

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

उत्तर क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GH188682

Power Supply Position in Northern Region for 24.02.2018  
Date of Reporting : 25.02.2018



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
40615	716	41330	49.98	31994	216	32210	49.96	885.91	12.66

\*Half hourly flow 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	59.98	8.46	0.00	2.92	0.00	2.77	74.12	25.79	25.08	-0.71	99.20	0.00
Haryana	52.68	0.07	0.00	0.11	0.00	1.15	54.00	63.44	65.67	2.23	119.67	0.09
Rajasthan	114.17	4.55	4.33	2.54	14.67	4.94	145.19	63.28	64.79	1.50	209.98	0.31
Delhi	0.00	0.00	13.27	0.00	0.00	0.00	13.27	47.83	47.41	-0.42	60.68	0.04
UP	143.29	7.88	0.00	2.05	0.00	21.60	174.82	111.25	113.53	2.28	288.35	2.98
Uttarakhand	0.00	7.32	0.00	0.46	0.00	0.00	7.78	24.97	27.61	2.63	35.38	0.00
HP	0.00	2.49	0.00	0.00	0.00	1.34	3.83	22.19	22.78	0.59	26.60	0.00
J & K	0.00	4.24	0.00	0.00	0.00	0.00	4.24	40.19	38.82	-1.37	43.05	9.24
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	2.99	-0.01	2.99	0.00
<b>Total</b>	<b>370.11</b>	<b>35.00</b>	<b>17.60</b>	<b>8.07</b>	<b>14.67</b>	<b>31.80</b>	<b>477.24</b>	<b>401.94</b>	<b>408.67</b>	<b>6.73</b>	<b>885.91</b>	<b>12.66</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	4498	0	-61	-1352	3016	0	-140	-896	4664	8	0
Haryana	5830	105	58	-951	4110	13	183	-361	6426	7	198
Rajasthan	8371	0	304	-830	8153	0	416	93	11190	8	0
Delhi	2346	0	-150	-819	1655	0	63	-1304	3337	11	0
UP	13773	90	479	1450	11311	0	83	42	13773	19	90
Uttarakhand	1755	0	52	240	1241	0	126	557	1947	8	0
HP	1212	0	-44	401	822	0	-37	445	1496	8	0
J&K	2064	521	68	983	1608	203	-109	890	2064	19	521
Chandigarh	165	0	-21	-35	78	0	6	-35	178	9	0
<b>Total</b>	<b>40615</b>	<b>716</b>	<b>685</b>	<b>-913</b>	<b>31994</b>	<b>216</b>	<b>591</b>	<b>-569</b>	<b>42601</b>	<b>8</b>	<b>420</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	854	951	958	20.40	850	20.47	-0.07	
Rihand II STPS (2*500)	1000	943	1011	1016	22.82	951	22.62	0.20	
Rihand III STPS (2*500)	1000	943	1006	1008	22.84	952	22.61	0.23	
Dadri I STPS (4*210)	840	732	674	410	13.74	573	14.44	-0.70	
Dadri II STPS (2*490)	980	464	431	301	9.48	395	9.37	0.11	
Unchahar I TPS (2*210)	420	317	194	404	7.02	293	7.38	-0.36	
Unchahar II TPS (2*210)	420	382	414	411	8.49	354	8.75	-0.27	
Unchahar III TPS (1*210)	210	191	207	204	4.21	175	4.40	-0.20	
Unchahar IV TPS (1*500)	500	0	0	0	0.00	0	0.00	0.00	
ISTPP (Jhajjar) (3*500)	1500	948	961	588	20.22	843	20.45	-0.23	
Dadri GPS (4*130.19+2*154.51)	830	815	171	126	3.55	148	3.66	-0.12	
Anta GPS (3*88.71+1*153.2)	419	416	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	0.05	0.00	
Singrauli Solar(15)	15	3	0	0	0.07	3	0.06	0.00	
KHEP(4*200)	800	656	650	0	2.70	112	2.38	0.32	
<b>Sub Total (A)</b>	<b>12612</b>	<b>9965</b>	<b>8500</b>	<b>7216</b>	<b>176</b>	<b>7313</b>	<b>176</b>	<b>-0.60</b>	
<b>B. NPC</b>	NAPS (2*220)	440	405	439	445	9.66	402	9.70	-0.04
RAPS- B (2*220)	440	394	435	438	9.45	394	9.34	0.10	
RAPS- C (2*220)	440	200	235	232	4.88	203	4.80	0.08	
<b>Sub Total (B)</b>	<b>1320</b>	<b>999</b>	<b>1109</b>	<b>1115</b>	<b>23.98</b>	<b>999</b>	<b>23.84</b>	<b>0.14</b>	
<b>C. NHPC</b>	Chamera I HPS (3*180)	540	534	548	0	1.76	74	1.60	0.16
Chamera II HPS (3*100)	300	296	302	0	1.06	44	1.00	0.06	
Chamera III HPS (3*77)	231	228	160	0	0.64	27	0.60	0.04	
Bairasuli HPS(3*60)	180	59	121	0	0.60	25	0.36	0.24	
Salal-HPS (6*115)	690	88	345	36	2.72	113	2.12	0.61	
Tanakpur-HPS (3*31.4)	94	18	20	17	0.50	21	0.44	0.06	
Uri-I HPS (4*120)	480	80	273	41	2.24	94	1.93	0.32	
Uri-II HPS (4*60)	240	55	182	39	1.41	59	1.32	0.09	
Dhauliganga-HPS (4*70)	280	277	279	0	0.76	32	0.84	-0.08	
Dulhasti-HPS (3*130)	390	385	406	0	2.02	84	1.80	0.22	
Sewa-II HPS (3*40)	120	119	124	0	0.71	30	0.70	0.00	
Parbati 3 (4*130)	520	16	132	0	0.37	16	0.39	-0.01	
<b>Sub Total (C)</b>	<b>4065</b>	<b>2155</b>	<b>2891</b>	<b>133</b>	<b>15</b>	<b>617</b>	<b>13</b>	<b>1.72</b>	
<b>D. SJVNL</b>	NJPC (6*250)	1500	1263	1314	0	5.72	239	5.66	0.06
Rampur HEP (6*68.67)	412	344	373	0	1.64	68	1.58	0.06	
<b>Sub Total (D)</b>	<b>1912</b>	<b>1607</b>	<b>1687</b>	<b>0</b>	<b>7.36</b>	<b>307</b>	<b>7.24</b>	<b>0.12</b>	
<b>E. THDC</b>	Tehri HPS (4*250)	1000	828	823	0	7.17	299	7.14	0.03
Koteswar HPS (4*100)	400	120	397	92	2.94	122	2.89	0.05	
<b>Sub Total (E)</b>	<b>1400</b>	<b>948</b>	<b>1220</b>	<b>92</b>	<b>10.11</b>	<b>421</b>	<b>10.02</b>	<b>0.08</b>	
<b>F. BBMB</b>	Bhakra HPS (2*108+3*126+5*157)	1379	655	1185	404	15.83	660	15.73	0.11
Dehar HPS (6*165)	990	93	495	0	2.39	100	2.24	0.15	
Pong HPS (6*66)	396	223	310	62	5.35	223	5.34	0.00	
<b>Sub Total (F)</b>	<b>2765</b>	<b>971</b>	<b>1990</b>	<b>466</b>	<b>23.58</b>	<b>982</b>	<b>23.31</b>	<b>0.26</b>	
<b>G. IPP(s)/JV(s)</b>	Allain Duhangan HPS(IPP) (2*96)	192	0	0	0	0.32	13	0.31	0.01
Karcham Wantoo HPS(IPP) (4*250)	1000	0	785	0	3.26	136	3.20	0.06	
Malana Stg-II HPS (2*50)	100	0	0	0	0.17	7	0.16	0.01	
Shree Cement TPS (2*150)	300	0	146	114	3.21	134	3.22	-0.01	
Budhil HPS(IPP) (2*35)	70	0	0	0	0.13	5	0.14	-0.01	
Sainj HPS (IPP) (2*50)	100	0	0	0	0.26	0.26	0.26	0.00	
<b>Sub Total (G)</b>	<b>1762</b>	<b>0</b>	<b>931</b>	<b>114</b>	<b>7.09</b>	<b>296</b>	<b>7.03</b>	<b>0.07</b>	
<b>H. Total Regional Entities (A-G)</b>	<b>25837</b>	<b>16646</b>	<b>18327</b>	<b>9136</b>	<b>262.44</b>	<b>10935</b>	<b>260.65</b>	<b>1.79</b>	

I. State Entities	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(Sentout MW)	
Punjab	Guru Gobind Singh TPS (Ropar) (6*210)	1260	160	160	3.48	145	
	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	170	3.67	153	
	Goindwal(GVK) (2*270)	540	145	145	3.49	145	
	Rajpura (2*700)	1400	1120	660	26.59	1108	
	Talwandi Saboo (3*660)	1980	924	924	22.76	948	
	<b>Thermal (Total)</b>	<b>6560</b>	<b>2519</b>	<b>2059</b>	<b>59.98</b>	<b>2499</b>	
	Total Hydro	1000	289	244	8.46	352	
	Wind Power	0	0	0	0.00	0	
	Biomass	303	0	0	2.77	115	
	Solar	859	0	0	2.92	122	
	<b>Renewable(Total)</b>	<b>1162</b>	<b>0</b>	<b>0</b>	<b>5.69</b>	<b>237</b>	
	<b>Total Punjab</b>	<b>8722</b>	<b>2808</b>	<b>2303</b>	<b>74.12</b>	<b>3088</b>	
	Haryana	Paripat TPS (2*210+2*250)	920	0	0	0.00	0
		DCRTPP (Yamuna nagar) (2*300)	600	285	231	6.06	253
		Faridabad GPS (NTPC)(2*137.75+1*156)	432	0	0	0.00	0
RGTPP (khedar) (IPP) (2*600)		1200	994	732	21.46	894	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CL.P) (2*660)		1320	1173	741	25.16	1048	
<b>Thermal (Total)</b>		<b>4497</b>	<b>2452</b>	<b>1704</b>	<b>52.68</b>	<b>2195</b>	
Total Hydro		62	0	3	0.07	3	
Wind Power		0	0	0	0.00	0	
Biomass		106	0	0	1.15	48	
Solar		50	0	0	0.11	5	
<b>Renewable(Total)</b>		<b>156</b>	<b>0</b>	<b>0</b>	<b>1.26</b>	<b>53</b>	
<b>Total Haryana</b>		<b>4715</b>	<b>2452</b>	<b>1707</b>	<b>54.00</b>	<b>2250</b>	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	1040	823	22.34	931
		suratgarh TPS (6*250)	1500	748	735	17.19	716
		Chabra TPS (4*250)	1000	1195	1194	28.13	1172
	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	170	171	4.33	181	
	RAPS A (NPC) (1*100+1*200)	300	192	192	4.46	186	
	Barsingsar (NLC) (2*125)	250	204	215	4.89	204	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	741	721	17.58	733	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	1122	822	24.04	1002	
	Kawai(Adani) (2*660)	1320	0	0	0.00	0	
	<b>Thermal (Total)</b>	<b>9536</b>	<b>5412</b>	<b>4873</b>	<b>122.96</b>	<b>5123</b>	
	Total Hydro	550	157	127	4.55	190	
	Wind power	4292	69	319	14.67	611	
	Biomass	102	20	20	0.48	20	
	Solar	1995	0	0	2.54	106	
	Renewable/Others (Total)	6389	89	339	17.68	737	
	<b>Total Rajasthan</b>	<b>16475</b>	<b>5658</b>	<b>5339</b>	<b>145.19</b>	<b>6050</b>	
UP	Anpara TPS (3*210+2*500)	1630	1332	1319	33.91	1413	
	Obra TPS (2*50+2*94+5*200)	1194	264	140	4.45	185	
	Paricha TPS (2*110+2*220+2*250)	1160	679	660	15.23	634	
	Panki TPS (2*105)	210	0	0	0.00	0	
	Harduaqanj TPS (1*60+1*105+2*250)	665	445	441	10.68	445	
	Tanda TPS (NTPC) (4*110)	440	392	394	9.20	383	
	Roza TPS (IPP) (4*300)	1200	1055	1001	24.22	1009	
	Anpara-C (IPP) (2*600)	1200	1020	1022	24.56	1023	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0	
	Anpara-D(2*500)	1000	451	452	10.90	454	
	Lalitpur TPS(3*660)	1980	0	0	0.00	0	
	Bara(3*660)	1980	405	403	10.15	423	
	<b>Thermal (Total)</b>	<b>13109</b>	<b>6043</b>	<b>5832</b>	<b>143.29</b>	<b>5970</b>	
	Vishnuparvag_HPS (IPP)(4*110)	440	63	63	1.53	64	
	Alakanada(4*82.5)	330	82	0	1.04	43	
	Other Hydro	527	230	222	5.32	222	
	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	2.05	85	
<b>Renewable(Total)</b>	<b>128</b>	<b>0</b>	<b>0</b>	<b>2.05</b>	<b>85</b>		
<b>Total UP</b>	<b>15515</b>	<b>7318</b>	<b>7017</b>	<b>174.82</b>	<b>7284</b>		
Uttarakhand	Other Hydro	1250	509	205	7.32	305	
	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	0.46	19	
	Small Hydro (< 25 MW)	180	0	0	0.00	0	
	<b>Renewable(Total)</b>	<b>407</b>	<b>0</b>	<b>0</b>	<b>0.46</b>	<b>19</b>	
	<b>Total Uttarakhand</b>	<b>2107</b>	<b>509</b>	<b>205</b>	<b>7.78</b>	<b>324</b>	
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	41	39	0.92	38	
	Pragati Gas Turbine (2x104+ 1x122)	330	264	267	6.38	266	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	242	252	5.97	249	
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0	
	<b>Thermal (Total)</b>	<b>2917</b>	<b>547</b>	<b>558</b>	<b>13.27</b>	<b>553</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>547</b>	<b>558</b>	<b>13.27</b>	<b>553</b>		

HP	Baspa HPS (IPP) (3*100)	300	0	0	0.79	33
	Malana HPS (IPP) (2*43)	86	0	0	0.17	7
	Other Hydro (>25MW)	372	97	21	1.52	63
	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	101	27	1.34	56
	<b>Renewable(Total)</b>	<b>486</b>	<b>101</b>	<b>27</b>	<b>1.34</b>	<b>56</b>
	<b>Total HP</b>	<b>1244</b>	<b>199</b>	<b>47</b>	<b>3.83</b>	<b>159</b>
	<b>Total J &amp; K</b>	<b>1398</b>	<b>213</b>	<b>159</b>	<b>4</b>	<b>177</b>
<b>Total State Control Area Generation</b>		<b>53111</b>	<b>19704</b>	<b>17335</b>	<b>477.24</b>	<b>19885</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>		<b>8255</b>	<b>7568.85</b>	<b>168.61</b>	<b>7025</b>	<b>7025</b>
<b>Total Regional Availability(Gross)</b>		<b>78948</b>	<b>46286</b>	<b>34040</b>	<b>908.29</b>	<b>37845</b>

**IV. Total Hydro Generation:**

<b>Regional Entities Hydro</b>	<b>12234</b>	<b>9223</b>	<b>691</b>	<b>62.43</b>	<b>2596</b>
<b>State Control Area Hydro</b>	<b>7468</b>	<b>1742</b>	<b>1070</b>	<b>35.00</b>	<b>1533</b>
<b>Total Regional Hydro</b>	<b>19702</b>	<b>10965</b>	<b>1762</b>	<b>97.43</b>	<b>4129</b>

**V. Total Renewable Generation:**

<b>Regional Entities Renewable</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0.13</b>	<b>6</b>
<b>State Control Area Renewable</b>	<b>8844</b>	<b>190</b>	<b>366</b>	<b>28.47</b>	<b>1186</b>
<b>Total Regional Renewable</b>	<b>8874</b>	<b>190</b>	<b>366</b>	<b>28.61</b>	<b>1192</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)	100	-250	100	250	0.74	3.44	-2.70
765 KV Gwalior-Agra (D/C)	1849	1938	2598	0	45.73	0.00	45.73
400 KV Zerda-Kankroli	-266	-222	0	273	0.00	5.40	-5.40
400 KV Zerda-Bhinmal	-179	-159	18	301	0.00	3.58	-3.58
220 KV Aurajya-Malanpur	-115	-114	0	150	0.00	2.68	-2.68
220 KV Badod-Kota/Morak	-112	-52	32	84	0.00	1.53	-1.53
Mundra-Mohindergarh(HVDC Bipole)	702	699	705	0	16.99	0.00	16.99
400 KV RAPPCC-Sujalpur	249	227	310	0	4.75	0.00	4.75
400 KV Vindhychal-Rihand	966	951	0	976	0.00	23.02	-23.02
765 kV Phagi-Gwalior (D/C)	815	1147	720	0	26.40	0.00	26.40
+/- 800 kV HVDC Champa-Kurushetra	2500	1000	2500	0	46.34	0	46.34
<b>Sub Total WR</b>	<b>6509</b>	<b>5165</b>			<b>140.95</b>	<b>39.65</b>	<b>101.30</b>
400 kV Sasaram - Varanasi	140	128	140	0	3.08	0.00	3.08
400 kV Sasaram - Allahabad	52	63	96	0	1.72	0.00	1.72
400 kV MZP- GKP (D/C)	9	162	274	20	3.29	0.00	3.29
400 kV Patna-Balia(D/C) X 2	555	677	808	0	15.78	0.00	15.78
400 kV B'Sharif-Balia (D/C)	74	72	185	0	2.93	0.00	2.93
765 KV Gaya-Balia	128	172	116	0	4.30	0.00	4.30
765 KV Gaya-Varanasi (D/C)	121	305	489	0	4.57	0.00	4.57
220 KV Pusauli-Sahupuri	169	123	169	0	3.33	0.00	3.33
132 KV K'nasa-Sahupuri	0	0	0	0	9.60	0.00	9.60
132 KV Son Ngr-Rihand	0	-22	0	24	0.00	0.00	0.00
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-116	0	134	136	0.26	0.00	0.26
400 KV Motihari -GKP (D/C)	240	278	348	0	6.56	0.00	6.56
400 kV B'Sharif - Varanasi (D/C)	74	-54	148	76	0.85	0.00	0.85
+/- 800 KV HVDC Alipurduar-Agra	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1446</b>	<b>1904</b>			<b>56.26</b>	<b>0.00</b>	<b>56.25</b>
+/- 800 KV HVDC BiswanathChariali-Agra	300	500	500	0.00	11.05	0.00	11.05
<b>Sub Total NER</b>	<b>300</b>	<b>500</b>			<b>11.05</b>	<b>0.00</b>	<b>11.05</b>
<b>Total IR Exch</b>	<b>8255</b>	<b>7569</b>			<b>208.26</b>	<b>39.65</b>	<b>168.61</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
52.29	0.10	52.39	-8.72	-18.63	3.24	-3.59	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
46.91	119.15	166.06	67.31	101.30	168.61	20.40	-17.85	2.55

**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	-14	-14	0	38	0	1	-0.85

**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	11.16	72.21	82.57	5.39	0.90	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)	
50.14	6.02	49.82	14.27	49.97	0.039	0.054	50.04	49.87	17.43

## 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	401	0:00	401	0:00	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	414	3:58	398	18:10	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	419	4:00	404	9:32	0.0	0.0	0.0	0.0	0.0
Kanpur	400	418	4:00	407	11:25	0.0	0.0	0.0	0.0	0.0
Dadri	400	425	3:59	409	9:34	0.0	0.0	17.1	0.0	17.1
Ballabgarh	400	425	4:01	407	9:35	0.0	0.0	9.1	0.0	9.1
Bawana	400	426	3:54	410	9:35	0.0	0.0	23.2	0.0	23.2
Bassi	400	419	4:01	396	6:13	0.0	0.0	0.0	0.0	0.0
Hissar	400	422	4:00	404	6:21	0.0	0.0	0.3	0.0	0.3
Moga	400	420	3:52	407	6:14	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	429	13:18	413	6:40	0.0	0.0	45.7	0.0	45.7
Nalagarh	400	429	4:00	415	18:16	0.0	0.0	51.5	0.0	51.5
Kishenpur	400	418	3:45	406	10:18	0.0	0.0	0.0	0.0	0.0
Wagoora	400	402	23:56	386	10:26	0.0	10.9	0.0	0.0	0.0
Amritsar	400	428	3:58	412	20:58	0.0	0.0	33.0	0.0	33.0
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	422	13:01	410	18:15	0.0	0.0	16.7	0.0	16.7
Rishikesh	400	416	3:59	397	9:34	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	13:04	751	0:00	0.0	0.0	0.0	0.0	0.0
Balia	765	782	23:30	760	18:46	0.0	0.0	0.0	0.0	0.0
Moga	765	800	20:15	767	6:14	0.0	0.0	0.0	0.0	0.0
Agra	765	798	13:04	763	18:50	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	807	4:01	776	9:37	0.0	0.0	6.7	0.0	6.7
Unnao	765	772	4:00	752	18:46	0.0	0.0	0.0	0.0	0.0
Lucknow	765	791	4:00	768	18:47	0.0	0.0	0.0	0.0	0.0
Meerut	765	812	20:25	772	9:36	0.0	0.0	5.5	0.0	5.5
Jhatikara	765	809	4:32	774	9:35	0.0	0.0	7.4	0.0	7.4
Bareilly 765 kV	765	797	4:00	770	9:35	0.0	0.0	0.0	0.0	0.0
Anta	765	791	4:00	768	9:38	0.0	0.0	0.0	0.0	0.0
Phagi	765	800	4:00	772	6:15	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	485.45	602.35	475.40	361.66	164.49	514.35
Pong	426.72	384.05	401.78	259.17	401.15	244.95	45.76	378.77
Tehri	829.79	740.04	784.60	380.11	783.20	361.52	39.17	192.00
Koteshwar	612.50	598.50	610.80	4.95	610.09	4.50	192.00	194.31
Chamera-I	760.00	748.75	754.67	0.00	0.00	0.00	43.09	47.48
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	495.80	0.35	505.15	2.13	50.18	57.38

\* 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	-795	-101	0	-947	-405	0	-20.69	-10.01	-30.70
Delhi	-640	-664	0	-667	-152	0	-15.87	-6.50	-22.37
Haryana	-486	125	0	-633	-318	0	-16.20	-3.70	-19.90
HP	395	50	0	438	-37	0	12.76	-1.21	11.55
J&K	579	311	0	579	404	0	13.48	5.61	19.10
CHD	-35	0	0	-35	0	0	-0.43	-0.13	-0.55
Rajasthan	-90	184	0	-90	-739	0	-0.60	-2.13	-2.73
UP	42	0	0	-4	1454	0	-3.71	11.50	7.80
Uttarakhand	219	338	0	219	21	0	5.37	6.84	12.21
Total	-811	242	0	-1141	228	0	-25.88	0.29	-25.59

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-795	-947	-101	-1418	0	0
Delhi	-606	-699	140	-688	0	0
Haryana	-486	-901	165	-958	0	0
HP	743	315	171	-603	0	0
J&K	579	545	449	-334	0	0
CHD	0	-35	0	-41	0	0
Rajasthan	67	-90	897	-1382	0	0
UP	61	-437	1653	0	0	0
Uttarakhand	277	219	475	6	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	1	16
Rajasthan	2	22
Delhi	4	25
UP	1	20
Uttarakhand	1	18
HP	3	38
J & K	2	30
Chandigarh	4	23

**XIII. System Constraints:**

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

**XV. Weather Conditions For 24.02.2018 :**

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

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

**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 : 24.02.2018

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER