

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

उत्तर क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 16.02.2018  
Date of Reporting : 17.02.2018



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
41922	522	42444	49.98	30396	301	30697	50.00	902.33	11.95

\*Half hourly (one 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/Naphtha/Diesal	Solar	Wind	Other (Biomass/ Small hydro/ Co-Generation etc.)	Total					
Punjab	58.51	9.42	0.00	2.61	0.00	2.34	72.89	36.14	37.04	0.90	109.92	0.00
Haryana	50.41	0.02	0.00	0.15	0.00	1.07	51.65	69.45	70.88	1.42	122.53	0.00
Rajasthan	117.53	4.61	4.26	3.04	1.47	4.58	135.48	70.13	73.78	3.66	209.26	1.01
Delhi	0.00	0.00	13.38	0.00	0.00	0.00	13.38	52.33	51.44	-0.89	64.82	0.03
UP	163.05	5.20	0.00	0.00	0.00	21.60	189.85	94.30	94.02	-0.28	283.86	0.00
Uttarakhand	0.00	7.80	0.00	0.64	0.00	0.00	8.44	26.67	26.73	0.06	35.17	0.11
HP	0.00	2.66	0.00	0.00	0.00	1.09	3.74	23.24	24.08	0.84	27.82	0.03
J & K	0.00	4.17	0.00	0.00	0.00	0.00	4.17	41.68	41.43	-0.25	45.60	10.77
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.24	3.34	0.10	3.34	0.00
<b>Total</b>	<b>389.50</b>	<b>33.89</b>	<b>17.63</b>	<b>6.43</b>	<b>1.47</b>	<b>30.68</b>	<b>479.60</b>	<b>417.16</b>	<b>422.73</b>	<b>5.56</b>	<b>902.33</b>	<b>11.95</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	5372	0	47	-1053	3058	0	4	-798	5372	19	0
Haryana	6037	0	119	-534	3969	0	97	-334	6431	7	0
Rajasthan	8712	0	-18	75	7847	0	-23	162	10999	8	0
Delhi	3068	0	-178	-549	1520	0	-15	-1135	3809	11	0
UP	13363	0	-88	-7	10112	0	12	14	13363	19	0
Uttarakhand	1820	0	35	672	1249	0	6	609	1850	8	0
HP	1289	0	34	490	855	0	-9	517	1536	8	2
J&K	2090	522	-32	956	1708	301	26	819	2153	8	538
Chandigarh	173	0	-18	-36	78	0	4	-36	214	8	0
<b>Total</b>	<b>41922</b>	<b>522</b>	<b>-100</b>	<b>16</b>	<b>30396</b>	<b>301</b>	<b>101</b>	<b>-183</b>	<b>43877</b>	<b>8</b>	<b>540</b>

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

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	850	908	878	20.09	837	20.32	-0.23	
Rihand II STPS (2*500)	1000	943	1003	971	22.68	945	22.52	0.16	
Rihand III STPS (2*500)	1000	943	966	941	22.38	933	22.16	0.23	
Dadri I STPS (4*210)	840	769	722	422	13.53	564	13.95	-0.43	
Dadri II STPS (2*490)	980	464	303	278	8.85	369	8.76	0.09	
Unchahar I TPS (2*210)	420	382	376	231	7.66	319	8.06	-0.40	
Unchahar II TPS (2*210)	420	382	351	248	7.48	312	7.71	-0.24	
Unchahar III TPS (1*210)	210	191	196	114	3.75	156	3.86	-0.11	
Unchahar IV TPS (1*500)	500	0	0	0	0.00	0	0.00	0.00	
ISTPP (Jhajjar) (3*500)	1500	1250	1307	850	24.56	1023	24.53	0.03	
Dadri GPS (4*130.19+2*154.51)	830	838	134	113	3.44	143	3.56	-0.12	
Anta GPS (3*88.71+1*153.2)	419	281	0	0	0.00	0	0.00	0.00	
Auraya GPS (4*111.19+2*109.30)	663	655	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	0.06	-0.01	
Singrauli Solar(15)	15	3	0	0	0.08	3	0.07	0.01	
KHEP(4*200)	800	792	819	0	2.52	105	2.38	0.14	
<b>Sub Total (A)</b>	<b>12612</b>	<b>10388</b>	<b>8879</b>	<b>6821</b>	<b>177</b>	<b>7367</b>	<b>177</b>	<b>-0.47</b>	
<b>B. NPC</b>	NAPS (2*220)	440	411	447	450	9.90	412	9.83	0.07
RAPS- B (2*220)	440	398	441	440	9.54	398	9.43	0.11	
RAPS- C (2*220)	440	205	235	236	4.93	205	4.92	0.01	
<b>Sub Total (B)</b>	<b>1320</b>	<b>1014</b>	<b>1123</b>	<b>1126</b>	<b>24.37</b>	<b>1015</b>	<b>24.18</b>	<b>0.18</b>	
<b>C. NHPC</b>	Chamera I HPS (3*180)	540	534	542	0	1.72	72	1.60	0.12
Chamera II HPS (3*100)	300	296	200	0	1.09	46	0.98	0.12	
Chamera III HPS (3*77)	231	152	160	0	0.68	28	0.55	0.13	
Bairasuli HPS(3*60)	180	59	123	0	0.55	23	0.40	0.15	
Salal-HPS (6*115)	690	88	347	90	2.84	118	2.12	0.72	
Tanakpur-HPS (3*31.4)	94	18	33	20	0.49	20	0.43	0.06	
Uri-I HPS (4*120)	480	76	238	18	2.13	89	1.82	0.31	
Uri-II HPS (4*60)	240	54	184	37	1.36	57	1.30	0.05	
Dhauliganga-HPS (4*70)	280	277	284	0	0.78	32	0.84	-0.06	
Dulhasti-HPS (3*130)	390	385	409	0	2.45	102	2.20	0.25	
Sewa-II HPS (3*40)	120	119	119	0	0.34	14	0.36	-0.01	
Parbati 3 (4*130)	520	8	146	0	0.21	9	0.19	0.02	
<b>Sub Total (C)</b>	<b>4065</b>	<b>2066</b>	<b>2783</b>	<b>166</b>	<b>15</b>	<b>610</b>	<b>13</b>	<b>1.86</b>	
<b>D. SJVNL</b>	NJPC (6*250)	1500	1380	1258	0	5.83	243	5.80	0.03
Rampur HEP (6*68.67)	412	390	360	0	1.64	68	1.61	0.03	
<b>Sub Total (D)</b>	<b>1912</b>	<b>1770</b>	<b>1618</b>	<b>0</b>	<b>7.47</b>	<b>311</b>	<b>7.41</b>	<b>0.06</b>	
<b>E. THDC</b>	Tehri HPS (4*250)	1000	860	858	0	7.30	304	7.26	0.04
Koteswar HPS (4*100)	400	120	305	90	2.93	122	2.88	0.05	
<b>Sub Total (E)</b>	<b>1400</b>	<b>980</b>	<b>1163</b>	<b>90</b>	<b>10.22</b>	<b>426</b>	<b>10.14</b>	<b>0.08</b>	
<b>F. BBMB</b>	Bhakra HPS (2*108+3*126+5*157)	1379	678	1212	429	16.45	686	16.28	0.17
Dehar HPS (6*165)	990	113	495	0	2.89	120	2.72	0.17	
Pong HPS (6*66)	396	194	315	0	4.64	193	4.66	-0.02	
<b>Sub Total (F)</b>	<b>2765</b>	<b>986</b>	<b>2022</b>	<b>429</b>	<b>23.98</b>	<b>999</b>	<b>23.67</b>	<b>0.31</b>	
<b>G. IPP(s)/JV(s)</b>	Allain Duhangan HPS(IPP) (2*96)	192	0	70	0	0.34	14	0.33	0.01
Karcham Wantoo HPS(IPP) (4*250)	1000	0	785	0	3.12	130	3.08	0.04	
Malana Stg-II HPS (2*50)	100	0	0	0	0.18	7	0.17	0.01	
Shree Cement TPS (2*150)	300	0	145	99	2.96	123	3.07	-0.11	
Budhil HPS(IPP) (2*35)	70	0	0	0	0.15	6	0.14	0.01	
Sainj HPS (IPP) (2*50)	100	0	0	0	0.27	0.27	0.27	0.00	
<b>Sub Total (G)</b>	<b>1762</b>	<b>0</b>	<b>1000</b>	<b>99</b>	<b>6.75</b>	<b>281</b>	<b>6.79</b>	<b>-0.04</b>	
<b>H. Total Regional Entities (A-G)</b>	<b>25837</b>	<b>17204</b>	<b>18589</b>	<b>8731</b>	<b>264.23</b>	<b>11009</b>	<b>262.24</b>	<b>1.99</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	-0.11	-5	
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	0	0	-0.01	-1	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	170	171	3.85	160	
	Goindwal(GVK) (2*270)	540	145	145	3.98	166	
	Rajpura (2*700)	1400	1320	770	28.31	1179	
	Talwandi Saboo (3*660)	1980	1116	616	22.51	938	
	<b>Thermal (Total)</b>	<b>6560</b>	<b>2751</b>	<b>1702</b>	<b>58.51</b>	<b>2438</b>	
	Total Hydro	1000	327	224	9.42	393	
	Wind Power	0	0	0	0.00	0	
	Biomass	303	0	0	2.34	98	
	Solar	859	0	0	2.61	109	
	<b>Renewable(Total)</b>	<b>1162</b>	<b>0</b>	<b>0</b>	<b>4.95</b>	<b>206</b>	
	<b>Total Punjab</b>	<b>8722</b>	<b>3078</b>	<b>1926</b>	<b>72.89</b>	<b>3037</b>	
	Haryana	Paripat TPS (2*210+2*250)	920	0	405	5.03	210
		DCRTPP (Yamuna nagar) (2*300)	600	231	235	5.66	236
Faridabad GPS (NTPC)(2*137.75+1*156)		432	0	0	0.00	0	
RGTPP (khedar) (IPP) (2*600)		1200	777	383	16.21	675	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP) (2*660)		1320	981	742	23.51	979	
<b>Thermal (Total)</b>		<b>4497</b>	<b>1989</b>	<b>1765</b>	<b>50.41</b>	<b>2100</b>	
Total Hydro		62	3	0	0.02	1	
Wind Power		0	0	0	0.00	0	
Biomass		106	0	0	1.07	45	
Solar		50	0	0	0.15	6	
<b>Renewable(Total)</b>		<b>156</b>	<b>0</b>	<b>0</b>	<b>1.22</b>	<b>51</b>	
<b>Total Haryana</b>		<b>4715</b>	<b>1992</b>	<b>1765</b>	<b>51.65</b>	<b>2152</b>	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	857	819	22.38	933
		suratgarh TPS (6*250)	1500	731	729	19.30	804
	Chabra TPS (4*250)	1000	1221	1323	26.93	1122	
	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	174	177	4.26	177	
	RAPS A (NPC) (1*100+1*200)	300	191	194	4.43	184	
	Barsingsar (NLC) (2*125)	250	212	212	4.65	194	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	823	822	19.34	806	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	1117	996	24.93	1039	
	Kawai(Adani) (2*660)	1320	0	0	0.00	0	
	<b>Thermal (Total)</b>	<b>9536</b>	<b>5326</b>	<b>5272</b>	<b>126.21</b>	<b>5259</b>	
	Total Hydro	550	185	95	4.61	192	
	Wind power	4292	22	77	1.47	61	
	Biomass	102	6	6	0.16	6	
	Solar	1995	7	0	3.04	127	
	Renewable/Others (Total)	6389	35	83	4.66	194	
	<b>Total Rajasthan</b>	<b>16475</b>	<b>5546</b>	<b>5450</b>	<b>135.48</b>	<b>5645</b>	
UP	Anpara TPS (3*210+2*500)	1630	1009	1168	28.30	1179	
	Obra TPS (2*50+2*94+5*200)	1194	433	405	10.30	429	
	Paricha TPS (2*110+2*220+2*250)	1160	806	471	19.90	829	
	Panki TPS (2*105)	210	0	0	0.00	0	
	Harduaqani TPS (1*60+1*105+2*250)	665	442	252	9.00	375	
	Tanda TPS (NTPC) (4*110)	440	398	216	8.45	352	
	Roza TPS (IPP) (4*300)	1200	800	445	15.80	658	
	Anpara-C (IPP) (2*600)	1200	664	657	15.80	658	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	270	171	5.00	208	
	Anpara-D(2*500)	1000	453	451	10.80	450	
	Lalitpur TPS(3*660)	1980	615	345	13.30	554	
	Bara(3*660)	1980	1097	981	26.40	1100	
	<b>Thermal (Total)</b>	<b>13109</b>	<b>6987</b>	<b>5562</b>	<b>163.05</b>	<b>6794</b>	
	Vishnuparvaq_HPS (IPP)(4*110)	440	63	63	1.50	63	
	Alaknanda(4*82.5)	330	83	82	1.00	42	
	Other Hydro	527	154	22	2.70	113	
	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>15515</b>	<b>8187</b>	<b>6629</b>	<b>189.85</b>	<b>7910</b>	
	Uttarakhand	Other Hydro	1250	581	219	7.80	325
		Total Gas	450	0	0	0.00	0
		Wind Power	0	0	0	0.00	0
Biomass		127	0	0	0.00	0	
Solar		100	0	0	0.64	27	
Small Hydro (< 25 MW)		180	0	0	0.00	0	
<b>Renewable(Total)</b>		<b>407</b>	<b>0</b>	<b>0</b>	<b>0.64</b>	<b>27</b>	
<b>Total Uttarakhand</b>		<b>2107</b>	<b>581</b>	<b>219</b>	<b>8.44</b>	<b>352</b>	
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	30	36	0.90	38	
	Pragati Gas Turbine (2x104+ 1x122)	330	262	275	6.49	270	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	248	249	5.99	249	
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0	
	<b>Thermal (Total)</b>	<b>2917</b>	<b>540</b>	<b>560</b>	<b>13.38</b>	<b>557</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>540</b>	<b>560</b>	<b>13.38</b>	<b>557</b>		

HP	Baspa HPS (IPP) (3*100)	300	26	0	1.00	42
	Malana HPS (IPP) (2*43)	86	44	0	0.20	8
	Other Hydro (>25MW)	372	96	32	1.46	61
	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	78	19	1.09	45
	<b>Renewable(Total)</b>	<b>486</b>	<b>78</b>	<b>19</b>	<b>1.09</b>	<b>45</b>
	<b>Total HP</b>	<b>1244</b>	<b>244</b>	<b>50</b>	<b>3.74</b>	<b>156</b>
	<b>Total J &amp; K</b>	<b>1398</b>	<b>212</b>	<b>145</b>	<b>4</b>	<b>174</b>
<b>Total State Control Area Generation</b>		<b>53111</b>	<b>20379</b>	<b>16745</b>	<b>479.60</b>	<b>19983</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>		<b>8699</b>	<b>9077</b>	<b>180.57</b>	<b>7524</b>	<b>7524</b>
<b>Total Regional Availability(Gross)</b>		<b>78948</b>	<b>47667</b>	<b>34552</b>	<b>924.40</b>	<b>38517</b>

**IV. Total Hydro Generation:**

<b>Regional Entities Hydro</b>	<b>12234</b>	<b>9261</b>	<b>685</b>	<b>62.61</b>	<b>2603</b>
<b>State Control Area Hydro</b>	<b>7468</b>	<b>1852</b>	<b>900</b>	<b>33.89</b>	<b>1484</b>
<b>Total Regional Hydro</b>	<b>19702</b>	<b>11112</b>	<b>1585</b>	<b>96.50</b>	<b>4087</b>

**V. Total Renewable Generation:**

<b>Regional Entities Renewable</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0.15</b>	<b>6</b>
<b>State Control Area Renewable</b>	<b>8844</b>	<b>113</b>	<b>102</b>	<b>12.56</b>	<b>523</b>
<b>Total Regional Renewable</b>	<b>8874</b>	<b>113</b>	<b>102</b>	<b>12.70</b>	<b>529</b>

**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 MU
	MW	MW	Import	Export	Import	Export	
Vindhychal(HVDC B/B)	-200	-200	0	200	0.00	4.84	-4.84
765 KV Gwalior-Agra (D/C)	1697	2065	2546	0	54.35	0.00	54.35
400 KV Zerda-Kankroli	-173	-180	0	180	0.00	2.84	-2.84
400 KV Zerda-Bhimnal	-114	-92	213	117	0.00	0.35	-0.35
220 KV Auraja-Malanpur	-117	-60	0	128	0.00	2.10	-2.10
220 KV Badod-Kota/Morak	-39	-52	44	66	0.00	0.45	-0.45
Mundra-Mohindergarh(HVDC Bipole)	702	702	704	0	16.75	0.00	16.75
400 KV RAPPCC-Sujalpur	269	235	489	0	7.09	0.00	7.09
400 KV Vindhychal-Rihand	957	899	0	968	0.00	22.70	-22.70
765 kV Phagi-Gwalior (D/C)	860	895	1441	0	28.10	0.00	28.10
+/- 800 kV HVDC Champa-Kurushetra	2000	2500	3000	0	53.48	0	53.48
<b>Sub Total WR</b>	<b>5842</b>	<b>6712</b>			<b>159.77</b>	<b>33.28</b>	<b>126.49</b>
400 kV Sasaram - Varanasi	117	128	128	0	2.67	0.00	2.67
400 kV Sasaram - Allahabad	73	66	100	0	1.89	0.00	1.89
400 KV MZP- GKP (D/C)	331	247	441	0	7.88	0.00	7.88
400 KV Patna-Balia(D/C) X 2	698	562	862	0	17.48	0.00	17.48
400 KV B'Sharif-Balia (D/C)	189	156	344	0	6.19	0.00	6.19
765 KV Gaya-Balia	173	184	309	0	5.54	0.00	5.54
765 KV Gaya-Varanasi (D/C)	276	212	649	0	10.47	0.00	10.47
220 KV Pusauli-Sahupuri	174	116	174	0	2.20	0.00	2.20
132 KV K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
132 KV Son Ngr-Rihand	-19	-16	0	26	0.00	0.47	-0.47
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	4	-39	206	39	1.74	0.00	1.74
400 KV Motihari -GKP (D/C)	246	236	332	0	6.21	0.00	6.21
400 kV B'Sharif - Varanasi (D/C)	95	13	263	0	3.34	0.00	3.34
+/- 800 KV HVDC Alipurduar-Agra	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>2357</b>	<b>1865</b>			<b>65.59</b>	<b>0.47</b>	<b>65.13</b>
+/- 800 KV HVDC BiswanathChariali-Agra	500	500	0	500.00	0.00	11.05	-11.05
<b>Sub Total NER</b>	<b>500</b>	<b>500</b>			<b>0.00</b>	<b>11.05</b>	<b>-11.05</b>
<b>Total IR Exch</b>	<b>8699</b>	<b>9077</b>			<b>225.36</b>	<b>44.80</b>	<b>180.57</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
51.99	0.17	52.16	-8.43	-18.77	11.16	12.49	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
54.89	130.44	185.33	54.08	126.49	180.57	-0.81	-3.96	-4.76

**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 MU
	MW	MW	Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	-41	-35	0	41	0	1	-0.86

**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	7.73	60.51	82.73	8.00	1.86	0.00	0.00

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block		Freq Dev Index (% of Time)
Maximum		Minimum					MAX	MIN	
Freq	Time	Freq	Time	Hz	Index		(Hz)	(Hz)	
50.19	13.04	49.78	22.06	49.98	0.037	0.058	50.14	49.86	17.27

## 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	13:02	399	7:14	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	418	4:01	400	18:08	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	421	3:05	402	9:12	0.0	0.0	0.4	0.0	0.4
Kanpur	400	420	3:59	406	9:14	0.0	0.0	0.0	0.0	0.0
Dadri	400	426	4:01	405	10:08	0.0	0.0	24.2	0.0	24.2
Ballabgarh	400	425	3:59	403	10:07	0.0	0.0	20.1	0.0	20.1
Bawana	400	427	4:02	406	10:08	0.0	0.0	27.8	0.0	27.8
Bassi	400	426	4:00	397	7:37	0.0	0.0	15.1	0.0	15.1
Hissar	400	420	4:01	399	7:11	0.0	0.0	0.0	0.0	0.0
Moga	400	421	19:59	402	7:13	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	426	2:55	407	7:10	0.0	0.0	36.5	0.0	36.5
Nalagarh	400	428	4:01	409	6:39	0.0	0.0	40.8	0.0	40.8
Kishenpur	400	417	3:59	402	6:55	0.0	0.0	0.0	0.0	0.0
Wagoora	400	397	3:20	385	10:10	0.0	28.5	0.0	0.0	0.0
Amritsar	400	427	3:59	411	6:34	0.0	0.0	33.3	0.0	33.3
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	420	13:25	409	21:35	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	415	20:56	398	15:29	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	783	13:07	746	22:12	0.0	0.0	0.0	0.0	0.0
Balia	765	788	4:01	764	10:07	0.0	0.0	0.0	0.0	0.0
Moga	765	804	19:58	758	7:12	0.0	0.0	0.4	0.0	0.4
Agra	765	798	13:05	764	9:11	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	806	3:59	775	9:14	0.0	0.0	17.9	0.0	17.9
Unnao	765	779	4:00	757	8:46	0.0	0.0	0.0	0.0	0.0
Lucknow	765	796	2:37	767	10:12	0.0	0.0	0.0	0.0	0.0
Meerut	765	812	19:58	768	9:49	0.0	0.0	21.8	0.0	21.8
Jhatikara	765	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	802	3:59	768	9:10	0.0	0.0	0.7	0.0	0.7
Anta	765	793	3:58	771	6:30	0.0	0.0	0.0	0.0	0.0
Phagi	765	801	3:58	768	7:11	0.0	0.0	4.1	0.0	4.1

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	487.90	671.08	477.99	414.26	142.63	493.53
Pong	426.72	384.05	403.28	296.79	402.60	281.22	61.84	330.43
Tehri	829.79	740.04	788.35	430.38	788.00	425.58	39.19	191.00
Koteshwar	612.50	598.50	610.10	4.60	610.22	4.69	191.00	193.50
Chamera-I	760.00	748.75	755.01	0.00	0.00	0.00	41.79	46.19
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	495.98	1.41	504.41	1.44	46.07	68.10

\* 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	-798	0	0	-951	-102	0	-20.79	-1.06	-21.85
Delhi	-643	-492	0	-568	19	0	-15.55	-0.53	-16.09
Haryana	-488	154	0	-636	102	0	-16.41	2.45	-13.96
HP	393	124	0	435	55	0	12.72	-0.18	12.54
J&K	598	221	0	598	358	0	13.94	6.44	20.37
CHD	-36	0	0	-36	0	0	-0.43	-0.08	-0.51
Rajasthan	-91	253	0	-91	166	0	-0.62	8.23	7.62
UP	14	0	0	-7	0	0	-3.83	0.00	-3.83
Uttarakhand	218	391	0	218	454	0	5.35	9.03	14.38
Total	-834	651	0	-1038	1053	0	-25.63	24.31	-1.33

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-798	-951	0	-560	0	0
Delhi	-567	-703	577	-498	0	0
Haryana	-488	-917	161	-163	0	0
HP	740	314	146	-542	0	0
J&K	598	563	457	-320	0	0
CHD	0	-36	9	-31	0	0
Rajasthan	65	-91	1673	-419	0	0
UP	59	-439	0	0	0	0
Uttarakhand	276	218	581	190	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	23
Haryana	1	17
Rajasthan	2	13
Delhi	3	23
UP	1	19
Uttarakhand	5	37
HP	3	23
J & K	4	26
Chandigarh	4	40

**XIII. System Constraints:**

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

**XV. Weather Conditions For 16.02.2018 :**

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

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

1. 220/132kV, 200MVA ICT-2 at Rai Bareilly (PG) first time charged from 220kV side on no load at 11:13hrs (16.02.2018).
2. 400 kV Neemrana-Babai first time charged at 19.41 hrs and 400 kV Bus-1 at Babai charged at 19.53 hrs on 16.02.2018.

**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 : 16.02.2018

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER