

I. State Entities	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(S entout MW)	
Punjab	Guru Gobind Singh TPS (Ropar) (6*210)	1260	210	160	4.12	172	
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	0	0	-0.01	-1	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	211	173	4.18	174	
	Goindwal(GVK) (2*270)	540	240	145	4.81	200	
	Rajpura (2*700)	1400	1320	920	29.70	1238	
	Talwandi Saboo (3*660)	1980	1450	924	30.91	1288	
	Thermal (Total)	6560	3431	2322	73.71	3071	
	Total Hydro	1000	303	210	8.88	370	
	Wind Power	0	0	0	0.00	0	
	Biomass	303	0	0	2.77	115	
	Solar	859	0	0	2.92	122	
	Renewable(Total)	1162	0	0	5.69	237	
	Total Punjab	8722	3734	2532	88.28	3678	
	Haryana	Paripat TPS (2*210+2*250)	920	0	0	0.00	0
		DCRTPP (Yamuna nagar) (2*300)	600	259	231	5.97	249
		Faridabad GPS (NTPC)(2*137.75+1*156)	432	0	0	0.00	0
RGTPP (khedar) (IPP) (2*600)		1200	805	762	21.69	904	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP) (2*660)		1320	1183	739	25.76	1073	
Thermal (Total)		4497	2247	1732	53.43	2226	
Total Hydro		62	0	1	0.01	0	
Wind Power		0	0	0	0.00	0	
Biomass		106	0	0	1.34	56	
Solar		50	0	0	0.12	5	
Renewable(Total)		156	0	0	1.45	61	
Total Haryana		4715	2247	1733	54.89	2287	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	924	824	23.01	959
		suratgarh TPS (6*250)	1500	738	727	21.15	881
		Chabra TPS (4*250)	1000	1169	1198	24.89	1037
	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	169	171	4.13	172	
	RAPS A (NPC) (1*100+1*200)	300	192	192	4.46	186	
	Barsingsar (NLC) (2*125)	250	215	215	4.93	205	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	716	712	17.51	730	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	871	1123	25.39	1058	
	Kawai(Adani) (2*660)	1320	0	0	0.00	0	
	Thermal (Total)	9536	4994	5162	125.47	5228	
	Total Hydro	550	135	96	3.96	165	
	Wind power	4292	1037	100	10.14	423	
	Biomass	102	19	19	0.46	19	
	Solar	1995	0	0	2.33	97	
	Renewable/Others (Total)	6389	1056	119	12.93	539	
	Total Rajasthan	16475	6185	5377	142.36	5932	
UP	Anpara TPS (3*210+2*500)	1630	1319	1194	29.77	1241	
	Obra TPS (2*50+2*94+5*200)	1194	148	240	4.14	173	
	Paricha TPS (2*110+2*220+2*250)	1160	674	596	13.97	582	
	Panki TPS (2*105)	210	0	0	0.00	0	
	Harduaqani TPS (1*60+1*105+2*250)	665	530	433	11.84	493	
	Tanda TPS (NTPC) (4*110)	440	396	390	9.29	387	
	Roza TPS (IPP) (4*300)	1200	1019	792	20.51	855	
	Anpara-C (IPP) (2*600)	1200	1101	1099	25.97	1082	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	40	39	0.94	39	
	Anpara-D(2*500)	1000	401	408	10.16	423	
	Lalitpur TPS(3*660)	1980	0	0	0.30	13	
	Bara(3*660)	1980	404	513	11.36	473	
	Thermal (Total)	13109	6032	5704	138.24	5760	
	Vishnuparvaq_HPS (IPP)(4*110)	440	63	63	1.51	63	
	Alaknanda(4*82.5)	330	82	0	0.99	41	
	Other Hydro	527	230	221	5.19	216	
	Cogeneration	981	900	900	21.60	900	
	Wind Power	0	0	0	0.00	0	
	Biomass	26	0	0	0.00	0	
	Solar	102	0	0	2.91	121	
Renewable(Total)	128	0	0	2.91	121		
Total UP	15515	7307	6888	170.45	7102		
Uttarakhand	Other Hydro	1250	506	250	7.62	317	
	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	0.60	25	
	Small Hydro (< 25 MW)	180	0	0	0.00	0	
	Renewable(Total)	407	0	0	0.60	25	
	Total Uttarakhand	2107	506	250	8.22	342	
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	40	38	0.91	38	
	Pragati Gas Turbine (2x104+ 1x122)	330	267	260	6.60	275	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	254	245	5.97	249	
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0	
	Thermal (Total)	2917	561	543	13.48	561	
	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	561	543	13.48	561		

HP	Baspa HPS (IPP) (3*100)	300	0	0	0.88	37	
	Malana HPS (IPP) (2*43)	86	0	0	0.22	9	
	Other Hydro (>25MW)	372	95	20	1.44	60	
	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	107	26	1.28	53	
	Renewable(Total)	486	107	26	1.28	53	
	Total HP	1244	202	46	3.83	159	
	J & K	Baglihar HPS (IPP) (3*150+3*150)	900	122	122	2.93	122
		Other Hydro/IPP(including 98 MW Small Hydro)	308	91	37	1.31	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	
Renewable(Total)		98	0	0	0.00	0	
Total J & K		1398	213	159	4	177	
Total State Control Area Generation		53111	20955	17528	485.72	20238	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		6794	9055	169.38	7058		
Total Regional Availability(Gross)	78948	45777	35159	921.29	38387		

IV. Total Hydro Generation:

Regional Entities Hydro	12234	8745	706	64.99	2703
State Control Area Hydro	7468	1734	1046	34.94	1534
Total Regional Hydro	19702	10480	1752	99.93	4237

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.14	6
State Control Area Renewable	8844	1163	145	24.86	1036
Total Regional Renewable	8874	1163	145	25.00	1042

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

Element	Peak(19:00 Hrs)		Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	Off Peak(03:00 Hrs)	Import	Export	Import	Export	
Vindhychal(HVDC B/B)	-250	-250	0	250	0.00	6.02	-6.02
765 KV Gwalior-Agra (D/C)	1443	2080	2382	0	49.46	0.00	49.46
400 KV Zerda-Kankroli	-277	-210	0	299	0.00	4.74	-4.74
400 KV Zerda-Bhinmal	-241	-126	55	333	0.00	2.74	-2.74
220 KV Aurajya-Malanpur	-126	-102	0	147	0.00	2.60	-2.60
220 KV Badod-Kota/Morak	-87	-56	0	144	0.00	1.27	-1.27
Mundra-Mohindergarh(HVDC Bipole)	698	701	704	0	17.00	0.00	17.00
400 KV RAPPCC-Sujalpur	97	273	310	18	4.77	0.00	4.77
400 KV Vindhychal-Rihand	974	965	0	968	0.00	23.16	-23.16
765 kV Phagi-Gwalior (D/C)	745	1115	1319	0	26.59	0.00	26.59
+/- 800 kV HVDC Champa-Kurushetra	2000	2500	2500	0	49.67	0	49.67
Sub Total WR	4976	6890			147.50	40.52	106.98
400 kV Sasaram - Varanasi	144	135	144	0	2.97	0.00	2.97
400 kV Sasaram - Allahabad	47	58	90	0	1.62	0.00	1.62
400 kV MZP- GKP (D/C)	-24	119	340	67	3.07	0.00	3.07
400 kV Patna-Balia(D/C) X 2	576	566	825	0	14.90	0.00	14.90
400 kV B'Sharif-Balia (D/C)	45	105	253	0	3.41	0.00	3.41
765 KV Gaya-Balia	111	156	265	0	4.63	0.00	4.63
765 KV Gaya-Varanasi (D/C)	124	215	591	0	8.34	0.00	8.34
220 KV Pusauli-Sahupuri	165	120	167	0	3.07	0.00	3.07
132 KV K'nasa-Sahupuri	0	0	0	0	0.96	0.00	0.96
132 KV Son Ngr-Rihand	-24	-23	0	29	0.00	0.52	-0.52
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-100	-11	164	101	0.70	0.00	0.70
400 KV Motihari -GKP (D/C)	202	234	364	0	6.13	0.00	6.13
400 kV B'Sharif - Varanasi (D/C)	52	-9	190	106	1.42	0.00	1.42
+/- 800 KV HVDC Alipurduar-Agra	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1318	1665			51.21	0.52	50.69
+/- 800 KV HVDC BiswanathChariali-Agra	500	500	500	0.00	11.71	0.00	11.71
Sub Total NER	500	500			11.71	0.00	11.71
Total IR Exch	6794	9055			210.43	41.04	169.38

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
52.67	0.10	52.77	-9.52	-18.63	3.49	-4.41	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
46.74	120.23	166.96	62.41	106.98	169.38	15.67	-13.25	2.42

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

Element	Peak(19:00 Hrs)		Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	Off Peak(03:00 Hrs)	Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	-17	-16	0	38	0	1	-0.84

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	1.28	17.91	68.54	76.76	3.77	1.56	0.00	0.00

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block		Freq Dev Index (% of Time)
Maximum		Minimum					MAX	MIN	
Freq	Time	Freq	Time	Hz	Index		(Hz)	(Hz)	
50.17	6.01	49.71	6.43	49.95	0.062	0.063	50.08	49.80	23.24

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	405	12:01	401	0:00	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	417	14:29	398	19:10	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	420	13:01	403	10:04	0.0	0.0	0.0	0.0	0.0
Kanpur	400	422	13:02	407	22:35	0.0	0.0	0.7	0.0	0.7
Dadri	400	424	3:58	408	10:04	0.0	0.0	17.4	0.0	17.4
Ballabgarh	400	423	4:01	404	6:37	0.0	0.0	4.3	0.0	4.3
Bawana	400	424	2:53	408	6:38	0.0	0.0	20.1	0.0	20.1
Bassi	400	416	4:01	392	6:33	0.0	0.0	0.0	0.0	0.0
Hissar	400	419	4:01	400	6:26	0.0	0.0	0.0	0.0	0.0
Moga	400	420	20:11	402	6:36	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	426	20:31	406	6:40	0.0	0.0	23.2	0.0	23.2
Nalagarh	400	430	20:30	412	6:35	0.0	0.0	38.6	0.0	38.6
Kishenpur	400	416	2:51	403	6:37	0.0	0.0	0.0	0.0	0.0
Wagoora	400	402	13:02	386	9:58	0.0	17.7	0.0	0.0	0.0
Amritsar	400	426	20:20	409	10:09	0.0	0.0	24.5	0.0	24.5
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	423	20:20	402	10:39	0.0	0.0	2.3	0.0	2.3
Rishikesh	400	416	4:01	395	10:06	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	789	13:02	744	22:35	0.0	0.0	0.0	0.0	0.0
Balia	765	783	4:32	763	19:10	0.0	0.0	0.0	0.0	0.0
Moga	765	802	20:20	757	6:43	0.0	0.0	0.3	0.0	0.3
Agra	765	799	13:02	763	6:37	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	804	13:02	776	6:24	0.0	0.0	1.9	0.0	1.9
Unnao	765	778	13:05	754	22:42	0.0	0.0	0.0	0.0	0.0
Lucknow	765	797	13:02	771	18:43	0.0	0.0	0.0	0.0	0.0
Meerut	765	810	13:02	728	10:43	0.0	0.1	12.7	0.0	12.7
Jhatikara	765	806	13:02	774	6:33	0.0	0.0	5.8	0.0	5.8
Bareilly 765 kV	765	802	13:05	769	10:08	0.0	0.0	0.4	0.0	0.4
Anta	765	791	18:05	769	6:15	0.0	0.0	0.0	0.0	0.0
Phagi	765	800	18:04	768	6:16	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	485.75	610.73	475.75	368.17	148.18	558.12
Pong	426.72	384.05	401.99	266.33	401.32	252.05	46.35	374.46
Tehri	829.79	740.04	785.20	387.87	783.90	370.68	39.33	192.00
Koteshwar	612.50	598.50	610.82	4.95	610.20	4.69	192.00	191.59
Chamera-I	760.00	748.75	754.72	0.00	0.00	0.00	40.46	47.50
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	495.76	1.15	505.04	1.95	50.18	57.27

* 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	-921	-101	0	-1073	-962	0	-23.73	-9.34	-33.07
Delhi	-638	-562	0	-566	-111	0	-15.47	-4.06	-19.52
Haryana	-486	173	0	-633	-399	0	-16.19	-1.39	-17.59
HP	394	66	0	438	-33	0	12.75	-0.83	11.92
J&K	579	212	0	579	236	0	13.48	4.94	18.42
CHD	-35	0	0	-35	0	0	-0.43	-0.06	-0.49
Rajasthan	-90	124	0	-90	-639	0	-0.60	-1.85	-2.45
UP	42	-67	0	-4	1393	0	-3.71	4.66	0.95
Uttarakhand	292	303	0	292	333	0	7.13	7.85	14.99
Total	-864	148	0	-1093	-183	0	-26.76	-0.08	-26.83

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-921	-1073	-101	-1317	0	0
Delhi	-564	-699	377	-670	0	0
Haryana	-486	-900	173	-875	0	0
HP	742	315	203	-557	0	0
J&K	579	545	444	-410	0	0
CHD	0	-35	0	-30	0	0
Rajasthan	67	-90	736	-1399	0	0
UP	61	-437	1393	-67	0	0
Uttarakhand	350	292	532	84	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	21
Haryana	1	13
Rajasthan	1	13
Delhi	1	16
UP	1	14
Uttarakhand	3	41
HP	4	42
J & K	3	33
Chandigarh	5	41

XIII. System Constraints:**XIV. Grid Disturbance / Any Other Significant Event:****XV. Weather Conditions For 23.02.2018 :****XVI. Synchronisation of new generating units :****XVII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / substation :**

1. 400kV Bus - I at Orai (PG) first time charged at 17:35 hrs on 23.02.2018
2. 400kV Bus - II at Orai (PG) first time charged at 17:55 hrs on 23.02.2018

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 : 23.02.2018

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER