

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

उत्तर क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 23.11.2017

Date of Reporting : 24.11.2017



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
39611	504	40114	50.01	29344	284	29627	49.97	836.78	12.58

\* 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:

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	Gas/Naptha/Diesal	Solar	Wind	Other (Biomass/ Small hydro/ Co-Generation etc.)	Total					
Punjab	78.35	8.42	0.00	0.04	0.00	0.22	87.03	7.60	7.77	0.17	94.79	0.00
Haryana	34.42	0.41	7.39	0.00	0.00	0.00	42.22	66.93	68.10	1.17	110.32	0.03
Rajasthan	111.66	4.65	7.67	3.10	1.59	4.74	133.42	65.62	66.74	1.11	200.15	0.00
Delhi	0.00	0.00	18.19	0.00	0.00	0.00	18.19	43.84	42.90	-0.94	61.10	0.01
UP	157.72	6.00	0.00	0.00	0.00	19.20	182.92	83.37	83.34	-0.03	266.26	2.49
Uttarakhand	0.00	8.18	6.53	0.58	0.00	0.00	15.29	17.75	17.79	0.04	33.08	0.00
HP	0.00	4.50	0.00	0.00	0.00	1.91	6.41	18.54	19.66	1.13	26.07	0.17
J & K	0.00	4.69	0.00	0.00	0.00	0.00	4.69	37.73	37.23	-0.51	41.91	9.88
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.49	3.10	-0.39	3.10	0.00
<b>Total</b>	<b>382.15</b>	<b>36.84</b>	<b>39.79</b>	<b>3.72</b>	<b>1.59</b>	<b>26.07</b>	<b>490.16</b>	<b>344.86</b>	<b>346.62</b>	<b>1.76</b>	<b>836.78</b>	<b>12.58</b>

\* Shortage furnished by the respective constituent. \$ Others include UP Co-generation and JK Diesal

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

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	5057	0	-11	-2488	2919	0	50	-1668	5057	19	0
Haryana	6009	0	27	-712	3480	0	-22	-529	6009	19	0
Rajasthan	8795	0	-324	-622	7622	0	160	201	10525	8	0
Delhi	3144	0	-58	-987	1489	0	-22	-1242	3373	11	0
UP	11374	0	-280	-122	10252	0	-70	86	11967	12	395
Uttarakhand	1707	0	16	356	1114	0	33	241	1833	18	0
HP	1343	0	74	184	782	0	18	313	1487	8	0
J&K	2015	504	207	820	1608	284	8	800	2015	19	504
Chandigarh	167	0	-4	-20	78	0	-22	0	174	8	0
<b>Total</b>	<b>39611</b>	<b>504</b>	<b>-352</b>	<b>-3592</b>	<b>29344</b>	<b>284</b>	<b>134</b>	<b>-1796</b>	<b>39611</b>	<b>19</b>	<b>504</b>

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

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UI [OG:(+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
<b>A. NTPC</b>								
Singrauli STPS (5*200+2*500)	2000	900	999	1004	22.50	937	21.48	1.01
Rihand I STPS (2*500)	1000	923	901	886	19.93	830	19.92	0.01
Rihand II STPS (2*500)	1000	943	875	887	19.98	833	19.93	0.05
Rihand III STPS (2*500)	1000	943	881	867	19.89	829	19.93	-0.04
Dadri I STPS (4*210)	840	769	314	208	6.25	260	6.45	-0.20
Dadri II STPS (2*490)	980	929	830	508	16.37	682	16.95	-0.58
Unchahar I TPS (2*210)	420	160	124	121	2.99	124	2.89	0.10
Unchahar II TPS (2*210)	420	383	312	283	6.93	289	6.22	0.70
Unchahar III TPS (1*210)	210	192	144	113	3.20	134	3.26	-0.05
Unchahar IV TPS(1*500)	500	0	0	0	0.00	0	0.00	0.00
ISTPP (Jhajhar) (3*500)	1500	948	795	578	17.59	733	17.98	-0.39
Dadri GPS (4*130.19+2*154.51)	830	806	151	127	3.44	143	3.65	-0.21
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	638	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	0.06	3	0.06	0.00
KHEP(4*200)	800	792	816	0	3.05	127	2.75	0.30
<b>Sub Total (A)</b>	<b>12612</b>	<b>9738</b>	<b>7142</b>	<b>5582</b>	<b>142</b>	<b>5926</b>	<b>142</b>	<b>0.70</b>
<b>B. NPC</b>								
NAPS (2*220)	440	412	446	453	9.85	410	9.85	0.00
RAPS- B (2*220)	440	402	444	447	9.67	403	9.52	0.15
RAPS- C (2*220)	440	410	455	450	10.05	419	9.84	0.21
<b>Sub Total (B)</b>	<b>1320</b>	<b>1224</b>	<b>1345</b>	<b>1350</b>	<b>29.57</b>	<b>1232</b>	<b>29.21</b>	<b>0.36</b>
<b>C. NHPC</b>								
Chamera I HPS (3*180)	540	534	369	0	1.57	65	1.60	-0.03
Chamera II HPS (3*100)	300	229	203	0	1.17	49	1.09	0.08
Chamera III HPS (3*77)	231	231	229	0	1.05	44	0.92	0.13
Bairasul HPS(3*60)	180	51	124	0	0.48	20	0.41	0.07
Salal-HPS (6*115)	690	110	345	35	0.29	12	2.63	-2.34
Tanakpur-HPS (3*31.4)	94	35	33	36	0.89	37	0.84	0.05
Uri-I HPS (4*120)	480	80	210	40	2.25	94	1.86	0.39
Uri-II HPS (4*60)	240	58	163	37	1.47	61	1.39	0.09
Dhauliganga-HPS (4*70)	280	55	210	0	1.39	58	1.33	0.06
Dulhasti-HPS (3*130)	390	387	397	0	3.51	146	3.30	0.21
Sewa-II HPS (3*40)	120	79	62	0	0.22	9	0.24	-0.01
Parbati 3 (4*130)	520	24	261	0	0.61	25	0.58	0.03
<b>Sub Total (C)</b>	<b>4065</b>	<b>1872</b>	<b>2606</b>	<b>148</b>	<b>15</b>	<b>621</b>	<b>16</b>	<b>-1.27</b>
<b>D. SJVNL</b>								
NJPC (6*250)	1500	1497	1467	0	8.63	360	8.54	0.09
Rampur HEP (6*68.67)	412	412	410	0	2.40	100	2.38	0.02
<b>Sub Total (D)</b>	<b>1912</b>	<b>1910</b>	<b>1877</b>	<b>0</b>	<b>11.03</b>	<b>460</b>	<b>10.92</b>	<b>0.11</b>
<b>E. THDC</b>								
Tehri HPS (4*250)	1000	988	682	0	6.35	265	6.21	0.13
Koteshwar HPS (4*100)	400	91	102	91	2.24	93	2.19	0.05
<b>Sub Total (E)</b>	<b>1400</b>	<b>1079</b>	<b>784</b>	<b>91</b>	<b>8.59</b>	<b>358</b>	<b>8.40</b>	<b>0.19</b>
<b>F. BBMB</b>								
Bhakra HPS (2*108+3*126+5*157)	1379	486	1073	366	11.86	494	11.67	0.19
Dehar HPS (6*165)	990	167	495	0	4.12	172	4.00	0.12
Pong HPS (6*66)	396	158	264	66	3.81	159	3.79	0.03
<b>Sub Total (F)</b>	<b>2765</b>	<b>811</b>	<b>1832</b>	<b>432</b>	<b>19.79</b>	<b>825</b>	<b>19.46</b>	<b>0.33</b>
<b>G. IPP(s)/JV(s)</b>								
Allain DuhanganHPS(IPP) (2*96)	192	0	136	0	0.65	27	0.62	0.03
Karcham Wangtoo HPS(IPP) (4*250)	1000	0	825	0	4.57	190	4.50	0.07
Malana Stg-II HPS (2*50)	100	0	0	0	0.31	13	0.29	0.02
Shree Cement TPS (2*150)	300	0	0	0	0.00	0	0.63	-0.63
Budhil HPS(IPP) (2*35)	70	0	70	0	0.21	9	0.21	0.00
Sainj HPS (IPP) (2*50)	100	0	0	0	0.50	0.50	0.50	0.00
<b>Sub Total (G)</b>	<b>1762</b>	<b>0</b>	<b>1031</b>	<b>0</b>	<b>5.75</b>	<b>239</b>	<b>6.26</b>	<b>-0.51</b>
<b>H. Total Regional Entities (A-G)</b>	<b>25837</b>	<b>16633</b>	<b>16617</b>	<b>7603</b>	<b>231.87</b>	<b>9661</b>	<b>231.97</b>	<b>-0.10</b>
<b>I. State Entities</b>	<b>Station</b>	<b>Effective Installed Capacity (MW)</b>	<b>Peak MW</b>	<b>Off Peak MW</b>	<b>Energy(MU)</b>	<b>Average(Sentout MW)</b>		

Punjab	Guru Gobind Singh TPS (Ropar) (6*210)	1260	0	0	0.00	0
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	0	0	0.00	0
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	0	0	0.00	0
	Goindwal(GVK) (2*270)	540	420	145	8.19	341
	Rajpura (2*700)	1400	1320	1220	31.30	1304
	Talwandi Saboo (3*660)	1980	1841	924	38.87	1619
	<b>Thermal (Total)</b>	<b>6560</b>	<b>3581</b>	<b>2289</b>	<b>78.35</b>	<b>3265</b>
	Total Hydro	1000	368	312	8.42	351
	Wind Power	0	0	0	0.00	0
	Biomass	303	0	0	0.22	9
	Solar	859	0	0	0.04	2
	<b>Renewable(Total)</b>	<b>1162</b>	<b>0</b>	<b>0</b>	<b>0.26</b>	<b>11</b>
	<b>Total Punjab</b>	<b>8722</b>	<b>3949</b>	<b>2601</b>	<b>87.03</b>	<b>3626</b>
	Haryana	Panipat TPS (2*210+2*250)	920	200	201	2.83
DCRTPP (Yamuna nagar) (2*300)		600	532	461	11.97	499
Faridabad GPS (NTPC)(2*137.75+1*156)		432	316	293	7.39	308
RGTPP (khardar) (IPP) (2*600)		1200	561	0	6.74	281
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	611	367	12.87	536
<b>Thermal (Total)</b>		<b>4497</b>	<b>2220</b>	<b>1322</b>	<b>41.81</b>	<b>1742</b>
Total Hydro		62	9	17	0.41	17
Wind Power		0	0	0	0.00	0
Biomass		106	0	0	0.00	0
Solar		50	0	0	0.00	0
<b>Renewable(Total)</b>		<b>156</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>
<b>Total Haryana</b>		<b>4715</b>	<b>2229</b>	<b>1339</b>	<b>42.22</b>	<b>1759</b>
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	883	702	17.66
	suratgarh TPS (6*250)	1500	991	711	21.03	876
	Chabra TPS (4*250)	1000	1194	1026	27.12	1130
	Chabra TPS (1*660)	660	0	0	0.00	0
	Dholpur GPS (3*110)	330	140	129	3.30	138
	Ramgarh GPS(1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	177	186	4.37	182
	RAPS A (NPC) (1*100+1*200)	300	170	244	4.29	179
	Barsingar (NLC) (2*125)	250	224	224	5.21	217
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	718	700	15.92	663
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	495	410	11.63	485
	Kawai(Adani) (2*660)	1320	617	434	13.10	546
	<b>Thermal (Total)</b>	<b>9536</b>	<b>5609</b>	<b>4766</b>	<b>123.62</b>	<b>5151</b>
	Total Hydro	550	172	132	4.65	194
	Wind power	4292	38	89	1.59	66
	Biomass	102	19	19	0.45	19
	Solar	1995	0	0	3.10	129
Renewable/Others (Total)	6389	57	108	5.15	214	
<b>Total Rajasthan</b>	<b>16475</b>	<b>5838</b>	<b>5006</b>	<b>133.42</b>	<b>5559</b>	
UP	Anpara TPS (3*210+2*500)	1630	1128	941	28.10	1171
	Obra TPS (2*50+2*94+5*200)	1194	523	527	13.80	575
	Paricha TPS (2*110+2*220+2*250)	1160	438	429	10.60	442
	Panki TPS (2*105)	210	0	0	0.00	0
	Harduaganj TPS (1*60+1*105+2*250)	665	318	313	8.20	342
	Tanda TPS (NTPC) (4*110)	440	274	270	7.39	308
	Roza TPS (IPP) (4*300)	1200	761	746	19.30	804
	Anpara-C (IPP) (2*600)	1200	735	685	22.30	929
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Anpara-D(2*500)	1000	452	338	9.60	400
	Lalitpur TPS(3*660)	1980	740	737	17.83	743
	Bara(2*660)	1320	726	733	20.60	858
	<b>Thermal (Total)</b>	<b>12449</b>	<b>6095</b>	<b>5719</b>	<b>157.72</b>	<b>6572</b>
	Vishnuparyag HPS (IPP)(4*110)	440	127	117	2.80	117
	Alakanada(4*82.5)	330	85	84	2.00	83
	Other Hydro	527	80	32	1.20	50
	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
	<b>Renewable(Total)</b>	<b>128</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>
	<b>Total UP</b>	<b>14855</b>	<b>7187</b>	<b>6752</b>	<b>182.92</b>	<b>7622</b>
	Uttarakhand	Other Hydro	1250	603	218	8.18
Total Gas		450	295	301	6.53	272
Wind Power		0	0	0	0.00	0
Biomass		127	0	0	0.00	0
Solar		100	0	0	0.58	24
Small Hydro (< 25 MW)		180	0	0	0.00	0
<b>Renewable(Total)</b>		<b>407</b>	<b>0</b>	<b>0</b>	<b>0.58</b>	<b>24</b>
<b>Total Uttarakhand</b>		<b>2107</b>	<b>898</b>	<b>519</b>	<b>15.29</b>	<b>637</b>
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	68	67	1.87	78
	Pragati Gas Turbine (2x104+ 1x122)	330	270	273	6.96	290
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	383	380	9.36	390
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0
	<b>Thermal (Total)</b>	<b>2917</b>	<b>721</b>	<b>720</b>	<b>18.19</b>	<b>758</b>
	Wind Power	0	0	0	0.00	0
	Biomass	16	0	0	0.00	0
	Solar	2	0	0	0.00	0
	<b>Renewable(Total)</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>
<b>Total Delhi</b>	<b>2935</b>	<b>721</b>	<b>720</b>	<b>18.19</b>	<b>758</b>	
HP	Baspa HPS (IPP) (3*100)	300	92	28	1.57	65
	Malana HPS (IPP) (2*43)	86	52	0	0.32	13
	Other Hydro (>25MW)	372	145	99	2.61	109
	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	107	58	1.91	79
	<b>Renewable(Total)</b>	<b>486</b>	<b>107</b>	<b>58</b>	<b>1.91</b>	<b>79</b>
<b>Total HP</b>	<b>1244</b>	<b>396</b>	<b>185</b>	<b>6.41</b>	<b>267</b>	
J & K	Baglihar HPS (IPP) (3*150+3*150)	900	147	147	3.53	147
	Other Hydro/IPP(including 98 MW Small Hydro)	308	64	27	1.16	48
	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
<b>Renewable(Total)</b>	<b>98</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>
<b>Total J &amp; K</b>	<b>1398</b>	<b>211</b>	<b>174</b>	<b>5</b>	<b>195</b>
<b>Total State Control Area Generation</b>	<b>52451</b>	<b>21429</b>	<b>17296</b>	<b>490.16</b>	<b>20423</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>		<b>4238</b>	<b>6150</b>	<b>136.40</b>	<b>5683</b>
<b>Total Regional Availability(Gross)</b>	<b>78288</b>	<b>42284</b>	<b>31049</b>	<b>858.43</b>	<b>35768</b>

**IV. Total Hydro Generation:**

<b>Regional Entities Hydro</b>	<b>12234</b>	<b>8877</b>	<b>671</b>	<b>63.12</b>	<b>2621</b>
<b>State Control Area Hydro</b>	<b>7468</b>	<b>2346</b>	<b>1572</b>	<b>36.84</b>	<b>1910</b>
<b>Total Regional Hydro</b>	<b>19702</b>	<b>11222</b>	<b>2243</b>	<b>99.96</b>	<b>4532</b>

**V. Total Renewable Generation:**

<b>Regional Entities Renewable</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0.13</b>	<b>5</b>
<b>State Control Area Renewable</b>	<b>8844</b>	<b>164</b>	<b>166</b>	<b>7.89</b>	<b>329</b>
<b>Total Regional Renewable</b>	<b>8874</b>	<b>164</b>	<b>166</b>	<b>8.02</b>	<b>334</b>

**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	
Vindhychal(HVDC B/B)	-300	-400	0	500	0.00	10.97	-10.97
765 KV Gwalior-Agra (D/C)	1009	1856	2085	0	36.90	0.00	36.90
400 KV Zerda-Kankroli	-107	-35	164	81	0.00	1.52	-1.52
400 KV Zerda-Bhinmal	17	103	280	65	1.48	0.00	1.48
220 KV Auraiya-Malanpur	106	41	109	0	1.80	0.00	1.80
220 KV Badod-Kota/Morak	-138	-31	16	132	0.00	2.01	-2.01
Mundra-Mohindergarh(HVDC Bipole)	701	699	703	0	16.99	0.00	16.99
400 KV RAPP- Sujalpur	109	216	430	35	3.95	0.00	3.95
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	568	1015	552	0	20.23	0.00	20.23
+/- 800 kV HVDC Champa-Kurushetra	500	500	3000	0	11.33	0	11.33
<b>Sub Total WR</b>	<b>2465</b>	<b>3964</b>			<b>92.67</b>	<b>14.50</b>	<b>78.17</b>
400 kV Sasaram - Varanasi	169	176	186	0	4.01	0.00	4.01
400 kV Sasaram - Allahabad	72	65	111	0	1.99	0.00	1.99
400 KV MZP- GKP (D/C)	61	244	496	0	6.80	0.00	6.80
400 KV Patna-Balia(D/C) X 2	511	605	890	0	16.42	0.00	16.42
400 KV B'Sharif-Balia (D/C)	17	74	193	0	2.39	0.00	2.39
765 KV Gaya-Balia	146	183	219	0	3.91	0.00	3.91
765 KV Gaya-Varanasi (D/C)	-71	165	234	71	3.37	0.00	3.37
220 KV Pusauli-Sahupuri	96	64	102	0	2.03	0.00	2.03
132 KV K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
132 KV Son Ngr-Rihand	-40	0	0	40	0.00	0.23	-0.23
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-116	-106	122	160	0.00	0.62	-0.62
400 KV Motihari -GKP (D/C)	-216	-146	0	218	0.00	3.70	-3.70
400 kV B'Sharif - Varanasi (D/C)	144	62	144	94	0.64	0.00	0.64
+/- 800 KV HVDC Alipurduar-Agra	300	300	300	0	7.23	0.00	7.23
<b>Sub Total ER</b>	<b>1073</b>	<b>1686</b>			<b>48.79</b>	<b>4.55</b>	<b>44.24</b>
+/- 800 KV HVDC BiswanathCharialli-Agra	700	500	700	0.00	13.99	0.00	13.99
<b>Sub Total NER</b>	<b>700</b>	<b>500</b>			<b>13.99</b>	<b>0.00</b>	<b>13.99</b>
<b>Total IR Exch</b>	<b>4238</b>	<b>6150</b>			<b>155.45</b>	<b>19.05</b>	<b>136.40</b>

**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
46.27	1.05	47.33	0.78	-37.68	-12.94	-12.58	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
35.17	108.29	143.46	58.22	78.17	136.40	23.05	-30.11	-7.06

**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	0	-11	0	27	0	0	-0.15

**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	0.39	9.56	57.72	77.80	11.12	1.97	0.00	0.00

Frequency (Hz)				Average Frequency	Frequency Variation	Std. Dev.	Frequency in 15 Min Block		Freq Dev Index (% of Time)
Maximum		Minimum					MAX (Hz)	MIN (Hz)	
Freq	Time	Freq	Time	Hz	Index				
50.15	13.04	49.78	7.17	49.98	0.042	0.062	50.07	49.83	22.20

**VIII(A). Voltage profile 400 kV**

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviation Index
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV	
Rihand	400	410	19:54	405	12:30	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	417	2:01	402	17:25	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	420	2:01	405	14:16	0.0	0.0	0.0	0.0	0.0
Kanpur	400	420	4:01	407	11:38	0.0	0.0	0.0	0.0	0.0
Dadri	400	425	0:00	295	17:50	0.0	0.0	30.6	0.0	30.6
Ballabhgarh	400	424	2:28	410	6:25	0.0	0.0	24.9	0.0	24.9
Bawana	400	427	2:45	409	18:08	0.0	0.0	25.1	0.0	25.1
Bassi	400	426	20:42	399	6:53	0.0	0.0	15.6	0.0	15.6
Hissar	400	423	4:00	405	6:24	0.0	0.0	13.0	0.0	13.0
Moga	400	422	3:00	404	6:24	0.0	0.0	2.5	0.0	2.5
Abdullapur	400	430	0:00	410	18:10	0.0	0.0	41.4	0.0	41.4
Nalagarh	400	433	0:00	414	6:44	0.0	0.0	48.0	3.2	48.0
Kishenpur	400	425	22:02	402	6:24	0.0	0.0	1.6	0.0	1.6
Wagoora	400	400	3:59	376	18:40	5.1	64.1	0.0	0.0	5.1
Amritsar	400	429	0:00	412	6:24	0.0	0.0	42.7	0.0	42.7
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	427	4:00	407	20:27	0.0	0.0	22.6	0.0	22.6

Rishikesh	400	419	0:00	401	11:49	0.0	0.0	0.0	0.0	0.0
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**VIII(B). Voltage profile 765 kV**

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviation Index
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	
Fatehpur	765	774	2:02	742	22:10	0.0	0.0	0.0	0.0	0.0
Balia	765	789	1:50	763	17:43	0.0	0.0	0.0	0.0	0.0
Moga	765	796	13:03	775	22:11	0.0	0.0	0.0	0.0	0.0
Agra	765	795	20:50	768	6:24	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	807	2:57	780	6:25	0.0	0.0	31.3	0.0	31.3
Unnao	765	781	4:00	756	14:17	0.0	0.0	0.0	0.0	0.0
Lucknow	765	797	2:00	772	14:15	0.0	0.0	0.0	0.0	0.0
Meerut	765	809	20:00	772	6:24	0.0	0.0	11.1	0.0	11.1
Jhatikara	765	807	3:01	780	6:24	0.0	0.0	22.7	0.0	22.7
Bareilly 765 kV	765	800	2:00	774	11:39	0.0	0.0	0.0	0.0	0.0
Anta	765	795	2:27	772	6:24	0.0	0.0	0.0	0.0	0.0
Phagi	765	802	20:44	772	6:21	0.0	0.0	0.2	0.0	0.2

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)	nflow (m <sup>3</sup> /s)	Usage (m <sup>3</sup> /s)
Bhakra	513.59	445.62	505.11	1312.37	496.14	948.89	198.59	340.31
Pong	426.72	384.05	415.02	680.86	412.30	577.87	46.89	232.88
Tehri	829.79	740.04	819.75	997.27	818.90	982.26	47.27	141.00
Koteshwar	612.50	598.50	610.46	4.78	609.77	4.48	141.00	147.53
Chamera-I	760.00	748.75	756.84	0.00	0.00	0.00	44.28	42.52
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	510.16	3.53	510.41	2.73	54.21	138.14

\* 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 (MU)	PXIL (MU)	Total (MU)
Punjab	-748	-920	0	-748	-1740	0	-18.96	-30.12	-49.08	
Delhi	-959	-283	0	-559	-428	0	-17.79	-3.71	-21.50	
Haryana	-701	172	0	-701	-11	0	-23.09	0.00	-23.09	
HP	215	98	0	210	-26	0	7.06	-1.52	5.54	
J&K	497	303	0	497	322	0	11.94	6.10	18.04	
CHD	0	0	0	0	-20	0	0.00	-0.10	-0.10	
Rajasthan	177	24	0	39	-660	0	3.57	2.75	6.32	
UP	86	0	0	-54	-68	0	-4.56	-1.17	-5.73	
Uttarakhand	120	121	0	120	236	0	3.06	3.88	6.93	
<b>Total</b>	<b>-1312</b>	<b>-484</b>	<b>0</b>	<b>-1195</b>	<b>-2396</b>	<b>0</b>	<b>-38.78</b>	<b>-23.90</b>	<b>-62.68</b>	

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-748	-850	-920	-1740	0	0
Delhi	-559	-959	172	-428	0	0
Haryana	-701	-1377	173	-1016	0	0
HP	413	210	145	-724	0	0
J&K	497	497	469	-302	0	0
CHD	0	0	39	-82	0	0
Rajasthan	224	-8	1396	-721	0	0
UP	86	-540	0	-72	0	0
Uttarakhand	178	120	436	-253	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	14
Haryana	1	22
Rajasthan	3	21
Delhi	3	24
UP	1	15
Uttarakhand	1	14
HP	3	23
J & K	2	31
Chandigarh	3	30

**XIII. System Constraints:**

**XIV. Grid Disturbance / Any Other Significant Event:**

**XV. Weather Conditions For 23.11.2017 :**

**XVI. Synchronisation of new generating units :**

**XVII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / substation :**

1. 315MVA ICT-2 at Kala Amb first time charged from 400KV side @ 11:44Hrs on 23.11.17

**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 : 23.11.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER