

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 21.10.2016

Date of Reporting : 22.10.2016



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
44013	572	44584	50.10	34843	268	35110	50.09	908.9	9.85

* 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	49.97	9.92	0.93	60.83	59.23	59.01	-0.22	119.83	0.00
Haryana	35.76	0.68	0.00	36.44	97.23	95.97	-1.26	132.41	0.00
Rajasthan	114.80	3.80	17.17	135.77	61.85	62.92	1.07	198.69	0.77
Delhi	14.47		0.00	14.47	63.16	63.97	0.81	78.44	0.03
UP	173.36	15.07	0.00	188.43	91.27	90.92	-0.35	279.35	0.00
Uttarakhand		10.99	0.00	13.29	21.56	22.23	0.68	35.52	0.00
HP		6.15	2.93	9.08	15.02	15.68	0.66	24.75	0.03
J & K		10.62	0.00	10.62	27.01	25.43	-1.58	36.05	9.01
Chandigarh				0.00	3.91	3.82	-0.09	3.82	0.00
Total	388.36	57.22	21.03	468.91	440.23	439.94	-0.29	908.86	9.85

* 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	6317		426	-1227	3864	0	5	9	6317	19:00	0
Haryana	7131	0	-195	748	4351	0	156	212	7131	19:00	0
Rajasthan	8635	153	203	558	8431	0	-22	571	8911	24:00	0
Delhi	3966	0	65	-62	2736	0	242	-244	3966	19:00	0
UP	13080	0	-380	-5	12237	0	9	66	13106	20:00	0
Uttarakhand	1799	0	70	295	1269	0	36	317	1799	19:00	0
HP	1203	0	25	-236	773	0	26	135	1322	8:00	0
J&K	1678	419	-187	245	1071	268	-187	111	4430	21:00	1108
Chandigarh	205	0	-31	-24	111	0	5	0	205	19:00	0
Total	44013	572	-4	292	34843	268	270	1178	44013	19:00	572

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

Diversity is 1.07

UI [OD:(+ve), UD: (-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	1833	1979	1992	44.32	1847	43.96	0.36
	Rihand I STPS (2*500)	1000	943	1009	882	22.33	931	22.17	0.17
	Rihand II STPS (2*500)	1000	943	982	933	22.42	934	22.20	0.21
	Rihand III STPS (2*500)	1000	472	507	483	11.37	474	11.06	0.30
	Dadri I STPS (4*210)	840	815	391	322	7.78	324	8.22	-0.43
	Dadri II STPS (2*490)	980	980	1006	693	18.27	761	19.37	-1.10
	Unchahar I TPS (2*210)	420	353	317	299	7.02	293	7.27	-0.24
	Unchahar II TPS (2*210)	420	400	368	307	7.12	297	7.42	-0.30
	Unchahar III TPS (1*210)	210	200	194	142	3.49	145	3.69	-0.20
	ISTPP (Jhajjar) (3*500)	1500	1188	454	326	7.03	293	7.37	-0.34
	Dadri GPS (4*130.19+2*154.51)	830	785	361	366	8.04	335	8.25	-0.21
	Anta GPS (3*88.71+1*153.2)	419	387	0	220	2.07	86	1.95	0.12
	Auraiya GPS (4*111.19+2*109.30)	663	627	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	0	0	0	0.00	0	0.00	0.00
	Singrauli Solar(15)	15	2	0	0	0.05	2	0.05	0.01
	KHEP(4*200)	800	858	859	0	4.26	178	3.75	0.51
Sub Total (A)	12112	10786	8427	6965	166	6899	167	-1.14	
B. NPC	NAPS (2*220)	440	193	216	219	4.65	194	4.63	0.01
	RAPS- B (2*220)	440	381	425	429	9.21	384	9.14	0.07
	RAPS- C (2*220)	440	136	149	133	2.72	113	3.25	-0.53
	Sub Total (B)	1320	710	790	781	16.58	691	17.03	-0.45
C. NHPC	Chamera I HPS (3*180)	540	443	551	0	2.23	93	2.00	0.23
	Chamera II HPS (3*100)	300	301	309	0	2.47	103	2.30	0.17
	Chamera III HPS (3*77)	231	231	193	0	1.44	60	1.30	0.14
	Bairasuli HPS(3*60)	180	179	179	0	0.89	37	0.80	0.09
	Salal-HPS (6*115)	690	207	340	217	5.69	237	4.97	0.72
	Tanakpur-HPS (3*31.4)	94	50	52	52	1.40	58	1.19	0.21
	Uri-I HPS (4*120)	480	89	130	42	2.45	102	2.15	0.30
	Uri-II HPS (4*60)	240	58	122	77	1.52	63	1.38	0.13
	Dhauliganga-HPS (4*70)	280	280	276	0	1.95	81	1.84	0.11
	Dulhasti-HPS (3*130)	390	380	251	290	7.23	301	7.00	0.23
	Sewa-II HPS (3*40)	120	119	74	0	0.32	13	0.36	-0.05
	Parbati 3 (4*130)	520	303	322	0	0.95	40	0.91	0.04
	Sub Total (C)	4065	2639	2799	678	29	1189	26	2.33
	D.SJVNL	NJPC (6*250)	1500	1605	1603	0	12.23	510	12.00
Rampur HEP (6*68.67)		412	442	440	0	3.49	146	3.35	0.14
Sub Total (D)		1912	2047	2043	0	15.72	655	15.35	0.38
E. THDC	Tehri HPS (4*250)	1000	1071	1078	0	5.60	233	5.41	0.18
	Koteshwar HPS (4*100)	400	75	100	64	1.84	77	1.80	0.04
	Sub Total (E)	1400	1146	1178	64	7.44	310	7.21	0.23
F. BBMB	Bhakra HPS (2*108+3*126+5*157)	1379	707	959	645	17.25	719	16.97	0.28
	Dehar HPS (6*165)	990	258	495	165	6.37	266	6.20	0.17
	Pong HPS (6*66)	396	99	264	0	2.47	103	2.38	0.09
	Sub Total (F)	2765	1065	1718	810	26.10	1087	25.55	0.54
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	109	0	0.98	41	0.92	0.06
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	810	0	6.59	275	6.40	0.19
	Malana Stg-II HPS (2*50)	100	0	96	0	0.67	28	0.64	0.03
	Shree Cement TPS (2*150)	300	0	-1	-1	-0.04	-2	0.00	-0.04
	Budhil HPS(IPP) (2*35)	70	0	25	10	0.35	15	0.36	0.00
	Sub Total (G)	1662	0	1039	9	8.56	357	8.32	0.24
H. Total Regional Entities (A-G)	25237	18393	17993	9306	268.51	11188	266.38	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	210	160	3.55	148	
	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	-0.12	-5	
	Goindwal(GVK) (2*270)	540	0	0	-0.02	-1	
	Rajpura (2*700)	1400	1320	660	25.75	1073	
	Talwandi Saboo (3*660)	1980	1500	616	20.83	868	
	Thermal (Total)	6560	3030	1436	49.97	2082	
	Total Hydro	1000	554	372	9.92	413	
	Wind Power	0	0	0	0.00	0	
	Biomass	288	23	23	0.54	23	
	Solar	560	0	0	0.39	16	
	Renewable(Total)	848	23	23	0.93	39	
	Total Punjab	8408	3607	1831	60.83	2534	
	Haryana	Panipat TPS (2*210+2*250)	920	202	194	4.97	207
		DCRTPP (Yamuna nagar) (2*300)	600	551	469	11.41	475
Faridabad GPS (NTPC)(2*137.75+1*1156)		432	0	0	0.00	0	
RGTPP (khedar) (IPP) (2*600)		1200	1074	762	19.38	808	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP) (2*660)		1320	0	0	0.00	0	
Thermal (Total)		4497	1827	1425	35.76	1490	
Total Hydro		62	30	19	0.68	28	
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	1857	1444	36.44	1518	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	1041	1070	25.70	1071
		suratgarh TPS (6*250)	1500	675	739	17.30	721
	Chabara TPS (4*250)	1000	807	926	21.00	875	
	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	115	117	2.70	113	
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0	
	Barsingar (NLC) (2*125)	250	227	226	5.30	221	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	805	814	18.80	783	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	559	512	12.70	529	
	Kawai(Adani) (2*660)	1320	478	482	11.30	471	
	Thermal (Total)	8876	4707	4886	114.80	4783	
	Total Hydro	550	182	139	3.80	158	
	Wind power	4017	203	984	13.50	563	
	Biomass	99	21	21	0.50	21	
	Solar	1295	0	0	3.17	132	
	Renewable/Others (Total)	5411	224	1005	17.17	715	
Total Rajasthan	14837	5113	6030	135.77	5657		
UP	Anpara TPS (3*210+2*500)	1630	1198	1103	24.02	1001	
	Obra TPS (2*50+2*94+5*200)	1194	329	289	7.70	321	
	Paricha TPS (2*110+2*220+2*250)	1160	694	695	13.40	558	
	Panki TPS (2*105)	210	153	131	3.30	138	
	Harduaganj TPS (1*60+1*105+2*250)	665	516	518	10.90	454	
	Tanda TPS (NTPC) (4*110)	440	380	392	8.62	359	
	Roza TPS (IPP) (4*300)	1200	1067	1062	23.18	966	
	Anpara-C (IPP) (2*600)	1200	1072	1067	25.44	1060	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	381	404	7.52	313	
	Anpara-D(2*500)	1000	138	430	9.89	412	
	Lalitpur TPS(3*660)	1980	1151	1003	23.94	998	
	Bara(2*660)	1320	542	542	13.05	544	
	Thermal (Total)	12449	7621	7636	170.96	7123	
	Vishnuparyag HPS (IPP)(4*110)	440	231	231	7.52	313	
	Alaknada(4*82.5)	330	143	83	3.30	138	
	Other Hydro	527	146	216	4.25	177	
	Cogeneration	981	100	100	2.40	100	
	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	8241	8266	188.43	7851	
Uttarakhand	Other Hydro	1250	615	387	10.99	458	
	Total Gas	225	91	95	2.25	94	
	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	706	482	13.29	554	
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	74	77	1.81	75	
	Pragati Gas Turbine (2x104+ 1x122)	330	144	153	2.90	121	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	251	250	6.17	257	
	Badarpur TPS (NTPC) (3*95+2*210)	705	166	163	3.59	149	
	Thermal (Total)	2917	636	643	14.47	603	
	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	636	643	14.47	603		

HP	Baspa HPS (IPP) (3*100)	300	69	69	2.24	93
	Malana HPS (IPP) (2*43)	86	80	0	0.65	27
	Other Hydro	372	167	141	3.26	136
	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	126	120	2.93	122
	Renewable(Total)	486	126	120	2.93	122
	Total HP	1244	443	330	9.08	378
	J & K	Baglihar HPS (IPP) (3*150+3*150)	900	438	290	7.85
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	576	383	11	442
Total State Control Area Generation		50078	21178	19408	468.91	19538
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		5567	7708	184.38	7682	
Total Regional Availability(Gross)	75315	44738	36423	921.80	38408	

IV. Total Hydro Generation:

Regional Entities Hydro	12234	9612	1552	90.29	3762
State Control Area Hydro	7163	3011	2255	60.15	2602
Total Regional Hydro	19397	12622	3807	150.44	6364

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.07	3
State Control Area Renewable	7356	373	1148	21.08	879
Total Regional Renewable	7386	373	1148	21.16	882

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)	-250	-250	0	250	0.00	5.73	-5.73
765 KV Gwalior-Agra (D/C)	1352	2236	0	2500	51.45	0.00	51.45
400 KV Zerda-Kankroli	-72	-29	22	139	0.00	1.49	-1.49
400 KV Zerda-Bhinmal	-9	-29	56	169	0.00	0.66	-0.66
220 KV Auraiya-Malanpur	-58	-40	0	69	0.00	0.73	-0.73
220 KV Badod-Kota/Morak	10	-17	73	56	0.00	0.33	-0.33
Mundra-Mohindergerh(HVDC Bipole)	1999	1999	2007	0.00	48.38	0.00	48.38
400 KV Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	864	1229	1471	0	30.72	0.00	30.72
Sub Total WR	3836	5099			130.55	8.94	121.61
Pusauli Bypass/HVDC	-324	-264	0	329	0.00	5.77	-5.77
400 KV MZP- GKP (D/C)	129	391	513	0	8.39	0.00	8.39
400 KV Patna-Balia(D/C) X 2	558	597	678	0	13.66	0.00	13.66
400 KV B Sharif-Balia (D/C)	4	160	258	0	3.39	0.00	3.39
765 KV Gaya-Balia	100	256	281	0	5.24	0.00	5.24
765 KV Gaya-Varanasi (D/C)	278	454	569	0	10.43	0.00	10.43
220 KV Pusauli-Sahupuri	170	160	171	0	3.54	0.00	3.54
132 KV K'nasa-Sahupuri	-36	-28	0	36	0.00	0.62	-0.62
132 KV Son Ngr-Rihand	-43	0	0	43	0.00	0.40	-0.40
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-42	49	150	42	1.64	0.00	1.64
400 KV Barh -GKP (D/C)	424	430	506	0	9.70	0.00	9.70
400 kV B Sharif - Varanasi (D/C)	25	-80	176	53	1.85	0.00	1.85
Sub Total ER	1243	2125			57.83	6.78	51.05
+/- 800 KV BiswanathChariali-Agra	488	484	500	0.00	11.72	0.00	11.72
Sub Total NER	488	484			11.72	0.00	11.72
Total IR Exch	5567	7708			200.10	15.72	184.38

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
42.89	3.78	46.67	9.63	-0.29	3.52	12.64	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
59.82	127.97	187.79	62.77	121.61	184.38	2.95	-6.36	-3.41

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	-9	-8	0	10	0	0	-0.03

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	0.21	13.21	63.99	74.25	10.88	1.48	0.23	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)		
50.25	18.02	49.76	14.23	49.98	0.048	50.12	0.00	25.75	

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	0:00	402	15:46	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	417	6:04	399	14:37	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	404	0:00	404	0:00	0.0	0.0	0.0	0.0	0.0
Kanpur	400	418	3:00	401	12:16	0.0	0.0	0.0	0.0	0.0
Dadri	400	421	2:54	398	14:41	0.0	0.0	1.2	0.0	1.2
Ballabgarh	400	429	2:56	402	11:38	0.0	0.0	42.6	0.0	42.6
Bawana	400	423	1:08	400	11:37	0.0	0.0	19.7	0.0	19.7
Bassi	400	423	4:03	400	11:23	0.0	0.0	0.9	0.0	0.9
Hissar	400	420	2:58	397	14:41	0.0	0.0	0.0	0.0	0.0
Moga	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	428	1:28	404	18:28	0.0	0.0	33.9	0.0	33.9
Nalagarh	400	429	3:05	408	11:43	0.0	0.0	37.0	0.0	37.0
Kishenpur	400	424	2:59	392	18:17	0.0	0.0	8.7	0.0	8.7
Wagoora	400	413	3:00	365	18:17	5.4	39.4	0.0	0.0	5.4
Amritsar	400	428	2:56	405	11:26	0.0	0.0	34.4	0.0	34.4
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	413	4:03	386	14:41	0.0	3.4	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	779	2:59	746	18:25	0.0	0.0	0.0	0.0	0.0
Balia	765	784	6:02	758	18:11	0.0	0.0	0.0	0.0	0.0
Moga	765	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Agra	765	792	2:59	753	14:41	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	806	3:00	767	14:36	0.0	0.0	12.4	0.0	12.4
Unnao	765	765	6:04	736	15:43	0.0	12.8	0.0	0.0	0.0
Lucknow	765	786	6:03	754	14:37	0.0	0.0	0.0	0.0	0.0
Meerut	765	806	2:58	754	11:39	0.0	0.0	8.3	0.0	8.3
Jhatikara	765	803	2:58	764	14:41	0.0	0.0	3.9	0.0	3.9
Bareilly 765 kV	765	784	6:04	749	11:37	0.0	0.0	0.0	0.0	0.0
Anta	765	795	21:44	766	14:33	0.0	0.0	0.0	0.0	0.0
Phagi	765	796	2:49	766	11:52	0.0	0.0	0.0	0.0	0.0

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	500.12	1101.35	509.94	1545.02	237.69	500.84
Pong	426.72	384.05	415.40	693.24	419.44	861.93	68.13	149.97
Tehri	829.79	740.04	824.05	1087.84	819.10	983.00	122.87	121.00
Koteswar	612.50	598.50	609.21	4.21	611.50	5.20	121.00	121.70
Chamera-I	760.00	748.75	759.33	0.00	0.00	0.00	78.01	60.42
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	515.18	3.61	512.23	3.62	44.53	132.20

* 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	9	0	0	9	-1236	0	0.21	-3.80	-3.59
Delhi	6	-250	0	-94	32	0	-0.35	-0.49	-0.84
Haryana	-17	229	0	476	272	0	4.25	4.90	9.15
HP	135	0	0	-8	-229	0	3.19	-3.35	-0.16
J&K	61	50	0	61	184	0	3.26	1.77	5.04
CHD	0	0	0	0	0	-24	0.00	0.15	0.15
Rajasthan	-5	576	0	-7	565	0	-0.13	13.58	13.45
UP	166	-100	0	95	-100	0	-1.24	-2.29	-3.53
Uttarakhand	12	305	0	25	270	0	0.40	9.28	9.68
Total	368	809	0	556	-241	-24	9.60	19.76	29.36

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	9	9	0	-1308	0	0
Delhi	6	-94	192	-321	0	0
Haryana	489	-17	418	-186	0	0
HP	224	-8	135	-722	0	0
J&K	210	61	333	-15	0	0
CHD	0	0	0	0	35	-24
Rajasthan	-5	-7	578	548	0	0
UP	207	-294	0	-100	0	0
Uttarakhand	25	12	672	148	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	1	17
Haryana	3	30
Rajasthan	1	13
Delhi	3	25
UP	1	15
Uttarakhand	7	11
HP	1	15
J & K	6	37
Chandigarh	5	48

XIII. System Constraints:**XIV. Grid Disturbance / Any Other Significant Event:****XV. Weather Conditions For 21.10.2016 :**
Normal**XVI. Synchronisation of new generating units :****XVII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**

1. 125 MVAR Bus reactor along with Bay no. 407 at Panchkula S/S first time charged at 18:48 hrs. dt. 21.10.2016

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.