

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

उत्तर क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GH188682

Power Supply Position in Northern Region for 28.03.2018

Date of Reporting : 29.03.2018



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
42162	1273	43434	49.96	35954	289	36243	49.97	915.21	11.10

\*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/Diesel	Solar	Wind	Other (Biomass/ Small hydro/ Co-Generation etc.)	Total					
Punjab	81.59	6.05	0.00	3.24	0.00	2.90	93.77	34.39	34.09	-0.31	127.86	0.00
Haryana	68.96	0.29	6.93	0.17	0.00	1.08	77.44	43.70	45.34	1.64	122.77	0.68
Rajasthan	119.49	0.37	3.87	0.00	4.93	5.01	133.65	45.52	46.94	1.43	180.60	0.00
Delhi	0.00	0.00	11.65	0.00	0.00	0.00	11.65	64.24	63.37	-0.87	75.02	0.10
UP	165.40	5.87	0.00	2.94	0.00	21.60	195.82	108.16	109.88	1.71	305.70	0.26
Uttarakhand	0.00	6.75	0.00	0.80	0.00	0.00	7.55	27.69	28.68	1.00	36.23	0.00
HP	0.00	3.34	0.00	0.00	0.00	2.61	5.95	18.33	19.34	1.01	25.29	0.53
J & K	0.00	4.41	0.00	0.00	0.00	4.41	37.44	33.81	-3.62	38.22	9.54	0.00
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.30	3.52	0.22	3.52	0.00
<b>Total</b>	<b>435.43</b>	<b>27.08</b>	<b>22.45</b>	<b>7.15</b>	<b>4.93</b>	<b>33.19</b>	<b>530.23</b>	<b>382.78</b>	<b>384.98</b>	<b>2.20</b>	<b>915.21</b>	<b>11.10</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	5787	0	16	-1269	4171	0	14	-1118	6018	8	0
Haryana	5906	0	39	-555	4769	0	79	-471	6197	20	178
Rajasthan	7153	0	-86	-152	7379	0	-249	-491	9028	8	0
Delhi	3555	0	-85	-453	2453	0	54	-757	3654	20	0
UP	14770	795	591	17	13277	0	-52	42	14770	19	795
Uttarakhand	1793	0	186	714	1318	0	42	702	1821	20	0
HP	1101	0	-35	-71	854	0	40	324	1354	9	0
J&K	1911	478	174	634	1637	289	-108	713	1968	7	492
Chandigarh	186	0	-6	-45	97	0	12	-36	186	19	0
<b>Total</b>	<b>42162</b>	<b>1273</b>	<b>794</b>	<b>-1182</b>	<b>35954</b>	<b>289</b>	<b>-167</b>	<b>-1091</b>	<b>42333</b>	<b>20</b>	<b>1525</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	449	497	504	11.06	461	10.69	0.37	
Rihand II STPS (2*500)	1000	943	1034	1013	22.88	953	22.36	0.51	
Rihand III STPS (2*500)	1000	943	1006	1012	22.63	943	22.33	0.30	
Dadri I STPS (4*210)	840	769	804	772	16.34	681	17.17	-0.83	
Dadri II STPS (2*490)	980	928	935	817	19.06	794	20.06	-0.99	
Unchahar I TPS (2*210)	420	382	391	415	8.33	347	8.48	-0.15	
Unchahar II TPS (2*210)	420	382	397	334	8.40	350	8.42	-0.02	
Unchahar III TPS (1*210)	210	191	193	170	4.17	174	4.28	-0.11	
Unchahar IV TPS (1*500)	500	0	0	0	0.00	0	0.00	0.00	
ISTPP (Jhajjar) (3*500)	1500	850	901	905	20.15	840	20.00	0.14	
Dadri GPS (4*130.19+2*154.51)	830	805	186	189	4.05	169	4.08	-0.03	
Anta GPS (3*88.71+1*153.2)	419	404	0	0	0.00	0	0.00	0.00	
Auraya GPS (4*111.19+2*109.30)	663	646	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	0.07	0.01	
KHEP(4*200)	800	792	853	0	2.63	110	2.38	0.26	
<b>Sub Total (A)</b>	<b>12612</b>	<b>9035</b>	<b>7872</b>	<b>6783</b>	<b>155</b>	<b>6450</b>	<b>153</b>	<b>1.31</b>	
B. NPC	NAPS (2*220)	440	392	421	438	9.44	393	9.40	0.04
RAPS- B (2*220)	440	389	429	433	9.32	388	9.23	0.09	
RAPS- C (2*220)	440	200	230	230	4.32	180	4.80	-0.48	
<b>Sub Total (B)</b>	<b>1320</b>	<b>981</b>	<b>1080</b>	<b>1101</b>	<b>23.09</b>	<b>962</b>	<b>23.44</b>	<b>-0.35</b>	
C. NHPC	Chamera I HPS (3*180)	540	534	544	0	2.40	100	2.20	0.20
Chamera II HPS (3*100)	300	296	300	0	2.25	94	2.05	0.20	
Chamera III HPS (3*77)	231	228	235	0	1.45	60	1.30	0.15	
Bairasuli HPS(3*60)	180	61	183	19	1.22	51	0.95	0.27	
Salal-HPS (6*115)	690	122	530	140	3.84	160	2.88	0.96	
Tanakpur-HPS (3*31.4)	94	17	14	16	0.43	18	0.40	0.02	
Uri-I HPS (4*120)	480	212	354	238	5.75	240	5.08	0.67	
Uri-II HPS (4*60)	240	134	176	118	3.33	139	3.22	0.12	
Dhauliganga-HPS (4*70)	280	207	210	0	0.84	35	0.77	0.07	
Dulhasti-HPS (3*130)	390	385	406	0	2.90	121	2.70	0.20	
Sewa-II HPS (3*40)	120	119	122	0	1.55	65	1.50	0.05	
Parbati 3 (4*130)	520	21	131	0	0.58	24	0.51	0.07	
<b>Sub Total (C)</b>	<b>4065</b>	<b>2336</b>	<b>3205</b>	<b>531</b>	<b>27</b>	<b>1105</b>	<b>24</b>	<b>2.96</b>	
D.SJVNL	NJPC (6*250)	1500	1497	1546	0	7.13	297	7.00	0.13
Rampur HEP (6*68.67)	412	412	432	0	2.02	84	1.95	0.08	
<b>Sub Total (D)</b>	<b>1912</b>	<b>1910</b>	<b>1978</b>	<b>0</b>	<b>9.15</b>	<b>381</b>	<b>8.95</b>	<b>0.20</b>	
E. THDC	Tehri HPS (4*250)	1000	539	541	0	6.07	253	6.01	0.06
Koteswar HPS (4*100)	400	111	297	90	2.68	112	2.66	0.03	
<b>Sub Total (E)</b>	<b>1400</b>	<b>650</b>	<b>838</b>	<b>90</b>	<b>8.75</b>	<b>364</b>	<b>8.67</b>	<b>0.08</b>	
F. BBMB	Bhakra HPS (2*108+3*126+5*157)	1379	530	1040	406	12.80	533	12.71	0.09
Dehar HPS (6*165)	990	128	495	0	3.23	134	3.08	0.15	
Pong HPS (6*66)	396	47	156	0	1.14	48	1.12	0.02	
<b>Sub Total (F)</b>	<b>2765</b>	<b>705</b>	<b>1691</b>	<b>406</b>	<b>17.17</b>	<b>715</b>	<b>16.92</b>	<b>0.25</b>	
G. IPP(s)/JV(s)	Allain Duhangan HPS(IPP) (2*96)	192	0	97	0	0.48	20	0.46	0.02
Karcham Wantoo HPS(IPP) (4*250)	1000	0	825	0	3.88	161	3.79	0.08	
Malana Stg-II HPS (2*50)	100	0	0	0	0.26	11	0.24	0.02	
Shree Cement TPS (2*150)	300	0	258	151	4.51	188	4.36	0.15	
Budhil HPS(IPP) (2*35)	70	0	0	0	0.23	10	0.21	0.03	
Sainj HPS (IPP) (2*50)	100	0	0	0	0.00	0	0.33	0.00	
<b>Sub Total (G)</b>	<b>1762</b>	<b>0</b>	<b>1180</b>	<b>151</b>	<b>9.35</b>	<b>390</b>	<b>9.06</b>	<b>0.29</b>	
<b>H. Total Regional Entities (A-G)</b>	<b>25837</b>	<b>15617</b>	<b>17844</b>	<b>9062</b>	<b>248.82</b>	<b>10368</b>	<b>244.07</b>	<b>4.75</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	630	520	12.87	536	
	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	460	364	9.57	399	
	Goindwal(GVK) (2*270)	540	0	0	-0.05	-2	
	Rajpura (2*700)	1400	1320	1320	31.54	1314	
	Talwandi Saboo (3*660)	1980	1228	820	27.66	1153	
	<b>Thermal (Total)</b>	<b>6560</b>	<b>3638</b>	<b>3024</b>	<b>81.59</b>	<b>3399</b>	
	Total Hydro	1000	137	88	6.05	252	
	Wind Power	0	0	0	0.00	0	
	Biomass	303	0	0	2.90	121	
	Solar	859	0	0	3.24	135	
	<b>Renewable(Total)</b>	<b>1162</b>	<b>0</b>	<b>0</b>	<b>6.13</b>	<b>256</b>	
	<b>Total Punjab</b>	<b>8722</b>	<b>3775</b>	<b>3112</b>	<b>93.77</b>	<b>3907</b>	
	Haryana	Paripat TPS (2*210+2*250)	920	597	464	14.35	598
		DCRTPP (Yamuna nagar) (2*300)	600	0	0	0.00	0
Faridabad GPS (NTPC)(2*137.75+1*156)		432	287	287	6.93	289	
RGTPP (kheadar) (IPP) (2*600)		1200	1040	1161	26.51	1104	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP) (2*660)		1320	1230	1062	28.10	1171	
<b>Thermal (Total)</b>		<b>4497</b>	<b>3154</b>	<b>2974</b>	<b>75.89</b>	<b>3162</b>	
Total Hydro		62	1	14	0.29	12	
Wind Power		0	0	0	0.00	0	
Biomass		106	0	0	1.08	45	
Solar		50	0	0	0.17	7	
<b>Renewable(Total)</b>		<b>156</b>	<b>0</b>	<b>0</b>	<b>1.26</b>	<b>52</b>	
<b>Total Haryana</b>		<b>4715</b>	<b>3155</b>	<b>2988</b>	<b>77.44</b>	<b>3227</b>	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	1035	824	23.17	965
		suratgarh TPS (6*250)	1500	218	179	4.84	201
	Chabra TPS (4*250)	1000	1255	1259	28.84	1202	
	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	155	154	3.87	161	
	RAPS A (NPC) (1*100+1*200)	300	187	188	4.35	181	
	Barsingsar (NLC) (2*125)	250	181	175	4.05	169	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	714	712	17.53	730	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	1117	1089	26.33	1097	
	Kawai(Adani) (2*660)	1320	621	615	14.73	614	
	<b>Thermal (Total)</b>	<b>9536</b>	<b>5483</b>	<b>5195</b>	<b>127.70</b>	<b>5321</b>	
	Total Hydro	550	18	20	0.37	15	
	Wind power	4292	56	829	4.93	205	
	Biomass	102	27	27	0.65	27	
	Solar	1995	0	0	0.00	0	
	Renewable/Others (Total)	6389	83	856	5.58	233	
	<b>Total Rajasthan</b>	<b>16475</b>	<b>5584</b>	<b>6071</b>	<b>133.65</b>	<b>5569</b>	
UP	Anpara TPS (3*210+2*500)	1630	1312	1347	34.08	1420	
	Obra TPS (2*50+2*94+5*200)	1194	312	297	7.20	300	
	Paricha TPS (2*110+2*220+2*250)	1160	697	696	16.06	669	
	Panki TPS (2*105)	210	0	0	0.00	0	
	Harduaqani TPS (1*60+1*105+2*250)	665	542	539	11.12	463	
	Tanda TPS (NTPC) (4*110)	440	390	390	8.70	362	
	Roza TPS (IPP) (4*300)	1200	720	713	15.95	665	
	Anpara-C (IPP) (2*600)	1200	1096	1036	25.23	1051	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0	
	Anpara-D(2*500)	1000	48	0	1.07	44	
	Lalitpur TPS(3*660)	1980	1226	1234	27.86	1161	
	Bara(3*660)	1980	747	753	18.13	756	
	<b>Thermal (Total)</b>	<b>13109</b>	<b>7090</b>	<b>7005</b>	<b>165.40</b>	<b>6892</b>	
	Vishnuparvag_HPS (IPP)(4*110)	440	68	78	1.75	73	
	Alaknanda(4*82.5)	330	82	0	0.86	36	
	Other Hydro	527	337	57	3.26	136	
	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	2.94	123	
<b>Renewable(Total)</b>	<b>128</b>	<b>0</b>	<b>0</b>	<b>2.94</b>	<b>123</b>		
<b>Total UP</b>	<b>15515</b>	<b>8477</b>	<b>8040</b>	<b>195.82</b>	<b>8159</b>		
Uttarakhand	Other Hydro	1250	317	187	6.75	281	
	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	0.80	33	
	Small Hydro (< 25 MW)	180	0	0	0.00	0	
	<b>Renewable(Total)</b>	<b>407</b>	<b>0</b>	<b>0</b>	<b>0.80</b>	<b>33</b>	
	<b>Total Uttarakhand</b>	<b>2107</b>	<b>317</b>	<b>187</b>	<b>7.55</b>	<b>315</b>	
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	36	37	0.86	36	
	Pragati Gas Turbine (2x104+ 1x122)	330	146	153	3.63	151	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	351	257	7.16	298	
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0	
	<b>Thermal (Total)</b>	<b>2917</b>	<b>533</b>	<b>447</b>	<b>11.65</b>	<b>486</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>533</b>	<b>447</b>	<b>11.65</b>	<b>486</b>		

HP	Baspa HPS (IPP) (3*100)	300	0	0	0.96	40
	Malana HPS (IPP) (2*43)	86	20	0	0.25	11
	Other Hydro (>25MW)	372	77	53	2.12	89
	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	172	74	2.61	109
	<b>Renewable(Total)</b>	<b>486</b>	<b>172</b>	<b>74</b>	<b>2.61</b>	<b>109</b>
	<b>Total HP</b>	<b>1244</b>	<b>270</b>	<b>127</b>	<b>5.95</b>	<b>248</b>
	<b>Total J &amp; K</b>	<b>1398</b>	<b>254</b>	<b>232</b>	<b>4</b>	<b>184</b>
J & K	900	146	146	4.41	184	
Other Hydro/IPP(including 98 MW Small Hydro)	308	108	86	0.00	0	
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>254</b>	<b>232</b>	<b>4</b>	<b>184</b>	
<b>Total State Control Area Generation</b>	<b>53111</b>	<b>22365</b>	<b>21204</b>	<b>530.23</b>	<b>22093</b>	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		6410	8693	154.19	6425	
<b>Total Regional Availability(Gross)</b>	<b>78948</b>	<b>46618</b>	<b>38959</b>	<b>933.25</b>	<b>38885</b>	

**IV. Total Hydro Generation:**

<b>Regional Entities Hydro</b>	12234	9487	1027	69.07	2868
<b>State Control Area Hydro</b>	7468	1484	803	27.08	1270
<b>Total Regional Hydro</b>	19702	10971	1830	96.15	4139

**V. Total Renewable Generation:**

<b>Regional Entities Renewable</b>	30	0	0	0.15	6
<b>State Control Area Renewable</b>	8844	255	930	19.32	805
<b>Total Regional Renewable</b>	8874	255	930	19.46	811

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

Element	Peak(19:00 Hrs)		Dff Peak(03:00 Hrs)		Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	Import	Export	
Vindhychal(HVDC B/B)	200	200	200	150	4.27	0.33	3.94		
765 KV Gwalior-Agra (D/C)	1513	1924	2203	0	42.54	0.00	42.54		
400 KV Zerda-Kankroli	-413	-304	0	413	0.00	7.36	-7.36		
400 KV Zerda-Bhinmal	-320	-320	0	376	0.00	5.86	-5.86		
220 KV Aurajya-Malanpur	-71	-47	0	114	0.00	1.34	-1.34		
220 KV Badod-Kota/Morak	-176	-35	0	2	0.00	1.71	-1.71		
Mundra-Mohindergarh(HVDC Bipole)	301	298	303	0	7.37	0.00	7.37		
400 KV RAPPCC-Sujalpur	120	41	303	71	1.57	0.00	1.57		
400 KV Vindhychal-Rihand	948	965	0	971	0.00	23.17	-23.17		
765 kV Phagi-Gwalior (D/C)	257	624	915	0	16.13	0.00	16.13		
+/- 800 kV HVDC Champa-Kurushetra	2000	2500	2500	0	53.57	0	53.57		
765KV Orai-Jabalpur	705	1065	1352	0	22.60	0	22.60		
765KV Orai-Salna	0	0	0	0	0.00	0	0.00		
765KV Orai-Gwalior	0	0	0	0	0.00	0	0.00		
<b>Sub Total WR</b>	<b>5064</b>	<b>6911</b>			<b>148.05</b>	<b>39.78</b>	<b>108.27</b>		
400 kv Sasaram - Varanasi	-2	-1	33	19	0.00	0.21	-0.21		
400 kv Sasaram - Allahabad	-59	-79	0	105	0.00	1.55	-1.55		
400 KV MZP- GKP (D/C)	21	62	177	3	1.74	0.00	1.74		
400 KV Patna-Balia(D/C) X 2	299	459	598	0	10.75	0.00	10.75		
400 KV B'Sharif-Balia (D/C)	130	158	218	0	4.17	0.00	4.17		
765 KV Gaya-Balia	178	305	381	0	7.36	0.00	7.36		
765 KV Gaya-Varanasi (D/C)	99	155	273	0	4.57	0.00	4.57		
220 KV Pusauli-Sahupuri	166	136	169	0	3.26	0.00	3.26		
132 KV Knasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
132 KV Son Ngr-Rihand	0	0	0	0	0.00	0.73	-0.73		
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
765 KV Sasaram - Fatehpur	-90	-85	51	90	0.00	0.42	-0.42		
400 KV Mothari-GKP (D/C)	136	180	230	0	4.16	0.00	4.16		
400 kv B'Sharif - Varanasi (D/C)	-32	-8	154	21	1.11	0.00	1.11		
+/- 800 KV HVDC Alipurduar-Agra	500	500	500	0	11.71	0.00	11.71		
<b>Sub Total ER</b>	<b>1346</b>	<b>1782</b>			<b>48.82</b>	<b>2.91</b>	<b>45.92</b>		
+/- 800 KV HVDC BiswanathChariali-Agra	0	0	0	0.00	0.00	0.00	0.00		
<b>Sub Total NER</b>	<b>0</b>	<b>0</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>		
<b>Total IR Exch</b>	<b>6410</b>	<b>8693</b>			<b>196.87</b>	<b>42.68</b>	<b>154.19</b>		

**VI(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]**

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange ShdI (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
61.01	0.08	61.09	-12.69	-17.20	4.71	-1.57	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
53.11	104.61	157.72	45.92	108.27	154.19	-7.20	3.67	-3.53

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

Element	Peak(19:00 Hrs)		Dff Peak(03:00 Hrs)		Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	12	-37	0	0	0	0	0	0	-0.50

**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	0.79	28.74	84.10	67.55	3.10	0.64	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)		
50.14	18.02	49.73	21.05	49.94	0.077	50.06	49.82	32.45	

## 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	
Rihand	400	402	13:05	398	22:49	0.0	0.0	0.0	0.0
Gorakhpur	400	416	8:15	399	18:40	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	417	8:15	400	18:40	0.0	0.0	0.0	0.0
Kanpur	400	420	7:52	408	18:42	0.0	0.0	0.0	0.0
Dadri	400	420	3:56	408	11:19	0.0	0.0	0.0	0.0
Ballabgarh	400	423	3:59	407	11:26	0.0	0.0	8.5	0.0
Bawana	400	421	3:53	405	18:42	0.0	0.0	2.9	0.0
Bassi	400	419	4:01	402	22:27	0.0	0.0	0.0	0.0
Hissar	400	419	3:56	402	19:13	0.0	0.0	0.0	0.0
Moga	400	423	3:59	405	18:40	0.0	0.0	7.7	0.0
Abdullapur	400	425	3:59	404	18:39	0.0	0.0	15.2	0.0
Nalagarh	400	430	3:59	409	18:43	0.0	0.0	34.1	0.0
Kishenpur	400	427	3:56	410	6:55	0.0	0.0	16.7	0.0
Wagoora	400	410	3:45	392	19:38	0.0	0.0	0.0	0.0
Amritsar	400	427	3:49	409	10:53	0.0	0.0	18.2	0.0
Kashipur	400	402	0:00	402	0:00	0.0	0.0	0.0	0.0
Hamirpur	400	425	4:00	408	7:14	0.0	0.0	15.0	0.0
Rishikesh	400	412	5:00	390	18:54	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	780	13:04	756	0:10	0.0	0.0	0.0	0.0	
Balia	765	789	7:45	761	18:40	0.0	0.0	0.0	0.0	
Moga	765	805	3:59	774	18:42	0.0	0.0	7.7	0.0	
Agra	765	789	13:04	770	0:12	0.0	0.0	0.0	0.0	
Bhiwani	765	802	3:29	778	11:24	0.0	0.0	7.0	0.0	
Unnao	765	779	8:17	755	18:55	0.0	0.0	0.0	0.0	
Lucknow	765	793	8:17	765	18:43	0.0	0.0	0.0	0.0	
Meerut	765	807	3:57	777	11:22	0.0	0.0	15.9	0.0	
Jhatikara	765	798	3:59	772	11:24	0.0	0.0	0.0	0.0	
Bareilly 765 kV	765	796	8:17	766	18:39	0.0	0.0	0.0	0.0	
Anta	765	787	3:31	768	11:25	0.0	0.0	0.0	0.0	
Phagi	765	798	4:00	774	11:25	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	473.73	329.69	464.59	186.89	164.29	406.35
Pong	426.72	384.05	394.13	111.75	396.59	151.67	35.20	93.02
Tehri	829.79	740.04	767.45	184.97	764.25	156.60	86.38	180.00
Koteshwar	612.50	598.50	610.01	4.57	610.82	4.95	180.00	177.50
Chamera-I	760.00	748.75	753.97	0.00	0.00	0.00	74.31	64.64
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	495.77	1.51	506.29	0.84	71.10	73.37

\* 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	-1118	0	0	-1269	0	0	-28.04	0.00	-28.04
Delhi	-448	-309	0	-453	0	0	-10.12	-0.44	-10.56
Haryana	-505	33	0	-555	0	0	-14.17	-0.44	-14.62
HP	256	69	0	198	-269	0	7.88	-1.22	6.66
J&K	516	198	0	516	119	0	11.84	4.37	16.21
CHD	-45	10	0	-45	0	0	-0.54	-0.05	-0.59
Rajasthan	1	-492	0	1	-154	0	0.04	-8.55	-8.51
UP	67	-25	0	67	-50	0	1.55	-0.85	0.70
Uttarakhand	196	506	0	196	517	0	4.88	11.50	16.38
Total	-1080	-11	0	-1346	164	0	-26.69	4.33	-22.37

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-1118	-1421	0	0	0	0
Delhi	-351	-455	298	-406	0	0
Haryana	-505	-762	33	-781	0	0
HP	545	149	167	-645	0	0
J&K	516	471	435	-524	0	0
CHD	0	-45	15	-40	0	0
Rajasthan	1	1	413	-1566	0	0
UP	67	62	0	-84	0	0
Uttarakhand	225	196	644	211	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	10
Haryana	1	24
Rajasthan	1	24
Delhi	3	21
UP	0	12
Uttarakhand	4	26
HP	5	36
J & K	5	69
Chandigarh	5	40

**XIII. System Constraints:**

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

**XV. Weather Conditions For 28.03.2018 :**

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

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

1. 400KV Main bay (bay no-412) of 500MVA,400/220kV ICT -III at Sikar(PG) first time charged at 14:02 hrs of 28.03.2018
2. 220KV Bay no- 206 of 500MVA,400/220kV ICT -III at Sikar(PG) first time charged at 16:44 hrs of 28.03.2018

**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 : 28.03.2018

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER