

	Thermal (Total)	6560	2391	2876	54.20	2258
	Total Hydro	1000	601	675	15.14	631
	Wind Power	0	0	0	0.00	0
	Biomass	288	0	0	0.15	6
	Solar	560	0	0	0.03	1
	Renewable(Total)	848	0	0	0.18	7
	Total Punjab	8408	2992	3551	69.51	2896
Haryana	Panipat TPS (2*210+2*250)	920	200	213	4.87	203
	DCRTPP (Yamuna nagar) (2*300)	600	466	515	11.19	466
	Faridabad GPS (NTPC)(2*137.75+1*156)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar (CLP) (2*660)	1320	741	1181	19.43	810
	Thermal (Total)	4497	1407	1909	35.50	1479
	Total Hydro	62	33	32	0.67	28
	Wind Power	0	0	0	0.00	0
	Biomass	40	0	0	0.00	0
	Solar	0	0	0	0.00	0
	Renewable(Total)	40	0	0	0.00	0
	Total Haryana	4599	1440	1941	36.17	1507
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	781	787	18.71	780
	suratgarh TPS (6*250)	1500	377	371	8.99	375
	Chabra TPS (4*250)	1000	565	473	12.10	504
	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	103	162	3.00	125
	RAPS A (NPC) (1*100+1*200)	300	162	165	4.04	168
	Barsingar (NLC) (2*125)	250	97	112	2.39	100
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwst LTPS (IPP) (8*135)	1080	398	643	14.43	601
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	827	1123	21.08	878
	Kawai(Adani) (2*660)	1320	864	1196	23.99	1000
	Thermal (Total)	9536	4174	5032	108.72	4530
	Total Hydro	550	0	0	0.10	4
	Wind power	4017	1563	1671	38.61	1609
	Biomass	99	25	25	0.61	25
	Solar	1295	0	0	2.68	112
	Renewable/Others (Total)	5411	1588	1696	41.90	1746
	Total Rajasthan	15497	5762	6728	150.72	6280
UP	Anpara TPS (3*210+2*500)	1630	1380	1379	30.80	1283
	Obra TPS (2*50+2*94+5*200)	1194	650	644	14.60	608
	Paricha TPS (2*110+2*220+2*250)	1160	781	777	17.00	708
	Panki TPS (2*105)	210	140	0	1.10	46
	Harduaganj TPS (1*60+1*105+2*250)	665	542	525	11.50	479
	Tanda TPS (NTPC) (4*110)	440	270	390	7.13	297
	Roza TPS (IPP) (4*300)	1200	1062	1051	22.20	925
	Anpara-C (IPP) (2*600)	1200	342	337	8.00	333
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	329	322	7.70	321
	Anpara-D(2*500)	1000	854	846	18.50	771
	Lalitpur TPS(3*660)	1980	1007	998	21.60	900
	Bara(2*660)	1320	578	1179	18.60	775
	Thermal (Total)	12449	7935	8448	178.73	7447
	Vishnuparyag HPS (IPP)(4*110)	440	435	435	10.40	433
	Alaknanda(4*82.5)	330	164	164	4.40	183
	Other Hydro	527	224	218	4.00	167
	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
Renewable(Total)	128	0	0	0.00	0	
Total UP	14855	8958	9465	202.33	8430	
Uttarakhand	Other Hydro	1250	675	587	16.47	686
	Total Gas	225	85	267	4.11	171
	Wind Power	0	0	0	0.00	0
	Biomass	127	0	0	0.00	0
	Solar	20	0	0	0.64	27
	Small Hydro (< 25 MW)	180	0	0	0.00	0
	Renewable(Total)	327	0	0	0.64	27
	Total Uttarakhand	1802	760	854	21.22	884
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	66	67	1.78	74
	Pragati Gas Turbine (2x104+ 1x122)	330	150	154	3.74	156
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	302	293	7.09	296
	Badarpur TPS (NTPC) (3*95+2*210)	705	158	184	3.72	155
	Thermal (Total)	2917	676	698	16.33	680
	Wind Power	0	0	0	0.00	0
	Biomass	16	0	0	0.00	0
	Solar	2	0	0	0.00	0
Renewable(Total)	18	0	0	0.00	0	
Total Delhi	2935	676	698	16.33	680	
HP	Baspa HPS (IPP) (3*100)	300	328	298	7.62	317
	Malana HPS (IPP) (2*43)	86	87	34	1.32	55
	Other Hydro (>25MW)	372	374	342	8.06	336
	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	197	226	5.25	219
	Renewable(Total)	486	197	226	5.25	219
Total HP	1244	986	900	22.24	927	
J & K	Baqilhar HPS (IPP) (3*150+3*150)	900	883	883	21.19	883
	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
	Renewable(Total)	98	0	0	0.00	0
Total J & K	1398	968	939	23	961	
Total State Control Area Generation		50738	22542	25076	541.58	22566
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6023	7300	124.08	5170
Total Regional Availability(Gross)		76475	48259	50635	1074.92	44788

IV. Total Hydro Generation:

Regional Entities Hydro	12234	10633	8788	215.98	8999
State Control Area Hydro	7163	4171	4217	96.48	4218
Total Regional Hydro	19397	14804	13005	312.46	13217

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.13	5
State Control Area Renewable	7356	1785	1922	47.96	1998
Total Regional Renewable	7386	1785	1922	48.09	2004

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	100	100	500	0.47	9.04	-8.57
765 KV Gwalior-Agra (D/C)	1691	1822	2139	0	30.18	0.00	30.18
400 KV Zerda-Kankroli	-124	-190	0	296	0.00	5.02	-5.02
400 KV Zerda-Bhinmal	-116	-157	20	251	0.00	3.88	-3.88
220 KV Auraiya-Malanpur	-88	-74	0	130	0.00	2.19	-2.19
220 KV Badod-Kota/Morak	57	50	85	42	1.26	0.00	1.26
Mundra-Mohinderghar(HVDC Bipole)	1202	1599	2004	0	33.78	0.00	33.78
400 KV RAPPCC-Sujalpur	158	110	138	0	0.01	0.00	0.01
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kv Phagi-Gwalior (D/C)	472	746	517	0	13.90	0.00	13.90
+/- 800 kv HVDC Champa-Kurushetra	1500	1000	1500	0	23.86	0	23.86
Sub Total WR	4252	5006			103.46	20.13	83.33
400 kv Sasaram - Varanasi	112	144	0	120	3.97	0.00	3.97
400 kv Sasaram - Allahabad	20	21	0	33	0.39	0.00	0.39
400 KV MZP- GKP (D/C)	158	128	370	200	3.14	0.00	3.14
400 KV Patna-Balia(D/C) X 2	456	517	573	0	10.20	0.00	10.20
400 KV B'Sharif-Balia (D/C)	133	40	175	0	1.72	0.00	1.72
765 KV Gaya-Balia	268	238	299	0	4.11	0.00	4.11
765 KV Gaya-Varanasi (D/C)	175	244	40	258	3.19	0.00	3.19
220 KV Pusaali-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	-40	-30	0	38	0.00	0.76	-0.76
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-90	-21	30	176	0.00	1.56	-1.56
400 KV Barh -GKP (D/C)	426	524	524	0	8.19	0.00	8.19
400 kv B'Sharif - Varanasi (D/C)	13	3	137	61	0.53	0.00	0.53
+/- 800 KV HVDC Alipurduar-Agra	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1631	1808			35.43	2.32	33.11
+/- 800 KV HVDC BiswanathCharialli-Agra	140	486	500	0.00	7.65	0.00	7.65
Sub Total NER	140	486			7.65	0.00	7.65
Total IR Exch	6023	7300			146.54	22.46	124.08

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
41.72	0.78	42.50	-0.75	1.72	-10.33	-15.03	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
31.43	101.29	132.72	40.76	83.33	124.08	9.33	-17.96	-8.63

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	-27	-27	0	29	0	1	-0.59

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	0.14	1.60	32.82	64.76	18.39	13.82	1.50	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)	
50.27	18.02	49.79	19.26	50.03	0.054	0.066	0.00	0.00	35.24

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 ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	471.90	298.24	477.72	407.63	792.47	460.29
Pong	426.72	384.05	394.56	116.59	391.45	72.04	178.25	189.10
Tehri	829.79	740.04	744.95	23.73	741.95	9.13	206.03	239.00
Koteshwar	612.50	598.50	609.32	4.20	607.30	3.34	239.00	242.70
Chamera-I	760.00	748.75	753.18	0.00	0.00	0.00	324.11	0.00
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	513.63	6.80	504.05	2.91	278.27	280.68

* 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	0	0	195	0	0	6.54	2.45	8.99
Delhi	539	-17	0	471	-274	0	12.77	-2.82	9.94
Haryana	342	204	0	342	147	0	3.23	4.31	7.54
HP	-881	-354	0	-699	-820	0	-18.50	-13.48	-31.99
J&K	-575	-227	0	-575	-91	0	-13.80	-4.40	-18.19
CHD	0	34	0	0	0	0	0.00	0.42	0.42
Rajasthan	37	328	0	36	328	0	0.80	7.72	8.51
UP	880	-30	0	1005	-30	0	10.26	-0.34	9.92
Uttarakhand	131	-152	0	133	-318	0	3.08	-4.45	-1.37
Total	766	-214	0	909	-1058	0	4.37	-10.59	-6.22

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	293	195	443	0	0	0
Delhi	722	471	37	-472	0	0
Haryana	342	-107	224	137	0	0
HP	-699	-958	-320	-922	0	0
J&K	-575	-575	69	-344	0	0
CHD	0	0	59	0	0	0
Rajasthan	38	26	336	284	0	0
UP	1113	38	0	-30	0	0
Uttarakhand	133	111	83	-359	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	1	15
Haryana	1	16
Rajasthan	1	13
Delhi	3	33
UP	3	32
Uttarakhand	3	25
HP	3	25
J & K	4	28
Chandigarh	4	26

XIII. System Constraints:

XIV. Grid Disturbance / Any Other Significant Event:

XV. Weather Conditions For 28.05.2017 :

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 : 28.05.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER