

# पाँवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

## उत्तर क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GO188682

Power Supply Position in Northern Region for 01.08.2018

Date of Reporting : 02.08.2018



### I. Regional Availability/Demand:

Evening Peak (20:00 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
53562	933	54495	49.80	47339	375	47714	50.05	1187.49	8.56

\* 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)							UI (OD: +ve), UD: (-ve))				
	Thermal	Hydro	Gas/Naptha/ Diesel	Solar	Wind	Other (Biomass/ Small hydro/ Co-Generation etc.)	Total	Drawal Schedule (Net MU)	Actual Drawal (Net MU)	UI (Net MU)	Consumption (Net MU)	Shortages* (MU)
Punjab	83.67	16.60	0.00	5.80	0.00	2.26	108.33	145.25	144.44	-0.81	252.76	0.00
Haryana	40.53	0.84	0.00	0.17	0.00	0.59	42.12	140.42	143.86	3.44	185.98	0.00
Rajasthan	91.36	0.00	3.12	8.54	48.24	0.29	151.54	64.68	66.08	1.40	217.62	0.00
Delhi	5.60	0.00	11.52	0.00	0.00	0.00	17.12	96.76	95.46	-1.30	112.58	0.03
UP	124.54	21.80	0.00	1.40	0.00	2.40	150.14	157.76	159.21	1.45	309.34	0.00
Uttarakhand	0.00	18.19	0.00	0.50	0.00	0.00	18.69	20.78	20.36	-0.42	39.04	0.00
HP	0.00	18.39	0.00	0.00	0.00	9.05	27.44	-1.59	0.86	2.45	28.30	0.00
J & K	0.00	25.58	0.00	0.00	0.00	0.00	25.58	17.86	10.21	-7.65	35.79	8.52
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.36	6.08	-0.28	6.08	0.00
<b>Total</b>	<b>345.70</b>	<b>101.40</b>	<b>14.64</b>	<b>16.39</b>	<b>48.24</b>	<b>14.58</b>	<b>540.95</b>	<b>648.28</b>	<b>646.54</b>	<b>-1.74</b>	<b>1187.49</b>	<b>8.56</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 (20:00 Hrs) MW				Off Peak (03:00 Hrs) MW				UI/OA/PX (OD/Import: +ve), UD/Export: (-ve)		
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	Maximum Demand Met (MW) and Time(Hrs)	Shortage (MW)	
Punjab	10934	0	125	1926	9853	0	2177	11154	11154	15	0
Haryana	8555	0	-88	2196	7724	0	5	2231	9054	22	0
Rajasthan	8608	0	-350	-504	9056	0	163	-610	10437	24	0
Delhi	4957	0	-218	623	4305	0	80	672	5742	24	0
UP	15473	470	-68	1286	12677	180	205	1177	15916	21	0
Uttarakhand	1750	0	-73	371	1446	0	-81	162	1788	21	0
HP	1155	0	115	-1921	975	0	48	-1730	1347	10	0
J&K	1852	463	-71	-567	1104	195	-405	-1063	1947	21	487
Chandigarh	279	0	-18	-40	198	0	-39	-75	309	16	0
<b>Total</b>	<b>53562</b>	<b>933</b>	<b>-646</b>	<b>3370</b>	<b>47339</b>	<b>375</b>	<b>-187</b>	<b>2941</b>	<b>55377</b>	<b>21</b>	<b>487</b>

\* STOA figures are at sellers boundary & PX figures are at regional boundary.

# figures may not be at simultaneous hour.

Diversity is: 1.04

### III. Regional Entities :

A. NTPC	Station/ Constituent	Inst. Capacity	Declared	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
		(Effective) MW	Capacity(MW)	(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
A. NTPC	Singrauli STPS (6*200+2*500)	2000	1189	1363	1214	28.69	1196	27.90	0.79
	Rihand I STPS (2*500)	1000	923	1008	973	21.85	910	21.67	0.18
	Rihand II STPS (2*500)	1000	943	996	842	21.92	913	22.15	-0.23
	Rihand III STPS (2*500)	1000	943	1000	755	21.87	911	21.19	0.68
	Dadri I STPS (4*210)	840	769	787	470	12.65	527	12.91	-0.26
	Dadri II STPS (2*490)	980	929	924	574	16.61	692	16.24	0.37
	Unchahar I TPS (2*210)	420	382	371	262	6.37	266	6.88	-0.51
	Unchahar II TPS (2*210)	420	191	200	116	2.93	122	3.29	-0.37
	Unchahar III TPS (1*210)	210	191	150	129	2.93	122	3.31	-0.38
	Unchahar IV TPS (1*500)	500	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajhar) (3*500)	1500	1421	990	590	16.32	680	15.79	0.53
	Dadri GPS (4*130.19+2*154.51)	830	0	0	0	0.00	0	0.00	0.00
	Anta GPS (3*88.71+1*153.2)	419	0	0	0	0.00	0	0.00	0.00
	Auraya GPS (4*111.19+2*109.30)	663	0	147	95	2.48	103	2.50	-0.02
	Dadri Solar(5)	5	1	0	0	0.02	1	0.02	0.00
	Unchahar Solar(10)	10	0	0	0	0.01	1	0.01	0.00
	Singrauli Solar(15)	15	1	0	0	0.01	0	0.01	0.00
	KHEP(4*200)	800	872	867	865	20.86	869	20.93	-0.07
	<b>Sub Total (A)</b>	<b>12612</b>	<b>8754</b>	<b>8803</b>	<b>6885</b>	<b>176</b>	<b>7313</b>	<b>175</b>	<b>0.72</b>
B. NPC	NAPS (2*220)	440	383	417	422	9.16	382	9.19	-0.03
	RAPS- B (2*220)	440	357	402	410	8.76	365	8.57	0.19
	RAPS- C (2*220)	440	410	451	452	9.69	404	9.78	-0.09
	<b>Sub Total (B)</b>	<b>1320</b>	<b>1150</b>	<b>1270</b>	<b>1284</b>	<b>27.62</b>	<b>1151</b>	<b>27.54</b>	<b>0.08</b>
C. NHPC	Chamera I HPS (3*180)	540	534	536	537	12.90	537	12.80	0.10
	Chamera II HPS (3*100)	300	297	307	303	7.26	302	7.12	0.14
	Chamera III HPS (3*77)	231	229	236	236	5.63	234	5.50	0.13
	Bairasul HPS(3*60)	180	105	181	109	2.59	108	2.51	0.08
	Salal-HPS (6*115)	690	683	699	700	16.79	700	16.39	0.40
	Tanakpur-HPS (3*31.4)	94	0	0	0	0.00	0	0.00	0.00
	Uri-I HPS (4*120)	480	475	481	482	11.59	483	11.40	0.18
	Uri-II HPS (4*60)	240	213	243	243	5.12	213	5.11	0.01
	Dhauliganga-HPS (4*70)	280	278	293	288	6.82	284	6.68	0.14
	Dulhasi-HPS (3*130)	390	379	397	384	9.19	383	9.10	0.09
	Sewa-II HPS (3*40)	120	120	124	73	1.26	52	1.20	0.06
	Parbati 3 (4*130)	520	179	484	0	4.26	178	4.30	-0.04
	Kishanganga(3*110)	330	186	0	0	4.45	185	4.46	-0.01
	<b>Sub Total (C)</b>	<b>4395</b>	<b>3678</b>	<b>3981</b>	<b>3355</b>	<b>88</b>	<b>3660</b>	<b>87</b>	<b>1.27</b>
D. SJVNL	NUPC (6*250)	1500	1586	1629	1609	37.70	1571	38.07	-0.37
	Rampur HEP (6*68.67)	412	438	448	450	10.59	441	10.51	0.08
	<b>Sub Total (D)</b>	<b>1912</b>	<b>2024</b>	<b>2077</b>	<b>2059</b>	<b>48.29</b>	<b>2012</b>	<b>48.58</b>	<b>-0.29</b>
E. THDC	Tehri HPS (4*250)	1000	920	922	928	18.84	785	18.93	-0.09
	Koteswar HPS (4*100)	400	302	400	371	7.26	302	7.24	0.02
	<b>Sub Total (E)</b>	<b>1400</b>	<b>1222</b>	<b>1322</b>	<b>1299</b>	<b>26.10</b>	<b>1088</b>	<b>26.17</b>	<b>-0.07</b>
F. BBMB	Bhakra HPS (2*108+3*126+5*157)	1379	698	1128	519	16.86	703	16.76	0.10
	Dehar HPS (6*165)	990	599	825	495	14.53	605	14.38	0.15
	Pong HPS (6*68)	386	141	236	118	3.43	143	3.39	0.04
	<b>Sub Total (F)</b>	<b>2765</b>	<b>1439</b>	<b>2189</b>	<b>1132</b>	<b>34.82</b>	<b>1451</b>	<b>34.53</b>	<b>0.29</b>
G. IPP(s)/JV(s)	Allain DuhanganHPS(IPP) (2*96)	192	0	202	135	3.52	147	3.68	-0.16
	Karcham Wangtoo HPS(IPP) (4*250)	1000	0	1100	1100	26.47	1103	26.08	0.39
	Malana Stg-II HPS (2*50)	100	0	112	111	2.62	109	2.34	0.28
	Shree Cement TPS (2*150)	300	0	221	133	3.45	144	4.03	-0.58
	Budhil HPS(IPP) (2*35)	70	0	75	75	1.77	74	1.65	0.12
	Sainj HPS (IPP) (2*50)	100	0	0	0	2.62	0	2.61	0.00
	<b>Sub Total (G)</b>	<b>1762</b>	<b>0</b>	<b>1710</b>	<b>1553</b>	<b>37.83</b>	<b>1576</b>	<b>37.78</b>	<b>0.05</b>
<b>H. Total Regional Entities (A-G)</b>		<b>26167</b>	<b>18266</b>	<b>21352</b>	<b>17567</b>	<b>438.01</b>	<b>18251</b>	<b>435.97</b>	<b>2.04</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	320	11.13	464
	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	713	383	12.76	532
	Goidndwal(GVK) (2*270)	540	246	246	5.06	211
	Rajpura (2*700)	1400	660	660	15.52	647
	Talwandi Saboo (3*660)	1980	1841	1841	39.18	1632
	<b>Thermal (Total)</b>	<b>6560</b>	<b>4090</b>	<b>3450</b>	<b>83.67</b>	<b>3486</b>
	Total Hydro	1000	629	688	16.60	692
	Wind Power	0	0	0	0.00	0
	Biomass	303	0	0	2.26	94
	Solar	859	0	0	5.80	242
	<b>Renewable(Total)</b>	<b>1162</b>	<b>0</b>	<b>0</b>	<b>8.06</b>	<b>336</b>
	<b>Total Punjab</b>	<b>8722</b>	<b>4719</b>	<b>4138</b>	<b>108.33</b>	<b>4514</b>
Haryana	Panipat TPS (2*210+2*250)	920	399	394	9.72	405
	DCRTPP (Yamuna nagar) (2*300)	600	495	471	11.16	465
	Faridabad GPS (NTPC)(2*137.75+1*156)	432	0	0	0.00	0
	RGTPP (Khedar) (IPP) (2*600)	1200	383	377	9.23	384
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	487	376	10.43	435
	<b>Thermal (Total)</b>	<b>4497</b>	<b>1764</b>	<b>1618</b>	<b>40.53</b>	<b>1689</b>
	Total Hydro	62	28	28	0.84	35
	Wind Power	0	0	0	0.00	0
	Biomass	106	0	0	0.59	24
	Solar	50	0	0	0.17	7
	<b>Renewable(Total)</b>	<b>156</b>	<b>0</b>	<b>0</b>	<b>0.75</b>	<b>31</b>
	<b>Total Haryana</b>	<b>4715</b>	<b>1792</b>	<b>1646</b>	<b>42.12</b>	<b>1755</b>
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	800	800	19.18	799
	suratgarh TPS (6*250)	1500	1	355	4.49	187
	Chabra TPS (4*250)	1000	1170	1173	21.32	888
	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	133	128	3.12	130
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingar (NLC) (2*125)	250	14	0	0.01	0
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	831	471	14.67	611
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	499	403	10.39	433
	Kawai(Adani) (2*660)	1320	1136	854	21.32	888
	<b>Thermal (Total)</b>	<b>9536</b>	<b>4584</b>	<b>4184</b>	<b>94.48</b>	<b>3937</b>
	Total Hydro	550	0	0	0.00	0
	Wind power	4292	2025	2071	48.24	2010
	Biomass	102	12	12	0.29	12
	Solar	1995	28	0	8.54	356
	Renewable/Others (Total)	6389	2065	2083	57.06	2377
	<b>Total Rajasthan</b>	<b>16475</b>	<b>6649</b>	<b>6267</b>	<b>151.54</b>	<b>6314</b>
UP	Anpara TPS (3*210+2*500)	1630	1310	838	27.70	1154
	Obra TPS (2*50+2*94+5*200)	1194	507	312	8.90	371
	Paricha TPS (2*110+2*220+2*250)	1160	802	469	13.60	567
	Panki TPS (2*105)	210	0	0	0.00	0
	Harduaganj TPS (1*60+1*105+2*250)	665	451	255	7.50	313
	Tanda TPS (NTPC) (4*110)	440	390	222	6.34	264
	Roza TPS (IPP) (4*300)	1200	0	0	0.00	0
	Anpara-C (IPP) (2*600)	1200	1082	666	20.90	871
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Anpara-D(2*500)	1000	945	938	21.30	888
	Lalitpur TPS(3*660)	1980	613	346	9.80	408
	Bara(3*660)	1980	352	352	8.50	354
	<b>Thermal (Total)</b>	<b>13109</b>	<b>6452</b>	<b>4398</b>	<b>124.54</b>	<b>5189</b>
	Vishnuparyag HPS (IPP)(4*110)	440	435	435	10.50	438
	Alaknanada(4*82.5)	330	346	348	8.30	346
	Other Hydro	527	211	122	3.00	125
	Cogeneration	1360	100	100	2.40	100
	Wind Power	0	0	0	0.00	0
	Biomass	26	0	0	0.00	0
	Solar	472	0	0	1.40	58
	<b>Renewable(Total)</b>	<b>498</b>	<b>0</b>	<b>0</b>	<b>1.40</b>	<b>58</b>
	<b>Total UP</b>	<b>16264</b>	<b>7544</b>	<b>5403</b>	<b>150.14</b>	<b>6256</b>
Uttarakhand	Other Hydro	1250	765	758	18.19	758
	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	0.50	21
	Small Hydro (< 25 MW)	180	0	0	0.00	0
	<b>Renewable(Total)</b>	<b>407</b>	<b>0</b>	<b>0</b>	<b>0.50</b>	<b>21</b>
	<b>Total Uttarakhand</b>	<b>2107</b>	<b>765</b>	<b>758</b>	<b>18.69</b>	<b>779</b>
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	72	76	1.78	74
	Pragati Gas Turbine (2x104+ 1x122)	330	146	151	3.66	152
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	260	250	6.09	254
	Badarpur TPS (NTPC) (3*95+2*210)	705	272	148	5.60	233
	<b>Thermal (Total)</b>	<b>2917</b>	<b>750</b>	<b>625</b>	<b>17.12</b>	<b>713</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>750</b>	<b>625</b>	<b>17.12</b>	<b>713</b>

HP	Baspa HPS (IPP) (3*100)	300	331	331	7.92	330
	Malana HPS (IPP) (2*43)	86	98	105	2.43	101
	Other Hydro (>25MW)	372	336	338	8.04	335
	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	387	377	9.05	377
	Renewable(Total)	486	387	377	9.05	377
	Total HP	1244	1152	1151	27.44	1143
J & K	Baglihar HPS (IPP) (3*150+3*150)	900	881	881	21.16	882
	Other Hydro/IPP(including 98 MW Small Hydro)	308	190	190	4.42	184
	Gas/Diesel/Others	0	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
	Renewable(Total)	98	0	0	0.00	0
	Total J & K	1208	1071	1071	25.58	1066
Total State Control Area Generation		53670	24443	21059	540.95	22539
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			12789	9911.74	235.52	9814
Total Regional Availability(Gross)		79837	58583	48538	1214.49	50604

IV. Total Hydro Generation:

Regional Entities Hydro	12564	11850	10056	252.29	10438
State Control Area Hydro	7468	4637	4601	101.40	4623
Total Regional Hydro	20032	16487	14657	353.69	15061

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.05	2
State Control Area Renewable	9214	2452	2460	76.81	3200
Total Regional Renewable	9244	2452	2460	76.85	3202

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

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal(HVDC B/B)	-250	-250	0	250	0.00	6.08	-6.08
765 KV Gwalior-Agra (D/C)	2770	1881	2770	0	48.33	0.00	48.33
400 KV Zerdar-Kankroli	128	-69	128	154	0.00	0.27	-0.27
400 KV Zerdar-Bhinmal	62	59	133	154	0.10	0.00	0.10
220 KV Auraiya-Malanpur	36	24	0	27	0.49	0.00	0.49
220 KV Badod-Kota/Morak	19	64	218	0	2.06	0.00	2.06
Mundra-Mohindergarh(HVDC Bipole)	1402	802	1805	0	25.26	0.00	25.26
400 KV RAPPC-Sujalpur	210	111	250	-48	3.14	0.00	3.14
400 KV Vindhychal-Rihand	-954	-715	0	503	0.00	21.57	-21.57
765 kV Phagt-Gwalior (D/C)	964	1035	1285	0	25.94	0.00	25.94
+/- 800 kV HVDC Champa-Kurushetra	2500	1600	2000	0	38.29	0	38.29
765KV Orai-Jabalpur	1243	788	1243	0	19.94	0	19.94
765KV Orai-Satna	1848	1556	1848	0	39.81	0	39.81
765KV Orai-Gwalior	383	286	0	420	0.00	8	-8.04
<b>Sub Total WR</b>	<b>10362</b>	<b>7173</b>			<b>203.37</b>	<b>35.96</b>	<b>167.41</b>
400 kV Sasaram - Varanasi	129	109	129	0	3.65	0.00	3.65
400 kV Sasaram - Allahabad	26	35	57	0	0.97	0.00	0.97
400 KV MZP- GKP (D/C)	383	436	639	0	12.08	0.00	12.08
400 KV Patna-Balia(D/C) X 2	641	771	898	0	18.36	0.00	18.36
400 KV B'Shanif-Balia (D/C)	135	183	258	0	4.56	0.00	4.56
765 KV Gaya-Balia	347	253	360	0	5.79	0.00	5.79
765 KV Gaya-Varanasi (D/C)	282	246	449	0	6.65	0.00	6.65
220 KV Pusaui-Sahupuri	130	100	130	0	2.72	0.00	2.72
132 KV K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
132 KV Son Ngr-Rihand	-28	-30	0	34	0.00	0.56	-0.56
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-248	-162	16	251	0.00	2.46	-2.46
400 KV Motihari -GKP (D/C)	-220	-146	0	274	0.00	4.27	-4.27
400 kV B'Shanif - Varanasi (D/C)	50	-56	205	76	2.01	0.00	2.01
+/- 800 KV HVDC Alipurduar-Agra	400	400	400	0	9.24	0.00	9.24
<b>Sub Total ER</b>	<b>2027</b>	<b>2139</b>			<b>66.02</b>	<b>7.29</b>	<b>58.73</b>
+/- 800 KV HVDC BiswanathChariaili-Agra	400	600	600	0.00	9.39	0.00	9.39
<b>Sub Total NER</b>	<b>400</b>	<b>600</b>			<b>9.39</b>	<b>0.00</b>	<b>9.39</b>
<b>Total IR Exch</b>	<b>12789</b>	<b>9912</b>			<b>278.78</b>	<b>43.25</b>	<b>235.52</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
45.93	3.72	49.65	33.60	50.60	-26.08	-5.40	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
53.45	188.70	242.15	68.12	167.41	235.52	14.67	-21.29	-6.63

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

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	8	0	0	23	0	0	-0.11

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	2.60	53.30	85.30	10.90	1.70	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)	
50.19	13.03	49.85	22.20	49.99	0.025	0.049	0.00	0.00	14.70

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	4:01	400	0:04	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	421	16:01	394	19:19	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	412	16:02	382	5:43	0.0	0.0	0.0	0.0	0.0
Kanpur	400	417	16:03	402	0:38	0.0	0.0	0.0	0.0	0.0
Dadri	400	411	7:01	398	22:29	0.0	0.0	0.0	0.0	0.0
Ballabgarh	400	411	7:04	396	22:14	0.0	0.0	0.0	0.0	0.0
Bawana	400	409	16:02	397	0:17	0.0	0.0	0.0	0.0	0.0
Bassi	400	417	16:02	399	22:17	0.0	0.0	0.0	0.0	0.0
Hissar	400	407	16:04	394	0:07	0.0	0.0	0.0	0.0	0.0
Moga	400	403	9:41	393	0:17	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	408	8:01	398	0:12	0.0	0.0	0.0	0.0	0.0
Nalagarh	400	408	8:06	402	0:14	0.0	0.0	0.0	0.0	0.0
Kishenpur	400	407	13:06	400	21:16	0.0	0.0	0.0	0.0	0.0
Wagooora	400	403	4:44	388	20:28	0.0	0.0	0.0	0.0	0.0
Amritsar	400	405	8:01	396	0:03	0.0	0.0	0.0	0.0	0.0
Kashipur	400	402	0:00	402	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	405	8:30	398	0:03	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	404	4:06	391	23:15	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	778	16:04	751	0:38	0.0	0.0	0.0	0.0	0.0
Balia	765	790	16:02	756	19:19	0.0	0.0	0.0	0.0	0.0
Moga	765	784	10:01	756	0:17	0.0	0.0	0.0	0.0	0.0
Agra	765	791	16:02	760	22:32	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	792	16:00	767	0:11	0.0	0.0	0.0	0.0	0.0
Unnao	765	771	16:04	741	22:30	0.0	0.7	0.0	0.0	0.0
Lucknow	765	794	16:02	758	23:07	0.0	0.0	0.0	0.0	0.0
Meerut	765	798	16:02	767	23:38	0.0	0.0	0.0	0.0	0.0
Jhatikara	765	792	16:02	759	22:21	0.0	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	789	16:02	754	23:08	0.0	0.0	0.0	0.0	0.0
Anta	765	795	4:12	775	22:20	0.0	0.0	0.0	0.0	0.0
Phagi	765	795	15:57	770	21:47	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	478.16	420.92	496.89	971.87	922.17	566.34
Pong	426.72	384.05	399.73	209.93	412.13	566.84	462.30	1004.17
Tehri	829.79	740.04	794.90	527.54	798.85	589.90	542.80	479.00
Koteswar	612.50	598.50	610.25	4.69	610.10	4.69	479.00	479.38
Chamera-I	760.00	748.75	757.53	0.00	0.00	0.00	312.75	350.57
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	509.95	5.58	522.93	10.77	327.19	244.22

\* NA: Not Available

X(A). Short-Term Open Access Details:

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (20:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	2177	0	0	2178	-251	0	52.26	-0.75	51.51
Delhi	921	-249	0	689	-66	0	20.42	-3.45	16.97
Haryana	2141	90	0	2195	0	0	44.66	-1.74	42.92
HP	-1496	-234	0	-1521	-400	0	-33.48	-7.07	-40.55
J&K	-962	-101	0	-962	395	0	-23.10	4.77	-18.33
CHD	0	-75	0	0	-40	0	0.00	-0.93	-0.93
Rajasthan	-23	-587	0	-23	-481	0	-0.64	-7.10	-7.74
UP	1785	-609	0	1286	0	0	35.10	-17.45	17.65
Uttarakhand	-167	329	0	-167	539	0	-4.02	8.36	4.34
Total	4377	-1436	0	3674	-304	0	91.20	-25.36	65.84

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	2178	2177	0	-251	0	0
Delhi	1002	688	86	-638	0	0
Haryana	2354	1666	108	-1086	0	0
HP	-1286	-1724	-178	-400	0	0
J&K	-962	-962	524	-172	0	0
CHD	0	0	0	-90	0	0
Rajasthan	71	-133	145	-1871	0	0
UP	1797	1266	0	-1015	0	0
Uttarakhand	-167	-167	539	276	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	12
Haryana	0	12
Rajasthan	1	17
Delhi	3	28
UP	1	18
Uttarakhand	2	19
HP	1	16
J & K	3	20
Chandigarh	2	36

#### XIII. System Constraints:

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

#### XV. Weather Conditions For 01.08.2018 :

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

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

220kV Gurgaon(PG)- Sector 33 ckt 2 charged at 20:13hrs and synchronised from Gurgaon(PG) at 20:45hrs.

#### 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 : 01.08.2018

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER