

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	420	320	7.91	330	
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	340	295	6.87	286	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	954	796	19.18	799	
	Goindwal(GVK) (2*270)	540	0	0	0.00	0	
	Rajpura (2*700)	1400	1320	660	24.89	1037	
	Talwandi Saboo (3*660)	1980	1228	616	21.59	899	
	Thermal (Total)	6560	4262	2687	80.44	3352	
	Total Hydro	1000	663	669	15.50	646	
	Total Punjab	7560	4925	3356	95.94	3998	
	Haryana	Panipat TPS (2*210+2*250)	920	549	553	13.05	544
DCRTPP (Yamuna nagar) (2*300)		600	503	467	11.54	481	
Faridabad GPS (NTPC)(2*137.75+1*156)		432	171	187	4.15	173	
RGTPP (khedar) (IPP) (2*600)		1200	777	762	17.24	718	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP) (2*660)		1320	377	379	9.81	409	
Thermal (Total)		4497	2377	2348	55.80	2325	
Total Hydro		62	26	36	0.77	32	
Total Haryana		4559	2403	2384	56.57	2357	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	993	1002	24.15	1006
	suratgarh TPS (6*250)	1500	945	949	22.77	949	
	Chabra TPS (4*250)	1000	558	442	13.47	561	
	Dholpur GPS (3*110)	330	85	89	2.16	90	
	Ramgarh GPS(1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	135	141	3.34	139	
	RAPS A (NPC) (1*100+1*200)	300	134	136	3.42	142	
	Barsingsar (NLC) (2*125)	250	171	168	3.91	163	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	704	769	18.11	755	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	437	449	10.24	427	
	Kawai(Adani) (2*660)	1320	889	1201	27.34	1139	
	Thermal (Total)	8876	5051	5346	129	5371	
	Total Hydro	550	0	0	0.07	3	
	Wind power	3214	316	878	11.05	460	
	Biomass	99	18	18	0.42	18	
	Solar	730	0	0	2.42	101	
	Renewable/Others (Total)	4043	334	896	13.89	579	
	Total Rajasthan	13469	5385	6242	142.86	5952	
	UP	Anpara TPS (3*210+2*500)	1630	1364	1390	32.80	1367
Obra TPS (2*50+2*94+5*200)		1194	382	510	12.06	503	
Paricha TPS (2*110+2*220+2*250)		1160	851	871	19.44	810	
Panki TPS (2*105)		210	0	0	0.00	0	
Harduaganj TPS (1*60+1*105+2*250)		665	377	437	7.56	315	
Tanda TPS (NTPC) (4*110)		440	384	393	8.43	351	
Roza TPS (IPP) (4*300)		1200	0	558	8.98	374	
Anpara-C (IPP) (2*600)		1200	1080	1089	23.07	961	
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	112	0	1.64	68	
Anpara-D(2*500)		1000	207	88	3.15	131	
Lalitpur TPS(3*660)		1980	0	0	0.00	0	
Bara(2*660)		1320	531	535	11.75	490	
Thermal (Total)		12449	5288	5871	129	5370	
Vishnuparyag HPS (IPP)(4*110)		440	435	435	9.80	408	
Alaknanda(4*82.5)		330	285	342	7.43	310	
Other Hydro		527	42	226	1.97	82	
Cogeneration		981	100	100	2.40	100	
Total UP		14727	6150	6974	150	6269	
Uttarakhand		Total Hydro	1398	748	626	18.08	753
		Total Gas	225	0	0	0.00	0
	Total Uttarakhand	1623	748	626	18	753	
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	67	69	1.77	74	
	Pragati Gas Turbine (2x104+ 1x122)	330	263	261	6.52	272	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	0	0	0.00	0	
	Badarpur TPS (NTPC) (3*95+2*210)	705	329	319	7.03	293	
	Thermal (Total)	2917	659	649	15.32	638	
	Total Delhi	2917	659	649	15.32	638	
HP	Baspa HPS (IPP) (3*100)	300	300	330	7.78	324	
	Malana HPS (IPP) (2*43)	86	98	93	2.19	91	
	Other Hydro	878	436	446	10.50	437	
	Total HP	1264	834	869	20.47	853	
J & K	Baglihar HPS (IPP) (3*150+2*150)	750	584	584	14.02	584	
	Other Hydro/IPP	560	184	176	4.28	178	
	Gas/Diesel/Others	190	0	0	0.00	0	
	Total J & K	1500	768	760	18.29	762	
Total State Control Area Generation		47619	21871	21860	517.98	21583	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			8567.58	7796.51	184.96	7707	
Total Regional Availability(Gross)		72856	50612	47586	1128.51	47021	

IV. Total Hydro Generation:						
Regional Entities Hydro		12234	10945	9171	227.90	9496
State Control Area Hydro		7106	3801	3963	92	3849
Total Regional Hydro		19340	14746	13134	320.26	13344

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)	-200	250	250	200	4.15	1.16	3.00
765 KV Gwalior-Agra (D/C)	2752	2648	2962	0	55.32	0.00	55.32
400 KV Zerda-Kankroli	-82	-264	0	375	0.00	5.28	-5.28
400 KV Zerda-Bhinmal	-23	-236	7	317	0.00	3.57	-3.57
220 KV Auraiya-Malanpur	19	21	0	26	0.35	0.00	0.35
220 KV Badod-Kota/Morak	-37	-38	15	88	0.00	0.82	-0.82
Mundra-Mohinderghar(HVDC Bipole)	1898	2198	2308	0.00	48.99	0.00	48.99
400 KV Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1081	994	1233	0	22.27	0.00	22.27
Sub Total WR	5408	5573			131.08	10.83	120.25
Pusauli Bypass/HVDC	200	200	200	0	4.60	0.00	4.60
400 KV MZP- GKP (D/C)	479	390	502	0	8.46	0.00	8.46
400 KV Patna-Balia(D/C) X 2	804	690	865	0	16.30	0.00	16.30
400 KV B'Sharif-Balia (D/C)	258	130	258	0	3.73	0.00	3.73
765 KV Gaya-Balia	320	219	320	0	2.98	0.00	2.98
765 KV Gaya-Varanasi (D/C)	427	101	427	0	4.57	0.00	4.57
220 KV Pusauli-Sahupuri	154	173	198	0	4.08	0.00	4.08
132 KV K'nasa-Sahupuri	0	-22	0	25	0.00	0.44	-0.44
132 KV Son Ngr-Rihand	0	-22	0	40	0.00	0.34	-0.34
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-30	-133	0	194	0.00	2.50	-2.50
400 KV Barh -GKP (D/C)	548	498	548	0	10.70	0.00	10.70
400 kV B'Sharif - Varanasi (D/C)	0	0	0	0	0.00	0.00	0.00
Sub Total ER	3160	2224			55.41	3.28	52.12
+/- 800 KV BiswanathCharialli-Agra	0	0	1500	0.00	12.59	0.00	12.59
Sub Total NER	0	0			12.59	0.00	12.59
Total IR Exch	8568	7797			199.08	14.11	184.96

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
37.33	3.41	40.74	5.70	16.13	7.38	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
53.82	125.77	179.59	64.71	120.25	184.96	10.89	-5.53	5.37

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	-22	0	0	30	0	1	-0.56

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	0.00	5.15	49.29	78.31	14.65	1.93	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)		
50.16	16.04	49.82	20.29	50.00	0.029	50.16	49.96	21.69	

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	404	0:00	398	21:23	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	418	6:05	395	21:16	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	409	9:01	384	15:37	0.0	7.1	0.0	0.0	0.0
Kanpur	400	413	6:03	385	15:39	0.0	0.6	0.0	0.0	0.0
Dadri	400	414	6:03	390	15:37	0.0	0.0	0.0	0.0	0.0
Ballabgarh	400	421	6:03	390	15:37	0.0	0.0	0.2	0.0	0.2
Bawana	400	414	5:47	394	14:29	0.0	0.0	0.0	0.0	0.0
Bassi	400	414	18:28	389	14:31	0.0	0.1	0.0	0.0	0.0
Hissar	400	412	6:01	392	14:30	0.0	0.0	0.0	0.0	0.0
Moga	400	408	4:00	394	14:25	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	410	3:18	392	12:48	0.0	0.0	0.0	0.0	0.0
Nalagarh	400	412	3:59	396	12:23	0.0	0.0	0.0	0.0	0.0
Kishenpur	400	407	5:35	394	14:28	0.0	0.0	0.0	0.0	0.0
Wagoora	400	407	5:36	383	20:47	0.0	15.9	0.0	0.0	0.0
Amritsar	400	418	4:02	403	12:20	0.0	0.0	0.0	0.0	0.0
Kashipur	400	418	13:52	406	22:37	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	405	9:21	398	14:22	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	414	19:02	384	15:40	0.0	10.0	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	764	18:01	712	15:37	2.1	47.1	0.0	0.0	2.1
Balia	765	778	6:28	739	15:41	0.0	1.1	0.0	0.0	0.0
Moga	765	780	17:55	754	14:30	0.0	0.0	0.0	0.0	0.0
Agra	765	772	8:30	739	14:32	0.0	3.1	0.0	0.0	0.0
Bhiwani	765	784	18:00	753	14:31	0.0	0.0	0.0	0.0	0.0
Unnao	765	774	6:33	705	15:41	1.7	36.5	0.0	0.0	1.7
Lucknow	765	787	9:04	724	15:37	0.0	0.1	0.0	0.0	0.0
Meerut	765	794	5:58	755	14:30	0.0	0.0	0.0	0.0	0.0
Jhatikara	765	779	18:04	747	14:31	0.0	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	781	6:34	743	0:42	0.0	0.0	0.0	0.0	0.0
Anta	765	781	17:43	754	14:31	0.0	0.0	0.0	0.0	0.0
Phagi	765	782	6:03	746	20:47	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	479.52	447.73	487.91	671.08	991.74	962.38
Pong	426.72	384.05	390.75	63.75	405.88	370.28	302.57	137.79
Tehri	829.79	740.04	748.75	42.27	742.20	11.00	312.39	283.00
Koteshwar	612.50	598.50	610.10	4.69	609.81	4.44	283.00	219.00
Chamera-I	760.00	748.75	750.70	0.00	0.00	0.00	257.79	249.00
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	504.54	7.11	522.39	5.61	294.60	288.18

* 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	680	658	0	680	548	0	19.21	14.61	33.82
Delhi	528	-53	0	473	-16	0	12.90	1.38	14.28
Haryana	1052	346	0	851	327	0	22.20	7.21	29.41
HP	-1134	-375	0	-883	-402	0	-23.15	-8.96	-32.11
J&K	-723	-15	0	-572	-15	0	-17.42	-2.30	-19.72
CHD	0	0	0	0	0	0	0.35	0.03	0.38
Rajasthan	-414	342	0	-414	384	0	-9.93	9.75	-0.18
UP	1275	0	0	1214	0	0	27.79	0.00	27.79
Uttarakhand	47	11	0	50	88	0	1.14	0.78	1.92
Total	1311	915	0	1400	914	0	33.09	22.49	55.59

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1022	680	669	544	0	0
Delhi	704	430	473	-280	0	0
Haryana	1125	851	377	35	0	0
HP	-877	-1136	-311	-505	0	0
J&K	-572	-1026	-15	-216	0	0
CHD	44	0	30	0	0	0
Rajasthan	-414	-414	528	24	0	0
UP	1389	1036	0	0	0	0
Uttarakhand	51	45	142	1	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	40.97%

(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 23.06.2016 :

XV. Synchronisation of new generating units :

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

1. 400KV Jalandhar - (by passing Samba) - Kishanpur line first time test charged and synchronized on 23.06.16/ 18:29 hrs.

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.