

	Rajpura (2*700)	1400	660	330	12.23	510
	Talwandi Saboo (3*660)	1980	740	616	19.97	832
	Thermal (Total)	6560	2516	2212	61.08	2545
	Total Hydro	1000	411	260	7.91	330
	Wind Power	0	0	0	0.00	0
	Biomass	288	0	0	1.20	50
	Solar	560	0	0	0.16	7
	Renewable(Total)	848	0	0	1.36	56
	Total Punjab	8408	2927	2472	70.34	2931
Haryana	Panipat TPS (2*210+2*250)	920	203	204	4.95	206
	DCRTPP (Yamuna nagar) (2*300)	600	562	457	11.27	470
	Faridabad GPS (NTPC)(2*137.75+1*156)	432	189	164	4.26	177
	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	20.80	867
	Thermal (Total)	4497	2142	1564	41.28	1720
	Total Hydro	62	14	8	0.42	18
	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	2156	1572	41.70	1737
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1158	951	23.63
suratgarh TPS (6*250)		1500	454	404	10.27	428
Chabra TPS (4*250)		1000	928	741	19.74	823
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	184	181	4.41	184
RAPS A (NPC) (1*100+1*200)		300	165	166	4.18	174
Barsingar (NLC) (2*125)		250	98	109	2.38	99
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	823	455	16.63	693
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(2*600)		1200	839	785	20.62	859
Kawai (Adani) (2*660)		1320	457	451	10.73	447
Thermal (Total)		8876	5106	4243	112.60	4692
Total Hydro		550	175	213	4.78	199
Wind power		4017	424	1466	22.57	941
Biomass		99	16	16	0.39	16
Solar		1295	3	0	0.15	6
Renewable/Others (Total)		5411	443	1482	23.11	963
Total Rajasthan		14837	5724	5938	140.49	5854
UP	Anpara TPS (3*210+2*500)	1630	1052	918	24.50	1021
	Obra TPS (2*50+2*94+5*200)	1194	297	423	8.70	363
	Paricha TPS (2*110+2*220+2*250)	1160	830	576	14.70	613
	Panki TPS (2*105)	210	0	0	0.00	0
	Harduaqanj TPS (1*60+1*105+2*250)	665	551	399	10.80	450
	Tanda TPS (NTPC) (4*110)	440	284	207	5.90	246
	Roza TPS (IPP) (4*300)	1200	1100	756	22.00	917
	Anpara-C (IPP) (2*600)	1200	882	617	19.70	821
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	81	58	1.50	63
	Anpara-D(2*500)	1000	885	573	18.30	763
	Lalitpur TPS(3*660)	1980	0	0	0.00	0
	Bara(2*660)	1320	862	716	19.80	825
	Thermal (Total)	12449	6824	5243	145.90	6079
	Vishnuparyag HPS (IPP)(4*110)	440	103	98	2.40	100
	Alakanada(4*82.5)	330	76	82	1.40	58
	Other Hydro	527	250	66	3.73	155
	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	8053	6289	172.63	7193	
Uttarakhand	Other Hydro	1250	493	210	7.29	304
	Total Gas	225	285	277	6.83	285
	Wind Power	0	0	0	0.00	0
	Biomass	127	0	0	0.00	0
	Solar	20	0	0	0.02	1
	Small Hydro (< 25 MW)	180	0	0	0.00	0
	Renewable(Total)	327	0	0	0.02	1
	Total Uttarakhand	1802	778	487	14.15	589
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.01	0
	Delhi Gas Turbine (6x30 + 3x34)	282	78	69	1.92	80
	Pragati Gas Turbine (2x104+ 1x122)	330	261	263	5.88	245
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	248	280	6.02	251
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0
	Thermal (Total)	2917	587	612	13.81	576
	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	587	612	13.81	576
HP	Baspa HPS (IPP) (3*100)	300	0	28	1.35	56
	Malana HPS (IPP) (2*43)	86	13	0	0.36	15
	Other Hydro	372	90	29	1.87	78
	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	64	55	1.38	58
	Renewable(Total)	486	64	55	1.38	58
	Total HP	1244	167	112	4.96	207
	J & K	Baqilhar HPS (IPP) (3*150+3*150)	900	127	109	2.60
Other Hydro/IPP(including 98 MW Small Hydro)		308	85	23	1.14	47
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	212	132	4	156

Total State Control Area Generation	50078	20604	17614	461.81	19242
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		5052	2852	168.82	7034
Total Regional Availability(Gross)	75315	43500	28599	890.31	37096

IV. Total Hydro Generation:

Regional Entities Hydro	12234	8591	907	65.79	2741
State Control Area Hydro	7163	2186	1458	36.63	1812
Total Regional Hydro	19397	10776	2365	102.42	4553

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.04	2
State Control Area Renewable	7356	507	1537	25.86	1078
Total Regional Renewable	7386	507	1537	25.90	1079

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)	300	-500	300	500	3.54	4.14	-0.59
765 KV Gwalior-Agra (D/C)	-1271	-1652	2152	0	39.95	0.00	39.95
400 KV Zerda-Kankroli	-193	-281	0	281	0.00	4.29	-4.29
400 KV Zerda-Bhimnal	-79	-205	29	252	0.00	2.59	-2.59
220 KV Auraiya-Malanpur	-99	-79	0	106	0.00	1.70	-1.70
220 KV Badod-Kota/Morak	-82	-127	0	149	0.00	1.22	-1.22
Mundra-Mohinderghar(HVDC Bipole)	2202	1597	2406	0.00	47.60	0.00	47.60
400 KV RAPPCC-Sujalpur	400	60	400	0	6.20	0.00	6.20
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1103	972	1571	0	30.25	0.00	30.25
Sub Total WR	2281	-215			127.54	13.94	113.61
400 kV Sasaram - Varanasi	275	237	282	0	9.34	0.00	9.34
400 kV Sasaram - Allahabad	-61	-104	104	0	1.90	0.00	1.90
400 KV MZP- GKP (D/C)	152	402	460	0	7.34	0.00	7.34
400 KV Patna-Balia(D/C) X 2	650	671	817	0	16.71	0.00	16.71
400 KV B'Sharif-Balia (D/C)	47	131	224	0	3.16	0.00	3.16
765 KV Gaya-Balia	159	131	264	0	4.47	0.00	4.47
765 KV Gaya-Varanasi (D/C)	305	479	635	0	11.00	0.00	11.00
220 KV Pusaali-Sahupuri	155	117	171	0	3.42	0.00	3.42
132 KV K'nasa-Sahupuri	-32	0	0	32	0.00	0.51	-0.51
132 KV Son Ngr-Rihand	-34	-40	0	45	0.00	0.83	-0.83
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	129	71	135	185	0.00	0.81	-0.81
400 KV Barh -GKP (D/C)	456	472	554	0	11.04	0.00	11.04
400 kV B'Sharif - Varanasi (D/C)	70	0	147	89	1.05	0.00	1.05
Sub Total ER	2271	2567			69.43	2.15	67.28
+/- 800 KV BiswanathCharialli-Agra	500	500	0	500.00	0.00	12.06	-12.06
Sub Total NER	500	500			0.00	12.06	-12.06
Total IR Exch	5052	2852			196.97	28.15	168.82

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
45.65	0.98	46.63	1.72	-8.83	9.05	0.39	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
57.40	97.60	155.00	55.22	113.61	168.82	-2.19	16.01	13.82

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	13	0	14	0	1	-0.71

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	0.63	13.40	51.77	67.52	16.05	3.53	0.02	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)		
50.21	22.00	49.77	17.10	49.99	0.052	0.00	0.00	32.48	

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	405	0:00	398	12:33	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	422	0:00	402	17:48	0.0	0.0	1.8	0.0	1.8
Bareilly(PG)400kV	400	424	0:00	397	22:44	0.0	0.0	15.1	0.0	15.1
Kanpur	400	422	0:03	401	15:10	0.0	0.0	1.2	0.0	1.2
Dadri	400	428	2:01	404	15:06	0.0	0.0	26.8	0.0	26.8
Ballabgarh	400	432	0:06	407	12:14	0.0	0.0	43.3	11.4	43.3
Bawana	400	429	0:04	406	15:11	0.0	0.0	39.3	0.0	39.3
Bassi	400	423	4:01	394	12:13	0.0	0.0	2.3	0.0	2.3
Hissar	400	421	3:59	395	15:11	0.0	0.0	0.0	0.0	0.0
Moga	400	422	0:01	399	15:09	0.0	0.0	18.7	0.0	18.7
Abdullapur	400	425	3:20	403	15:08	0.0	0.0	27.0	0.0	27.0
Nalagarh	400	430	2:02	408	15:10	0.0	0.0	33.1	0.0	33.1
Kishenpur	400	420	2:00	388	15:06	0.0	0.5	0.0	0.0	0.0
Wagoora	400	394	15:40	360	15:06	59.3	90.7	0.0	0.0	59.3
Amritsar	400	432	4:03	407	10:47	0.0	0.0	41.9	4.9	41.9
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	426	3:19	403	18:20	0.0	0.0	30.8	0.0	30.8
Rishikesh	400	422	20:39	394	9:38	0.0	0.0	2.9	0.0	2.9

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	781	0:15	740	9:39	0.0	0.9	0.0	0.0	0.0
Balia	765	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Moga	765	800	20:21	761	15:10	0.0	0.0	0.0	0.0	0.0

Agra	765	793	0:00	753	9:41	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	807	0:00	771	9:37	0.0	0.0	26.4	0.0	26.4
Unnao	765	778	0:03	739	14:54	0.0	6.4	0.0	0.0	0.0
Lucknow	765	808	0:00	767	15:11	0.0	0.0	3.4	0.0	3.4
Meerut	765	811	20:39	767	15:11	0.0	0.0	6.6	0.0	6.6
Jhatikara	765	808	0:00	767	15:11	0.0	0.0	19.1	0.0	19.1
Bareilly 765 kV	765	801	0:00	761	9:38	0.0	0.0	0.4	0.0	0.4
Anta	765	793	20:41	767	7:35	0.0	0.0	0.0	0.0	0.0
Phagi	765	799	20:21	764	9:42	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 ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	492.94	827.99	504.93	1312.37	170.72	465.16
Pong	426.72	384.05	410.63	514.41	414.24	644.91	59.18	381.34
Tehri	829.79	740.04	814.90	902.26	809.65	795.44	41.75	158.00
Koteshwar	612.50	598.50	610.01	4.44	610.89	4.95	158.00	161.98
Chamera-I	760.00	748.75	759.46	0.00	0.00	0.00	40.56	37.92
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	507.81	2.02	503.97	4.41	34.47	93.31

* 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	-461	2	0	-542	0	0	-13.96	1.05	-12.91
Delhi	-281	-314	0	-370	-162	0	-8.82	-0.91	-9.73
Haryana	-852	342	0	-543	308	0	-15.58	7.54	-8.03
HP	360	67	0	267	-56	0	9.52	-1.50	8.03
J&K	621	118	0	615	183	0	14.69	2.69	17.38
CHD	0	0	0	0	0	0	0.00	-0.07	-0.07
Rajasthan	-7	255	0	-7	206	0	4.40	5.73	10.14
UP	126	0	0	-94	-100	0	-6.54	-1.33	-7.86
Uttarakhand	327	-115	0	24	24	0	6.82	-0.57	6.25
Total	-169	356	0	-650	403	0	-9.46	12.65	3.19

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-441	-752	296	0	0	0
Delhi	-281	-459	232	-358	0	0
Haryana	-532	-874	352	-64	0	0
HP	549	242	67	-492	0	0
J&K	621	602	281	-203	0	0
CHD	0	0	0	-71	0	0
Rajasthan	450	-7	558	-159	0	0
UP	161	-749	0	-100	0	0
Uttarakhand	358	24	170	-175	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	0.35%
ER	0.00%
Simultaneous	4.17%

(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	9
Haryana	1	18
Rajasthan	2	13
Delhi	2	21
UP	0	11
Uttarakhand	3	33
HP	0	12
J & K	4	28
Chandigarh	3	26

XIII. System Constraints:

XIV. Grid Disturbance / Any Other Significant Event:

XV. Weather Conditions For 10.12.2016 :

Fog in some parts of NR.

XVI. Synchronisation of new generating units :

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

400kV Jalandhar – Samba Ckt1 charged at 16:45 hrs and ckt 2 at 17:38 hrs for the first time.

400kV Unchahar 401 bay and Station Transformer charged on no load from 400kV Side only for the first time at 18:45 hrs.

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 : 10.12.2016

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER