



	<b>Thermal (Total)</b>	<b>6560</b>	<b>4173</b>	<b>3547</b>	97.93	<b>4080</b>
	Total Hydro	1000	846	782	19.89	829
	Wind Power	0	0	0	0.00	0
	Biomass	288	0	0	0.07	3
	Solar	560	0	0	0.06	3
	<b>Renewable(Total)</b>	<b>848</b>	<b>0</b>	<b>0</b>	<b>0.13</b>	<b>5</b>
	<b>Total Punjab</b>	<b>8408</b>	<b>5019</b>	<b>4329</b>	<b>117.95</b>	<b>4914</b>
Haryana	Panipat TPS (2*210+2*250)	920	842	835	19.14	797
	DCRTPP (Yamuna nagar) (2*300)	600	548	551	12.49	520
	Faridabad GPS (NTPC)(2*137.75+1*156)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	573	570	12.44	519
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	592	588	12.93	539
	<b>Thermal (Total)</b>	<b>4497</b>	<b>2555</b>	<b>2544</b>	<b>57.00</b>	<b>2375</b>
	Total Hydro	62	33	34	0.84	35
	Wind Power	0	0	0	0.00	0
	Biomass	40	0	0	0.00	0
	Solar	0	0	0	0.00	0
	<b>Renewable(Total)</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>
	<b>Total Haryana</b>	<b>4599</b>	<b>2588</b>	<b>2578</b>	<b>57.84</b>	<b>2410</b>
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	144	145	3.42	142
	suratgarh TPS (6*250)	1500	1	174	3.17	132
	Chabra TPS (4*250)	1000	1513	876	27.96	1165
	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	185	187	4.57	190
	RAPS A (NPC) (1*100+1*200)	300	165	164	4.57	190
	Barsingar (NLC) (2*125)	250	219	214	4.62	193
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	532	301	8.77	366
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	0	0	0.00	0
	Kawai(Adani) (2*660)	1320	891	861	21.05	877
	<b>Thermal (Total)</b>	<b>9536</b>	<b>3650</b>	<b>2922</b>	<b>78.13</b>	<b>3255</b>
	Total Hydro	550	0	0	0.00	0
	Wind power	4017	1083	1279	17.43	726
	Biomass	99	29	29	0.68	29
	Solar	1295	0	0	1.88	78
	Renewable/Others (Total)	5411	1112	1308	19.99	833
	<b>Total Rajasthan</b>	<b>15497</b>	<b>4762</b>	<b>4230</b>	<b>98.12</b>	<b>4088</b>
UP	Anpara TPS (3*210+2*500)	1630	908	477	16.70	696
	Obra TPS (2*50+2*94+5*200)	1194	410	445	9.20	383
	Paricha TPS (2*110+2*220+2*250)	1160	796	584	16.60	692
	Panki TPS (2*105)	210	0	0	0.00	0
	Harduaganj TPS (1*60+1*105+2*250)	665	446	319	9.40	392
	Tanda TPS (NTPC) (4*110)	440	289	248	6.60	275
	Roza TPS (IPP) (4*300)	1200	810	669	17.90	746
	Anpara-C (IPP) (2*600)	1200	1136	1128	26.50	1104
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Anpara-D(2*500)	1000	719	896	19.80	825
	Lalitpur TPS(3*660)	1980	1865	1397	34.40	1433
	Bara(2*660)	1320	555	602	14.30	596
	<b>Thermal (Total)</b>	<b>12449</b>	<b>7934</b>	<b>6765</b>	<b>171.40</b>	<b>7142</b>
	Vishnuparyag HPS (IPP)(4*110)	440	0	435	8.00	333
	Alaknanda(4*82.5)	330	342	340	8.20	342
	Other Hydro	527	324	225	5.60	233
	Cogeneration	981	0	0	0.00	0
	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>8600</b>	<b>7765</b>	<b>193.20</b>	<b>8050</b>
	Uttarakhand	Other Hydro	1250	859	855	20.59
Total Gas		225	274	280	6.64	277
Wind Power		0	0	0	0.00	0
Biomass		127	0	0	0.00	0
Solar		100	0	0	0.67	28
Small Hydro (< 25 MW)		180	0	0	0.00	0
<b>Renewable(Total)</b>		<b>407</b>	<b>0</b>	<b>0</b>	<b>0.67</b>	<b>28</b>
<b>Total Uttarakhand</b>		<b>1882</b>	<b>1133</b>	<b>1135</b>	<b>27.90</b>	<b>1162</b>
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	75	74	1.84	77
	Pragati Gas Turbine (2x104+ 1x122)	330	153	155	3.75	156
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	420	417	10.02	418
	Badarpur TPS (NTPC) (3*95+2*210)	705	326	331	7.17	299
	<b>Thermal (Total)</b>	<b>2917</b>	<b>974</b>	<b>977</b>	<b>22.79</b>	<b>949</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>974</b>	<b>977</b>	<b>22.79</b>	<b>949</b>	
HP	Baspa HPS (IPP) (3*100)	300	300	330	7.61	317
	Malana HPS (IPP) (2*43)	86	107	107	2.53	105
	Other Hydro (>25MW)	372	411	397	8.98	374
	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	262	308	7.25	302
	<b>Renewable(Total)</b>	<b>486</b>	<b>262</b>	<b>308</b>	<b>7.25</b>	<b>302</b>
<b>Total HP</b>	<b>1244</b>	<b>1080</b>	<b>1142</b>	<b>26.37</b>	<b>1099</b>	
J & K	Baqilhar HPS (IPP) (3*150+3*150)	900	883	881	21.16	882
	Other Hydro/IPP(including 98 MW Small Hydro)	308	202	200	4.81	201
	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>1085</b>	<b>1081</b>	<b>26</b>	<b>1082</b>	
<b>Total State Control Area Generation</b>		<b>50818</b>	<b>25241</b>	<b>23237</b>	<b>570.12</b>	<b>23755</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>8228</b>	<b>6056</b>	<b>155.64</b>	<b>6485</b>
<b>Total Regional Availability(Gross)</b>		<b>76555</b>	<b>54459</b>	<b>47755</b>	<b>1172.28</b>	<b>48845</b>

**IV. Total Hydro Generation:**

Regional Entities Hydro	12234	12093	10609	260.08	10837
State Control Area Hydro	7243	4843	5174	115.46	5115
<b>Total Regional Hydro</b>	<b>19477</b>	<b>16936</b>	<b>15783</b>	<b>375.54</b>	<b>15952</b>

**V. Total Renewable Generation:**

Regional Entities Renewable	30	0	0	0.09	4
State Control Area Renewable	7436	1374	1616	28.04	1168
<b>Total Regional Renewable</b>	<b>7466</b>	<b>1374</b>	<b>1616</b>	<b>28.13</b>	<b>1172</b>

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

Element	Peak(20:00 Hrs) MW	Off Peak(03:00 Hrs) MW	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
			Import	Export	Import	Export	
Vindhychal(HVDC B/B)	-500	-500	0	500	0.00	11.26	-11.26
765 KV Gwalior-Agra (D/C)	2305	1461	2377	0	40.00	0.00	40.00
400 KV Zerda-Kankroli	49	27	100	60	1.25	0.00	1.25
400 KV Zerda-Bhinmal	107	0	151	131	1.12	0.00	1.12
220 KV Auraiya-Malanpur	-12	-42	0	63	0.00	0.59	-0.59
220 KV Badod-Kota/Morak	124	117	223	0	3.22	0.00	3.22
Mundra-Mohindergarh(HVDC Bipole)	0	0	0	0	0.00	0.00	0.00
400 KV RAPP- Sujalpur	70	-30	154	-148	0.91	0.00	0.91
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	736	644	1117	0	16.76	0.00	16.76
+/- 800 kV HVDC Champa-Kurushetra	1500	1000	1500	0	27.07	0	27.07
<b>Sub Total WR</b>	<b>4379</b>	<b>2677</b>			<b>90.34</b>	<b>11.85</b>	<b>78.49</b>
400 kV Sasaram - Varanasi	186	176	198	0	4.49	0.00	4.49
400 kV Sasaram - Allahabad	57	67	68	0	1.41	0.00	1.41
400 KV MZP- GKP (D/C)	447	440	568	0	10.45	0.00	10.45
400 KV Patna-Balia(D/C) X 2	574	419	664	0	10.70	0.00	10.70
400 KV B Sharif-Balia (D/C)	395	317	442	0	8.00	0.00	8.00
765 KV Gaya-Balia	368	270	391	0	5.82	0.00	5.82
765 KV Gaya-Varanasi (D/C)	309	317	417	0	6.72	0.00	6.72
220 KV Pusaui-Sahupuri	0	0	0	0	0.00	0.00	0.00
132 KV K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
132 KV Son Ngr-Rihand	-6	-11	0	18	0.00	0.23	-0.23
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-109	-82	59	119	0.00	0.86	-0.86
400 KV Barh -GKP (D/C)	416	358	466	0	8.36	0.00	8.36
400 kV B Sharif - Varanasi (D/C)	62	108	8	165	2.55	0.00	2.55
+/- 800 KV HVDC Alipurduar-Agra	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>2699</b>	<b>2379</b>			<b>58.51</b>	<b>1.09</b>	<b>57.42</b>
+/- 800 KV HVDC BiswanathChariali-Agra	1150	1000	1150	0.00	19.74	0.00	19.74
<b>Sub Total NER</b>	<b>1150</b>	<b>1000</b>			<b>19.74</b>	<b>0.00</b>	<b>19.74</b>
<b>Total IR Exch</b>	<b>8228</b>	<b>6056</b>			<b>168.58</b>	<b>12.94</b>	<b>155.64</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
46.43	3.72	50.16	-1.14	-0.73	-5.36	0.00	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
43.65	116.18	159.83	77.15	78.49	155.64	33.50	-37.69	-4.19

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

Element	Peak(20:00 Hrs) MW	Off Peak(03:00 Hrs) MW	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
			Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	-29	-26	0	29	0	1	-0.60

**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	0.07	4.94	46.75	74.50	18.54	2.70	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 (Hz)	MIN (Hz)	
50.17	13.01	49.80	19.13	50.00	0.034	0.058	50.13	49.87	25.50

**VIII(A). Voltage profile 400 kV**

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviat
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV	
Rihand	400	405	12:20	400	12:22	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	417	5:01	396	19:16	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	413	5:03	392	20:27	0.0	0.0	0.0	0.0	0.0
Kanpur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Dadri	400	413	7:05	394	14:34	0.8	0.8	0.0	0.0	0.8
Ballabgarh	400	416	7:02	390	14:42	0.0	0.0	0.0	0.0	0.0
Bawana	400	408	7:04	390	14:42	0.0	0.0	0.0	0.0	0.0
Bassi	400	424	4:01	397	20:15	0.0	0.0	14.5	0.0	14.5
Hissar	400	409	7:02	391	14:38	0.0	0.0	0.0	0.0	0.0
Moga	400	405	3:59	391	20:27	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	404	5:23	391	14:42	0.0	0.0	0.0	0.0	0.0
Nalagarh	400	409	4:03	396	13:57	0.0	0.0	0.0	0.0	0.0
Kishenpur	400	409	3:48	398	20:26	0.0	0.0	0.0	0.0	0.0
Wagoora	400	406	3:30	385	20:28	0.0	7.7	0.0	0.0	0.0
Amritsar	400	408	3:49	394	14:23	0.0	0.0	0.0	0.0	0.0
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	406	0:26	393	14:38	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	410	17:34	394	14:25	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 Deviat
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	
Fatehpur	765	780	7:03	741	14:34	0.0	0.0	0.0	0.0	0.0
Balia	765	786	5:02	752	20:07	0.0	0.0	0.0	0.0	0.0
Moga	765	780	4:00	753	20:08	0.0	0.0	0.0	0.0	0.0
Agra	765	789	18:03	755	20:26	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	794	7:00	761	14:40	0.0	0.0	0.0	0.0	0.0

Unnao	765	770	7:03	735	20:11	0.0	5.1	0.0	0.0	0.0
Lucknow	765	789	7:05	752	20:12	0.0	0.0	0.0	0.0	0.0
Meerut	765	793	7:03	758	14:35	0.0	0.0	0.0	0.0	0.0
Jhatikara	765	794	7:04	757	14:42	0.0	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	787	4:02	751	20:26	0.0	0.0	0.0	0.0	0.0
Anta	765	792	2:57	759	20:28	0.0	0.0	0.0	0.0	0.0
Phagi	765	798	2:57	760	20:26	0.0	0.0	0.0	0.0	0.0

Note : \*0" in Max / Min Col -> 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	491.88	798.09	485.07	585.65	1627.82	692.06
Pong	426.72	384.05	407.37	416.46	399.42	203.01	1041.66	166.87
Tehri	829.79	740.04	789.70	448.00	783.60	371.99	639.45	492.00
Koteswar	612.50	598.50	609.79	4.44	609.88	4.95	492.00	483.52
Chamera-I	760.00	748.75	757.58	0.00	0.00	0.00	434.46	352.75
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	521.33	10.82	506.04	6.51	437.24	417.05

\* 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	1428	0	0	1428	0	0	33.91	0.13	34.04
Delhi	688	-268	0	540	-185	0	14.44	-3.25	11.18
Haryana	738	190	0	738	53	0	17.91	4.14	22.05
HP	-1573	-155	0	-1422	-127	-51	-32.87	-3.22	-36.09
J&K	-786	-493	0	-786	-106	0	-18.86	-6.92	-25.77
CHD	0	0	0	0	0	0	0.00	0.11	0.11
Rajasthan	-207	-282	0	-207	61	0	-5.18	5.40	0.21
UP	337	1373	0	250	795	0	4.47	8.82	13.29
Uttarakhand	-265	20	0	-265	53	0	-6.37	1.07	-5.30
Total	360	385	0	277	545	-51	7.45	6.27	13.72

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1428	1387	54	0	0	0
Delhi	738	526	78	-488	0	0
Haryana	935	738	241	-60	0	0
HP	-1202	-1675	-71	-206	0	-51
J&K	-786	-786	-56	-498	0	0
CHD	0	0	44	-45	0	0
Rajasthan	-207	-409	418	-353	0	0
UP	337	73	1373	-89	0	0
Uttarakhand	-265	-265	144	-56	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	5.21%

(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	1	16
Haryana	4	28
Rajasthan	0	11
Delhi	2	23
UP	0	9
Uttarakhand	4	32
HP	3	17
J & K	3	36
Chandigarh	4	25

**XIII. System Constraints:**

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

**XV. Weather Conditions For 25.07.2017 :**

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

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

1. 400 KV MainpuriUP-Mainpuri PG line-1 First time charged at 18.13 hrs from Mainpuri UP end and synchronized at Mainpuri PG end at 18.14 hrs on 25.07.17

2. 500 MVA ICT-1 at 400/220 KV Bhadla sub-station put on load at 18.42 hrs on 25.07.17

3. 765 KV Mainpuri-G. NoidaUP First time charged on 25.07.17 from G.Noida end

**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 : 25.07.2017**

**पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**