

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 29.11.2016

Date of Reporting : 30.11.2016



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
40750	564	41314	50.05	27943	358	28301	50.06	810.69	10.43

* 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	47.46	8.71	0.37	56.54	46.59	47.48	0.89	104.01	0.00
Haryana	23.18	0.42	0.00	23.59	86.27	83.66	-2.61	107.25	0.12
Rajasthan	119.16	4.59	5.73	129.48	69.66	70.24	0.58	199.72	1.02
Delhi	12.18		0.00	12.18	42.37	42.95	0.59	55.13	0.02
UP	161.66	6.40	0.00	168.06	83.23	82.05	-1.18	250.11	0.00
Uttarakhand		7.27	0.00	12.80	16.28	17.90	1.62	30.70	0.00
HP		3.53	1.73	5.26	17.92	18.17	0.24	23.42	0.00
J & K		4.89	0.00	4.89	36.00	32.21	-3.79	37.10	9.28
Chandigarh				0.00	3.31	3.23	-0.08	3.23	0.00
Total	363.64	35.81	7.83	412.80	401.63	397.88	-3.74	810.69	10.43

* 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	5511	0	-206	-488	3150	0	112	-443	5511	19:00	0
Haryana	5917	146	-114	17	3027	0	33	-246	5917	19:00	146
Rajasthan	8754	0	-30	536	7730	0	64	534	10057	8:00	0
Delhi	2982	0	90	-343	1420	0	53	-518	2987	11:00	0
UP	12904	0	-193	-143	9409	0	-159	124	12904	19:00	0
Uttarakhand	1641	0	-6	176	985	0	1	158	1723	18:00	0
HP	1195	0	6	101	706	0	-15	346	1321	8:00	0
J&K	1674	419	-51	732	1431	358	-228	750	1712	7:00	428
Chandigarh	171	0	-30	-30	85	0	1	-30	183	18:00	0
Total	40750	564	-535	557	27943	0	-138	675	40750	19:00	564

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

Diversity is 1.04

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

III. Regional Entities :

Entity	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
				(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1830	1985	1857	43.76	1824	43.25	0.51
	Rihand I STPS (2*500)	1000	946	905	809	21.44	894	21.11	0.33
	Rihand II STPS (2*500)	1000	948	1035	826	22.33	930	21.72	0.60
	Rihand III STPS (2*500)	1000	948	1020	753	22.00	917	21.26	0.74
	Dadri I STPS (4*210)	840	815	208	163	3.83	160	3.87	-0.04
	Dadri II STPS (2*490)	980	980	460	357	9.66	403	10.39	-0.72
	Unchahar I TPS (2*210)	420	360	306	273	7.01	292	7.17	-0.16
	Unchahar II TPS (2*210)	420	404	296	303	7.61	317	7.90	-0.29
	Unchahar III TPS (1*210)	210	202	167	152	3.75	156	3.88	-0.13
	ISTPP (Jhajjhar) (3*500)	1500	1440	934	637	16.54	689	15.92	0.62
	Dadri GPS (4*130.19+2*154.51)	830	749	251	261	0.59	25	6.41	-5.82
	Anta GPS (3*88.71+1*153.2)	419	409	0	0	0.00	0	0.01	-0.01
	Auraiya GPS (4*111.19+2*109.30)	663	625	0	0	0.00	0	0.01	-0.01
	Dadri Solar(5)	5	1	0	0	0.02	1	0.02	0.00
	Unchahar Solar(10)	10	2	0	0	0.03	1	0.04	-0.01
	Singrauli Solar(15)	15	1	0	0	0.06	2	0.03	0.03
	KHEP(4*200)	800	865	735	413	2.91	121	2.60	0.31
Sub Total (A)	12112	11524	8302	6804	162	6731	166	-4.06	
B. NPC	NAPS (2*220)	440	402	434	440	9.66	403	9.65	0.01
	RAPS- B (2*220)	440	382	423	427	9.16	382	9.17	-0.01
	RAPS- C (2*220)	440	220	237	239	5.01	209	5.28	-0.27
	Sub Total (B)	1320	1004	1094	1106	23.83	993	24.10	-0.27
C. NHPC	Chamera I HPS (3*180)	540	540	550	0	1.84	77	1.62	0.22
	Chamera II HPS (3*100)	300	201	205	0	1.50	63	1.33	0.18
	Chamera III HPS (3*77)	231	231	156	0	0.72	30	0.69	0.02
	Bairasuli HPS(3*60)	180	120	121	0	0.52	22	0.50	0.02
	Salal-HPS (6*115)	690	92	303	32	2.60	108	2.21	0.39
	Tanakpur-HPS (3*31.4)	94	25	37	32	0.76	32	0.61	0.16
	Uri-I HPS (4*120)	480	79	230	31	2.11	88	1.89	0.21
	Uri-II HPS (4*60)	240	54	122	38	1.35	56	1.30	0.06
	Dhauliganga-HPS (4*70)	280	210	212	0	1.15	48	1.05	0.10
	Dulhasti-HPS (3*130)	390	339	387	0	3.53	147	3.30	0.23
	Sewa-II HPS (3*40)	120	80	32	0	0.21	9	0.25	-0.04
	Parbati 3 (4*130)	520	130	132	0	0.44	18	0.39	0.05
	Sub Total (C)	4065	2101	2487	133	17	697	15	1.60
	D.SJVNL	NJPC (6*250)	1500	1610	1619	0	7.91	330	7.80
Rampur HEP (6*68.67)		412	442	448	0	2.20	92	2.15	0.04
Sub Total (D)		1912	2052	2067	0	10.11	421	9.95	0.16
E. THDC	Tehri HPS (4*250)	1000	1075	1070	0	7.32	305	7.00	0.32
	Koteshwar HPS (4*100)	400	96	201	92	2.37	99	2.32	0.05
	Sub Total (E)	1400	1171	1271	92	9.69	404	9.32	0.37
F. BBMB	Bhakra HPS (2*108+3*126+5*157)	1379	564	987	361	13.61	567	13.53	0.08
	Dehar HPS (6*165)	990	138	495	145	3.42	143	3.31	0.12
	Pong HPS (6*66)	396	164	396	66	3.90	163	3.94	-0.04
	Sub Total (F)	2765	866	1878	572	20.93	872	20.77	0.16
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.60	25	0.58	0.03
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	630	0	4.53	189	4.27	0.27
	Malana Stg-II HPS (2*50)	100	0	0	0	0.27	11	0.25	0.02
	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	0.23	10	0.23	0.00
	Sub Total (G)	1662	0	629	-1	5.59	233	5.32	0.27
H. Total Regional Entities (A-G)	25237	18718	17727	8706	248.42	10351	250.20	-1.77	

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	-0.15	-6	
	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	-0.08	-3	
	Goindwal(GVK) (2*270)	540	0	0	-0.03	-1	
	Rajpura (2*700)	1400	660	330	13.92	580	
	Talwandi Saboo (3*660)	1980	1550	924	33.82	1409	
	Thermal (Total)	6560	2210	1254	47.46	1977	
	Total Hydro	1000	357	354	8.71	363	
	Wind Power	0	0	0	0.00	0	
	Biomass	288	0	0	0.30	13	
	Solar	560	0	0	0.07	3	
	Renewable(Total)	848	0	0	0.37	15	
	Total Punjab	8408	2567	1608	56.54	2356	
	Haryana	Panipat TPS (2*210+2*250)	920	0	0	0.00	0
		DCRTPP (Yamuna nagar) (2*300)	600	558	476	12.05	502
Faridabad GPS (NTPC)(2*137.75+1*1156)		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	592	370	11.13	464	
Thermal (Total)		4497	1150	846	23.18	966	
Total Hydro		62	10	10	0.42	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	1160	856	23.59	983	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	1060	1036	25.53	1064
		suratgarh TPS (6*250)	1500	432	410	10.16	423
	Chabara TPS (4*250)	1000	904	908	20.99	874	
	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	153	3.89	162	
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0	
	Barsingsar (NLC) (2*125)	250	223	227	5.28	220	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	833	833	19.06	794	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	991	956	23.47	978	
	Kawai(Adani) (2*660)	1320	454	451	10.78	449	
	Thermal (Total)	8876	5050	4974	119.16	4965	
	Total Hydro	550	157	201	4.59	191	
	Wind power	4017	112	86	2.58	108	
	Biomass	99	6	6	0.15	6	
	Solar	1295	0	0	2.99	125	
	Renewable/Others (Total)	5411	118	92	5.73	239	
Total Rajasthan	14837	5325	5267	129.48	5395		
UP	Anpara TPS (3*210+2*500)	1630	1190	1184	27.80	1158	
	Obra TPS (2*50+2*94+5*200)	1194	275	265	6.70	279	
	Paricha TPS (2*110+2*220+2*250)	1160	836	581	15.20	633	
	Panki TPS (2*105)	210	149	135	3.30	138	
	Harduaganj TPS (1*60+1*105+2*250)	665	434	306	8.40	350	
	Tanda TPS (NTPC) (4*110)	440	282	205	6.16	257	
	Roza TPS (IPP) (4*300)	1200	768	558	15.90	663	
	Anpara-C (IPP) (2*600)	1200	1081	644	22.80	950	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	404	282	7.20	300	
	Anpara-D(2*500)	1000	792	562	15.70	654	
	Lalitpur TPS(3*660)	1980	0	0	0.00	0	
	Bara(2*660)	1320	582	429	13.30	554	
	Thermal (Total)	12449	6793	5151	142.46	5936	
	Vishnuparyag HPS (IPP)(4*110)	440	103	98	2.50	104	
	Alaknada(4*82.5)	330	76	0	1.60	67	
	Other Hydro	527	112	63	2.30	96	
	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	7884	6112	168.06	7003		
Uttarakhand	Other Hydro	1250	532	144	7.27	303	
	Total Gas	225	228	281	5.50	229	
	Wind Power	0	0	0	0.00	0	
	Biomass	127	0	0	0.00	0	
	Solar	20	0	0	0.04	1	
	Small Hydro (< 25 MW)	180	0	0	0.00	0	
	Renewable(Total)	327	0	0	0.04	1	
	Total Uttarakhand	1802	760	425	12.80	533	
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	45	47	1.85	77	
	Pragati Gas Turbine (2x104+ 1x122)	330	153	159	4.19	175	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	268	280	6.14	256	
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0	
	Thermal (Total)	2917	467	485	12.18	508	
	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	467	485	12.18	508		

HP	Baspa HPS (IPP) (3*100)	300	27	0	1.24	52
	Malana HPS (IPP) (2*43)	86	0	0	0.29	12
	Other Hydro	372	79	45	2.00	83
	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	71	1.73	72
	Renewable(Total)	486	79	71	1.73	72
	Total HP	1244	185	116	5.26	219
	J & K	Baglihar HPS (IPP) (3*150+3*150)	900	88	89	2.12
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	226	182	5	204
Total State Control Area Generation		50078	18574	15051	412.80	17200
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		4975	4916	188.12	7838	
Total Regional Availability(Gross)	75315	41276	28673	849.34	35389	

IV. Total Hydro Generation:

Regional Entities Hydro	12234	9067	1210	65.78	2741
State Control Area Hydro	7163	1986	1449	37.54	1795
Total Regional Hydro	19397	11054	2659	103.32	4535

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.11	5
State Control Area Renewable	7356	197	163	7.87	328
Total Regional Renewable	7386	197	163	7.97	332

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)	150	50	350	0	2.66	0.00	2.66
765 KV Gwalior-Agra (D/C)	2354	2218	2808	0	58.52	0.00	58.52
400 KV Zerda-Kankroli	-68	-39	21	102	0.00	1.06	-1.06
400 KV Zerda-Bhinmal	3	40	190	26	1.27	0.00	1.27
220 KV Auraiya-Malanpur	-43	-110	0	120	0.00	2.07	-2.07
220 KV Badod-Kota/Morak	-33	-51	18	56	0.00	0.89	-0.89
Mundra-Mohindergarh(HVDC Bipole)	1201	1199	1202	0.00	28.92	0.00	28.92
400 KV RAPP-C-Sujalpur	-420	-330	550	0	10.62	0.00	10.62
400 KV Vindhyachal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1212	1151	799	0	32.90	0.00	32.90
Sub Total WR	4356	4128			134.88	4.02	130.86
400 kV Sasaram - Varanasi	139	65	0	139	0.00	0.82	-0.82
400 kV Sasaram - Allahabad	184	125	0	184	0.00	3.55	-3.55
400 KV MZP- GKP (D/C)	266	463	539	0	9.97	0.00	9.97
400 KV Patna-Balia(D/C) X 2	655	715	847	0	17.22	0.00	17.22
400 KV B'Sharif-Balia (D/C)	112	165	228	0	4.33	0.00	4.33
765 KV Gaya-Balia	225	231	370	0	5.26	0.00	5.26
765 KV Gaya-Varanasi (D/C)	-507	-535	820	0	16.08	0.00	16.08
220 KV Pusauli-Sahupuri	-205	-157	205	0	4.09	0.00	4.09
132 KV K'nasa-Sahupuri	-28	-28	0	32	0.55	0.00	0.55
132 KV Son Ngr-Rihand	-42	-34	0	44	0.91	0.00	0.91
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	104	116	318	0	4.52	0.00	4.52
400 KV Barh -GKP (D/C)	454	460	562	0	11.14	0.00	11.14
400 kV B'Sharif - Varanasi (D/C)	-58	-129	237	0	3.48	0.00	3.48
Sub Total ER	1299	1457			77.55	4.38	73.18
+/- 800 KV BiswanathCharialli-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	4975	4916			212.43	24.31	188.12

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
50.72	1.14	51.86	0.83	-11.84	23.31	3.86	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
76.00	94.35	170.34	57.26	130.86	188.12	-18.73	36.51	17.78

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	-28	-27	0	31	0	1	-0.67

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	0.91	17.11	68.81	71.44	9.14	2.37	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						
50.19	18.00	49.75	5.39	49.97	0.061	0.070	0.00	0.00	28.56

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	495.20	914.64	506.57	1382.01	176.27	422.74
Pong	426.72	384.05	411.76	55.85	415.60	705.67	55.81	253.21
Tehri	829.79	740.04	817.60	953.00	812.10	844.00	48.45	163.00
Koteswar	612.50	598.50	610.60	4.80	610.76	4.95	163.00	156.10
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	46.99	49.63
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	509.67	3.04	506.62	0.52	66.28	105.01

*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	-444	1	0	-444	-45	0	-13.27	-0.32	-13.60
Delhi	-239	-279	0	-261	-83	0	-7.95	-1.39	-9.35
Haryana	-595	349	0	-328	345	0	-10.02	7.93	-2.10
HP	293	53	0	199	-98	0	8.06	-1.44	6.62
J&K	354	396	0	351	381	0	8.84	6.99	15.83
CHD	-30	0	0	-30	0	0	-0.36	0.00	-0.36
Rajasthan	-7	541	0	-7	543	0	4.42	17.53	21.94
UP	124	0	0	-43	-100	0	-6.21	-1.18	-7.39
Uttarakhand	147	12	0	147	29	0	3.71	1.21	4.92
Total	-397	1072	0	-416	974	0	-12.80	29.32	16.52

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-444	-706	99	-358	0	0
Delhi	-203	-502	219	-346	0	0
Haryana	-76	-631	372	-48	0	0
HP	471	199	166	-519	0	0
J&K	413	306	396	-166	0	0
CHD	0	-30	0	0	0	0
Rajasthan	452	-7	1711	512	0	0
UP	165	-739	0	-100	0	0
Uttarakhand	183	147	263	-71	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	0.35%
ER	0.00%
Simultaneous	0.00%

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

WR	13.19%
ER	0.00%
Simultaneous	12.85%

(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	15
Haryana	2	21
Rajasthan	0	10
Delhi	3	45
UP	1	16
Uttarakhand	1	16
HP	2	16
J & K	3	25
Chandigarh	2	22

XIII. System Constraints:**XIV. Grid Disturbance / Any Other Significant Event:****XV. Weather Conditions For 29.11.2016 :**

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.