



	<b>Thermal (Total)</b>	<b>6560</b>	<b>2247</b>	<b>1962</b>	48.62	<b>2026</b>
	Total Hydro	1000	617	646	15.31	638
	Wind Power	0	0	0	0.00	0
	Biomass	288	0	0	0.36	15
	Solar	560	0	0	0.08	3
	<b>Renewable(Total)</b>	<b>848</b>	<b>0</b>	<b>0</b>	<b>0.44</b>	<b>18</b>
	<b>Total Punjab</b>	<b>8408</b>	<b>2864</b>	<b>2608</b>	<b>64.37</b>	<b>2682</b>
Haryana	Panipat TPS (2*210+2*250)	920	197	221	5.14	214
	DCRTPP (Yamuna nagar) (2*300)	600	572	556	12.31	513
	Faridabad GPS (NTPC)(2*137.75+1*156)	432	179	165	4.29	179
	RGTPP (khedar) (IPP) (2*600)	1200	553	475	11.06	461
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar (CLP) (2*660)	1320	450	585	12.57	524
	<b>Thermal (Total)</b>	<b>4497</b>	<b>1951</b>	<b>2002</b>	<b>45.36</b>	<b>1890</b>
	Total Hydro	62	9	32	0.46	19
	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>1960</b>	<b>2034</b>	<b>45.82</b>	<b>1909</b>
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	944	847	22.08	920
	suratgarh TPS (6*250)	1500	281	219	6.43	268
	Chabra TPS (4*250)	1000	614	472	13.67	570
	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	162	113	3.41	142
	RAPS A (NPC) (1*100+1*200)	300	161	166	4.07	169
	Barsingar (NLC) (2*125)	250	113	113	2.59	108
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	560	715	16.49	687
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	450	563	12.96	540
	Kawai(Adani) (2*660)	1320	1090	1192	28.38	1183
	<b>Thermal (Total)</b>	<b>9536</b>	<b>4375</b>	<b>4400</b>	<b>110.08</b>	<b>4587</b>
	Total Hydro	550	0	0	0.09	4
	Wind power	4017	175	129	5.74	239
	Biomass	99	18	18	0.44	18
	Solar	1295	0	0	2.67	111
	Renewable/Others (Total)	5411	193	147	8.84	368
	<b>Total Rajasthan</b>	<b>15497</b>	<b>4568</b>	<b>4547</b>	<b>119.01</b>	<b>4959</b>
UP	Anpara TPS (3*210+2*500)	1630	1362	1333	32.50	1354
	Obra TPS (2*50+2*94+5*200)	1194	672	669	15.67	653
	Paricha TPS (2*110+2*220+2*250)	1160	2223	2190	16.23	676
	Panki TPS (2*105)	210	140	81	2.72	113
	Harduaganj TPS (1*60+1*105+2*250)	665	542	513	12.79	533
	Tanda TPS (NTPC) (4*110)	440	383	385	9.20	383
	Roza TPS (IPP) (4*300)	1200	1080	1080	24.73	1031
	Anpara-C (IPP) (2*600)	1200	522	527	12.50	521
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	405	403	9.50	396
	Anpara-D(2*500)	1000	860	857	20.30	846
	Lalitpur TPS(3*660)	1980	711	716	17.17	716
	Bara(2*660)	1320	920	923	22.13	922
	<b>Thermal (Total)</b>	<b>12449</b>	<b>9820</b>	<b>9677</b>	<b>195.44</b>	<b>8143</b>
	Vishnuparyag HPS (IPP)(4*110)	440	436	435	10.08	420
	Alaknanda(4*82.5)	330	152	84	3.19	133
	Other Hydro	527	171	173	3.51	146
	Cogeneration	981	200	200	4.80	200
	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>10779</b>	<b>10569</b>	<b>217.02</b>	<b>9043</b>	
Uttarakhand	Other Hydro	1250	659	555	14.56	607
	Total Gas	225	276	274	5.94	248
	Wind Power	0	0	0	0.00	0
	Biomass	127	0	0	0.00	0
	Solar	20	0	0	0.74	31
	Small Hydro (< 25 MW)	180	0	0	0.00	0
	<b>Renewable(Total)</b>	<b>327</b>	<b>0</b>	<b>0</b>	<b>0.74</b>	<b>31</b>
	<b>Total Uttarakhand</b>	<b>1802</b>	<b>935</b>	<b>829</b>	<b>21.25</b>	<b>885</b>
Delhi	Raighat TPS (2*67.5)	135	0	0	-0.01	0
	Delhi Gas Turbine (6x30 + 3x34)	282	64	41	1.44	60
	Pragati Gas Turbine (2x104+ 1x122)	330	148	154	3.60	150
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	306	-6	2.49	104
	Badarpur TPS (NTPC) (3*95+2*210)	705	322	324	8.07	336
	<b>Thermal (Total)</b>	<b>2917</b>	<b>840</b>	<b>513</b>	<b>15.59</b>	<b>650</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>840</b>	<b>513</b>	<b>15.59</b>	<b>650</b>	
HP	Baspa HPS (IPP) (3*100)	300	271	120	5.21	217
	Malana HPS (IPP) (2*43)	86	81	16	0.83	35
	Other Hydro (>25MW)	372	345	268	7.14	297
	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	235	256	6.11	254
	<b>Renewable(Total)</b>	<b>486</b>	<b>235</b>	<b>256</b>	<b>6.11</b>	<b>254</b>
<b>Total HP</b>	<b>1244</b>	<b>932</b>	<b>660</b>	<b>19.28</b>	<b>803</b>	
J & K	Baqilhar HPS (IPP) (3*150+3*150)	900	884	885	21.23	885
	Other Hydro/IPP(including 98 MW Small Hydro)	308	85	56	1.87	78
	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>969</b>	<b>941</b>	<b>23</b>	<b>962</b>	
<b>Total State Control Area Generation</b>		<b>50738</b>	<b>23847</b>	<b>22701</b>	<b>525.43</b>	<b>21893</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>7544</b>	<b>8224</b>	<b>170.92</b>	<b>7121</b>
<b>Total Regional Availability(Gross)</b>		<b>76475</b>	<b>52317</b>	<b>48418</b>	<b>1123.38</b>	<b>46807</b>

**IV. Total Hydro Generation:**

Regional Entities Hydro	12234	10302	7284	191.83	7993
State Control Area Hydro	7163	4221	3800	89.58	4011
<b>Total Regional Hydro</b>	<b>19397</b>	<b>14523</b>	<b>11084</b>	<b>281.41</b>	<b>12004</b>

**V. Total Renewable Generation:**

Regional Entities Renewable	30	0	0	0.15	6
State Control Area Renewable	7356	428	403	16.12	672
<b>Total Regional Renewable</b>	<b>7386</b>	<b>428</b>	<b>403</b>	<b>16.27</b>	<b>678</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	12.16	-12.16
765 KV Gwalior-Agra (D/C)	2393	2052	2613	0	46.26	0.00	46.26
400 KV Zerda-Kankroli	-102	-233	0	330	0.00	5.34	-5.34
400 KV Zerda-Bhinmal	1	-153	40	278	0.00	3.28	-3.28
220 KV Auraiya-Malanpur	43	-27	0	67	0.00	0.54	-0.54
220 KV Badod-Kota/Morak	-20	-3	43	55	0.00	0.33	-0.33
Mundra-Mohindergarh(HVDC Bipole)	1503	2006	2011	0	41.72	0.00	41.72
400 KV RAPPCC-Sujalpur	195	224	233	0	4.46	0.00	4.46
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kv Phagi-Gwalior (D/C)	811	952	1126	0	21.97	0.00	21.97
+/- 800 kV HVDC Champa-Kurushetra	1500	1500	1500	0	29.89	0	29.89
<b>Sub Total WR</b>	<b>5824</b>	<b>5818</b>			<b>144.30</b>	<b>21.66</b>	<b>122.64</b>
400 kv Sasaram - Varanasi	262	253	273	0	6.46	0.00	6.46
400 kv Sasaram - Allahabad	96	107	113	0	2.41	0.00	2.41
400 KV MZP- GKP (D/C)	211	302	377	0	6.25	0.00	6.25
400 KV Patna-Balia(D/C) X 2	618	747	762	0	16.24	0.00	16.24
400 KV B'Sharif-Balia (D/C)	166	216	235	0	4.35	0.00	4.35
765 KV Gaya-Balia	338	354	404	0	6.65	0.00	6.65
765 KV Gaya-Varanasi (D/C)	255	316	335	0	5.58	0.00	5.58
220 KV Pusauli-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	-30	-27	0	30	0.00	0.66	-0.66
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-190	-57	0	190	0.00	2.06	-2.06
400 KV Barh -GKP (D/C)	492	562	566	0	11.45	0.00	11.45
400 kv B'Sharif - Varanasi (D/C)	2	-67	82	81	0.00	0.54	-0.54
+/- 800 KV HVDC Alipurduar-Agra	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>2220</b>	<b>2706</b>			<b>59.40</b>	<b>3.27</b>	<b>56.13</b>
+/- 800 KV HVDC BiswanathCharialli-Agra	-500	-300	0	500.00	0.00	7.85	-7.85
<b>Sub Total NER</b>	<b>-500</b>	<b>-300</b>			<b>0.00</b>	<b>7.85</b>	<b>-7.85</b>
<b>Total IR Exch</b>	<b>7544</b>	<b>8224</b>			<b>203.70</b>	<b>32.78</b>	<b>170.92</b>

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

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
48.94	1.31	50.25	2.04	3.20	1.98	-0.01	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
54.27	110.30	164.57	48.28	122.64	170.92	-5.99	12.33	6.35

**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	-28	-25	0	30	0	1	-0.64

**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	0.22	9.53	59.22	76.38	12.08	2.04	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)	
50.15	5.03	49.77	15.23	49.98	0.040	0.061	0.00	0.00	23.62

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

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviate
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV	
Rihand	400	405	18:16	401	9:36	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	410	14:01	388	20:41	0.0	3.6	0.0	0.0	0.0
Bareilly(PG)400kV	400	413	5:34	372	11:58	0.0	1.6	0.0	0.0	0.0
Kanpur	400	411	6:37	396	21:09	0.0	0.0	0.0	0.0	0.0
Dadri	400	417	5:32	399	14:45	0.0	0.0	0.0	0.0	0.0
Ballabgarh	400	414	5:33	394	14:47	0.0	0.0	0.0	0.0	0.0
Bawana	400	414	5:33	397	14:45	0.0	0.0	0.0	0.0	0.0
Bassi	400	421	18:30	397	22:31	0.0	0.0	0.5	0.0	0.5
Hissar	400	410	18:00	395	19:34	0.0	0.0	0.0	0.0	0.0
Moga	400	414	18:02	400	10:30	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	413	5:34	397	19:42	0.0	0.0	0.0	0.0	0.0
Nalagarh	400	418	5:38	403	10:46	0.0	0.0	0.0	0.0	0.0
Kishenpur	400	411	2:48	399	21:08	0.0	0.0	0.0	0.0	0.0
Wagoora	400	398	18:01	376	20:07	15.4	80.0	0.0	0.0	15.4
Amritsar	400	422	2:46	403	10:26	0.0	0.0	5.1	0.0	5.1
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	415	2:44	398	10:14	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	416	5:33	388	19:50	0.0	1.9	0.0	0.0	0.0

**VIII(B). Voltage profile 765 kV**

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviate
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	
Fatehpur	765	771	18:35	739	10:46	0.0	1.8	0.0	0.0	0.0
Balia	765	773	23:29	741	20:44	0.0	0.3	0.0	0.0	0.0
Moga	765	792	18:32	764	10:35	0.0	0.0	0.0	0.0	0.0
Agra	765	788	18:32	755	10:36	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	798	18:32	768	22:29	0.0	0.0	0.0	0.0	0.0
Unnao	765	768	18:31	735	21:20	0.0	8.3	0.0	0.0	0.0

Lucknow	765	778	5:35	741	20:06	0.0	0.2	0.0	0.0
Meerut	765	799	18:32	761	19:53	0.0	0.0	0.0	0.0
Jhatikara	765	790	5:35	756	10:33	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	785	5:34	742	19:52	0.0	0.0	0.0	0.0
Anta	765	797	18:46	757	18:55	0.0	0.0	0.0	0.0
Phagi	765	800	18:38	763	22:31	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	470.55	277.56	477.34	401.01	814.82	541.96
Pong	426.72	384.05	394.65	121.45	391.87	80.40	96.14	128.67
Tehri	829.79	740.04	746.05	29.50	743.05	14.20	189.87	224.00
Koteshwar	612.50	598.50	610.10	4.95	603.83	1.88	224.00	227.72
Chamera-I	760.00	748.75	752.03	0.00	0.00	0.00	253.35	241.04
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	513.85	7.79	503.56	2.25	235.26	297.28

\* 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	293	541	0	318	345	0	8.09	13.41	21.50
Delhi	508	-153	0	470	-281	0	12.68	-3.61	9.07
Haryana	342	200	0	342	179	0	3.23	2.29	5.52
HP	-682	-453	0	-614	-734	0	-14.91	-11.58	-26.49
J&K	-574	-404	0	-574	-57	0	-13.77	-5.60	-19.37
CHD	0	0	0	0	0	0	0.00	0.50	0.50
Rajasthan	34	383	0	44	352	0	0.91	9.09	10.00
UP	984	1311	0	1153	729	0	12.32	8.83	21.15
Uttarakhand	126	-32	0	5	-14	0	1.39	0.16	1.55
<b>Total</b>	<b>1032</b>	<b>1393</b>	<b>0</b>	<b>1145</b>	<b>519</b>	<b>0</b>	<b>9.93</b>	<b>13.49</b>	<b>23.42</b>

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	490	293	935	345	0	0
Delhi	716	470	116	-504	0	0
Haryana	342	-107	266	-437	0	0
HP	-578	-715	-305	-777	0	0
J&K	-574	-574	-57	-404	0	0
CHD	0	0	88	0	0	0
Rajasthan	44	26	458	-64	0	0
UP	1153	109	1408	-46	0	0
Uttarakhand	131	-102	111	-49	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	2	17
Rajasthan	3	48
Delhi	2	20
UP	1	24
Uttarakhand	7	63
HP	5	51
J & K	1	14
Chandigarh	5	34

**XIII. System Constraints:**

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

**XV. Weather Conditions For 24.05.2017 :**

**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 : 24.05.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER