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 28.11.2016
Date of Reporting : 29.11.2016

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
39568	480	40048	50.05	26985	356	27341	50.06	811.64	15.31

* 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	39.71	7.58	1.32	48.61	47.36	48.97	1.61	97.58	0.00
Haryana	23.84	0.46	0.00	24.29	85.79	84.36	-1.43	108.66	0.11
Rajasthan	119.87	4.68	2.50	127.05	68.81	69.80	0.99	196.85	2.68
Delhi	13.81		0.00	13.81	40.96	40.90	-0.06	54.71	0.01
UP	170.20	7.30	0.00	177.50	83.78	82.87	-0.90	260.37	0.00
Uttarakhand		7.77	0.00	14.58	17.48	16.38	-1.10	30.96	0.00
HP		3.82	1.66	5.47	17.21	17.53	0.32	23.00	0.00
J & K		4.94	0.00	4.94	35.73	31.36	-4.38	36.30	12.51
Chandigarh				0.00	3.22	3.22	0.00	3.22	0.00
Total	**367.42**	**36.54**	**5.47**	**416.25**	**400.34**	**395.39**	**-4.96**	**811.64**	15.31

* Shortage furnished by the respective constituent.$ 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	5590	0	-260	-612	3000	0	129	-454	5590	19:00	0
Haryana	5966	66	-35	-8	2815	0	147	-305	5966	19:00	66
Rajasthan	8951	0	81	510	7398	0	-113	481	9934	8:00	148
Delhi	2912	0	-39	-470	1394	0	-31	-606	2982	11:00	0
UP	11502	0	-416	-153	9288	0	42	99	11522	20:00	0
Uttarakhand	1628	0	-236	263	942	0	-92	207	1664	18:00	0
HP	1193	0	-4	90	640	0	-23	374	1280	8:00	0
J&K	1656	414	-192	631	1424	356	-254	701	1721	7:00	430
Chandigarh	171	0	-36	-30	83	0	9	-30	172	8:00	0
Total	**39568**	**480**	**-1138**	**221**	**26985**	**356**	**-186**	**467**	**39568**	**19:00**	**480**

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

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III. Regional Entities :

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

	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
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1820	1965	1832	43.24	1801	42.96	0.27
	Rihand I STPS (2*500)	1000	907	964	752	20.22	842	20.36	-0.15
	Rihand II STPS (2*500)	1000	950	1016	835	21.97	915	21.49	0.48
	Rihand III STPS (2*500)	1000	950	975	728	21.59	900	21.32	0.27
	Dadri I STPS (4*210)	840	815	164	161	4.00	167	4.17	-0.16
	Dadri II STPS (2*490)	980	980	444	353	9.43	393	10.21	-0.78
	Unchahar I TPS (2*210)	420	360	361	267	7.50	313	7.68	-0.18
	Unchahar II TPS (2*210)	420	404	319	276	7.71	321	8.21	-0.50
	Unchahar III TPS (1*210)	210	202	197	142	3.93	164	4.14	-0.21
	ISTPP (Jhajjhar) (3*500)	1500	1440	846	628	17.88	745	18.17	-0.29
	Dadri GPS (4*130.19+2*154.51)	830	755	235	338	7.00	291	7.72	-0.73
	Anta GPS (3*88.71+1*153.2)	419	409	-1	-1	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	0.02	1	0.02	0.00
	Unchahar Solar(10)	10	2	0	0	0.05	2	0.04	0.01
	Singrauli Solar(15)	15	2	0	0	0.01	0	0.05	-0.04
	KHEP(4*200)	800	865	856	0	2.90	121	2.60	0.30
	Sub Total (A)	**12112**	**11486**	**8341**	**6311**	**167**	**6976**	**169**	**-1.72**
B. NPC	NAPS (2*220)	440	402	440	450	9.71	405	9.65	0.06
	RAPS- B (2*220)	440	381	421	429	9.16	382	9.14	0.02
	RAPS- C (2*220)	440	220	236	239	5.00	208	5.28	-0.28
	Sub Total (B)	**1320**	**1003**	**1097**	**1118**	**23.87**	**995**	**24.07**	**-0.20**
C. NHPC	Chamera I HPS (3*180)	540	540	418	0	2.01	84	1.80	0.21
	Chamera II HPS (3*100)	300	232	208	0	1.33	56	1.18	0.16
	Chamera III HPS (3*77)	231	231	153	0	0.74	31	0.70	0.04
	Bairasuil HPS(3*60)	180	120	122	0	0.58	24	0.55	0.03
	Salal-HPS (6*115)	690	106	300	32	2.97	124	2.54	0.43
	Tanakpur-HPS (3*31.4)	94	26	60	31	0.78	33	0.63	0.16
	Uri-I HPS (4*120)	480	85	229	27	2.17	90	2.03	0.13
	Uri-II HPS (4*60)	240	54	40	78	1.35	56	1.29	0.07
	Dhauliganga-HPS (4*70)	280	210	215	0	1.18	49	1.05	0.13
	Dulhasti-HPS (3*130)	390	383	390	0	3.67	153	3.40	0.27
	Sewa-II HPS (3*40)	120	80	80	0	0.24	10	0.25	-0.01
	Parbati 3 (4*130)	520	200	134	0	0.66	27	0.60	0.06
	Sub Total (C)	**4065**	**2266**	**2348**	**169**	**18**	**736**	**16**	**1.66**
D.SJVNL	NJPC (6*250)	1500	1610	1576	0	7.94	331	8.00	-0.06
	Rampur HEP (6*68.67)	412	442	432	0	2.02	84	1.98	0.05
	Sub Total (D)	**1912**	**2052**	**2008**	**0**	**9.96**	**415**	**9.98**	**-0.02**
E. THDC	Tehri HPS (4*250)	1000	1075	1042	0	7.37	307	7.00	0.37
	Koteshwar HPS (4*100)	400	96	205	97	2.37	99	2.32	0.05
	Sub Total (E)	**1400**	**1171**	**1247**	**97**	**9.74**	**406**	**9.32**	**0.42**
F. BBMB	Bhakra HPS (2*108+3*126+5*157)	1379	552	969	390	13.38	558	13.26	0.12
	Dehar HPS (6*165)	990	139	495	145	3.37	140	3.33	0.04
	Pong HPS (6*66)	396	168	396	66	4.01	167	4.02	-0.01
	Sub Total (F)	**2765**	**859**	**1860**	**601**	**20.75**	**865**	**20.60**	**0.15**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	41	0	0.61	25	0.58	0.03
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	630	0	4.49	187	4.27	0.22
	Malana Stg-II HPS (2*50)	100	0	0	0	0.27	11	0.25	0.02
	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	0.23	10	0.23	0.00
	Sub Total (G)	**1662**	**0**	**671**	**0**	**5.60**	**233**	**5.32**	**0.28**
H. Total Regional Entities (A-G)		**25237**	**18836**	**17571**	**8296**	**255.03**	**10626**	**254.45**	**0.58**

I. State Entities	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(Sentout MW)
Punjab	Guru Gobind Singh TPS (Ropar) (6*210)	1260	0	0	-0.11	-5
	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	-0.07	-3
	Goindwal(GVK) (2*270)	540	0	0	-0.02	-1
	Rajpura (2*700)	1400	610	330	14.22	592
	Talwandi Saboo (3*660)	1980	1650	616	25.71	1071
	Thermal (Total)	**6560**	**2260**	**946**	39.71	**1654**
	Total Hydro	1000	340	239	7.58	316
	Wind Power	0	0	0	0.00	0
	Biomass	288	0	0	1.05	44
	Solar	560	0	0	0.27	11
	Renewable(Total)	**848**	**0**	**0**	**1.32**	**55**
	Total Punjab	**8408**	**2600**	**1185**	**48.61**	**2025**
Haryana	Panipat TPS (2*210+2*250)	920	0	0	0.00	0
	DCRTPP (Yamuna nagar) (2*300)	600	575	487	12.57	524
	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	587	368	11.27	470
	Thermal (Total)	**4497**	**1162**	**855**	**23.84**	**993**
	Total Hydro	62	17	8	0.46	19
	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**	**1179**	**863**	**24.29**	**1012**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1137	954	25.40	1058
	suratgarh TPS (6*250)	1500	455	413	10.23	426
	Chabra TPS (4*250)	1000	915	833	21.82	909
	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	150	152	3.93	164
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingsar (NLC) (2*125)	250	226	225	5.28	220
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	832	829	19.24	802
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	939	999	23.78	991
	Kawai(Adani) (2*660)	1320	456	403	10.20	425
	Thermal (Total)	**8876**	**5110**	**4808**	**119.87**	**4995**
	Total Hydro	550	251	136	4.68	195
	Wind power	4017	65	81	1.85	77
	Biomass	99	21	21	0.50	21
	Solar	1295	3	0	0.15	6
	Renewable/Others (Total)	5411	89	102	2.50	104
	Total Rajasthan	**14837**	**5450**	**5046**	**127.05**	**5294**
UP	Anpara TPS (3*210+2*500)	1630	1189	1193	38.40	1600
	Obra TPS (2*50+2*94+5*200)	1194	302	252	6.80	283
	Paricha TPS (2*110+2*220+2*250)	1160	581	579	15.70	654
	Panki TPS (2*105)	210	135	126	3.10	129
	Harduaganj TPS (1*60+1*105+2*250)	665	309	313	8.50	354
	Tanda TPS (NTPC) (4*110)	440	208	208	5.90	246
	Roza TPS (IPP) (4*300)	1200	565	378	13.70	571
	Anpara-C (IPP) (2*600)	1200	959	635	22.80	950
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	282	282	7.00	292
	Anpara-D(2*500)	1000	444	439	10.50	438
	Lalitpur TPS(3*660)	1980	363	357	7.70	321
	Bara(2*660)	1320	597	366	13.30	554
	Thermal (Total)	**12449**	**5934**	**5128**	**153.40**	**6392**
	Vishnuparyag HPS (IPP)(4*110)	440	103	98	2.50	104
	Alaknanada(4*82.5)	330	75	75	1.60	67
	Other Hydro	527	136	63	3.20	133
	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**	**6948**	**6064**	**177.50**	**7396**
Uttarakhand	Other Hydro	1250	508	450	7.77	324
	Total Gas	225	300	279	6.77	282
	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	808	729	14.58	607
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	46	46	1.91	79
	Pragati Gas Turbine (2x104+ 1x122)	330	152	264	5.90	246
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	257	280	6.01	250
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0
	Thermal (Total)	**2917**	**455**	**590**	**13.81**	**576**
	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**	**455**	**590**	**13.81**	**576**

HP	Baspa HPS (IPP) (3*100)	300	28	0	1.27	53
	Malana HPS (IPP) (2*43)	86	0	0	0.29	12
	Other Hydro	372	111	38	2.26	94
	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	75	67	1.66	69
	Renewable(Total)	**486**	**75**	**67**	**1.66**	**69**
	Total HP	**1244**	**214**	**106**	**5.47**	**228**
J & K	Baglihar HPS (IPP) (3*150+3*150)	900	101	88	2.17	90
	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**	**239**	**181**	**5**	**206**
Total State Control Area Generation		**50078**	**17893**	**14764**	**416.25**	**17344**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4329**	**4520**	**166.41**	**6934**
Total Regional Availability(Gross)		**75315**	**39794**	**27580**	**837.69**	**34904**

IV. Total Hydro Generation:

Regional Entities Hydro	**12234**	**8989**	**867**	**66.39**	**2766**
State Control Area Hydro	**7163**	**2183**	**1635**	**38.20**	**1875**
Total Regional Hydro	**19397**	**11173**	**2501**	**104.59**	**4642**

V. Total Renewable Generation:

Regional Entities Renewable	**30**	**0**	**0**	**0.08**	**3**
State Control Area Renewable	**7356**	**164**	**169**	**5.51**	**230**
Total Regional Renewable	**7386**	**164**	**169**	**5.59**	**233**

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

Element	Peak(19:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy
	MW	MW	Import	Export	Import	Export	MU
Vindhychal(HVDC B/B)	-300	-300	0	500	0.00	8.25	-8.25
765 KV Gwalior-Agra (D/C)	1741	1844	2649	0	53.77	0.00	53.77
400 KV Zerda-Kankroli	-67	-66	113	-67	0.00	0.13	-0.13
400 KV Zerda-Bhinmal	17	23	294	9	2.27	0.00	2.27
220 KV Auraiya-Malanpur	-73	-90	0	126	0.00	2.19	-2.19
220 KV Badod-Kota/Morak	-51	-63	21	101	0.00	1.04	-1.04
Mundra-Mohindergarh(HVDC Bipole)	1198	1201	1204	0.00	28.92	0.00	28.92
400 KV RAPPC-Sujalpur	-345	-246	552	0	8.99	0.00	8.99
400 KV Vindhyachal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1102	1075	1515	0	31.71	0.00	31.71
Sub Total WR	**3222**	**3378**			**125.66**	**11.61**	**114.06**
400 kV Sasaram - Varanasi	161	60	0	161	0.00	3.43	-3.43
400 kV Sasaram - Allahabad	187	61	0	222	0.00	2.81	-2.81
400 KV MZP- GKP (D/C)	236	487	538	0	9.81	0.00	9.81
400 KV Patna-Balia(D/C) X 2	589	549	883	0	16.74	0.00	16.74
400 KV B'Sharif-Balia (D/C)	55	225	301	0	4.54	0.00	4.54
765 KV Gaya-Balia	170	264	321	0	6.23	0.00	6.23
765 KV Gaya-Varanasi (D/C)	-310	-506	712	0	14.11	0.00	14.11
220 KV Pusauli-Sahupuri	215	168	215	0	4.22	0.00	4.22
132 KV K'nasa-Sahupuri	-26	-32	0	32	0.00	0.56	-0.56
132 KV Son Ngr-Rihand	-40	-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	109	110	344	0	4.35	0.00	4.35
400 KV Barh -GKP (D/C)	420	396	524	0	10.73	0.00	10.73
400 kV B'Sharif - Varanasi (D/C)	20	-130	206	20	4.12	0.00	4.12
Sub Total ER	**1786**	**1622**			**74.83**	**7.64**	**67.20**
+/- 800 KV BiswanathCharialli-Agra	-679	-480	0	-685.00	0.00	14.84	-14.84
Sub Total NER	**-679**	**-480**			**0.00**	**14.84**	**-14.84**
Total IR Exch	**4329**	**4520**			**200.50**	**34.08**	**166.41**

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
51.18	1.14	52.32	-0.98	-12.03	24.05	0.00	0.00	0.00

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Incl ds Mndra	Total	Through ER(including NER)	Through WR	Total	Through ER (including NER)	Through WR	Total
75.39	90.07	165.46	52.36	114.06	166.41	-23.03	23.99	0.96

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

Element	Peak(19:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy
	MW	MW	Import	Export	Import	Export	MU
132 KV Tanakpur - Mahendarnagar	-31	-26	0	31	0	1	-0.68

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	0.20	13.24	62.59	71.71	11.90	3.17	0.00	0.00

<---------- Frequency (Hz) ---------->				Average	Frequency	Std. Dev.	Frequency in 15 Min Block		Freq Dev Index (% of Time)
Maximum		Minimum		Frequency	Variation		MAX	MIN	
Freq	Time	Freq	Time	Hz	Index		(Hz)	(Hz)	
50.19	18.00	49.79	15.39	49.98	0.051	0.068	0.00	0.00	28.29

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	405	00:00	400	07:29	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	419	01:45	404	17:41	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	422	01:47	398	12:10	0.0	0.0	9.4	0.0	9.4
Kanpur	400	408	16:34	404	16:39	0.0	0.0	0.0	0.0	0.0
Dadri	400	426	01:28	398	11:37	0.0	0.0	22.4	0.0	22.4
Ballabhgarh	400	432	02:02	402	11:35	0.0	0.0	34.4	4.4	34.4
Bawana	400	429	02:00	402	11:35	0.0	0.0	32.5	0.0	32.5
Bassi	400	423	20:27	398	07:18	0.0	0.0	7.5	0.0	7.5
Hissar	400	421	03:57	393	11:36	0.0	0.0	0.1	0.0	0.1
Moga	400	423	02:00	396	11:36	0.0	0.0	17.2	0.0	17.2
Abdullapur	400	425	02:01	399	11:36	0.0	0.0	22.1	0.0	22.1
Nalagarh	400	432	01:08	398	11:39	0.0	0.0	35.2	14.5	35.2
Kishenpur	400	431	22:03	389	10:44	0.0	0.1	0.5	0.0	0.5
Wagoora	400	419	22:03	362	10:45	47.8	82.7	0.0	0.0	47.8
Amritsar	400	432	02:01	399	11:37	0.0	0.0	38.9	2.8	38.9
Kashipur	400	0	00:00	0	00:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	428	02:01	403	09:06	0.0	0.0	28.3	0.0	28.3
Rishikesh	400	422	03:57	394	10:28	0.0	0.0	2.9	0.0	2.9

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	772	02:00	738	11:36	0.0	4.7	0.0	0.0	0.0
Balia	765	776	13:02	763	12:15	0.0	0.0	0.0	0.0	0.0
Moga	765	803	20:59	756	11:37	0.0	0.0	1.3	0.0	1.3
Agra	765	787	03:56	752	10:22	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	808	02:02	764	10:23	0.0	0.0	17.5	0.0	17.5
Unnao	765	775	02:02	736	11:36	0.0	9.9	0.0	0.0	0.0
Lucknow	765	804	02:01	767	11:37	0.0	0.0	10.7	0.0	10.7
Meerut	765	808	21:13	764	10:21	0.0	0.0	6.1	0.0	6.1
Jhatikara	765	807	02:01	759	11:37	0.0	0.0	16.8	0.0	16.8
Bareilly 765 kV	765	798	02:02	754	12:10	0.0	0.0	0.0	0.0	0.0
Anta	765	792	04:00	766	10:00	0.0	0.0	0.0	0.0	0.0
Phagi	765	800	21:04	760	10:03	0.0	0.0	0.0	0.0	0.0

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

IX. Reservior Parameters:

Name of Reservior	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	495.37	914.64	506.68	1382.01	180.46	408.64
Pong	426.72	384.05	411.87	555.85	415.73	705.67	46.18	257.20
Tehri	829.79	740.04	817.80	962.25	812.35	842.28	42.46	164.00
Koteshwar	612.50	598.50	610.25	4.69	610.69	4.95	164.00	156.30
Chamera-I	760.00	748.75	759.45	0.00	0.00	0.00	49.79	54.19
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	509.79	2.35	506.58	1.26	43.60	122.49

*** 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	-455	1	0	-444	-169	0	-13.34	-0.59	-13.93
Delhi	-239	-366	0	-362	-108	0	-9.70	-2.52	-12.21
Haryana	-595	289	0	-326	318	0	-9.96	6.80	-3.16
HP	293	81	0	199	-109	0	8.06	-1.09	6.97
J&K	354	347	0	349	282	0	7.94	6.45	14.38
CHD	-30	0	0	-30	0	0	-0.36	0.00	-0.36
Rajasthan	-7	489	0	-7	517	0	4.42	16.10	20.52
UP	99	0	0	-53	-100	0	-5.54	-1.25	-6.79
Uttarakhand	147	60	0	147	117	0	3.71	2.32	6.04
Total	**-433**	**900**	**0**	**-527**	**748**	**0**	**-14.78**	**26.22**	**11.45**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-444	-706	124	-360	0	0
Delhi	-239	-603	208	-376	0	0
Haryana	-83	-627	358	-293	0	0
HP	471	199	206	-531	0	0
J&K	354	306	396	-166	0	0
CHD	0	-30	0	0	0	0
Rajasthan	452	-7	1853	480	0	0
UP	161	-642	0	-100	0	0
Uttarakhand	183	147	346	-59	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%**

XII. Zero Crossing Violations

State	No. of violations(Maximum 8 in a day)	Maximum number of continuous blocks without sign change
Punjab	3	35
Haryana	0	10
Rajasthan	1	19
Delhi	4	23
UP	1	24
Uttarakhand	5	48
HP	4	33
J & K	5	39
Chandigarh	3	27

XIII.System Constraints:

XIV. Grid Disturbance / Any Other Significant Event:

XV. Weather Conditions For 28.11.2016 :
Normal

XVI. Synchronisation of new generating units :

XVII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :
First time charging of SVC of Ludhana at 1750hrs.
First time charging of bays 419,420,421 at 00:30hrs and 125 MVAR reactor at 22:28hrs at Jalandhar.

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 : 28.11.2016 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**