



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	1040	1160	25.65	1069
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	295	299	6.33	264
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	946	929	20.62	859
	Goindwal(GVK)	0	0	0	0.00	0
	Rajpura (2*700)	1400	1379	1390	31.79	1324
	Talwandi Saboo (1*660)	660	660	668	13.76	573
	<b>Thermal (Total)</b>	<b>4700</b>	<b>4320</b>	<b>4446</b>	<b>98.15</b>	<b>4089</b>
	Total Hydro	1000	800	801	20.87	870
	<b>Total Punjab</b>	<b>5700</b>	<b>5120</b>	<b>5247</b>	<b>119.02</b>	<b>4959</b>
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	701	655	15.74
DCRTPP (Yamuna nagar) (2*300)		600	277	275	6.40	267
Faridabad GPS (NTPC)		432	0	0	0.00	0
RGTPP (khedra) (IPP) (2*600)		1200	571	567	13.30	554
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	620	1118	16.74	697
<b>Thermal (Total)</b>		<b>4944</b>	<b>2169</b>	<b>2615</b>	<b>52.18</b>	<b>2174</b>
Total Hydro		62	30	31	0.75	31
<b>Total Haryana</b>		<b>5006</b>	<b>2199</b>	<b>2646</b>	<b>52.93</b>	<b>2205</b>
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	1024	986	24.10
	suratgarh TPS (6*250)	1500	1127	973	25.49	1062
	Chabra TPS (4*250)	1000	371	279	8.61	359
	Dholpur GPS (3*110)	330	89	88	2.16	90
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	205	217	5.12	213
	RAPS A (NPC) (1*100+1*200)	300	158	161	3.95	165
	Barsingar (NLC) (2*125)	250	178	174	4.16	173
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	722	718	17.19	716
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	747	1011	19.90	829
	Kawai(Adani) (2*660)	1320	1196	1107	23.81	992
	<b>Thermal (Total)</b>	<b>8876</b>	<b>5817</b>	<b>5714</b>	<b>134</b>	<b>5604</b>
	Total Hydro	550	190	179	3.82	159
	Wind power	3214	0	396	3.86	161
	Biomass	99	27	27	0.66	27
	Solar	730	0	0	0.00	0
	Renewable/Others (Total)	4043	27	423	4.52	188
	<b>Total Rajasthan</b>	<b>13469</b>	<b>6034</b>	<b>6316</b>	<b>142.83</b>	<b>5951</b>
	UP	Anpara TPS (3*210+2*500)	1630	1488	1294	34.50
Obra TPS (2*50+2*94+5*200)		1194	449	452	10.60	442
Paricha TPS (2*110+2*220+2*250)		1140	562	614	13.70	571
Panki TPS (2*105)		210	0	0	0.00	0
Harduaganj TPS (1*60+1*105+2*250)		665	410	360	9.70	404
Tanda TPS (NTPC) (4*110)		440	190	187	4.58	191
Roza TPS (IPP) (4*300)		1200	1108	1107	26.40	1100
Anpara-C (IPP) (2*600)		1200	1080	1090	25.90	1079
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	405	403	9.40	392
Anpara-D(1*500)		500	173	132	3.00	125
Lalitpur TPS(1*660)		660	0	0	0.00	0
<b>Thermal (Total)</b>		<b>9289</b>	<b>5865</b>	<b>5639</b>	<b>138</b>	<b>5741</b>
Vishnuparyag HPS (IPP)(4*110)		440	0	0	0.00	0
Alakanada(4*82.5)		330	272	290	7.00	292
Other Hydro		527	244	250	5.30	221
Cogeneration		981	50	50	1.20	50
<b>Total UP</b>	<b>11567</b>	<b>6431</b>	<b>6229</b>	<b>151</b>	<b>6303</b>	
Uttarakhand	Total Hydro	1398	889	720	19.05	794
	<b>Total Uttarakhand</b>	<b>1398</b>	<b>889</b>	<b>720</b>	<b>19.05</b>	<b>794</b>
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.01	0
	Delhi Gas Turbine (6x30 + 3x34)	282	34	34	0.84	35
	Prahati Gas Turbine (2x104+ 1x122)	330	261	264	6.39	266
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	290	265	6.63	276
	Badarpur TPS (NTPC) (3*95+2*210)	705	184	326	8.94	372
	<b>Thermal (Total)</b>	<b>2917</b>	<b>769</b>	<b>889</b>	<b>22.78</b>	<b>949</b>
	<b>Total Delhi</b>	<b>2917</b>	<b>769</b>	<b>889</b>	<b>22.78</b>	<b>949</b>
HP	Baspa HPS (IPP) (3*100)	300	179	328	6.22	259
	Malana HPS (IPP) (2*43)	86	86	81	1.38	57
	Other Hydro	878	450	460	10.28	428
	<b>Total HP</b>	<b>1264</b>	<b>715</b>	<b>869</b>	<b>17.88</b>	<b>745</b>
J & K	Baqilhar HPS (IPP) (3*150)	450	586	586	14.06	586
	Other Hydro/IPP	560	160	126	3.12	130
	Gas/Diesel/Others	190	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>1200</b>	<b>746</b>	<b>712</b>	<b>17.18</b>	<b>716</b>
<b>Total State Control Area Generation</b>		<b>42521</b>	<b>22903</b>	<b>23628</b>	<b>542.95</b>	<b>22623</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>8328</b>	<b>9622</b>	<b>220.59</b>	<b>9191</b>
<b>Total Regional Availability(Gross)</b>		<b>67758</b>	<b>52252</b>	<b>47487</b>	<b>1149.67</b>	<b>47903</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	12234	11151	5360	173.50	7229
State Control Area Hydro	6581	3886	3852	92	3827
<b>Total Regional Hydro</b>	<b>18815</b>	<b>15037</b>	<b>9212</b>	<b>265.35</b>	<b>11056</b>

**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)	250	250	250	0	6.02	0.00	6.02	
765 KV Gwalior-Agra (D/C)	2459	2775	2892	0	62.50	0.00	62.50		
400 KV Zerda-Kankroli	25	83	127	74	0.74	0.00	0.74		
400 KV Zerda-Bhinmal	109	159	271	0	3.06	0.00	3.06		
220 KV Auraiya-Malanpur	36	50	0	55	0.00	0.32	-0.32		
220 KV Badod-Kota/Morak	-40	8	83	89	0.00	0.21	-0.21		
Mundra-Mohindergarh(HVDC Bipole)	2498	2502	2511	0	60.47	0.00	60.47		
400 KV Vindhychal - Rihand	501	496	506	0	12.00	0.00	12.00		
765 kV Phagi-Gwalior (D/C)	977	1034	656	0	26.36	0.00	26.36		
<b>Sub Total WR</b>	<b>6815</b>	<b>7357</b>			<b>171.15</b>	<b>0.52</b>	<b>170.63</b>		
Pusauli Bypass/HVDC	400	400	400	0	8.94	0.00	8.94		
400 KV MZP- GKP (D/C)	176	386	594	0	9.58	0.00	9.58		
400 KV Patna-Balia(D/C) X 2	306	524	576	0	11.50	0.00	11.50		
400 KV B'Sharif-Balia (D/C)	87	323	442	0	7.34	0.00	7.34		
765 KV Pusauli-Balia	96	287	317	0	3.19	0.00	3.19		
765 KV Gaya-Fatehpur	91	109	233	24	3.10	0.00	3.10		
220 KV Pusauli-Sahupuri	170	88	206	0	3.25	0.00	3.25		
132 KV Knasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
132 KV Son Ngr-Rihand	-40	-44	0	44	0.00	0.94	-0.94		
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
765 KV Sasaram - Fatehpur	51	12	155	164	0.00	0.05	-0.05		
400 KV Barh -GKP (D/C)	176	180	230	0	4.05	0.00	4.05		
<b>Sub Total ER</b>	<b>1513</b>	<b>2265</b>			<b>50.95</b>	<b>0.99</b>	<b>49.96</b>		
+/- 800 KV BiswanathChariali-Agra	0	0	0	0	0	0	0		
<b>Sub Total NER</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>		
<b>Total IR Exch</b>	<b>8328</b>	<b>9622</b>			<b>222.10</b>	<b>1.51</b>	<b>220.59</b>		

**V(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
29.73	3.94	33.66	16.64	6.27	1.70	36.30	1.13	-1.13

  

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR incldns Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
53.13	151.10	204.23	49.96	170.63	220.59	-3.17	19.53	16.36

**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	-8	0	0	23	0	0	-0.09	

**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	1.47	26.77	74.48	65.24	5.90	2.08	0.02	0.00

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.20	18.02	49.73	5.19	49.95	0.080	0.073	50.14	49.86

**VII. Voltage profile 400 kV**

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV
Rihand	400	400	00:00	396	19:55	0.0	0.0	0.0	0.0
Gorakhpur	400	414	07:02	393	22:19	0.0	0.0	0.0	0.0
Barilly	400	403	19:57	381	22:17	0.0	0.2	0.0	0.0
Kanpur	400	411	18:01	394	11:22	0.0	0.0	0.0	0.0
Dadri	400	410	06:01	391	11:23	0.0	0.0	0.0	0.0
Ballabgarh	400	415	06:01	394	11:18	0.0	0.0	0.0	0.0
Bawana	400	413	06:01	396	11:10	4.9	4.9	0.0	0.0
Bassi	400	415	18:01	390	23:07	0.0	0.0	0.0	0.0
Hissar	400	409	18:01	389	11:19	0.0	0.2	0.0	0.0
Moga	400	407	03:20	391	11:19	0.0	0.0	0.0	0.0
Abdullapur	400	414	06:00	394	19:12	0.0	0.0	0.0	0.0
Nalagarh	400	420	03:24	400	11:24	0.0	0.0	0.0	0.0
Kishenpur	400	417	03:51	397	19:22	0.0	0.0	0.0	0.0
Wagoora	400	410	03:22	374	19:24	8.4	22.4	0.0	0.0
Amritsar	400	411	04:00	392	11:24	0.0	0.0	0.0	0.0
Kashipur	400	414	00:00	405	10:50	0.0	0.0	0.0	0.0
Hamirpur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Rishikesh	400	400	18:02	373	11:13	3.9	56.6	0.0	0.0

**VIII. Voltage profile 765 kV**

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV
Fatehpur	765	768	18:01	735	11:19	0.0	8.3	0.0	0.0
Balia	765	773	07:00	741	22:21	0.0	0.0	0.0	0.0
Moga	765	780	06:01	747	11:22	0.0	0.0	0.0	0.0
Agra	765	781	18:01	744	11:21	0.0	0.0	0.0	0.0
Bhiwani	765	786	18:01	752	11:14	0.0	0.0	0.0	0.0
Unnao	765	752	03:24	722	12:41	6.2	65.0	0.0	0.0
Lucknow	765	768	18:01	735	11:19	0.0	8.1	0.0	0.0
Meerut	765	792	18:01	750	11:23	0.0	0.0	0.0	0.0
Jhatikara	765	776	18:28	751	11:16	0.0	0.0	0.0	0.0
Barilly	765	772	18:02	739	09:27	0.0	2.6	0.0	0.0
Anta	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Phagi	765	779	18:01	747	23:04	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 <sup>3</sup> /s)	Usage (m <sup>3</sup> /s)
Bhakra	513.59	445.62	511.41	1620.46	510.97	1590.18	576.33	692.09
Pong	426.72	384.05	422.13	420.81	416.50	730.66	137.42	423.85
Tehri	829.79	740.04	820.65	1066.00	818.40	970.25	231.97	147.00
Koteshwar	612.50	598.50	610.74	4.95	611.66	5.46	147.00	148.23
Chamera-I	760.00	748.75	753.13	0.00	0.00	0.00	166.44	126.86
Rihand	268.22	252.98	852.30	292.90	856.30	360.60	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	516.74	10.31	517.57	6.71	142.29	441.02

\* 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	667	0	0	664	200	0	16.01	3.26	19.26
Delhi	286	-236	-35	530	25	-35	9.16	-0.07	9.09
Haryana	1706	96	0	1706	119	0	40.89	-1.83	39.06
HP	-919	-97	0	-742	-314	0	-19.23	-2.49	-21.72
J&K	-437	-35	0	-437	90	0	-10.50	2.21	-8.28
CHD	0	0	0	0	0	0	0.00	0.06	0.06
Rajasthan	-329	1792	38	-472	1139	38	-8.76	37.69	28.93
UP	297	0	0	214	0	0	5.15	0.51	5.66
Uttarakhand	-192	368	0	-347	444	0	-5.56	7.49	1.92
<b>Total</b>	<b>1078</b>	<b>1889</b>	<b>3</b>	<b>1115</b>	<b>1702</b>	<b>3</b>	<b>27.16</b>	<b>46.82</b>	<b>73.99</b>

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	667	664	595	0	0	0
Delhi	733	125	430	-557	0	-35
Haryana	1706	1683	130	-661	0	0
HP	-742	-919	132	-346	0	0
J&K	-437	-437	239	-35	0	0
CHD	0	0	49	0	0	0
Rajasthan	-304	-472	2022	531	47	3
UP	312	120	491	0	0	0
Uttarakhand	-178	-347	475	13	0	0

**XI. System Constraints:**

**XII. Grid Disturbance / Any Other Significant Event:**

**XIII. Weather Conditions For 10.09.2015 :**

Normal

**XIV. Synchronisation of new generating units :**

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

**XVI. Tripping of lines in pooling stations :**

**XVII. Complete generation loss in a generating station :**