

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

उत्तर क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 29.12.2017  
Date of Reporting : 30.12.2017



I. Regional Availability/Demand:

Demand Met	Evening Peak (19:00 Hrs) MW			Off Peak (03:00 Hrs) MW				Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
43836	994	44830	50.01	31496	299	31794	49.99	910.81	11.90

\* Half hourly flow 15 minutes block-one block each before and after the designated time/ average frequency

UI (OD: +ve), UD: (-ve)

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/Naphtha/Diesal	Solar	Wind	Other (Biomass/ Small hydro/ Co-Generation etc.)	Total					
Punjab	58.82	10.59	0.00	0.05	0.00	0.10	69.57	38.17	38.06	-0.11	107.63	0.00
Haryana	61.73	0.08	0.00	0.00	0.00	0.00	61.81	61.73	62.28	0.55	124.09	0.01
Rajasthan	116.95	4.21	2.14	2.16	17.54	4.91	147.90	63.52	64.46	0.94	212.36	0.83
Delhi	0.00	0.00	13.42	0.00	0.00	0.00	13.42	53.02	52.42	-0.60	65.83	0.00
UP	170.64	7.40	0.00	0.00	0.00	21.60	199.64	86.52	88.25	1.73	287.88	0.34
Uttarakhand	0.00	11.14	1.62	0.55	0.00	0.00	13.30	23.59	22.95	-0.65	36.25	0.00
HP	0.00	3.23	0.00	0.00	0.00	1.60	4.83	21.99	23.01	1.02	27.85	0.00
J & K	0.00	4.75	0.00	0.00	0.00	0.00	4.75	41.73	40.70	-1.03	45.46	10.72
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.67	3.47	-0.20	3.47	0.00
<b>Total</b>	<b>408.14</b>	<b>41.41</b>	<b>17.17</b>	<b>2.75</b>	<b>17.54</b>	<b>28.21</b>	<b>515.21</b>	<b>393.94</b>	<b>395.59</b>	<b>1.66</b>	<b>910.81</b>	<b>11.90</b>

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

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	5577	0	-88	-1062	3538	0	72	-858	5577	19	0
Haryana	6412	0	-3	-996	4075	0	65	-774	6790	7	0
Rajasthan	9216	0	-3	-799	7974	0	100	149	11000	8	0
Delhi	3357	0	-63	-708	1531	0	27	-1064	3971	11	0
UP	13809	490	91	-187	10575	0	-46	2	14013	18	380
Uttarakhand	1834	0	44	618	1189	0	-49	372	1968	8	0
HP	1425	0	55	402	837	0	12	492	1560	9	0
J&K	2017	504	-88	1059	1692	299	-94	873	2128	8	532
Chandigarh	189	0	-4	-26	85	0	8	-31	215	9	0
<b>Total</b>	<b>43836</b>	<b>994</b>	<b>-58</b>	<b>-1699</b>	<b>31496</b>	<b>299</b>	<b>95</b>	<b>-837</b>	<b>43836</b>	<b>19</b>	<b>994</b>

\* 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 :

A. NTPC	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
Rihand I STPS (2*500)	1000	650	699	698	15.96	665	15.53	0.42	
Rihand II STPS (2*500)	1000	943	944	910	22.50	937	22.30	0.20	
Rihand III STPS (2*500)	1000	943	996	873	22.20	925	22.11	0.09	
Dadri I STPS (4*210)	840	769	586	447	11.53	481	11.39	0.14	
Dadri II STPS (2*490)	980	929	814	534	16.77	699	17.26	-0.48	
Unchahar I TPS (2*210)	420	350	350	227	6.92	288	7.21	-0.30	
Unchahar II TPS (2*210)	420	383	335	217	6.98	291	7.24	-0.26	
Unchahar III TPS (1*210)	210	192	177	116	3.54	147	3.63	-0.09	
Unchahar IV TPS (1*500)	500	0	0	0	0.00	0	0.00	0.00	
ISTPP (Jhajjar) (3*500)	1500	1089	1344	852	22.22	926	22.74	-0.52	
Dadri GPS (4*130.19+2*154.51)	830	839	184	113	3.58	149	3.72	-0.14	
Anta GPS (3*88.71+1*153.2)	419	418	0	0	0.00	0	0.00	0.00	
Auraya GPS (4*111.19+2*109.30)	663	632	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	1	0	0	0.01	1	0.02	-0.01	
Singrauli Solar(15)	15	3	0	0	0.06	3	0.06	0.00	
KHEP(4*200)	800	792	699	0	2.66	111	2.38	0.28	
<b>Sub Total (A)</b>	<b>12612</b>	<b>10169</b>	<b>8344</b>	<b>6579</b>	<b>165</b>	<b>6868</b>	<b>164</b>	<b>0.71</b>	
<b>B. NPC</b>	NAPS (2*220)	440	412	447	454	9.90	412	9.85	0.04
RAPS- B (2*220)	440	192	218	217	4.60	192	4.61	-0.01	
RAPS- C (2*220)	440	419	462	462	10.07	420	10.06	0.01	
<b>Sub Total (B)</b>	<b>1320</b>	<b>1023</b>	<b>1127</b>	<b>1133</b>	<b>24.56</b>	<b>1023</b>	<b>24.52</b>	<b>0.04</b>	
<b>C. NHPC</b>	Chamera I HPS (3*180)	540	534	211	0	1.79	74	1.60	0.19
Chamera II HPS (3*100)	300	198	203	0	1.34	56	1.23	0.12	
Chamera III HPS (3*77)	231	228	125	0	0.83	34	0.70	0.13	
Bairasuli HPS(3*60)	180	59	124	0	0.50	21	0.39	0.10	
Salal-HPS (6*115)	690	96	345	30	0.26	11	2.32	-2.06	
Tanakpur-HPS (3*31.4)	94	23	31	24	0.61	26	0.54	0.07	
Uri-I HPS (4*120)	480	92	120	54	2.45	102	2.22	0.23	
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00	
Dhauliganga-HPS (4*70)	280	41	213	0	1.04	44	0.97	0.08	
Dulhasti-HPS (3*130)	390	257	262	0	3.26	136	3.00	0.26	
Sewa-II HPS (3*40)	120	119	82	0	0.38	16	0.36	0.02	
Parbati 3 (4*130)	520	16	130	0	0.40	17	0.38	0.02	
<b>Sub Total (C)</b>	<b>4065</b>	<b>1662</b>	<b>1847</b>	<b>108</b>	<b>13</b>	<b>536</b>	<b>14</b>	<b>-0.84</b>	
<b>D. SJVNL</b>	NJPC (6*250)	1500	1497	1478	0	7.45	311	7.19	0.27
Rampur HEP (6*68.67)	412	412	348	0	2.08	87	2.01	0.08	
<b>Sub Total (D)</b>	<b>1912</b>	<b>1910</b>	<b>1826</b>	<b>0</b>	<b>9.54</b>	<b>397</b>	<b>9.20</b>	<b>0.34</b>	
<b>E. THDC</b>	Tehri HPS (4*250)	1000	988	961	0	10.45	435	10.42	0.03
Koteswar HPS (4*100)	400	150	400	88	3.64	152	3.59	0.05	
<b>Sub Total (E)</b>	<b>1400</b>	<b>1138</b>	<b>1361</b>	<b>88</b>	<b>14.09</b>	<b>587</b>	<b>14.01</b>	<b>0.08</b>	
<b>F. BBMB</b>	Bhakra HPS (2*108+3*126+5*157)	1379	751	1206	430	18.03	751	18.02	0.01
Dehar HPS (6*165)	990	140	495	0	3.52	147	3.36	0.16	
Pong HPS (6*66)	396	295	396	0	7.07	295	7.07	0.01	
<b>Sub Total (F)</b>	<b>2765</b>	<b>1185</b>	<b>2097</b>	<b>430</b>	<b>28.62</b>	<b>1192</b>	<b>28.45</b>	<b>0.17</b>	
<b>G. IPP(s)/JV(s)</b>	Allain Duhangan HPS(IPP) (2*96)	192	0	104	0	0.38	16	0.36	0.02
Karcham Wantoo HPS(IPP) (4*250)	1000	0	775	0	3.85	161	3.79	0.06	
Malana Stg-II HPS (2*50)	100	0	0	0	0.23	9	0.21	0.01	
Shree Cement TPS (2*150)	300	0	144	89	3.06	128	3.11	-0.05	
Budhil HPS(IPP) (2*35)	70	0	0	0	0.24	10	0.18	0.06	
Sainji HPS (IPP) (2*50)	100	0	0	0	0.00	0	0.37	0.00	
<b>Sub Total (G)</b>	<b>1762</b>	<b>0</b>	<b>1023</b>	<b>89</b>	<b>7.76</b>	<b>323</b>	<b>7.65</b>	<b>0.11</b>	
<b>H. Total Regional Entities (A-G)</b>	<b>25837</b>	<b>17086</b>	<b>17625</b>	<b>8427</b>	<b>262.26</b>	<b>10928</b>	<b>261.66</b>	<b>0.61</b>	

I. State Entities	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average S entout MW)	
Punjab	Guru Gobind Singh TPS (Ropar) (6*210)	1260	0	0	-0.09	-4	
	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	-0.10	-4	
	Goindwal(GVK) (2*270)	540	246	0	2.00	83	
	Rajpura (2*700)	1400	1320	1020	28.75	1198	
	Talwandi Saboo (3*660)	1980	1100	924	28.29	1179	
	<b>Thermal (Total)</b>	<b>6560</b>	<b>2666</b>	<b>1944</b>	<b>58.82</b>	<b>2451</b>	
	Total Hydro	1000	465	268	10.59	441	
	Wind Power	0	0	0	0.00	0	
	Biomass	303	4	4	0.10	4	
	Solar	859	0	0	0.05	2	
	<b>Renewable(Total)</b>	<b>1162</b>	<b>4</b>	<b>4</b>	<b>0.15</b>	<b>6</b>	
	<b>Total Punjab</b>	<b>8722</b>	<b>3135</b>	<b>2216</b>	<b>69.57</b>	<b>2899</b>	
	Haryana	Paripat TPS (2*210+2*250)	920	226	198	5.15	215
		DCRTPP (Yamuna nagar) (2*300)	600	560	469	11.91	496
Faridabad GPS (NTPC)(2*137.75+1*156)		432	0	0	0.00	0	
RGTPP (khedar) (IPP) (2*600)		1200	800	759	20.42	851	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP) (2*660)		1320	1232	739	24.25	1011	
<b>Thermal (Total)</b>		<b>4497</b>	<b>2818</b>	<b>2165</b>	<b>61.73</b>	<b>2572</b>	
Total Hydro		62	2	3	0.08	3	
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>2820</b>	<b>2168</b>	<b>61.81</b>	<b>2575</b>	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	917	911	22.37	932
		suratgarh TPS (6*250)	1500	359	360	9.48	395
	Chabra TPS (4*250)	1000	603	653	14.91	621	
	Chabra TPS (1*660)	660	0	0	0.00	0	
	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	86	89	2.14	89	
	RAPS A (NPC) (1*100+1*200)	300	193	237	4.41	184	
	Barsingsar (NLC) (2*125)	250	111	111	2.46	103	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	843	506	18.27	761	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	911	826	22.50	937	
	Kawai(Adani) (2*660)	1320	1195	862	26.96	1123	
	<b>Thermal (Total)</b>	<b>9536</b>	<b>5218</b>	<b>4555</b>	<b>123.50</b>	<b>5146</b>	
	Total Hydro	550	128	145	4.21	176	
	Wind power	4292	592	992	17.54	731	
	Biomass	102	21	21	0.49	21	
	Solar	1995	0	0	2.16	90	
	Renewable/Others (Total)	6389	613	1013	20.18	841	
	<b>Total Rajasthan</b>	<b>16475</b>	<b>5959</b>	<b>5713</b>	<b>147.90</b>	<b>6162</b>	
UP	Anpara TPS (3*210+2*500)	1630	1359	1045	28.30	1179	
	Obra TPS (2*50+2*94+5*200)	1194	456	272	8.80	367	
	Paricha TPS (2*110+2*220+2*250)	1160	429	439	11.10	463	
	Panki TPS (2*105)	210	0	0	0.00	0	
	Harduaqanj TPS (1*60+1*105+2*250)	665	447	314	10.00	417	
	Tanda TPS (NTPC) (4*110)	440	383	270	8.54	356	
	Roza TPS (IPP) (4*300)	1200	724	742	18.80	783	
	Anpara-C (IPP) (2*600)	1200	1109	791	22.20	925	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0	
	Anpara-D(2*500)	1000	451	327	9.30	388	
	Lalitpur TPS(3*660)	1980	1116	1123	34.50	1438	
	Bara(2*660)	1320	797	735	19.10	796	
	<b>Thermal (Total)</b>	<b>12449</b>	<b>7271</b>	<b>6058</b>	<b>170.64</b>	<b>7110</b>	
	Vishnuparvay HPS (IPP)(4*110)	440	82	82	2.00	83	
	Alaknanda(4*82.5)	330	83	82	1.50	63	
	Other Hydro	527	217	28	3.90	163	
	Cogeneration	981	900	900	21.60	900	
	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>8553</b>	<b>7150</b>	<b>199.64</b>	<b>8318</b>		
Uttarakhand	Other Hydro	1250	674	396	11.14	464	
	Total Gas	450	52	69	1.62	67	
	Wind Power	0	0	0	0.00	0	
	Biomass	127	0	0	0.00	0	
	Solar	100	0	0	0.55	23	
	Small Hydro (< 25 MW)	180	0	0	0.00	0	
	<b>Renewable(Total)</b>	<b>407</b>	<b>0</b>	<b>0</b>	<b>0.55</b>	<b>23</b>	
	<b>Total Uttarakhand</b>	<b>2107</b>	<b>726</b>	<b>465</b>	<b>13.30</b>	<b>554</b>	
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	36	37	0.93	39	
	Pragati Gas Turbine (2x104+ 1x122)	330	256	273	6.47	270	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	246	251	6.01	251	
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0	
	<b>Thermal (Total)</b>	<b>2917</b>	<b>538</b>	<b>561</b>	<b>13.42</b>	<b>559</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>538</b>	<b>561</b>	<b>13.42</b>	<b>559</b>		

HP	Baspa HPS (IPP) (3*100)	300	0	0	1.14	47	
	Malana HPS (IPP) (2*43)	86	46	0	0.24	10	
	Other Hydro (>25MW)	372	96	39	1.85	77	
	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	103	41	1.60	67	
	<b>Renewable(Total)</b>	<b>486</b>	<b>103</b>	<b>41</b>	<b>1.60</b>	<b>67</b>	
	<b>Total HP</b>	<b>1244</b>	<b>245</b>	<b>80</b>	<b>4.83</b>	<b>201</b>	
	J & K	Baglihar HPS (IPP) (3*150+3*150)	900	147	147	3.55	148
		Other Hydro/IPP(including 98 MW Small Hydro)	308	58	35	1.20	50
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>205</b>	<b>182</b>	<b>5</b>	<b>198</b>		
<b>Total State Control Area Generation</b>		<b>52451</b>	<b>22181</b>	<b>18535</b>	<b>515.21</b>	<b>21467</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>		<b>7482</b>	<b>7236</b>	<b>7236</b>	<b>155.33</b>	<b>6472</b>	
<b>Total Regional Availability(Gross)</b>		<b>78288</b>	<b>47288</b>	<b>34198</b>	<b>932.80</b>	<b>38667</b>	

**IV. Total Hydro Generation:**

<b>Regional Entities Hydro</b>	<b>12234</b>	<b>8709</b>	<b>626</b>	<b>72.46</b>	<b>3009</b>
<b>State Control Area Hydro</b>	<b>7468</b>	<b>2153</b>	<b>1335</b>	<b>41.41</b>	<b>1882</b>
<b>Total Regional Hydro</b>	<b>19702</b>	<b>10862</b>	<b>1961</b>	<b>113.87</b>	<b>4891</b>

**V. Total Renewable Generation:**

<b>Regional Entities Renewable</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0.09</b>	<b>4</b>
<b>State Control Area Renewable</b>	<b>8844</b>	<b>720</b>	<b>1058</b>	<b>22.48</b>	<b>937</b>
<b>Total Regional Renewable</b>	<b>8874</b>	<b>720</b>	<b>1058</b>	<b>22.57</b>	<b>941</b>

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

Element	Peak(19:00 Hrs)		Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	Off Peak(03:00 Hrs)	Import	Export	Import	Export	
Vindhychal(HVDC B/B)	-250	-250	250	250	0.85	4.60	-3.76
765 KV Gwalior-Agra (D/C)	1885	1720	2658	0	40.13	0.00	40.13
400 KV Zerda-Kankroli	-153	-226	0	242	0.00	3.37	-3.37
400 KV Zerda-Bhinmal	-102	-201	65	254	0.00	2.14	-2.14
220 KV Aurajya-Malanpur	-59	-67	0	161	0.00	2.41	-2.41
220 KV Badod-Kota/Morak	-86	-86	56	102	0.00	1.27	-1.27
Mundra-Mohindergarh(HVDC Bipole)	1423	1423	2006	0	35.83	0.00	35.83
400 KV RAPPCC-Sujalpur	102	40	277	-18	2.77	0.00	2.77
400 KV Vindhychal-Rihand	995	830	0	997	0.00	22.40	-22.40
765 kV Phagi-Gwalior (D/C)	563	891	679	0	20.51	0.00	20.51
+/- 800 kV HVDC Champa-Kurushetra	1500	1500	2000	0	30.80	0	30.80
<b>Sub Total WR</b>	<b>5818</b>	<b>5574</b>			<b>130.89</b>	<b>36.19</b>	<b>94.69</b>
400 kV Sasaram - Varanasi	2	-236	236	7	1.07	0.00	1.07
400 kV Sasaram - Allahabad	0	0	0	36	0.00	0.05	-0.05
400 kV MZP- GKP (D/C)	196	261	607	0	8.64	0.00	8.64
400 kV Patna-Balia(D/C) X 2	752	557	1096	0	20.11	0.00	20.11
400 kV B'Sharif-Balia (D/C)	102	168	339	0	4.20	0.00	4.20
765 KV Gaya-Balia	167	234	373	0	6.68	0.00	6.68
765 KV Gaya-Varanasi (D/C)	143	305	515	0	6.44	0.00	6.44
220 KV Pusauli-Sahupuri	0	-32	45	0	0.38	0.00	0.38
132 KV K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
132 KV Son Ngr-Rihand	-27	-33	0	35	0.00	0.63	-0.63
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-55	-94	217	94	0.00	0.41	-0.41
400 KV Motihari -GKP (D/C)	-264	-146	0	264	0.00	4.63	-4.63
400 kV B'Sharif - Varanasi (D/C)	-2	-22	180	26	1.45	0.00	1.45
+/- 800 KV HVDC Alipurduar-Agra	150	0	150	0	2.59	0.00	2.59
<b>Sub Total ER</b>	<b>1164</b>	<b>962</b>			<b>51.55</b>	<b>5.71</b>	<b>45.84</b>
+/- 800 KV HVDC BiswanathChariali-Agra	500	700	700	0.00	14.80	0.00	14.80
<b>Sub Total NER</b>	<b>500</b>	<b>700</b>			<b>14.80</b>	<b>0.00</b>	<b>14.80</b>
<b>Total IR Exch</b>	<b>7482</b>	<b>7236</b>			<b>197.23</b>	<b>41.90</b>	<b>155.33</b>

**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
48.65	0.34	48.99	-1.67	-41.36	-1.37	8.35	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
45.94	122.49	168.44	60.63	94.69	155.33	14.69	-27.80	-13.11

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

Element	Peak(19:00 Hrs)		Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	Off Peak(03:00 Hrs)	Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	-12	-27	0	40	0	1	-0.81

**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	0.00	8.60	57.50	80.23	8.96	2.78	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	MIN	
Freq	Time	Freq	Time	Hz	Index	(Hz)	(Hz)		
50.20	13.02	49.80	8.36	49.98	0.039	50.11	49.86	19.77	

## 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	404	2:06	398	6:27	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	418	0:11	399	17:53	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	420	2:02	396	6:42	0.0	0.0	0.0	0.0	0.0
Kanpur	400	422	2:02	409	6:43	0.0	0.0	3.0	0.0	3.0
Dadri	400	425	2:24	410	11:34	0.0	0.0	26.3	0.0	26.3
Ballabgarh	400	424	2:03	409	6:38	0.0	0.0	26.6	0.0	26.6
Bawana	400	426	2:14	409	12:10	0.0	0.0	29.3	0.0	29.3
Bassi	400	423	5:01	394	7:35	0.0	0.0	2.6	0.0	2.6
Hissar	400	418	4:01	401	6:43	0.0	0.0	0.0	0.0	0.0
Moga	400	418	4:01	404	6:55	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	428	2:17	410	17:54	0.0	0.0	28.7	0.0	28.7
Nalagarh	400	428	2:24	413	17:54	0.0	0.0	39.7	0.0	39.7
Kishenpur	400	420	2:24	406	17:55	0.0	0.0	0.0	0.0	0.0
Wagoora	400	402	5:04	394	7:28	0.0	0.0	0.0	0.0	0.0
Amritsar	400	426	2:17	409	17:54	0.0	0.0	28.4	0.0	28.4
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	413	0:00	413	0:00	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	416	1:59	397	17:38	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 Deviation Index
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	
Fatehpur	765	788	0:19	760	6:26	0.0	0.0	0.0	0.0	0.0
Balia	765	795	2:02	768	10:16	0.0	0.0	0.0	0.0	0.0
Moga	765	798	19:56	761	7:23	0.0	0.0	0.0	0.0	0.0
Agra	765	798	17:02	770	22:16	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	802	2:10	777	7:17	0.0	0.0	11.2	0.0	11.2
Unnao	765	784	2:02	756	10:15	0.0	0.0	0.0	0.0	0.0
Lucknow	765	799	2:01	772	10:17	0.0	0.0	0.0	0.0	0.0
Meerut	765	809	19:58	774	6:46	0.0	0.0	16.3	0.0	16.3
Jhatikara	765	805	2:02	783	11:55	0.0	0.0	38.8	0.0	38.8
Bareilly 765 kV	765	801	2:02	774	10:16	0.0	0.0	0.1	0.0	0.1
Anta	765	788	20:58	762	8:20	0.0	0.0	0.0	0.0	0.0
Phagi	765	798	4:02	766	6:26	0.0	0.0	0.0	0.0	0.0

Note : '0' in Max / Min Col -&gt; 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 <sup>3</sup> /s)	Usage (m <sup>3</sup> /s)
Bhakra	513.59	445.62	499.29	1064.89	488.78	700.02	163.93	515.37
Pong	426.72	384.05	410.38	504.32	408.32	444.61	82.52	461.54
Tehri	829.79	740.04	810.15	805.26	809.25	787.65	38.49	244.00
Koteshwar	612.50	598.50	610.40	4.69	610.40	4.69	244.00	240.40
Chamera-I	760.00	748.75	758.37	0.00	0.00	0.00	44.59	48.11
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	504.85	3.12	505.10	3.26	50.69	159.20

\* 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	-858	0	0	-858	-204	0	-21.61	-0.97	-22.58
Delhi	-805	-259	0	-634	-74	0	-17.15	-0.15	-17.30
Haryana	-908	134	0	-909	-87	0	-27.64	0.49	-27.15
HP	387	105	0	371	32	0	11.95	-1.28	10.68
J&K	785	88	0	785	274	0	18.49	1.61	20.10
CHD	-31	0	0	-31	4	0	-0.37	0.10	-0.27
Rajasthan	-102	251	0	-102	-697	0	-0.60	4.72	4.12
UP	38	-36	0	-121	-66	0	-11.32	-1.52	-12.85
Uttarakhand	266	107	0	266	352	0	6.53	5.18	11.71
Total	-1227	389	0	-1233	-466	0	-41.73	8.20	-33.53

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-858	-960	0	-460	0	0
Delhi	-583	-805	559	-298	0	0
Haryana	-765	-1541	135	-770	0	0
HP	665	369	105	-777	0	0
J&K	785	756	313	-434	0	0
CHD	0	-31	39	-51	0	0
Rajasthan	83	-107	796	-775	0	0
UP	38	-1155	-36	-72	0	0
Uttarakhand	295	266	458	0	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	0	9
Haryana	2	26
Rajasthan	1	17
Delhi	5	39
UP	0	10
Uttarakhand	4	42
HP	5	38
J & K	1	22
Chandigarh	5	31

**XIII. System Constraints:**

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

**XV. Weather Conditions For 29.12.2017 :**

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

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

- 1: 500 MVA (ABB make) ICT-4 was charged at 16.18hrs of 28.12.2017 on no load from 400 kV Side & taken on load at 12.46hrs of 29.12.2017 successfully at GIS Gurgaon PG
- 2: 315 MVA ICT-2 charged at 15.32hrs from 400kV side & 16.32hrs of 29.12.17 from 220kV side at 400kV Dasna (UPPCL) s/stn.
- 3: 220kV Neemrana(400kV PG) – Behrod (RRVPN) line- 1 & 2 charged at 18.14hrs of 29.12.17
- 4 . 400kV Main bay(413) and tie bay (414) of 400 kV Samba Amargarh Line-1 was first time charged at 21:41 hrs & 21:43 hrs at Samba
- 5 . 400kV,50MVAR Line reactor - 1 of 400 kV Samba Amargarh Line-1 was first time charged at 21:41 at Samba
- 6 . 400kV Main bay(416) and 50MVAR line reactor of 400 kV Samba Amargarh Line-2 was first time charged at 22:50 hrs at Samba

**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 : 29.12.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER