

I. State Entities	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(Sentout MW)
Punjab	Guru Gobind Singh TPS (Ropar) (6*210)	1260	420	265	7.31	305
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	0	0	-0.02	-1
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	460	178	7.74	323
	Goidwal(GVK) (2*270)	540	246	246	5.21	217
	Rajpura (2*700)	1400	660	660	15.80	658
	Talwandi Saboo (3*660)	1980	1841	1600	40.02	1668
	Thermal (Total)	6560	3627	2949	76.06	3169
	Total Hydro	1000	684	692	17.48	728
	Wind Power	0	0	0	0.00	0
	Biomass	303	0	0	2.26	94
	Solar	859	0	0	5.80	242
	Renewable(Total)	1162	0	0	8.06	336
	Total Punjab	8722	4311	3641	101.59	4233
	Haryana	Panipat TPS (2*210+2*250)	920	394	396	9.71
DCRTPP (Yamuna nagar) (2*300)		600	479	476	11.17	465
Faridabad GPS (NTPC)(2*137.75+1*156)		432	0	0	0.00	0
RGTPP (khedan) (IPP) (2*600)		1200	387	0	4.40	183
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	572	398	10.42	434
Thermal (Total)		4497	1832	1270	35.70	1487
Total Hydro		62	29	29	0.90	37
Wind Power		0	0	0	0.00	0
Biomass		106	0	0	0.59	25
Solar		50	0	0	0.12	5
Renewable(Total)		156	0	0	0.70	29
Total Haryana		4715	1861	1299	37.30	1554
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	827	615	17.80
	suratgarh TPS (6*250)	1500	364	183	6.51	271
	Chabra TPS (4*250)	1000	869	824	21.70	904
	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	127	129	3.09	129
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingsar (NLC) (2*125)	250	0	0	0.00	0
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	512	502	14.16	590
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	412	410	9.96	415
	Kawai(Adani) (2*660)	1320	866	855	20.78	866
	Thermal (Total)	9536	3977	3518	94.00	3916
	Total Hydro	550	30	0	0.26	11
	Wind power	4292	1852	2052	44.41	1850
	Biomass	102	13	13	0.30	13
	Solar	1995	24	0	7.14	298
	Renewable/Others (Total)	6389	1889	2065	51.85	2160
	Total Rajasthan	16475	5896	5583	146.11	6088
	UP	Anpara TPS (3*210+2*500)	1630	1331	923	25.70
Obra TPS (2*50+2*94+5*200)		1194	523	311	8.89	371
Paricha TPS (2*110+2*220+2*250)		1160	798	464	12.63	526
Panki TPS (2*105)		210	0	0	0.00	0
Harduaganj TPS (1*60+1*105+2*250)		665	448	254	7.41	309
Tanda TPS (NTPC) (4*110)		440	392	223	6.10	254
Roza TPS (IPP) (4*300)		1200	0	0	0.00	0
Anpara-C (IPP) (2*600)		1200	1081	638	19.06	794
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	0	0	0.00	0
Anpara-D(2*500)		1000	926	944	21.68	903
Lalitpur TPS(3*660)		1980	622	352	8.45	352
Bara(3*660)		1980	354	350	8.49	354
Thermal (Total)		13109	6475	4459	118.40	4933
Vishnupurayag HPS (IPP)(4*110)		440	435	435	10.48	437
Alakananada(4*82.5)		330	350	349	8.32	347
Other Hydro		527	211	112	3.23	134
Cogeneration		1360	100	100	2.40	100
Wind Power		0	0	0	0.00	0
Biomass		26	0	0	0.00	0
Solar	472	0	0	1.33	55	
Renewable(Total)	498	0	0	1.33	55	
Total UP	16264	7571	5455	144.14	6006	
Uttarakhand	Other Hydro	1250	770	704	17.93	747
	Total Gas	450	0	0	0.00	0
	Wind Power	0	0	0	0.00	0
	Biomass	127	0	0	0.00	0
	Solar	100	0	0	0.31	13
	Small Hydro (< 25 MW)	180	0	0	0.00	0
	Renewable(Total)	407	0	0	0.31	13
	Total Uttarakhand	2107	770	704	18.24	760
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	72	71	1.76	73
	Pragati Gas Turbine (2x104+ 1x122)	330	148	148	3.66	153
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	251	26	5.18	216
	Badarpur TPS (NTPC) (3*95+2*210)	705	170	168	3.67	153
	Thermal (Total)	2917	641	413	14.27	595
	Wind Power	0	0	0	0.00	0
	Biomass	16	26	25	0.76	31
	Solar	2	0	0	0.00	0
	Renewable(Total)	18	26	25	0.76	31
Total Delhi	2935	667	438	15.03	626	

HP	Baspa HPS (IPP) (3*100)	300	330	330	7.92	330	
	Malana HPS (IPP) (2*43)	86	100	104	2.41	100	
	Other Hydro (>25MW)	372	332	282	7.75	323	
	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	410	367	9.04	377	
	Renewable(Total)	486	410	367	9.04	377	
	Total HP	1244	1173	1083	27.12	1130	
	J & K	Baglihar HPS (IPP) (3*150+3*150)	900	880	880	21.14	881
		Other Hydro/IPP(Including 98 MW Small Hydro)	308	190	190	4.42	184
Gas/Diesel/Others		0	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		1208	1070	1070	25.56	1065	
Total State Control Area Generation		53670	23319	19273	515.09	21462	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		14321	11956.87	252.69	10529		
Total Regional Availability(Gross)		79837	58576	49566	50092		

IV. Total Hydro Generation:

Regional Entities Hydro	12564	11715	10185	253.68	10496
State Control Area Hydro	7468	4752	4474	102.22	4649
Total Regional Hydro	20032	16466	14660	355.90	15145

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.07	3
State Control Area Renewable	9214	2325	2457	72.04	3002
Total Regional Renewable	9244	2325	2457	72.11	3005

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

Element	Peak(20:00 Hrs) MW	Diff Peak(03:00 Hrs) MW	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
			Import	Export	Import	Export	
Vindhychal(HVDC B/B)	-250	-250	0	250	0.00	6.01	-6.01
765 KV Gwalior-Agra (D/C)	2762	2084	2762	0	52.04	0.00	52.04
400 KV Zerdar-Kankroli	179	29	179	130	0.77	0.00	0.77
400 KV Zerdar-Bhinmal	163	36	188	123	1.09	0.00	1.09
220 KV Auraiya-Malanpur	39	35	0	12	0.89	0.00	0.89
220 KV Badod-Kota/Morak	55	82	216	0	2.30	0.00	2.30
Mundra-Mohindergarhi(HVDC Bipole)	798	998	1203	0	20.61	0.00	20.61
400 KV RAPPK-Sujalpur	297	190	297	69	3.37	0.00	3.37
400 KV Vindhychal-Rihand	963	892	0	968	0.00	19.42	-19.42
765 KV Phagt-Gwalior (D/C)	1281	1201	1435	0	28.62	0.00	28.62
+/- 800 KV HVDC Champa-Kurushetra	2500	1500	1900	0	30.30	0	30.30
765KV Orai-Jabalpur	1369	1013	1369	0	23.29	0	23.29
765KV Orai-Satna	1870	1564	1870	0	39.97	0	39.97
765KV Orai-Gwalior	419	334	0	419	0.00	8	-8.36
Sub Total WR	12445	9708			203.24	33.79	169.45
400 kV Sasaram - Varanasi	-109	-94	115	0	3.18	0.00	3.18
400 kV Sasaram - Allahabad	38	45	86	0	1.97	0.00	1.97
400 KV MZP- GKP (D/C)	440	533	687	0	12.75	0.00	12.75
400 KV Patna-Balia(D/C) X 2	714	883	1001	0	19.94	0.00	19.94
400 KV B'Sharif-Balia (D/C)	155	246	330	0	5.48	0.00	5.48
765 KV Gaya-Balia	416	309	419	0	7.43	0.00	7.43
765 KV Gaya-Varanasi (D/C)	-471	-377	518	0	9.67	0.00	9.67
220 KV Pusaui-Sahupuri	123	96	123	0	2.62	0.00	2.62
132 KV Knasa-Sahupuri	0	0	0	0	0.96	0.00	0.96
132 KV Son Ngr-Rihand	28	20	0	34	0.00	0.60	-0.60
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-179	-116	53	205	0.00	1.48	-1.48
400 KV Mothari -GKP (D/C)	-291	-191	0	291	0.00	4.14	-4.14
400 kV B'Sharif - Varanasi (D/C)	11	-105	225	44	2.46	0.00	2.46
+/- 800 KV HVDC Alipurduar-Agra	400	400	400	0	8.91	0.00	8.91
Sub Total ER	1275	1649			75.36	6.22	69.14
+/- 800 KV HVDC Biswanath-Charialli-Agra	600	600	600	0.00	14.09	0.00	14.09
Sub Total NER	600	600			14.09	0.00	14.09
Total IR Exch	14321	11957			292.70	40.01	252.69

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
48.74	3.71	52.45	30.77	55.83	-3.64	-3.31	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
75.87	189.90	265.77	83.23	169.45	252.69	7.36	-20.45	-13.08

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

Element	Peak(20:00 Hrs) MW	Diff Peak(03:00 Hrs) MW	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
			Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	-16	0	0	-16	0	0	-0.15

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	5.90	54.70	83.70	10.00	0.80	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)	
50.15	12.02	49.83	14.21	49.99	0.028	0.052	0.00	0.00	16.30

VIII(A). Voltage profile 400 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviation Index
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV	
Rihand	400	404	4:01	400	0:04	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	421	16:01	394	19:19	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	412	16:02	382	5:43	0.0	0.0	0.0	0.0	0.0
Kanpur	400	417	16:03	402	0:38	0.0	0.0	0.0	0.0	0.0
Dadri	400	411	7:01	398	22:29	0.0	0.0	0.0	0.0	0.0
Ballabgarh	400	411	7:04	396	22:14	0.0	0.0	0.0	0.0	0.0
Bawana	400	409	16:02	397	0:17	0.0	0.0	0.0	0.0	0.0
Bassi	400	417	16:02	399	22:17	0.0	0.0	0.0	0.0	0.0
Hissar	400	407	16:04	394	0:07	0.0	0.0	0.0	0.0	0.0
Moga	400	403	9:41	393	0:17	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	408	8:01	398	0:12	0.0	0.0	0.0	0.0	0.0
Nalagarh	400	408	8:06	402	0:14	0.0	0.0	0.0	0.0	0.0
Kishenpur	400	407	13:06	400	21:16	0.0	0.0	0.0	0.0	0.0
Wagoora	400	403	4:44	388	20:28	0.0	0.0	0.0	0.0	0.0
Amritsar	400	405	8:01	396	0:03	0.0	0.0	0.0	0.0	0.0
Kashipur	400	402	0:00	402	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	405	8:30	398	0:03	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	404	4:06	391	23:15	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)				Voltage Deviation Index
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	
Fatehpur	765	778	16:04	751	0:38	0.0	0.0	0.0	0.0	0.0
Balia	765	790	16:02	756	19:19	0.0	0.0	0.0	0.0	0.0
Moga	765	784	10:01	756	0:17	0.0	0.0	0.0	0.0	0.0
Agra	765	791	16:02	760	22:32	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	792	16:00	767	0:11	0.0	0.0	0.0	0.0	0.0
Unnao	765	771	16:04	741	22:30	0.0	0.7	0.0	0.0	0.0
Lucknow	765	794	16:02	758	23:07	0.0	0.0	0.0	0.0	0.0
Meerut	765	798	16:02	767	23:38	0.0	0.0	0.0	0.0	0.0
Jhatikara	765	792	16:02	759	22:21	0.0	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	789	16:02	754	23:08	0.0	0.0	0.0	0.0	0.0
Anta	765	795	4:12	775	22:20	0.0	0.0	0.0	0.0	0.0
Phagi	765	795	15:57	770	21:47	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	477.71	407.63	495.89	937.45	1131.23	570.07
Pong	426.72	384.05	399.59	209.93	410.59	514.41	500.44	284.98
Tehri	829.79	740.04	794.60	522.91	797.15	562.80	577.84	556.00
Koteswar	612.50	598.50	610.47	4.95	609.74	4.44	556.00	554.02
Chamera-I	760.00	748.75	757.91	0.00	0.00	0.00	332.81	351.28
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	509.86	5.64	522.36	9.15	327.19	240.97

* 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	2158	0	0	2157	0	0	51.78	0.00	51.78
Delhi	1087	-299	0	1011	-95	0	24.74	-2.38	22.36
Haryana	2091	116	0	2251	0	0	46.60	0.08	46.68
HP	-1536	-342	0	-1568	-393	0	-34.44	-8.15	-42.59
J&K	-1068	0	0	-1069	488	0	-25.64	7.82	-17.82
CHD	0	-55	0	0	-35	0	0.00	-0.70	-0.70
Rajasthan	-37	144	0	-343	71	0	-1.45	1.80	0.35
UP	1728	0	0	1359	-304	0	34.22	-7.09	27.13
Uttarakhand	-152	360	0	-205	548	0	-3.92	9.28	5.36
Total	4270	-77	0	3592	278	0	91.89	0.66	92.55

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	2159	2150	0	0	0	0
Delhi	1301	865	281	-678	0	0
Haryana	2381	1512	119	-613	0	0
HP	-1312	-1771	-313	-393	0	0
J&K	-1068	-1070	622	0	0	0
CHD	0	0	0	-70	0	0
Rajasthan	28	-343	149	-820	0	0
UP	1746	1291	0	-800	0	0
Uttarakhand	-152	-205	571	296	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	0	10
Haryana	2	17
Rajasthan	2	16
Delhi	6	47
UP	1	13
Uttarakhand	5	26
HP	1	22
J & K	3	25
Chandigarh	3	27

XIII. System Constraints:**XIV. Grid Disturbance / Any Other Significant Event:****XV. Weather Conditions For 31.07.2018 :****XVI. Synchronisation of new generating units :****XVII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / substation :**

- 220 kV Sarsawa - Khodri charged from Sarsawa (UP) end only at 20.15 hrs.
- 400 Bus-2 at Suratgarh super critical generating station (Rajasthan) first time charged at 17.06 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 : 31.07.2018

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER