

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	630	480	12.18	507
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	222	190	4.55	190
	Guru Har Gobind Singh TPS(L.mbt) (2*210+2*250)	920	709	563	14.36	598
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1015	704	22.03	918
	Talwandi Saboo (2*660)	1320	634	352	11.39	475
	Thermal (Total)	5360	3210	2289	64.51	2688
	Total Hydro	1000	260	209	6.89	287
	Total Punjab	6360	3470	2498	71.40	2975
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	465	222	9.37
DCRTPP (Yamuna nagar) (2*300)		600	558	461	12.35	514
Faridabad GPS (NTPC)		432	0	0	0.00	0
RGTPP (kheadar) (IPP) (2*600)		1200	1141	757	22.33	930
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	1043	740	18.59	774
Thermal (Total)		4944	3207	2180	62.63	2609
Total Hydro		62	6	9	0.25	11
Total Haryana		5006	3213	2189	62.88	2620
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	932	837	22.17
	suratgarh TPS (6*250)	1500	1135	960	26.24	1093
	Chabra TPS (4*250)	1000	452	626	13.87	578
	Dholpur GPS (3*110)	330	102	97	2.78	116
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	154	186	3.96	165
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingsar (NLC) (2*125)	250	176	173	4.04	169
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	847	8747	20.06	836
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	1165	1169	27.00	1125
	Kawai(Adani) (2*660)	1320	863	860	21.51	896
	Thermal (Total)	8876	5826	13655	142	5901
	Total Hydro	550	269	122	5.21	217
	Wind power	3214	18	132	1.03	43
	Biomass	99	20	20	0.49	20
	Solar	730	0	0	0.00	0
	Renewable/Others (Total)	4043	38	152	1.52	63
	Total Rajasthan	13469	6133	13929	148.36	6182
	UP	Anpara TPS (3*210+2*500)	1630	1363	1368	32.90
Obra TPS (2*50+2*94+5*200)		1194	272	299	7.10	296
Paricha TPS (2*110+2*220+2*250)		1140	860	707	20.20	842
Panki TPS (2*105)		210	0	0	0.00	0
Harduaaganj TPS (1*60+1*105+2*250)		665	545	537	12.70	529
Tanda TPS (NTPC) (4*110)		440	390	382	8.80	367
Roza TPS (IPP) (4*300)		1200	378	446	11.50	479
Anpara-C (IPP) (2*600)		1200	1081	990	24.20	1008
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	0	0	0.00	0
Anpara-D(1*500)		500	0	0	0.00	0
Lalitpur TPS(2*660)		1320	0	0	0.00	0
Bara(2*660)		1320	0	0	0.00	0
Thermal (Total)		11269	4889	4729	117	4892
Vishnuparyag HPS (IPP)(4*110)		440	66	63	1.60	67
Alakanada(4*82.5)		330	61	0	0.90	38
Other Hydro		527	36	2	0.40	17
Cogeneration		981	800	800	19.20	800
Total UP		13547	5852	5594	140	5813
Uttarakhand	Total Hydro	1398	621	353	9.78	407
	Total Uttarakhand	1398	621	353	9.78	407
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	33	56	0.86	36
	Praagati Gas Turbine (2x104+ 1x122)	330	139	139	3.38	141
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	252	253	6.04	252
	Badarpur TPS (NTPC) (3*95+2*210)	705	163	164	3.59	150
	Thermal (Total)	2917	586	612	13.87	578
	Total Delhi	2917	586	612	13.87	578
HP	Baspa HPS (IPP) (3*100)	300	0	0	0.91	38
	Malana HPS (IPP) (2*43)	86	0	0	0.20	8
	Other Hydro	878	121	51	2.13	89
	Total HP	1264	121	51	3.25	135
J & K	Baglihar HPS (IPP) (3*150)	450	143	143	3.43	143
	Other Hydro/IPP	560	94	66	1.84	77
	Gas/Diesel/Others	190	0	0	0.00	0
	Total J & K	1200	237	209	5.27	219
Total State Control Area Generation		45161	20233	25435	454.29	18929
J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))			6371.95	5885.84	148.55	6189
Total Regional Availability(Gross)		70398	44326	41147	885.98	36916

IV. Total Hydro Generation:

Regional Entities Hydro	12234	7977	835	64.88	2703
State Control Area Hydro	6581	1677	1018	34	1397
Total Regional Hydro	18815	9654	1853	98.42	4101

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

Element	Peak(19:00 Hrs)		Off Peak(03:00 Hrs)		Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	MW	MW	Import	Export	Import	Export	
	Vindhychal(HVDC B/B)	-300	-100	-100	50	300	0.06	5.75	
765 KV Gwalior-Agra (D/C)	2607	2609	3167	0	64.50	0.00	64.50		
400 KV Zerda-Kankroli	-43	-108	37	168	0.00	1.37	-1.37		
400 KV Zerda-Bhinmal	82	-1	199	74	1.51	0.00	1.51		
220 KV Auraiya-Malanpur	-65	-20	0	99	0.00	1.45	-1.45		
220 KV Badod-Kota/Morak	10	-16	20	24	0.23	0.00	0.23		
Mundra-Mohindergarh(HVDC Bipole)	2498	1698	2508	0	56.41	0.00	56.41		
400 KV Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00		
765 KV Phagi-Gwalior (D/C)	573	771	741	4	18.79	0.00	18.79		
Sub Total WR	5362	4865			141.50	8.57	132.93		
Pusauli Bypass/HVDC	400	400	400	0	9.01	0.00	9.01		
400 KV MZP- GKP (D/C)	252	120	0	384	0.00	4.79	-4.79		
400 KV Patna-Balia(D/C) X 2	345	387	462	0	9.34	0.00	9.34		
400 KV B' Sharif-Balia (D/C)	-16	-61	0	147	0.00	1.19	-1.19		
765 KV Gaya-Balia	242	225	249	0	2.32	0.00	2.32		
765 KV Gaya-Fatehpur	39	103	245	0	3.40	0.00	3.40		
220 KV Pusauli-Sahupuri	144	147	202	0	3.72	0.00	3.72		
132 KV K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48		
132 KV Son Ngr-Rihand	-24	-36	0	40	0.00	0.79	-0.79		
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
765 KV Sasaram - Fatehpur	-226	-144	0	226	0.00	2.86	-2.86		
400 KV Barh -GKP (D/C)	354	380	448	0	9.05	0.00	9.05		
Sub Total ER	1510	1521			37.31	9.62	27.69		
+/- 800 KV BiswanathCharialli-Agra	-500	-500	0	503	0.00	12.08	-12.08		
Sub Total NER	-500	-500			0.00	12.08	-12.08		
Total IR Exch	6372	5886			178.82	30.27	148.55		

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)		Power Exchange Shdli (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
32.26	0.21	32.47	-0.29	-4.61	9.76	0.01	4.93	-4.93
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
46.87	101.89	148.76	15.62	132.93	148.55	-31.25	31.04	-0.22

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

Element	Peak(19:00 Hrs)		Off Peak(03:00 Hrs)		Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	MW	MW	Import	Export	Import	Export	
	132 KV Tanakpur - Mahendarnagar	31	31	0	34	0	1	0	

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	6.63	52.43	72.50	12.97	4.86	0.41	NA

<----- 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	(Hz)	(Hz)			
50.36	18.03	49.83	7.48	50.00	0.041	0.064	50.18	49.98	27.50

VII. Voltage profile 400 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviation Index (% of Time)
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV	
Rihand	400	407	05:02	400	08:21	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	420	05:02	401	18:58	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	423	04:03	401	09:10	0.0	0.0	6.9	0.0	6.9
Kanpur	400	422	04:01	404	09:22	0.0	0.0	1.9	0.0	1.9
Dadrn	400	426	04:02	405	11:35	0.0	0.0	26.2	0.0	26.2
Ballabgarh	400	433	04:01	382	14:55	0.0	0.0	42.3	11.1	42.3
Bawana	400	428	02:01	408	11:36	0.0	0.0	44.5	0.0	44.5
Bassi	400	423	20:58	394	11:38	0.0	0.0	3.2	0.0	3.2
Hissar	400	420	04:02	400	11:35	0.0	0.0	0.0	0.0	0.0
Moga	400	423	19:42	406	10:24	0.0	0.0	1.8	0.0	1.8
Abdullapur	400	426	02:58	408	18:41	0.0	0.0	37.2	0.0	37.2
Nalagarh	400	436	00:37	413	07:43	0.0	0.0	62.1	11.9	62.1
Kishenpur	400	428	19:41	396	18:35	0.0	0.0	1.7	0.0	1.7
Wagoora	400	418	19:40	366	18:43	49.3	94.5	0.0	0.0	49.3
Amritsar	400	429	00:37	409	10:21	0.0	0.0	50.6	0.0	50.6
Kashipur	400	423	03:19	411	09:11	0.0	0.0	22.5	0.0	22.5
Hamirpur	400	423	23:01	405	07:52	0.0	0.0	12.5	0.0	12.5
Rishkesh	400	424	03:03	393	09:14	0.0	0.0	13.8	0.0	13.8

VIII. Voltage profile 765 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviation Index (% of Time)
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	
Fatehpur	765	780	04:02	747	09:22	0.0	0.0	0.0	0.0	0.0
Balia	765	775	04:02	743	18:24	0.0	0.0	0.0	0.0	0.0
Moga	765	800	19:40	771	07:48	0.0	0.0	0.0	0.0	0.0
Agra	765	800	04:39	759	08:41	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	803	03:05	769	11:36	0.0	0.0	7.6	0.0	7.6
Unnao	765	770	04:00	741	09:11	0.0	0.7	0.0	0.0	0.0
Lucknow	765	791	04:02	756	09:11	0.0	0.0	0.0	0.0	0.0
Meerut	765	812	04:02	774	11:18	0.0	0.0	28.3	0.0	28.3
Jhatikara	765	815	04:20	776	10:16	0.0	0.0	54.8	0.0	54.8
Bareilly 765 kV	765	795	05:03	755	09:13	0.0	0.0	0.0	0.0	0.0
Ania	765	779	04:35	759	22:17	0.0	0.0	0.0	0.0	0.0
Phagi	765	786	04:21	750	11:38	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	496.05	937.45	492.67	817.99	144.02	407.76
Pong	426.72	384.05	405.99	370.28	401.57	252.05	38.03	442.25
Tehri	829.79	740.04	789.55	446.21	798.95	592.30	59.27	222.00
Koteshwar	612.50	598.50	611.10	5.13	610.39	4.69	222.00	205.54
Chamera-I	760.00	748.75	758.38	0.00	0.00	0.00	43.90	51.82
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	495.71	0.97	502.90	1.50	64.44	29.18

* 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	-455	140	0	-910	-292	0	-16.08	0.35	-15.74
Delhi	-946	-506	0	-546	161	0	-14.66	-2.64	-17.30
Haryana	-595	268	0	-651	251	0	-16.07	2.43	-13.64
HP	143	216	0	205	84	0	10.32	-0.47	9.85
J&K	720	11	0	781	23	0	16.79	0.55	17.34
CHD	-31	10	0	0	10	0	-0.25	0.37	0.13
Rajasthan	-7	683	3	-7	293	3	8.22	8.73	16.95
UP	130	0	0	12	0	0	-2.82	0.00	-2.82
Uttarakhand	383	57	0	383	312	0	9.32	4.07	13.39
Total	-658	879	3	-733	842	2	-5.24	13.40	8.16

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-455	-910	140	-590	0	0
Delhi	-283	-976	212	-506	0	-3
Haryana	-595	-856	272	-556	0	0
HP	655	143	240	-776	0	0
J&K	781	570	132	-77	0	0
CHD	0	-31	57	0	0	0
Rajasthan	884	-7	686	-378	3	3
UP	176	-373	0	0	0	0
Uttarakhand	412	383	361	16	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	0.69%
ER	0.00%
Simultaneous	6.25%

XII. System Constraints:

XIII. Grid Disturbance / Any Other Significant Event:

XIV. Weather Conditions For 28.01.2016 :

Normal

XV. Synchronisation of new generating units :

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

XVII. Tripping of lines in pooling stations :

XVIII. Complete generation loss in a generating station :