

	Rajpura (2*700)	1400	1320	660	25.86	1078
	Talwandi Saboo (3*660)	1980	700	616	15.81	659
	Thermal (Total)	6560	2820	1816	58.80	2450
	Total Hydro	1000	335	212	8.31	346
	Wind Power	0	0	0	0.00	0
	Biomass	288	0	0	0.23	10
	Solar	560	0	0	0.06	2
	Renewable(Total)	848	0	0	0.29	12
	Total Punjab	8408	3155	2028	67.40	2808
Haryana	Panipat TPS (2*210+2*250)	920	225	201	4.60	192
	DCRTPP (Yamuna nagar) (2*300)	600	558	458	11.97	499
	Faridabad GPS (NTPC)(2*137.75+1*156)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	571	386	13.63	568
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar (CLP) (2*660)	1320	1150	738	23.58	982
	Thermal (Total)	4497	2504	1783	53.78	2241
	Total Hydro	62	10	12	0.31	13
	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	2514	1795	54.09	2254
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	979	894	22.08
suratgarh TPS (6*250)		1500	220	185	5.16	215
Chabra TPS (4*250)		1000	907	782	21.00	875
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	152	3.57	149
RAPS A (NPC) (1*100+1*200)		300	190	190	4.39	183
Barsingar (NLC) (2*125)		250	227	227	5.32	221
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	756	465	16.65	694
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(2*600)		1200	1140	827	24.71	1029
Kawai(Adani) (2*660)		1320	1170	822	23.50	979
Thermal (Total)		8876	5751	4544	126.36	5265
Total Hydro		550	293	247	5.74	239
Wind power		4017	454	1102	16.58	691
Biomass		99	7	7	0.16	7
Solar		1295	0	0	0.00	0
Renewable/Others (Total)		5411	461	1109	16.74	697
Total Rajasthan		14837	6505	5900	148.83	6201
UP		Anpara TPS (3*210+2*500)	1630	1434	1105	32.17
	Obra TPS (2*50+2*94+5*200)	1194	667	569	14.78	616
	Paricha TPS (2*110+2*220+2*250)	1160	582	576	16.03	668
	Panki TPS (2*105)	210	0	0	0.00	0
	Harduaqanj TPS (1*60+1*105+2*250)	665	401	420	11.31	471
	Tanda TPS (NTPC) (4*110)	440	387	276	8.59	358
	Roza TPS (IPP) (4*300)	1200	896	756	22.61	942
	Anpara-C (IPP) (2*600)	1200	1063	630	24.11	1005
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	141	141	3.85	160
	Anpara-D(2*500)	1000	399	431	9.74	406
	Lalitpur TPS(3*660)	1980	441	397	9.83	410
	Bara(2*660)	1320	1063	728	24.11	1005
	Thermal (Total)	12449	7474	6029	177.11	7380
	Vishnuparyag HPS (IPP)(4*110)	440	73	68	1.68	70
	Alaknada(4*82.5)	330	77	0	1.04	43
	Other Hydro	527	78	152	2.74	114
	Cogeneration	981	850	850	20.40	850
	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	8552	7099	202.97	8457	
Uttarakhand	Other Hydro	1250	581	255	8.57	357
	Total Gas	225	161	246	4.93	205
	Wind Power	0	0	0	0.00	0
	Biomass	127	0	0	0.00	0
	Solar	20	0	0	0.04	2
	Small Hydro (< 25 MW)	180	0	0	0.00	0
	Renewable(Total)	327	0	0	0.04	2
	Total Uttarakhand	1802	742	501	13.53	564
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.02	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	38	37	0.85	36
	Pragati Gas Turbine (2x104+ 1x122)	330	155	160	3.57	149
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	260	280	6.07	253
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0
	Thermal (Total)	2917	453	477	10.47	436
	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	453	477	10.47	436
HP	Baspa HPS (IPP) (3*100)	300	0	0	0.96	40
	Malana HPS (IPP) (2*43)	86	0	0	0.18	7
	Other Hydro	372	129	37	2.61	109
	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	0	0	0.00	0
	Renewable(Total)	486	0	0	0.00	0
	Total HP	1244	129	37	3.75	156
	J & K	Baqilhar HPS (IPP) (3*150+3*150)	900	118	117	2.82
Other Hydro/IPP(including 98 MW Small Hydro)		308	80	18	0.95	40
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	198	135	4	157	

Total State Control Area Generation	50078	22248	17972	504.81	21034
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		7593.8	7173.63	204.17	8507
Total Regional Availability(Gross)	75315	46370	32399	939.84	39160

IV. Total Hydro Generation:

Regional Entities Hydro	12234	8763	663	61.81	2576
State Control Area Hydro	7163	1935	1364	35.90	1702
Total Regional Hydro	19397	10698	2027	97.71	4278

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.09	4
State Control Area Renewable	7356	461	1109	17.06	711
Total Regional Renewable	7386	461	1109	17.15	715

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

Element	Peak(19:00 Hrs) MW	Off Peak(03:00 Hrs) MW	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
			Import	Export	Import	Export	
Vindhychal(HVDC B/B)	100	-400	200	400	0.95	4.23	-3.27
765 KV Gwalior-Agra (D/C)	2292	2582	2925	0	63.96	0.00	63.96
400 KV Zerda-Kankroli	85	153	0	241	0.00	2.78	-2.78
400 KV Zerda-Bhimnal	-58	-148	98	173	0.00	0.67	-0.67
220 KV Auraiya-Malanpur	-74	-25	0	78	0.00	1.01	-1.01
220 KV Badod-Kota/Morak	43	34	39	113	0.92	0.00	0.92
Mundra-Mohinderghar(HVDC Bipole)	2498	1602	2506	0.00	56.15	0.00	56.15
400 KV RAPPCC-Sujalpur	332	137	420	0	6.89	0.00	6.89
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1010	1135	1497	0	29.60	0.00	29.60
Sub Total WR	6228	5070			158.47	8.69	149.78
400 kV Sasaram - Varanasi	201	189	230	0	6.92	0.00	6.92
400 kV Sasaram - Allahabad	94	44	94	0	1.22	0.00	1.22
400 KV MZP- GKP (D/C)	-8	300	568	28	6.23	0.00	6.23
400 KV Patna-Balia(D/C) X 2	586	717	835	0	16.03	0.00	16.03
400 KV B'Sharif-Balia (D/C)	-41	116	272	41	2.82	0.00	2.82
765 KV Gaya-Balia	151	275	346	0	6.63	0.00	6.63
765 KV Gaya-Varanasi (D/C)	390	490	767	0	12.87	0.00	12.87
220 KV Pusaali-Sahupuri	133	103	136	0	2.66	0.00	2.66
132 KV K'nasa-Sahupuri	0	0	0	0	0.00	0.51	-0.51
132 KV Son Ngr-Rihand	-40	-27	0	40	0.00	0.76	-0.76
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-135	-72	197	147	0.00	0.07	-0.07
400 KV Barh -GKP (D/C)	468	504	576	0	11.47	0.00	11.47
400 kV B'Sharif - Varanasi (D/C)	67	-35	205	97	0.83	0.00	0.83
Sub Total ER	1866	2604			67.67	1.33	66.34
+/- 800 KV BiswanathCharialli-Agra	-500	-500	0	500.00	0.00	11.95	-11.95
Sub Total NER	-500	-500			0.00	11.95	-11.95
Total IR Exch	7594	7174			226.14	21.97	204.17

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
45.22	0.36	45.57	-0.74	-2.70	16.30	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
61.13	139.86	200.99	54.39	149.78	204.17	-6.74	9.92	3.18

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

Element	Peak(19:00 Hrs) MW	Off Peak(03:00 Hrs) MW	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
			Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	-15	-16	0	17	0	1	-0.87

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	3.69	42.87	68.36	21.38	6.62	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)		
50.18	17.03	49.83	18.11	50.01	0.037	0.060	50.10	49.91	31.64

VIII(A). Voltage profile 400 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Volta ge Deviat
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV	
Rihand	400	409	2:13	399	9:13	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	420	1:00	405	9:09	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	419	1:18	399	14:15	0.0	0.0	0.0	0.0	0.0
Kanpur	400	418	2:31	397	10:16	0.0	0.0	0.0	0.0	0.0
Dadri	400	429	3:04	401	12:06	0.0	0.0	23.9	0.0	23.9
Ballabgarh	400	433	2:31	403	10:22	0.0	0.0	33.0	10.6	33.0
Bawana	400	428	3:02	402	12:06	0.0	0.0	23.0	0.0	23.0
Bassi	400	425	4:02	394	10:20	0.0	0.0	12.1	0.0	12.1
Hissar	400	422	2:32	398	12:06	0.0	0.0	2.2	0.0	2.2
Moga	400	415	19:54	401	14:15	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	428	2:26	408	14:13	0.0	0.0	26.2	0.0	26.2
Nalagarh	400	431	3:27	410	14:22	0.0	0.0	38.1	0.7	38.1
Kishenpur	400	422	1:44	395	14:20	0.0	0.0	0.2	0.0	0.2
Wagoora	400	401	1:44	362	14:37	60.4	99.0	0.0	0.0	60.4
Amritsar	400	425	1:44	398	14:14	0.0	0.0	17.5	0.0	17.5
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	423	1:44	389	14:38	0.0	0.1	7.6	0.0	7.6
Rishikesh	400	420	2:26	395	9:08	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)				Volta ge Deviat
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	
Fatehpur	765	774	23:52	738	10:18	0.0	1.0	0.0	0.0	0.0
Balia	765	789	2:32	756	8:44	0.0	0.0	0.0	0.0	0.0
Moga	765	792	20:01	763	14:42	0.0	0.0	0.0	0.0	0.0

Agra	765	789	23:54	748	10:18	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	805	2:41	768	11:19	0.0	0.0	15.5	0.0	15.5
Unnao	765	781	1:42	734	9:08	0.0	25.5	0.0	0.0	0.0
Lucknow	765	802	1:44	766	8:45	0.0	0.0	2.1	0.0	2.1
Meerut	765	811	23:58	766	5:41	0.0	0.0	2.8	0.0	2.8
Jhatikara	765	806	2:32	760	10:21	0.0	0.0	15.2	0.0	15.2
Bareilly 765 kV	765	800	1:21	763	8:48	0.0	0.0	0.0	0.0	0.0
Anta	765	789	1:05	759	8:38	0.0	0.0	0.0	0.0	0.0
Phagi	765	802	2:33	756	10:17	0.0	0.0	5.0	0.0	5.0

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	483.98	560.76	497.39	994.96	144.70	434.49
Pong	426.72	384.05	405.84	361.16	407.46	416.46	46.89	282.18
Tehri	829.79	740.04	799.70	603.61	792.90	496.78	36.23	221.00
Koteshwar	612.50	598.50	609.90	4.44	610.71	4.95	221.00	209.60
Chamera-I	760.00	748.75	759.02	0.00	0.00	0.00	45.39	48.90
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	502.91	1.86	496.06	0.39	39.48	86.53

* 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	-544	2	0	-618	-51	0	-18.45	-0.02	-18.47
Delhi	-94	-565	0	-276	188	0	-3.86	0.26	-3.60
Haryana	-847	342	0	-513	224	0	-15.01	4.48	-10.53
HP	482	70	0	348	-388	0	12.01	-0.83	11.17
J&K	612	107	0	608	325	0	15.51	4.95	20.46
CHD	0	0	0	0	0	0	0.00	0.02	0.02
Rajasthan	24	303	0	16	-192	0	11.02	2.02	13.04
UP	113	0	0	-131	-100	0	-8.83	-1.82	-10.65
Uttarakhand	312	50	0	15	236	0	3.98	7.83	11.81
Total	57	308	0	-549	243	0	-3.63	16.90	13.26

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-534	-1264	146	-103	0	0
Delhi	-19	-288	701	-604	0	0
Haryana	-392	-847	343	-373	0	0
HP	726	240	140	-502	0	0
J&K	748	593	451	-15	0	0
CHD	0	0	58	-31	0	0
Rajasthan	1138	-7	303	-1122	0	0
UP	145	-1006	0	-100	0	0
Uttarakhand	312	0	637	21	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	13.54%
ER	0.00%
Simultaneous	11.46%

(ii)%age of times ATC violated on the inter-regional corridors

WR	44.44%
ER	0.00%
Simultaneous	45.49%

(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	2	24
Haryana	1	13
Rajasthan	4	34
Delhi	1	17
UP	3	17
Uttarakhand	2	25
HP	4	30
J & K	5	41
Chandigarh	4	41

XIII. System Constraints:

XIV. Grid Disturbance / Any Other Significant Event:

XV. Weather Conditions For 21.01.2017 :

XVI. Synchronisation of new generating units :

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

0

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 : 21.01.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER