

	Rajpura (2*700)	1400	920	660	23.88	995
	Talwandi Saboo (3*660)	1980	924	924	25.79	1074
	Thermal (Total)	6560	2209	1995	58.34	2431
	Total Hydro	1000	436	380	10.09	420
	Wind Power	0	0	0	0.00	0
	Biomass	288	0	0	0.29	12
	Solar	560	0	0	0.05	2
	Renewable(Total)	848	0	0	0.35	14
	Total Punjab	8408	2645	2375	68.77	2866
Haryana	Panipat TPS (2*210+2*250)	920	455	406	9.99	416
	DCRTPP (Yamuna nagar) (2*300)	600	277	234	5.74	239
	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	1188	739	21.63	901
	Thermal (Total)	4497	1920	1379	37.36	1557
	Total Hydro	62	3	14	0.29	12
	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	1923	1393	37.65	1569
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1037	968	24.71	1030
	suratgarh TPS (6*250)	1500	551	551	13.55	564
	Chabra TPS (4*250)	1000	880	809	21.03	876
	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	75	77	1.86	78
	RAPS A (NPC) (1*100+1*200)	300	170	173	4.29	179
	Barsingar (NLC) (2*125)	250	225	226	5.23	218
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	834	834	19.57	815
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	1135	913	25.50	1062
	Kawai(Adani) (2*660)	1320	625	619	14.74	614
	Thermal (Total)	8876	5532	5170	130.47	5436
	Total Hydro	550	135	177	4.11	171
	Wind power	4017	95	200	2.26	94
	Biomass	99	2	2	0.06	2
	Solar	1295	2	0	2.48	104
	Renewable/Others (Total)	5411	99	202	4.80	200
	Total Rajasthan	14837	5766	5549	139.38	5808
UP	Anpara TPS (3*210+2*500)	1630	1197	1172	28.59	1191
	Obra TPS (2*50+2*94+5*200)	1194	492	332	10.63	443
	Paricha TPS (2*110+2*220+2*250)	1160	808	635	19.52	813
	Panki TPS (2*105)	210	135	135	3.32	138
	Harduaganj TPS (1*60+1*105+2*250)	665	533	404	11.32	472
	Tanda TPS (NTPC) (4*110)	440	388	274	8.47	353
	Roza TPS (IPP) (4*300)	1200	1097	751	23.88	995
	Anpara-C (IPP) (2*600)	1200	1058	990	24.85	1035
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	275	188	6.20	258
	Anpara-D(2*500)	1000	354	317	8.74	364
	Lalitpur TPS(3*660)	1980	592	596	14.18	591
	Bara(2*660)	1320	0	0	0.00	0
	Thermal (Total)	12449	6929	5794	159.70	6654
	Vishnuparyag HPS (IPP)(4*110)	440	88	78	2.03	84
	Alakanada(4*82.5)	330	77	0	1.12	47
	Other Hydro	527	61	161	3.75	156
	Cogeneration	981	800	800	19.20	800
	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	7955	6833	185.79	7741	
Uttarakhand	Other Hydro	1250	535	299	9.28	387
	Total Gas	225	271	272	6.56	273
	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	806	571	15.87	661	
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.01	0
	Delhi Gas Turbine (6x30 + 3x34)	282	75	79	1.96	81
	Pragati Gas Turbine (2x104+ 1x122)	330	152	145	3.84	160
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	290	280	6.82	284
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0
	Thermal (Total)	2917	517	504	12.60	525
	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	517	504	12.60	525
	HP	Baspa HPS (IPP) (3*100)	300	53	0	1.12
Malana HPS (IPP) (2*43)		86	32	0	0.23	10
Other Hydro		372	204	50	2.70	112
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	52	38	1.05	44
Renewable(Total)		486	52	38	1.05	44
Total HP		1244	341	88	5.10	212
J & K	Baqilhar HPS (IPP) (3*150+3*150)	900	147	127	3.14	131
	Other Hydro/IPP(including 98 MW Small Hydro)	308	81	21	0.99	41
	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	228	148	4	172

Total State Control Area Generation	50078	20181	17461	469.29	19554
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		6907	6670	188.46	7852
Total Regional Availability(Gross)	75315	44363	32070	900.28	37512

IV. Total Hydro Generation:

Regional Entities Hydro	12234	8685	1140	61.71	2571
State Control Area Hydro	7163	2175	1617	39.87	1936
Total Regional Hydro	19397	10860	2757	101.57	4507

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.10	4
State Control Area Renewable	7356	151	240	6.24	260
Total Regional Renewable	7386	151	240	6.33	264

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)	-50	-200	200	200	1.68	1.48	0.20
765 KV Gwalior-Agra (D/C)	2138	1823	2773	0	52.95	0.00	52.95
400 KV Zerda-Kankroli	-25	-152	18	174	0.00	1.40	-1.40
400 KV Zerda-Bhimnal	141	-10	179	57	1.84	0.00	1.84
220 KV Auraiya-Malanpur	-99	-73	0	114	0.00	1.91	-1.91
220 KV Badod-Kota/Morak	-31	-48	10	92	0.00	1.20	-1.20
Mundra-Mohinderghar(HVDC Bipole)	2002	1698	2305	0.00	48.02	0.00	48.02
400 KV RAPPCC-Sujalpur	390	300	410	0	8.73	0.00	8.73
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1091	1102	1462	0	29.89	0.00	29.89
Sub Total WR	5557	4440			143.11	5.98	137.13
400 kV Sasaram - Varanasi	-97	-20	0	138	0.00	2.66	-2.66
400 kV Sasaram - Allahabad	-132	-72	0	175	0.00	2.86	-2.86
400 KV MZP- GKP (D/C)	95	379	397	0	7.01	0.00	7.01
400 KV Patna-Balia(D/C) X 2	701	697	860	0	17.71	0.00	17.71
400 KV B'Sharif-Balia (D/C)	64	217	276	0	4.66	0.00	4.66
765 KV Gaya-Balia	145	259	291	0	5.70	0.00	5.70
765 KV Gaya-Varanasi (D/C)	410	521	733	0	14.02	0.00	14.02
220 KV Pusaali-Sahupuri	88	0	132	0	1.52	0.00	1.52
132 KV K'nasa-Sahupuri	0	0	0	0	0.00	0.51	-0.51
132 KV Son Ngr-Rihand	-22	-27	0	30	0.00	0.59	-0.59
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	84	136	241	0	3.71	0.00	3.71
400 KV Barh -GKP (D/C)	494	492	558	0	11.86	0.00	11.86
400 kV B'Sharif - Varanasi (D/C)	23	148	231	0	3.71	0.00	3.71
Sub Total ER	1853	2730			69.90	6.61	63.29
+/- 800 KV BiswanathChariali-Agra	-503	-500	0	503.00	0.00	11.96	-11.96
Sub Total NER	-503	-500			0.00	11.96	-11.96
Total IR Exch	6907	6670			213.01	24.55	188.46

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
45.23	0.94	46.17	-0.31	-8.39	21.35	1.13	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
67.22	121.29	188.51	51.33	137.13	188.46	-15.89	15.84	-0.05

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	12	14	0	14	0	1	-0.68

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	0.05	4.20	49.55	76.33	14.62	4.59	0.31	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)		
50.26	17.03	49.79	22.11	50.00	0.037	0.060	50.15	49.91	23.67

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	410	2:02	399	14:08	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	419	0:56	404	17:54	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	422	4:02	403	18:13	0.0	0.0	1.3	0.0	1.3
Kanpur	400	419	4:00	404	8:28	0.0	0.0	0.0	0.0	0.0
Dadri	400	428	3:59	406	9:33	0.1	0.1	22.3	0.0	22.4
Ballabgarh	400	432	4:00	409	12:10	0.0	0.0	39.9	3.6	39.9
Bawana	400	424	1:16	404	11:09	0.0	0.0	20.7	0.0	20.7
Bassi	400	422	4:02	398	8:19	0.0	0.0	0.6	0.0	0.6
Hissar	400	420	4:01	399	8:28	0.0	0.0	0.0	0.0	0.0
Moga	400	420	0:12	403	8:26	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	425	3:59	362	18:04	35.1	35.1	24.8	0.0	59.9
Nalagarh	400	429	20:20	410	8:31	0.0	0.0	52.2	0.0	52.2
Kishenpur	400	420	0:29	398	11:34	0.0	0.0	0.0	0.0	0.0
Wagoora	400	409	7:01	368	11:32	51.8	95.3	0.0	0.0	51.8
Amritsar	400	429	1:04	404	8:29	0.0	0.0	26.7	0.0	26.7
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	423	20:20	407	11:15	0.0	0.0	0.8	0.0	0.8
Rishikesh	400	420	0:14	398	17:53	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	23:57	745	9:33	0.0	0.0	0.0	0.0	0.0
Balia	765	791	4:02	763	9:35	0.0	0.0	0.0	0.0	0.0
Moga	765	800	0:11	767	8:31	0.0	0.0	0.0	0.0	0.0

Agra	765	790	17:02	755	6:28	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	807	4:01	771	8:29	0.0	0.0	18.1	0.0	18.1
Unnao	765	773	4:01	743	9:33	0.0	0.0	0.0	0.0	0.0
Lucknow	765	803	4:02	772	18:18	0.0	0.0	4.0	0.0	4.0
Meerut	765	807	0:13	766	6:26	0.0	0.0	4.1	0.0	4.1
Jhatikara	765	806	4:01	769	8:31	0.0	0.0	16.6	0.0	16.6
Bareilly 765 kV	765	795	3:38	764	8:38	0.0	0.0	0.0	0.0	0.0
Anta	765	794	4:01	768	8:19	0.0	0.0	0.0	0.0	0.0
Phagi	765	802	4:01	765	8:22	0.0	0.0	0.7	0.0	0.7

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	489.00	700.02	501.48	1153.36	152.63	434.97
Pong	426.72	384.05	408.45	444.61	411.61	544.90	46.84	324.77
Tehri	829.79	740.04	809.60	794.47	803.80	681.16	84.19	192.00
Koteshwar	612.50	598.50	610.32	4.70	610.26	4.69	192.00	195.40
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	37.18	37.18
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	505.29	2.95	498.97	3.27	45.14	110.61

* 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	-623	2	0	-705	0	0	-22.92	0.88	-22.04
Delhi	-183	-234	0	-273	0	0	-5.72	-0.13	-5.85
Haryana	-974	291	0	-659	263	0	-18.46	6.61	-11.85
HP	519	61	0	404	9	0	12.79	-1.59	11.20
J&K	610	184	0	605	306	0	14.45	5.38	19.82
CHD	0	0	0	0	0	0	0.00	0.12	0.12
Rajasthan	-7	404	0	-7	488	0	8.59	11.86	20.45
UP	125	0	0	-106	-100	0	-7.08	-1.60	-8.68
Uttarakhand	206	50	0	206	85	0	5.10	1.62	6.72
Total	-327	759	0	-536	1052	0	-13.25	23.14	9.89

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-618	-1457	583	-325	0	0
Delhi	-137	-363	329	-353	0	0
Haryana	-659	-996	293	-83	0	0
HP	662	379	61	-649	0	0
J&K	610	592	412	-15	0	0
CHD	0	0	43	-46	0	0
Rajasthan	869	-7	937	267	0	0
UP	166	-812	0	-100	0	0
Uttarakhand	237	206	247	-136	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	4.51%
ER	0.00%
Simultaneous	1.39%

(iii)%age of times Angular Difference on Important Buses was beyond permissible limits(40 deg.)

Rihand - Dadri	0.00%
----------------	-------

XII. Zero Crossing Violations

State	No. of violations(Maximum 8 in a day)	Maximum number of continuous blocks without sign change
Punjab	1	13
Haryana	2	14
Rajasthan	0	11
Delhi	5	50
UP	0	12
Uttarakhand	2	17
HP	2	26
J & K	4	28
Chandigarh	3	34

XIII. System Constraints:

XIV. Grid Disturbance / Any Other Significant Event:

XV. Weather Conditions For 28.12.2016 :

XVI. Synchronisation of new generating units :

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

0
0.00
0
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 : 28.12.2016

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER