

I. State Entities	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(Sent out MW)	
Punjab	Guru Gobind Singh TPS (Ropar) (6*210)	1260	830	850	20.29	845	
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	418	400	9.34	389	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	865	828	19.77	824	
	Goindwal(GVK) (2*270)	540	0	0	-0.04	-2	
	Rajpura (2*700)	1400	1320	1320	29.29	1220	
	Talwandi Saboo (3*660)	1980	894	922	19.26	802	
	Thermal (Total)	6560	4327	4320	97.90	4079	
	Total Hydro	1000	661	588	15.02	626	
	Total Punjab	7560	4988	4908	112.92	4705	
	Haryana	Panipat TPS (2*210+2*250)	920	199	201	4.79	199
DCRTPP (Yamuna nagar) (2*300)		600	559	556	12.44	519	
Faridabad GPS (NTPC)(2*137.75+1*156)		432	189	189	4.25	177	
RGTPP (khedar) (IPP) (2*600)		1200	826	971	21.63	901	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP) (2*660)		1320	0	0	0.00	0	
Thermal (Total)		4497	1773	1917	43.12	1797	
Total Hydro		62	36	0	0.51	21	
Total Haryana		4559	1809	1917	43.63	1818	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	1055	980	24.82	1034
	suratgarh TPS (6*250)	1500	1050	960	24.51	1021	
	Chabra TPS (4*250)	1000	576	611	16.32	680	
	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	174	178	3.71	154	
	RAPS A (NPC) (1*100+1*200)	300	138	138	3.44	143	
	Barsingar (NLC) (2*125)	250	80	80	1.77	74	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	679	748	17.66	736	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	412	407	11.04	460	
	Kawai(Adani) (2*660)	1320	886	1207	27.49	1146	
	Thermal (Total)	8876	5050	5309	131	5448	
	Total Hydro	550	0	0	0.00	0	
	Wind power	3214	67	1509	17.33	722	
	Biomass	99	19	19	0.46	19	
	Solar	730	0	0	0.00	0	
	Renewable/Others (Total)	4043	86	1528	17.79	741	
	Total Rajasthan	13469	5136	6837	148.55	6190	
	UP	Anpara TPS (3*210+2*500)	1630	1365	1392	32.76	1365
Obra TPS (2*50+2*94+5*200)		1194	548	560	13.03	543	
Paricha TPS (2*110+2*220+2*250)		1160	815	1010	19.42	809	
Panki TPS (2*105)		210	140	144	3.29	137	
Harduaganj TPS (1*60+1*105+2*250)		665	569	537	11.93	497	
Tanda TPS (NTPC) (4*110)		440	380	375	7.56	315	
Roza TPS (IPP) (4*300)		1200	986	1098	21.84	910	
Anpara-C (IPP) (2*600)		1200	639	1082	21.21	884	
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	405	405	7.73	322	
Anpara-D(2*500)		1000	578	605	14.28	595	
Lalitpur TPS(3*660)		1980	446	494	9.58	399	
Bara(2*660)		1320	453	537	11.38	474	
Thermal (Total)		12449	7324	8239	174	7250	
Vishnuparyag HPS (IPP)(4*110)		440	435	435	10.48	437	
Alaknanda(4*82.5)		330	282	230	6.29	262	
Other Hydro		527	48	69	0.91	38	
Cogeneration		981	100	100	0.24	10	
Total UP		14727	8189	9073	192	7997	
Uttarakhand		Total Hydro	1398	829	728	18.76	782
		Total Gas	225	0	0	0.00	0
	Total Uttarakhand	1623	829	728	19	782	
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	138	139	3.30	138	
	Pragati Gas Turbine (2x104+ 1x122)	330	261	261	5.38	224	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	252	252	6.15	256	
	Badarpur TPS (NTPC) (3*95+2*210)	705	328	319	7.18	299	
	Thermal (Total)	2917	979	971	22.01	917	
	Total Delhi	2917	979	971	22.01	917	
HP	Baspa HPS (IPP) (3*100)	300	301	331	7.82	326	
	Malana HPS (IPP) (2*43)	86	86	88	1.89	79	
	Other Hydro	878	432	301	9.20	383	
	Total HP	1264	819	720	18.90	788	
J & K	Baglihar HPS (IPP) (3*150+2*150)	750	661	661	15.72	655	
	Other Hydro/IPP	560	184	176	4.28	178	
	Gas/Diesel/Others	190	0	0	0.00	0	
	Total J & K	1500	845	837	19.99	833	
Total State Control Area Generation		47619	23594	25991	576.69	24029	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6915	7655	174.66	7278	
Total Regional Availability(Gross)		72856	50436	51222	1167.11	48630	
IV. Total Hydro Generation:							
Regional Entities Hydro		12234	11196	9022	229.37	9557	
State Control Area Hydro		7106	3955	3607	91	3787	
Total Regional Hydro		19340	15151	12629	320.24	13343	

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

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal(HVDC B/B)	150	250	250	0	5.03	0.00	5.03
765 KV Gwalior-Agra (D/C)	2566	3000	3024	0	60.74	0.00	60.74
400 KV Zerda-Kankroli	-158	-182	0	334	0.00	5.14	-5.14
400 KV Zerda-Bhinmal	-95	-167	0	287	0.00	3.59	-3.59
220 KV Auraiya-Malanpur	12	1	0	58	0.00	0.32	-0.32
220 KV Badod-Kota/Morak	-5	18	92	-22	0.73	0.00	0.73
Mundra-Mohindergarh(HVDC Bipole)	2498	2305	2506	0.00	58.38	0.00	58.38
400 KV Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	978	1042	1125	0	22.81	0.00	22.81
Sub Total WR	5946	6267			147.67	9.05	138.62
Pusauli Bypass/HVDC	-200	-200	200	0	4.35	0.00	4.35
400 KV MZP- GKP (D/C)	255	446	588	0	10.44	0.00	10.44
400 KV Patna-Balia(D/C) X 2	732	811	886	0	9.79	0.00	9.79
400 KV B'Sharif-Balia (D/C)	70	169	280	0	4.05	0.00	4.05
765 KV Gaya-Balia	189	255	285	0	2.71	0.00	2.71
765 KV Gaya-Varanasi (D/C)	-177	-231	0	370	0.00	5.76	-5.76
220 KV Pusauli-Sahupuri	-175	-216	221	0	4.80	0.00	4.80
132 KV K'nasa-Sahupuri	0	-30	0	38	0.00	0.53	-0.53
132 KV Son Ngr-Rihand	-25	-25	0	34	0.00	0.58	-0.58
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-167	-126	70	167	0.00	2.41	-2.41
400 KV Barh -GKP (D/C)	488	538	560	0	11.45	0.00	11.45
400 kV B'Sharif - Varanasi (D/C)	-21	-3	12	138	0.00	1.03	-1.03
Sub Total ER	969	1388			47.59	10.30	37.29
+/- 800 KV BiswanathCharialli-Agra	0	0	0	450.00	0.00	1.25	-1.25
Sub Total NER	0	0			0.00	1.25	-1.25
Total IR Exch	6915	7655			195.27	20.60	174.66

V(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
41.35	1.37	42.72	7.63	26.17	9.67	-0.24	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
60.02	134.46	194.48	36.04	138.62	174.66	-23.98	4.16	-19.81

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

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	-20	-25	0	31	0	1	-0.64

VI. 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	2.78	15.87	69.65	75.09	7.09	1.98	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)		
50.17	6.03	49.70	21.06	49.96	0.063	50.19	49.85	24.91	

VII. Voltage profile 400 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviat
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV	
Rihand	400	413	7:25	405	16:29	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	421	6:33	398	22:06	0.0	0.0	1.4	0.0	1.4
Bareilly(PG)400kV	400	418	6:06	392	14:41	0.0	0.0	0.0	0.0	0.0
Kanpur	400	415	18:01	397	22:12	0.0	0.0	0.0	0.0	0.0
Dadri	400	417	6:01	394	14:51	0.0	0.0	0.0	0.0	0.0
Ballabgarh	400	425	6:01	396	14:51	0.0	0.0	17.8	0.0	17.8
Bawana	400	414	8:57	396	14:55	0.0	0.0	0.0	0.0	0.0
Bassi	400	416	5:02	387	22:11	0.0	0.7	0.0	0.0	0.0
Hissar	400	418	6:02	395	22:10	0.0	0.0	0.0	0.0	0.0
Moga	400	410	6:03	393	14:44	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	415	6:04	396	15:22	0.0	0.0	0.0	0.0	0.0
Nalagarh	400	416	4:06	396	15:08	0.0	0.0	0.0	0.0	0.0
Kishenpur	400	408	7:04	394	14:51	0.0	0.0	0.0	0.0	0.0
Wagoora	400	405	6:05	380	20:42	0.0	17.4	0.0	0.0	0.0
Amritsar	400	414	6:02	398	14:20	0.0	0.0	0.0	0.0	0.0
Kashipur	400	419	6:05	405	14:41	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	405	0:00	391	14:55	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	420	6:04	388	14:51	0.0	0.7	0.0	0.0	0.0

VIII. Voltage profile 765 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviat
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	
Fatehpur	765	792	6:13	746	22:08	0.0	0.0	0.0	0.0	0.0
Balia	765	794	6:19	756	22:10	0.0	0.0	0.0	0.0	0.0
Moga	765	792	6:06	754	14:52	0.0	0.0	0.0	0.0	0.0
Agra	765	786	6:02	738	22:12	0.0	0.7	0.0	0.0	0.0
Bhiwani	765	797	6:02	758	14:26	0.0	0.0	0.0	0.0	0.0
Unnao	765	780	8:05	741	15:26	0.0	0.0	0.0	0.0	0.0
Lucknow	765	792	6:28	758	1:01	0.0	0.0	0.0	0.0	0.0
Meerut	765	801	6:06	755	15:22	0.0	0.0	0.0	0.0	0.0
Jhatikara	765	790	6:02	746	22:10	0.0	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	795	6:06	752	14:40	0.0	0.0	0.0	0.0	0.0
Anta	765	782	5:01	751	22:10	0.0	0.0	0.0	0.0	0.0
Phagi	765	782	5:04	742	22:11	0.0	0.0	0.0	0.0	0.0

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	479.18	441.00	486.88	636.01	1000.57	941.79
Pong	426.72	384.05	390.01	55.55	405.63	361.16	290.25	118.39
Tehri	829.79	740.04	745.20	24.98	741.60	9.37	266.61	258.00
Koteshwar	612.50	598.50	610.26	4.69	610.78	4.95	258.00	218.22
Chamera-I	760.00	748.75	753.69	0.00	0.00	0.00	314.54	353.24
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	0.00	0.00
RPS	352.80	343.81	1144.00	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	505.18	7.13	522.12	6.43	241.00	328.87

* 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	1071	433	0	1168	310	0	29.50	10.67	40.18
Delhi	235	313	0	507	-70	0	11.91	3.86	15.77
Haryana	1156	346	0	857	325	0	23.32	7.55	30.87
HP	-1122	-376	0	-872	-379	0	-22.87	-9.05	-31.92
J&K	-621	0	0	-571	75	0	-16.50	-0.79	-17.29
CHD	0	0	0	0	0	0	0.36	0.10	0.45
Rajasthan	-109	431	0	-109	391	0	-2.60	11.76	9.15
UP	1343	0	0	891	0	0	20.81	0.00	20.81
Uttarakhand	74	10	0	78	152	0	1.79	1.05	2.84
Total	2027	1158	0	1949	804	0	45.71	25.15	70.86

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1802	828	715	310	0	0
Delhi	591	235	482	-102	0	0
Haryana	1307	682	365	139	0	0
HP	-866	-1125	-298	-473	0	0
J&K	-571	-848	75	-201	0	0
CHD	44	0	20	0	0	0
Rajasthan	-109	-109	729	359	0	0
UP	1440	594	0	0	0	0
Uttarakhand	78	73	154	10	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	6.25%

(ii)%age of times ATC violated on the inter-regional corridors

WR	12.85%
ER	0.00%
Simultaneous	59.38%

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

Rihand - Dadri	0.00%
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XII. System Constraints:

XIII. Grid Disturbance / Any Other Significant Event:

XIV. Weather Conditions For 18.06.2016 :

XV. Synchronisation of new generating units :

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

1. At Kanpur New (GIS) 1500 MVA (765kV/400kV) ICT-1 First time test charged on 18.06.16/1947hrs from 400kV side only no load.

XVII. Tripping of lines in pooling stations :

XVIII. 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.