

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 10.11.2016

Date of Reporting : 11.11.2016



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
40314	637	40952	50.10	30234	672	30906	50.11	834.6	13.11

* 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	43.64	9.15	1.20	53.98	42.81	42.43	-0.38	96.41	0.00
Haryana	35.68	0.57	0.00	36.25	73.70	72.40	-1.30	108.65	0.00
Rajasthan	118.61	4.88	11.92	135.41	68.20	70.64	2.45	206.06	0.10
Delhi	14.43		0.00	14.43	43.52	44.89	1.38	59.33	0.07
UP	162.95	14.12	0.00	177.07	87.26	89.26	2.00	266.33	3.64
Uttarakhand	8.31	0.00	0.00	12.58	20.40	21.14	0.74	33.71	0.00
HP	4.30		2.23	6.53	16.90	17.60	0.70	24.13	0.11
J & K	6.96		0.00	6.96	32.85	29.77	-3.08	36.73	9.18
Chandigarh				0.00	3.23	3.27	0.05	3.27	0.00
Total	375.31	48.29	15.35	443.22	388.86	391.41	2.55	834.63	13.11

* 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	4607	0	-166	-346	3157	0	42	-346	4607	19:00	0
Haryana	6010	0	-243	48	3193	0	-166	-548	6010	19:00	0
Rajasthan	8724	104	247	567	8643	0	268	572	9971	8:00	0
Delhi	3161	0	127	-253	1617	0	49	-675	3161	19:00	0
UP	12943	90	278	-193	10230	320	77	129	12943	19:00	90
Uttarakhand	1679	0	-62	192	1160	0	41	283	1709	18:00	0
HP	1241	0	80	-32	738	0	-2	366	1315	8:00	0
J&K	1774	443	-402	425	1406	352	-139	351	1775	8:00	444
Chandigarh	176	0	-29	-30	91	0	3	-30	176	19:00	0
Total	40314	637	-170	378	30234	672	173	100	40314	19:00	637

* 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	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	1833	1854	1998	42.08	1753	41.54	0.53
Rihand I STPS (2*500)	1000	943	891	736	19.45	810	19.35	0.10
Rihand II STPS (2*500)	1000	963	907	1063	20.22	843	20.08	0.14
Rihand III STPS (2*500)	1000	963	888	838	20.31	846	20.28	0.03
Dadri I STPS (4*210)	840	457	0	155	2.57	107	2.60	-0.03
Dadri II STPS (2*490)	980	595	151	677	9.51	396	10.26	-0.75
Unchahar I TPS (2*210)	420	265	363	125	5.71	238	5.95	-0.23
Unchahar II TPS (2*210)	420	402	405	295	8.27	345	8.66	-0.39
Unchahar III TPS (1*210)	210	201	213	146	4.13	172	4.37	-0.24
ISTPP (Jhajjar) (3*500)	1500	1425	311	299	8.39	350	8.59	-0.19
Dadri GPS (4*130.19+2*154.51)	830	728	390	354	7.37	307	7.57	-0.20
Anta GPS (3*88.71+1*153.2)	419	398	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	0.01	0	0.01	0.00
Unchahar Solar(10)	10	2	0	0	0.03	1	0.04	-0.01
Singrauli Solar(15)	15	2	0	0	0.05	2	0.04	0.01
KHEP(4*200)	800	860	857	287	3.00	125	2.85	0.15
Sub Total (A)	12112	10661	7230	6973	151	6296	152	-1.09
B. NPC								
NAPS (2*220)	440	404	435	451	9.66	402	9.70	-0.04
RAPS- B (2*220)	440	383	425	429	9.21	384	9.19	0.02
RAPS- C (2*220)	440	220	233	236	4.92	205	5.28	-0.36
Sub Total (B)	1320	1007	1093	1116	23.78	991	24.17	-0.39
C. NHPC								
Chamera I HPS (3*180)	540	540	180	0	2.22	92	2.00	0.22
Chamera II HPS (3*100)	300	301	309	0	1.62	67	1.50	0.12
Chamera III HPS (3*77)	231	231	226	0	0.86	36	0.80	0.06
Bairasuli HPS(3*60)	180	179	180	0	0.63	26	0.60	0.03
Salal-HPS (6*115)	690	132	302	188	3.85	161	3.16	0.69
Tanakpur-HPS (3*31.4)	94	35	33	38	1.00	42	0.83	0.17
Uri-I HPS (4*120)	480	76	231	30	2.13	89	1.81	0.32
Uri-II HPS (4*60)	240	55	121	38	1.40	58	1.33	0.08
Dhauliganga-HPS (4*70)	280	280	282	0	1.40	58	1.30	0.11
Dulhasti-HPS (3*130)	390	383	392	0	4.27	178	4.10	0.17
Sewa-II HPS (3*40)	120	119	116	0	0.31	13	0.36	-0.05
Parbati 3 (4*130)	520	196	263	0	0.58	24	0.65	-0.07
Sub Total (C)	4065	2526	2634	294	20	845	18	1.84
D.SJVNL								
NJPC (6*250)	1500	1605	1590	0	9.57	399	9.50	0.07
Rampur HEP (6*88.67)	412	442	445	0	2.76	115	2.64	0.12
Sub Total (D)	1912	2047	2035	0	12.32	513	12.14	0.18
E. THDC								
Tehri HPS (4*250)	1000	1075	1038	0	6.10	254	5.90	0.20
Koteshwar HPS (4*100)	400	91	97	89	2.23	93	2.24	-0.01
Sub Total (E)	1400	1166	1135	89	8.33	347	8.14	0.19
F. BBMB								
Bhakra HPS (2*108+3*126+5*157)	1379	553	1063	399	13.63	568	13.27	0.37
Dehar HPS (6*165)	990	171	495	145	4.17	174	4.10	0.08
Pong HPS (6*66)	396	188	330	66	4.52	189	4.52	0.01
Sub Total (F)	2765	912	1888	610	22.33	930	21.88	0.45
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.71	30	0.67	0.04
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	825	0	5.19	216	4.98	0.21
Malana Stg-II HPS (2*50)	100	0	0	0	0.38	16	0.40	-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	38	0	0.30	13	0.30	0.00
Sub Total (G)	1662	0	863	0	6.58	274	6.35	0.23
H. Total Regional Entities (A-G)	25237	18319	16878	9082	244.73	10197	243.30	1.42

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	159	0	0.77	32	
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	0	0	-0.03	-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	920	660	24.46	1019	
	Talwandi Saboo (3*660)	1980	616	616	18.55	773	
	Thermal (Total)	6560	1695	1276	43.64	1818	
	Total Hydro	1000	379	358	9.15	381	
	Wind Power	0	0	0	0.00	0	
	Biomass	288	39	39	0.94	39	
	Solar	560	0	0	0.26	11	
	Renewable(Total)	848	39	39	1.20	50	
	Total Punjab	8408	2113	1673	53.98	2249	
	Haryana	Panipat TPS (2*210+2*250)	920	209	203	5.02	209
		DCRTPP (Yamuna nagar) (2*300)	600	533	453	11.31	471
Faridabad GPS (NTPC)(2*137.75+1*1156)		432	0	0	0.00	0	
RGTPP (khedar) (IPP) (2*600)		1200	1059	754	19.36	806	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP) (2*660)		1320	0	0	0.00	0	
Thermal (Total)		4497	1801	1410	35.68	1487	
Total Hydro		62	22	14	0.57	24	
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	1823	1424	36.25	1511	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	962	920	22.72	947
		suratgarh TPS (6*250)	1500	896	766	20.03	834
	Chabra TPS (4*250)	1000	919	739	20.75	865	
	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	168	166	3.72	155	
	RAPS A (NPC) (1*100+1*200)	300	167	166	4.15	173	
	Barsingsar (NLC) (2*125)	250	226	226	5.34	223	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	784	697	18.22	759	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	62	484	9.42	393	
	Kawai(Adani) (2*660)	1320	605	604	14.25	594	
	Thermal (Total)	8876	4789	4768	118.61	4942	
	Total Hydro	550	219	218	4.88	203	
	Wind power	4017	149	1068	11.43	476	
	Biomass	99	21	21	0.50	21	
	Solar	1295	0	0	0.00	0	
	Renewable/Others (Total)	5411	170	1089	11.92	497	
	Total Rajasthan	14837	5178	6075	135.41	5642	
UP	Anpara TPS (3*210+2*500)	1630	1236	1203	28.80	1200	
	Obra TPS (2*50+2*94+5*200)	1194	338	301	7.41	309	
	Paricha TPS (2*110+2*220+2*250)	1160	755	583	16.77	699	
	Panki TPS (2*105)	210	135	135	3.34	139	
	Harduaganj TPS (1*60+1*105+2*250)	665	444	311	9.75	406	
	Tanda TPS (NTPC) (4*110)	440	289	294	6.80	283	
	Roza TPS (IPP) (4*300)	1200	1101	756	24.86	1036	
	Anpara-C (IPP) (2*600)	1200	1071	851	23.83	993	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	404	224	7.25	302	
	Anpara-D(2*500)	1000	460	414	10.24	427	
	Lalitpur TPS(3*660)	1980	539	543	12.92	539	
	Bara(2*660)	1320	0	572	6.17	257	
	Thermal (Total)	12449	6772	6187	158.15	6590	
	Vishnuparyag HPS (IPP)(4*110)	440	122	132	7.25	302	
	Alaknada(4*82.5)	330	80	80	3.34	139	
	Other Hydro	527	263	31	3.53	147	
	Cogeneration	981	200	200	4.80	200	
	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	7437	6630	177.07	7378	
	Uttarakhand	Other Hydro	1250	509	284	8.31	346
Total Gas		225	178	185	4.21	176	
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	687	469	12.58	524	
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.01	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	142	140	2.47	103	
	Pragati Gas Turbine (2x104+ 1x122)	330	300	305	6.94	289	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	302	80	5.03	210	
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0	
	Thermal (Total)	2917	744	525	14.43	601	
	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	744	525	14.43	601		

HP	Baspa HPS (IPP) (3*100)	300	0	0	1.53	64
	Malana HPS (IPP) (2*43)	86	44	0	0.35	15
	Other Hydro	372	134	70	2.42	101
	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	99	91	2.23	93
	Renewable(Total)	486	99	91	2.23	93
	Total HP	1244	278	162	6.53	272
	J & K	Baglihar HPS (IPP) (3*150+3*150)	900	293	143	4.19
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	430	236	7	290
Total State Control Area Generation		50078	18690	17194	443.22	18467
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		6058	6270	169.83	7076	
Total Regional Availability(Gross)	75315	41625	32546	857.78	35741	

IV. Total Hydro Generation:

Regional Entities Hydro	12234	9374	1280	72.53	3022
State Control Area Hydro	7163	2480	1700	50.53	2283
Total Regional Hydro	19397	11854	2980	123.06	5305

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.09	4
State Control Area Renewable	7356	308	1219	15.40	642
Total Regional Renewable	7386	308	1219	15.49	646

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	
Vindhychall(HVDC B/B)	-500	-500	0	500	0.00	12.15	-12.15
765 KV Gwalior-Agra (D/C)	1672	1912	2674	0	48.32	0.00	48.32
400 KV Zerda-Kankroli	-179	-89	60	219	0.00	2.18	-2.18
400 KV Zerda-Bhinmal	-127	-73	150	229	0.00	0.87	-0.87
220 KV Auraiya-Malanpur	-119	-96	0	130	0.00	2.11	-2.11
220 KV Badod-Kota/Morak	-29	-67	24	91	0.00	0.82	-0.82
Mundra-Mohindergerh(HVDC Bipole)	2002	1298	2005	0.00	39.85	0.00	39.85
400 KV Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1232	1308	1676	0	33.40	0.00	33.40
Sub Total WR	3952	3693			121.57	18.14	103.43
400 kV Sasaram - Varanasi	-237	-189	0	237	0.00	4.56	-4.56
400 kV Sasaram - Allahabad	150	150	150	0	3.54	0.00	3.54
400 KV MZP- GKP (D/C)	59	177	458	0	4.86	0.00	4.86
400 KV Patna-Balia(D/C) X 2	577	578	777	0	15.11	0.00	15.11
400 KV B'Sharif-Balia (D/C)	-27	71	203	27	2.27	0.00	2.27
765 KV Gaya-Balia	152	244	322	0	5.79	0.00	5.79
765 KV Gaya-Varanasi (D/C)	348	404	758	0	12.38	0.00	12.38
220 KV Pusauli-Sahupuri	210	138	213	0	3.78	0.00	3.78
132 KV K'nasa-Sahupuri	-26	-32	0	36	0.00	0.55	-0.55
132 KV Son Ngr-Rihand	-37	-40	0	44	0.00	0.96	-0.96
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-82	-79	194	107	0.00	0.01	-0.01
400 KV Barh -GKP (D/C)	490	448	544	0	10.85	0.00	10.85
400 kV B'Sharif - Varanasi (D/C)	29	7	165	35	1.21	0.00	1.21
Sub Total ER	1606	1877			59.78	6.08	53.70
+/- 800 KV BiswanathChariali-Agra	500	700	700	0.00	12.71	0.00	12.71
Sub Total NER	500	700			12.71	0.00	12.71
Total IR Exch	6058	6270			194.05	24.22	169.83

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
49.82	1.39	51.21	0.87	-12.10	3.96	16.46	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
56.04	106.33	162.38	66.40	103.43	169.83	10.36	-2.90	7.45

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	-27	0	0	27	0	0	-0.07

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	0.10	10.86	56.23	72.70	13.02	3.45	0.01	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)	
50.20	18.00	49.79	15.19	49.99	0.047	0.067	50.17	0.00	27.30

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	410	12:52	402	5:30	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	422	13:02	403	17:56	0.0	0.0	4.3	0.0	4.3
Bareilly(PG)400kV	400	421	0:04	395	10:49	0.0	0.0	1.7	0.0	1.7
Kanpur	400	419	0:45	398	10:49	0.0	0.0	0.0	0.0	0.0
Dadri	400	425	1:58	125	10:52	2.6	2.6	25.4	0.0	28.0
Ballabgarh	400	432	0:49	404	11:21	0.0	0.0	46.6	12.7	46.6
Bawana	400	429	1:58	409	11:21	0.0	0.0	42.3	0.0	42.3
Bassi	400	425	19:42	378	10:50	0.0	0.1	5.8	0.0	5.8
Hissar	400	423	1:58	403	6:25	0.0	0.0	13.4	0.0	13.4
Moga	400	426	0:04	407	11:20	0.0	0.0	28.1	0.0	28.1
Abdullapur	400	427	21:58	408	5:47	0.0	0.0	36.3	0.0	36.3
Nalagarh	400	436	2:02	412	6:55	0.0	0.0	53.5	25.7	53.5
Kishenpur	400	423	0:05	398	6:50	0.0	0.0	12.8	0.0	12.8
Wagoora	400	408	13:04	370	18:10	15.9	64.8	0.0	0.0	15.9
Amritsar	400	434	1:57	411	11:21	0.0	0.0	48.1	18.2	48.1
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	428	23:21	407	11:20	0.0	0.0	24.0	0.0	24.0
Rishikesh	400	418	0:03	396	6:30	0.0	0.0	0.0	0.0	0.0

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	778	0:50	736	10:49	0.0	0.0	0.0	0.0	0.0
Balia	765	792	0:40	766	6:29	0.0	0.0	0.0	0.0	0.0
Moga	765	808	0:03	773	11:41	0.0	0.0	18.2	0.0	18.2
Agra	765	793	19:42	753	6:28	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	809	1:59	773	11:21	0.0	0.0	28.5	0.0	28.5
Unnao	765	773	0:48	743	10:54	0.0	0.0	0.0	0.0	0.0
Lucknow	765	803	0:50	772	10:54	0.0	0.0	2.2	0.0	2.2
Meerut	765	810	20:02	758	6:38	0.0	0.0	5.5	0.0	5.5
Jhatikara	765	808	1:58	770	11:10	0.0	0.0	21.0	0.0	21.0
Bareilly 765 kV	765	796	0:50	759	10:56	0.0	0.0	0.0	0.0	0.0
Anta	765	803	1:58	769	9:43	0.0	0.0	11.0	0.0	11.0
Phagi	765	805	20:03	710	10:52	0.1	0.1	1.3	0.0	1.4

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	497.66	1006.54	508.56	1470.42	186.69	382.96
Pong	426.72	384.05	413.47	622.40	417.77	794.52	73.34	284.36
Tehri	829.79	740.04	821.20	1027.61	815.85	919.25	45.39	134.00
Koteswar	612.50	598.50	611.41	5.30	610.81	4.98	134.00	147.04
Chamera-I	760.00	748.75	759.69	0.00	0.00	0.00	58.80	59.68
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	512.05	2.93	508.97	4.64	55.59	119.60

* 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	-346	0	0	-346	0	0	-11.27	-0.69	-11.96
Delhi	-132	-543	0	-229	-24	0	-6.46	-2.62	-9.08
Haryana	-625	77	0	-309	357	0	-10.12	4.93	-5.18
HP	269	97	0	72	-104	0	4.85	-0.55	4.30
J&K	351	0	0	440	-15	0	9.47	-0.31	9.16
CHD	-30	0	0	-30	0	0	-0.36	0.08	-0.29
Rajasthan	-7	579	0	-7	575	0	4.42	19.03	23.45
UP	129	0	0	-93	-100	0	-6.06	-1.69	-7.75
Uttarakhand	147	136	0	179	13	0	3.78	4.55	8.33
Total	-245	346	0	-325	703	0	-11.76	22.73	10.97

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-346	-666	0	-555	0	0
Delhi	-113	-420	421	-767	0	0
Haryana	-309	-628	403	-315	0	0
HP	293	72	213	-617	0	0
J&K	440	331	0	-15	0	0
CHD	0	-30	0	0	19	-1
Rajasthan	452	-7	1548	563	0	0
UP	182	-692	0	-100	0	0
Uttarakhand	179	147	445	-41	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	0.00%

(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	1	23
Rajasthan	1	16
Delhi	3	30
UP	7	8
Uttarakhand	2	29
HP	2	17
J & K	4	36
Chandigarh	4	46

XIII. System Constraints:**XIV. Grid Disturbance / Any Other Significant Event:****XV. Weather Conditions For 10.11.2016 :**
Normal**XVI. Synchronisation of new generating units :****XVII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**

1. 400kV Heerapura-Phagi-1 first time charged at 1717Hrs of 10.11.16
2. Bay no's 413, 414, 415, 416, 417 & 418 at 400KV Malerkotla first time charged at 1700Hrs of 10.11.16

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.