



	Rajpura (2*700)	1400	760	660	20.42	851
	Talwandi Saboo (3*660)	1980	1074	924	24.79	1033
	<b>Thermal (Total)</b>	<b>6560</b>	<b>1834</b>	<b>1584</b>	<b>44.93</b>	<b>1872</b>
	Total Hydro	1000	408	156	7.17	299
	Wind Power	0	0	0	0.00	0
	Biomass	288	8	8	0.20	8
	Solar	560	0	0	0.04	2
	<b>Renewable(Total)</b>	<b>848</b>	<b>8</b>	<b>8</b>	<b>0.24</b>	<b>10</b>
	<b>Total Punjab</b>	<b>8408</b>	<b>2250</b>	<b>1748</b>	<b>52.34</b>	<b>2181</b>
Haryana	Panipat TPS (2*210+2*250)	920	0	0	0.00	0
	DCRTPP (Yamuna nagar) (2*300)	600	0	0	0.00	0
	Faridabad GPS (NTPC)(2*137.75+1*156)	432	196	156	4.15	173
	RGTPP (khedar) (IPP) (2*600)	1200	913	777	19.14	798
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	368	371	8.85	369
	<b>Thermal (Total)</b>	<b>4497</b>	<b>1477</b>	<b>1304</b>	<b>32.15</b>	<b>1340</b>
	Total Hydro	62	7	9	0.35	14
	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>1484</b>	<b>1313</b>	<b>32.49</b>	<b>1354</b>
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	91	90	2.14
suratgarh TPS (6*250)		1500	182	186	4.62	193
Chabra TPS (4*250)		1000	810	786	19.53	814
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	147	3.91	163
RAPS A (NPC) (1*100+1*200)		300	190	190	4.39	183
Barsingar (NLC) (2*125)		250	225	195	5.07	211
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	627	504	16.38	683
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(2*600)		1200	831	886	22.06	919
Kawai(Adani) (2*660)		1320	1182	819	24.15	1006
<b>Thermal (Total)</b>		<b>8876</b>	<b>4300</b>	<b>3803</b>	<b>102.25</b>	<b>4261</b>
Total Hydro		550	159	199	4.66	194
Wind power		4017	163	387	6.80	283
Biomass		99	7	7	0.16	7
Solar		1295	0	0	3.34	139
Renewable/Others (Total)		5411	170	394	10.29	429
<b>Total Rajasthan</b>		<b>14837</b>	<b>4629</b>	<b>4396</b>	<b>117.20</b>	<b>4883</b>
UP	Anpara TPS (3*210+2*500)	1630	1442	976	27.80	1158
	Obra TPS (2*50+2*94+5*200)	1194	665	550	14.80	617
	Paricha TPS (2*110+2*220+2*250)	1160	0	0	0.00	0
	Panki TPS (2*105)	210	0	0	0.00	0
	Harduaganj TPS (1*60+1*105+2*250)	665	95	100	2.30	96
	Tanda TPS (NTPC) (4*110)	440	372	274	8.01	334
	Roza TPS (IPP) (4*300)	1200	189	189	4.80	200
	Anpara-C (IPP) (2*600)	1200	1076	767	24.80	1033
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Anpara-D(2*500)	1000	405	291	9.00	375
	Lalitpur TPS(3*660)	1980	734	721	19.50	813
	Bara(2*660)	1320	1053	732	22.70	946
	<b>Thermal (Total)</b>	<b>12449</b>	<b>6031</b>	<b>4600</b>	<b>133.71</b>	<b>5571</b>
	Vishnuparyag HPS (IPP)(4*110)	440	68	68	1.60	67
	Alakanada(4*82.5)	330	76	0	0.90	38
	Other Hydro	527	35	65	2.20	92
	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
<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>7060</b>	<b>5583</b>	<b>158.81</b>	<b>6617</b>	
Uttarakhand	Other Hydro	1250	386	302	7.83	326
	Total Gas	225	296	274	7.03	293
	Wind Power	0	0	0	0.00	0
	Biomass	127	0	0	0.00	0
	Solar	20	0	0	0.03	1
	Small Hydro (< 25 MW)	180	0	0	0.00	0
	<b>Renewable(Total)</b>	<b>327</b>	<b>0</b>	<b>0</b>	<b>0.03</b>	<b>1</b>
	<b>Total Uttarakhand</b>	<b>1802</b>	<b>682</b>	<b>576</b>	<b>14.89</b>	<b>620</b>
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	79	80	1.95	81
	Pragati Gas Turbine (2x104+ 1x122)	330	162	160	3.90	162
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	250	280	6.09	254
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0
	<b>Thermal (Total)</b>	<b>2917</b>	<b>491</b>	<b>520</b>	<b>11.94</b>	<b>497</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>491</b>	<b>520</b>	<b>11.94</b>	<b>497</b>	
HP	Baspa HPS (IPP) (3*100)	300	0	0	0.87	36
	Malana HPS (IPP) (2*43)	86	0	0	0.20	8
	Other Hydro	372	99	26	1.96	81
	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	115	105	2.65	110
	<b>Renewable(Total)</b>	<b>486</b>	<b>115</b>	<b>105</b>	<b>2.65</b>	<b>110</b>
	<b>Total HP</b>	<b>1244</b>	<b>214</b>	<b>132</b>	<b>5.68</b>	<b>237</b>
J & K	Baqilhar HPS (IPP) (3*150+3*150)	900	143	142	3.42	143
	Other Hydro/IPP(including 98 MW Small Hydro)	308	94	39	1.33	55
	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>237</b>	<b>181</b>	<b>5</b>	<b>198</b>	

Total State Control Area Generation	50078	17047	14449	398.09	16587
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		6824.01	6141.85	172.26	7177
Total Regional Availability(Gross)	75315	40341	27967	806.54	33606

**IV. Total Hydro Generation:**

Regional Entities Hydro	12234	8753	1133	73.92	3080
State Control Area Hydro	7163	1886	1386	35.13	1758
Total Regional Hydro	19397	10639	2518	109.05	4838

**V. Total Renewable Generation:**

Regional Entities Renewable	30	0	0	0.12	5
State Control Area Renewable	7356	293	508	13.20	550
Total Regional Renewable	7386	293	508	13.32	555

**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)	-500	-350	0	500	0.00	9.93	-9.93
765 KV Gwalior-Agra (D/C)	2226	2307	2904	0	58.80	0.00	58.80
400 KV Zerda-Kankroli	50	-87	101	109	0.00	0.25	-0.25
400 KV Zerda-Bhimnal	135	21	245	5	2.52	0.00	2.52
220 KV Auraiya-Malanpur	-44	-10	0	49	0.00	0.53	-0.53
220 KV Badod-Kota/Morak	79	10	65	18	1.25	0.00	1.25
Mundra-Mohinderghar(HVDC Bipole)	1999	1352	2204	0.00	42.45	0.00	42.45
400 KV RAPPCC-Sujalpur	440	145	440	0	7.16	0.00	7.16
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1137	1008	711	0	29.77	0.00	29.77
<b>Sub Total WR</b>	<b>5522</b>	<b>4396</b>			<b>141.95</b>	<b>10.71</b>	<b>131.24</b>
400 kV Sasaram - Varanasi	206	194	214	0	4.89	0.00	4.89
400 kV Sasaram - Allahabad	29	46	63	0	0.97	0.00	0.97
400 KV MZP- GKP (D/C)	84	214	344	0	5.55	0.00	5.55
400 KV Patna-Balia(D/C) X 2	554	702	748	0	14.35	0.00	14.35
400 KV B'Sharif-Balia (D/C)	19	79	171	0	1.88	0.00	1.88
765 KV Gaya-Balia	235	238	315	0	5.66	0.00	5.66
765 KV Gaya-Varanasi (D/C)	343	284	583	0	9.46	0.00	9.46
220 KV Pusauli-Sahupuri	161	132	186	0	3.51	0.00	3.51
132 KV K'nasa-Sahupuri	-15	-10	0	30	0.00	0.51	-0.51
132 KV Son Ngr-Rihand	-36	-34	0	40	0.00	0.86	-0.86
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-174	-136	25	190	0.00	2.39	-2.39
400 KV Barh -GKP (D/C)	508	506	556	0	11.50	0.00	11.50
400 kV B'Sharif - Varanasi (D/C)	-105	31	73	112	0.00	0.87	-0.87
<b>Sub Total ER</b>	<b>1809</b>	<b>2246</b>			<b>57.78</b>	<b>4.63</b>	<b>53.15</b>
+/- 800 KV BiswanathCharialli-Agra	-507	-500	0	508.00	0.00	12.13	-12.13
<b>Sub Total NER</b>	<b>-507</b>	<b>-500</b>			<b>0.00</b>	<b>12.13</b>	<b>-12.13</b>
<b>Total IR Exch</b>	<b>6824</b>	<b>6142</b>			<b>199.73</b>	<b>27.47</b>	<b>172.26</b>

**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
32.51	0.36	32.87	-1.33	-4.22	8.67	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
40.20	136.68	176.89	41.02	131.24	172.26	0.81	-5.44	-4.63

**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	-34	-35	0	38	0	1	-0.86

**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	0.23	2.41	48.23	77.30	16.55	3.59	0.24	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)		
50.22	17.33	49.75	8.19	50.00	0.032	0.056	0.00	0.00	22.70

**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	2:40	401	8:13	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	422	13:34	406	19:01	0.0	0.0	6.2	0.0	6.2
Bareilly(PG)400kV	400	420	2:54	402	18:20	0.0	0.0	0.0	0.0	0.0
Kanpur	400	418	0:44	404	8:45	0.0	0.0	0.0	0.0	0.0
Dadri	400	429	2:54	408	18:44	0.0	0.0	28.5	0.0	28.5
Ballabgarh	400	424	0:12	406	8:45	0.0	0.0	20.5	0.0	20.5
Bawana	400	428	0:11	409	8:46	0.0	0.0	31.1	0.0	31.1
Bassi	400	425	2:55	404	8:46	0.0	0.0	20.6	0.0	20.6
Hissar	400	423	0:09	406	8:45	0.0	0.0	15.6	0.0	15.6
Moga	400	423	2:30	407	8:49	0.0	0.0	13.5	0.0	13.5
Abdullapur	400	430	0:11	412	18:44	0.0	0.0	50.7	0.0	50.7
Nalagarh	400	432	13:30	416	5:56	0.0	0.0	67.9	1.3	67.9
Kishenpur	400	420	13:01	403	6:57	0.0	0.0	0.0	0.0	0.0
Wagoora	400	405	15:11	379	19:24	0.0	59.4	0.0	0.0	0.0
Amritsar	400	425	2:57	407	7:16	0.0	0.0	29.6	0.0	29.6
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	423	2:59	411	8:16	0.0	0.0	27.3	0.0	27.3
Rishikesh	400	0	0:00	0	0:00	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	778	13:03	741	8:46	0.0	0.1	0.0	0.0	0.0
Balia	765	792	0:46	764	18:25	0.0	0.0	0.0	0.0	0.0
Moga	765	804	13:02	770	8:46	0.0	0.0	2.6	0.0	2.6

Agra	765	790	13:21	756	8:46	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	808	0:09	777	8:44	0.0	0.0	31.1	0.0	31.1
Unnao	765	778	2:32	747	18:20	0.0	0.0	0.0	0.0	0.0
Lucknow	765	800	3:58	765	18:25	0.0	0.0	0.0	0.0	0.0
Meerut	765	808	21:10	767	6:38	37.1	37.1	7.5	0.0	44.6
Jhatikara	765	809	0:12	770	6:38	0.0	0.0	10.3	0.0	10.3
Bareilly 765 kV	765	801	2:58	767	18:23	0.0	0.0	0.1	0.0	0.1
Anta	765	798	3:00	768	8:45	0.0	0.0	0.0	0.0	0.0
Phagi	765	803	2:05	770	8:45	0.0	0.0	8.4	0.0	8.4

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	482.63	519.70	495.86	937.45	173.72	368.09
Pong	426.72	384.05	405.12	344.07	405.82	361.16	91.72	233.93
Tehri	829.79	740.04	796.00	544.69	789.00	439.29	37.37	199.00
Koteshwar	612.50	598.50	609.25	4.21	610.28	4.69	199.00	208.00
Chamera-I	760.00	748.75	759.30	0.00	0.00	0.00	95.60	115.83
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	503.37	1.72	495.68	0.18	154.27	80.31

\* 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	-537	0	0	-610	-518	0	-18.23	-1.87	-20.10
Delhi	-118	-435	0	-298	145	0	-4.39	2.04	-2.36
Haryana	-831	254	0	-501	161	0	-14.55	3.37	-11.18
HP	441	108	0	365	-62	0	11.87	-3.45	8.41
J&K	616	0	0	613	251	0	14.59	3.76	18.35
CHD	0	0	0	0	-10	0	0.00	-0.08	-0.08
Rajasthan	23	382	0	-7	346	0	10.34	7.30	17.64
UP	97	0	0	-161	-100	0	-8.45	-1.69	-10.14
Uttarakhand	316	31	0	0	80	0	3.82	2.80	6.62
<b>Total</b>	<b>6</b>	<b>339</b>	<b>0</b>	<b>-599</b>	<b>292</b>	<b>0</b>	<b>-5.00</b>	<b>12.17</b>	<b>7.17</b>

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-527	-1248	0	-712	0	0
Delhi	-38	-309	758	-447	0	0
Haryana	-501	-831	264	-338	0	0
HP	707	320	108	-723	0	0
J&K	616	597	265	0	0	0
CHD	0	0	15	-51	0	0
Rajasthan	1112	-7	383	-40	0	0
UP	133	-919	0	-100	0	0
Uttarakhand	316	0	434	3	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	14
Rajasthan	1	13
Delhi	6	28
UP	0	9
Uttarakhand	3	16
HP	4	28
J & K	4	37
Chandigarh	3	26

**XIII. System Constraints:**

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

**XV. Weather Conditions For 29.01.2017 :**

**XVI. Synchronisation of new generating units :**

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

1. 400kV Bassi-Sikar 1 & 2 first time charged at 1006Hrs and 1029Hrs respectively on 29.01.2017.
2. 400kV Baghpat-Saharanpur-2 first time charged at 1418 Hrs on 29.01.2017.
3. 400kV Dehradun-Baghpat first time charged at 1925Hrs, 400kV Bus-1&2 at 400kV GSS Dehradun at 1941Hrs and 1958Hrs respectively on 29.01.2017
4. 400kV Dehradun-Roorkee first time charged at 2031Hrs on 29.01.2017
5. 315MVA ICT 1 &2 at 400kV GSS Dehradun first time charged at 2053Hrs and 2102Hrs respectively on 29.01.2017

**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 : 29.01.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER