadri Solar(5)	5	1	0	0	0.02	1	0.02	0.00	
Unchahar Solar(10)	10	2	0	0	0.04	2	0.04	0.00	
Singrauli Solar(15)	15	2	0	0	0.01	0	0.06	-0.05	
KHEP(4*200)	800	865	836	0	2.87	120	2.60	0.27	
Sub Total (A)	12112	11032	8163	6420	168	6998	172	-3.92	
B. NPC									
NAPS (2*220)	440	405	435	449	9.67	403	9.72	-0.05	
RAPS- B (2*220)	440	381	427	427	9.18	383	9.14	0.04	
RAPS- C (2*220)	440	220	236	236	5.11	213	5.28	-0.17	
Sub Total (B)	1320	1006	1098	1112	23.96	998	24.14	-0.18	
C. NHPC									
Chamera I HPS (3*180)	540	540	206	0	2.01	84	1.80	0.21	
Chamera II HPS (3*100)	300	201	209	0	1.45	60	1.30	0.15	
Chamera III HPS (3*77)	231	231	152	0	0.77	32	0.70	0.07	
Bairasuli HPS(3*60)	180	120	121	0	0.54	23	0.50	0.04	
Salal-HPS (6*115)	690	116	310	134	3.14	131	2.78	0.37	
Tanakpur-HPS (3*31.4)	94	30	27	27	0.87	36	0.71	0.16	
Uri-I HPS (4*120)	480	77	232	21	2.03	84	1.85	0.18	
Uri-II HPS (4*60)	240	56	40	121	1.42	59	1.35	0.07	
Dhauliganga-HPS (4*70)	280	210	213	0	1.23	51	1.16	0.08	
Dulhasti-HPS (3*130)	390	383	398	0	3.58	149	3.40	0.18	
Sewa-II HPS (3*40)	120	80	70	0	0.23	9	0.25	-0.02	
Parbati 3 (4*130)	520	130	135	0	0.41	17	0.39	0.02	
Sub Total (C)	4065	2172	2112	303	18	737	16	1.51	
D.SJVNL									
NJPC (6*250)	1500	1610	1614	0	8.63	360	8.69	-0.06	
Rampur HEP (6*88.67)	412	442	428	0	2.43	101	2.42	0.01	
Sub Total (D)	1912	2052	2042	0	11.06	461	11.12	-0.06	
E. THDC									
Tehri HPS (4*250)	1000	1075	1065	0	6.93	289	6.80	0.13	
Koteshwar HPS (4*100)	400	96	184	88	2.34	98	2.31	0.03	
Sub Total (E)	1400	1171	1249	88	9.27	386	9.11	0.16	
F. BBMB									
Bhakra HPS (2*108+3*126+5*157)	1379	540	1016	390	13.13	547	12.96	0.17	
Dehar HPS (6*165)	990	148	495	145	3.57	149	3.54	0.03	
Pong HPS (6*66)	396	146	330	66	3.48	145	3.50	-0.02	
Sub Total (F)	2765	834	1841	601	20.18	841	20.01	0.17	
G. IPP(s)/JV(s)									
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.43	18	0.40	0.03	
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	750	0	4.81	201	4.62	0.19	
Malana Stg-II HPS (2*50)	100	0	0	0	0.27	11	0.26	0.01	
Shree Cement TPS (2*150)	300	0	-1	-1	-0.05	-2	0.00	-0.05	
Budhil HPS(IPP) (2*35)	70	0	0	0	0.22	9	0.23	-0.01	
Sub Total (G)	1662	0	749	-1	5.69	237	5.51	0.19	
H. Total Regional Entities (A-G)	25237	18267	17254	8523	255.80	10658	257.93	-2.13	

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	-0.19	-8
	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	-0.10	-4
	Goindwal(GVK) (2*270)	540	0	0	-0.02	-1
	Rajpura (2*700)	1400	660	510	14.91	621
	Talwandi Saboo (3*660)	1980	1030	616	22.48	937
	Thermal (Total)	6560	1690	1126	37.07	1545
	Total Hydro	1000	332	316	7.72	322
	Wind Power	0	0	0	0.00	0
	Biomass	288	0	0	1.09	45
	Solar	560	0	0	0.18	7
	Renewable(Total)	848	0	0	1.26	53
	Total Punjab	8408	2022	1442	46.05	1919
	Haryana	Panipat TPS (2*210+2*250)	920	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	554	470	12.09	504
Faridabad GPS (NTPC)(2*137.75+1*1156)		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	527	367	10.37	432
Thermal (Total)		4497	1081	837	22.46	936
Total Hydro		62	8	6	0.43	18
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	1089	843	22.89	954
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	1148	946	25.72
	suratgarh TPS (6*250)	1500	453	406	10.41	434
	Chabra TPS (4*250)	1000	922	907	21.40	892
	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	157	156	3.75	156
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingar (NLC) (2*125)	250	111	114	2.63	109
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	837	841	19.26	803
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	558	465	12.02	501
	Kawai(Adani) (2*660)	1320	411	411	9.75	406
	Thermal (Total)	8876	4597	4246	104.94	4372
	Total Hydro	550	209	167	4.35	181
	Wind power	4017	149	201	4.87	203
	Biomass	99	0	13	0.30	13
	Solar	1295	13	0	0.41	17
	Renewable/Others (Total)	5411	162	214	5.58	233
Total Rajasthan	14837	4968	4627	114.87	4786	
UP	Anpara TPS (3*210+2*500)	1630	698	697	24.00	1000
	Obra TPS (2*50+2*94+5*200)	1194	294	309	7.10	296
	Paricha TPS (2*110+2*220+2*250)	1160	791	578	18.20	758
	Panki TPS (2*105)	210	63	0	0.50	21
	Harduaganj TPS (1*60+1*105+2*250)	665	441	322	10.00	417
	Tanda TPS (NTPC) (4*110)	440	284	279	6.45	269
	Roza TPS (IPP) (4*300)	1200	810	622	19.24	802
	Anpara-C (IPP) (2*600)	1200	986	990	24.44	1019
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	405	283	8.86	369
	Anpara-D(2*500)	1000	452	454	10.90	454
	Lalitpur TPS(3*660)	1980	0	362	5.90	246
	Bara(2*660)	1320	560	451	11.76	490
	Thermal (Total)	12449	5784	5347	147.35	6140
	Vishnuparyag HPS (IPP)(4*110)	440	107	102	2.56	107
	Alaknada(4*82.5)	330	0	0	1.19	50
	Other Hydro	527	242	73	3.75	156
	Cogeneration	981	700	700	16.80	700
	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	6833	6222	171.65	7152
	Uttarakhand	Other Hydro	1250	657	269	7.81
Total Gas		225	284	294	6.54	272
Wind Power		0	0	0	0.00	0
Biomass		127	0	0	0.00	0
Solar		20	0	0	0.00	0
Small Hydro (< 25 MW)		180	0	0	0.00	0
Renewable(Total)		327	0	0	0.00	0
Total Uttarakhand		1802	941	563	14.35	598
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.01	0
	Delhi Gas Turbine (6x30 + 3x34)	282	76	76	1.92	80
	Pragati Gas Turbine (2x104+ 1x122)	330	265	265	6.44	268
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	251	280	6.03	251
	Badarpur TPS (NTPC) (3*95+2*210)	705	-4	-4	0.81	34
	Thermal (Total)	2917	588	617	15.20	633
	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	588	617	15.20	633	

HP	Baspa HPS (IPP) (3*100)	300	27	0	1.29	54
	Malana HPS (IPP) (2*43)	86	48	0	0.31	13
	Other Hydro	372	95	61	2.18	91
	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	77	70	1.77	74
	Renewable(Total)	486	77	70	1.77	74
	Total HP	1244	247	131	5.56	232
	J & K	Baglihar HPS (IPP) (3*150+3*150)	900	173	102	2.87
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	311	195	6	235
Total State Control Area Generation		50078	17000	14641	396.20	16508
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		5929	5600	193.96	8082	
Total Regional Availability(Gross)	75315	40183	28764	845.96	35248	

IV. Total Hydro Generation:

Regional Entities Hydro	12234	8830	992	66.59	2774
State Control Area Hydro	7163	2397	1553	39.00	1897
Total Regional Hydro	19397	11227	2545	105.59	4672

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.06	3
State Control Area Renewable	7356	239	284	8.62	359
Total Regional Renewable	7386	239	284	8.68	362

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)	-250	-350	0	350	0.00	7.67	-7.67
765 KV Gwalior-Agra (D/C)	1768	1596	2511	0	51.17	0.00	51.17
400 KV Zerda-Kankroli	-148	-25	148	180	0.00	1.52	-1.52
400 KV Zerda-Bhinmal	-66	61	280	161	0.77	0.00	0.77
220 KV Auraiya-Malanpur	-99	-112	0	122	0.00	2.00	-2.00
220 KV Badod-Kota/Morak	-44	-41	33	85	0.00	0.89	-0.89
Mundra-Mohindergerh(HVDC Bipole)	2197	1201	2206	0.00	41.70	0.00	41.70
400 KV RAPP-C-Sujalpur	327	290	540	0	8.88	0.00	8.88
400 KV Vindhyachal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kv Phagi-Gwalior (D/C)	811	1434	1855	0	32.70	0.00	32.70
Sub Total WR	4496	4054			135.22	12.08	123.14
400 kv Sasaram - Varanasi	158	-138	159	0	4.84	0.00	4.84
400 kv Sasaram - Allahabad	6	3	6	0	0.16	0.00	0.16
400 KV MZP- GKP (D/C)	-107	168	188	107	1.91	0.00	1.91
400 KV Patna-Balia(D/C) X 2	337	526	569	0	12.32	0.00	12.32
400 KV B'Sharif-Balia (D/C)	30	142	208	0	3.16	0.00	3.16
765 KV Gaya-Balia	233	314	382	0	7.44	0.00	7.44
765 KV Gaya-Varanasi (D/C)	-319	-549	783	0	13.91	0.00	13.91
220 KV Pusauli-Sahupuri	187	166	199	0	3.87	0.00	3.87
132 KV K'nasa-Sahupuri	-24	-24	0	26	0.00	0.51	-0.51
132 KV Son Ngr-Rihand	-43	-30	0	43	0.00	0.84	-0.84
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-198	-113	37	203	0.00	2.15	-2.15
400 KV Barh -GKP (D/C)	370	410	474	0	9.78	0.00	9.78
400 kv B'Sharif - Varanasi (D/C)	103	-29	124	103	0.70	0.00	0.70
Sub Total ER	733	846			58.10	3.50	54.60
+/- 800 KV Biswanath Charialli-Agra	700	700	700	0.00	16.22	0.00	16.22
Sub Total NER	700	700			16.22	0.00	16.22
Total IR Exch	5929	5600			209.54	15.58	193.96

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
49.91	1.29	51.20	0.85	-9.36	21.48	10.98	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
73.53	114.44	187.97	70.82	123.14	193.96	-2.71	8.70	5.99

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	-29	0	0	31	0	0	-0.20

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	7.75	47.18	67.44	17.58	7.18	0.10	0.00

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation	Std. Dev.	Frequency in 15 Min Block		Freq Dev Index (% of Time)
Maximum		Minimum					MAX	MIN	
Freq	Time	Freq	Time	Hz	Index	(Hz)	(Hz)		
50.23	18.01	49.75	6.11	50.00	0.049	0.070	0.00	0.00	32.56

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	495.99	937.45	507.13	1411.35	159.14	378.20
Pong	426.72	384.05	412.23	566.84	416.33	730.66	60.60	223.96
Tehri	829.79	740.04	818.65	975.26	813.20	862.27	42.89	154.00
Koteswar	612.50	598.50	609.85	4.50	610.46	4.69	154.00	154.22
Chamera-I	760.00	748.75	759.55	0.00	0.00	0.00	53.99	53.99
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	510.29	2.88	506.51	1.06	47.75	122.01

* 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	0.08	-13.49
Delhi	-210	-490	0	-232	-4	0	-6.99	-2.83	-9.83
Haryana	-596	361	0	-311	349	0	-9.98	8.11	-1.87
HP	316	111	0	198	-72	0	8.05	-1.28	6.78
J&K	355	0	0	332	0	0	8.92	-0.15	8.77
CHD	-30	0	0	-30	0	0	-0.36	0.00	-0.36
Rajasthan	-7	1088	0	-7	533	0	6.70	28.96	35.66
UP	130	0	0	-44	0	0	-6.30	-1.03	-7.33
Uttarakhand	146	68	0	146	102	0	3.71	2.38	6.08
Total	-353	1140	0	-403	907	0	-9.82	34.23	24.41

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-456	-719	245	-296	0	0
Delhi	-123	-423	229	-525	0	0
Haryana	-83	-629	394	-48	0	0
HP	469	198	111	-612	0	0
J&K	462	306	0	-15	0	0
CHD	0	-30	0	0	0	0
Rajasthan	659	-7	2372	526	0	0
UP	166	-787	0	-100	0	0
Uttarakhand	182	146	217	-7	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	16.32%

(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	2	22
Haryana	4	25
Rajasthan	1	16
Delhi	5	38
UP	1	14
Uttarakhand	5	33
HP	3	30
J & K	5	72
Chandigarh	5	40

XIII. System Constraints:**XIV. Grid Disturbance / Any Other Significant Event:****XV. Weather Conditions For 24.11.2016 :**
Normal**XVI. Synchronisation of new generating units :****XVII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :****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.