



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	160	160	3.72	155	
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	121	90	2.31	96	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	200	204	4.76	198	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura (2*700)	1400	1075	700	23.96	998	
	Talwandi Saboo (2*660)	1320	345	348	10.59	441	
	<b>Thermal (Total)</b>	<b>5360</b>	<b>1901</b>	<b>1502</b>	<b>45.33</b>	<b>1889</b>	
	Total Hydro	1000	418	435	11.24	468	
	<b>Total Punjab</b>	<b>6360</b>	<b>2319</b>	<b>1937</b>	<b>56.57</b>	<b>2357</b>	
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00	0
DCRTPP (Yamuna nagar) (2*300)		600	551	459	11.42	476	
Faridabad GPS (NTPC)		432	0	0	0.00	0	
RGTPP (khedar) (IPP) (2*600)		1200	781	776	16.45	685	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP) (2*660)		1320	984	738	19.57	815	
<b>Thermal (Total)</b>		<b>4944</b>	<b>2316</b>	<b>1973</b>	<b>47.44</b>	<b>1977</b>	
Total Hydro		62	14	16	0.43	18	
<b>Total Haryana</b>		<b>5006</b>	<b>2330</b>	<b>1989</b>	<b>47.87</b>	<b>1995</b>	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	1068	1037	25.55	1065
	suratgarh TPS (6*250)	1500	431	412	10.25	427	
	Chabra TPS (4*250)	1000	439	525	11.56	482	
	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	209	211	5.07	211	
	RAPS A (NPC) (1*100+1*200)	300	159	160	3.97	165	
	Barsingar (NLC) (2*125)	250	94	95	2.13	89	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	960	960	22.91	954	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	599	479	12.13	505	
	Kawai(Adani) (2*660)	1320	1204	1150	26.29	1095	
	<b>Thermal (Total)</b>	<b>8876</b>	<b>5163</b>	<b>5029</b>	<b>120</b>	<b>4994</b>	
	Total Hydro	550	160	202	4.14	172	
	Wind power	3214	25	348	3.67	153	
	Biomass	99	20	20	0.48	20	
	Solar	730	5	0	0.25	11	
	Renewable/Others (Total)	4043	50	368	4.40	183	
	<b>Total Rajasthan</b>	<b>13469</b>	<b>5373</b>	<b>5599</b>	<b>128.38</b>	<b>5349</b>	
	UP	Anpara TPS (3*210+2*500)	1630	1285	1370	32.21	1342
Obra TPS (2*50+2*94+5*200)		1194	456	431	10.43	435	
Paricha TPS (2*110+2*220+2*250)		1140	653	576	14.12	589	
Panki TPS (2*105)		210	0	0	0.00	0	
Harduaganj TPS (1*60+1*105+2*250)		665	442	317	9.54	398	
Tanda TPS (NTPC) (4*110)		440	188	140	3.68	154	
Roza TPS (IPP) (4*300)		1200	216	194	5.09	212	
Anpara-C (IPP) (2*600)		1200	1077	639	22.32	930	
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(1*660)		660	0	0	0.00	0	
Bara(1*660)		660	0	80	1.36	57	
<b>Thermal (Total)</b>		<b>9949</b>	<b>4317</b>	<b>3747</b>	<b>99</b>	<b>4115</b>	
Vishnuparyag HPS (IPP)(4*110)		440	98	98	2.31	96	
Alaknanda(4*82.5)		330	60	64	1.49	62	
Other Hydro		527	60	37	0.83	35	
Cogeneration		981	600	600	14.40	600	
<b>Total UP</b>		<b>12227</b>	<b>5135</b>	<b>4546</b>	<b>118</b>	<b>4908</b>	
Uttarakhand		Total Hydro	1398	451	173	6.68	278
		<b>Total Uttarakhand</b>	<b>1398</b>	<b>451</b>	<b>173</b>	<b>6.68</b>	<b>278</b>
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.01	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	39	39	0.88	37	
	Pragati Gas Turbine (2x104+ 1x122)	330	150	150	3.66	152	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	270	251	6.14	256	
	Badarpur TPS (NTPC) (3*95+2*210)	705	165	165	3.47	144	
	<b>Thermal (Total)</b>	<b>2917</b>	<b>624</b>	<b>605</b>	<b>14.14</b>	<b>589</b>	
<b>Total Delhi</b>	<b>2917</b>	<b>624</b>	<b>605</b>	<b>14.14</b>	<b>589</b>		
HP	Baspa HPS (IPP) (3*100)	300	61	30	1.14	48	
	Malana HPS (IPP) (2*43)	86	45	0	0.28	12	
	Other Hydro	878	160	82	3.07	128	
	<b>Total HP</b>	<b>1264</b>	<b>266</b>	<b>112</b>	<b>4.49</b>	<b>187</b>	
J & K	Baglihar HPS (IPP) (3*150)	450	143	150	3.50	146	
	Other Hydro/IPP	560	91	59	1.79	75	
	Gas/Diesel/Others	190	0	0	0.00	0	
	<b>Total J &amp; K</b>	<b>1200</b>	<b>234</b>	<b>209</b>	<b>5.29</b>	<b>221</b>	
<b>Total State Control Area Generation</b>		<b>43841</b>	<b>16732</b>	<b>15170</b>	<b>381.20</b>	<b>15883</b>	
<b>J. Net Inter Regional Exchange</b> (Import +ve)/Export (-ve)			<b>5848</b>	<b>5910</b>	<b>157.48</b>	<b>6562</b>	
<b>Total Regional Availability(Gross)</b>		<b>69078</b>	<b>41051</b>	<b>30408</b>	<b>823.13</b>	<b>34297</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	12234	8729	1085	76.32	3180
State Control Area Hydro	6581	1761	1346	37	1537
<b>Total Regional Hydro</b>	<b>18815</b>	<b>10490</b>	<b>2431</b>	<b>113.20</b>	<b>4717</b>

**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		Import	Export	Import	Export	
Vindhychal(HVDC B/B)	50		50		200	50	1.43	0.66	0.77
765 KV Gwalior-Agra (D/C)	2824		2516		3205	0	65.01	0.00	65.01
400 KV Zerda-Kankroli	-81		-251		0	293	0.00	3.72	-3.72
400 KV Zerda-Bhinmal	9		-166		105	225	0.00	1.63	-1.63
220 KV Auraiya-Malanpur	-48		-52		0	74	0.00	1.26	-1.26
220 KV Badod-Kota/Morak	-62		-83		0	75	0.00	1.92	-1.92
Mundra-Mohindergarh(HVDC Bipole)	2499		2000		2506	0	55.68	0.00	55.68
400 KV Vindhychal - Rihand	0		0		0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	614		990		684	0	27.01	0.00	27.01
<b>Sub Total WR</b>	<b>5805</b>		<b>5004</b>				<b>149.13</b>	<b>9.19</b>	<b>139.93</b>
Pusaull Bypass/HVDC	-50		-50		0	50	0.00	1.48	-1.48
400 KV MZP -GKP (D/C)	-206		96		186	470	0.00	0.26	-0.26
400 KV Patna-Balia(D/C) X 2	356		587		613	0	12.08	0.00	12.08
400 KV B'Sharif-Balia (D/C)	-17		136		170	92	1.99	0.00	1.99
765 KV Gaya-Balia	216		305		401	0	3.68	0.00	3.68
765 KV Gaya-Fatehpur	0		0		0	0	0.00	0.00	0.00
220 KV Pusaull-Sahupuri	-158		-105		0	158	0.00	2.88	-2.88
132 KV K'nasa-Sahupuri	0		0		0	0	0.48	0.00	0.48
132 KV Son Ngr-Rihand	-26		-34		0	34	0.00	0.63	-0.63
132 KV Garhwa-Rihand	0		0		0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-66		21		307	105	2.22	0.00	2.22
400 KV Barh -GKP (D/C)	494		450		668	0	11.47	0.00	11.47
<b>Sub Total ER</b>	<b>543</b>		<b>1406</b>				<b>31.91</b>	<b>5.25</b>	<b>26.66</b>
+/- 800 KV BiswanathCharialli-Agra	-500		-500		0	500	0.00	9.12	-9.12
<b>Sub Total NER</b>	<b>-500</b>		<b>-500</b>				<b>0.00</b>	<b>9.12</b>	<b>-9.12</b>
<b>Total IR Exch</b>	<b>5848</b>		<b>5910</b>				<b>181.04</b>	<b>23.56</b>	<b>157.48</b>

**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	Total	Through ER	Through WR	Through ER	Through WR
30.69	0.66	31.35	-0.36	-7.52	11.16	25.43	6.03	-6.03	
<b>Total IR Schedule (MU)</b>			<b>Total IR Actual (MU)</b>			<b>Net IR UI (MU)</b>			
Through ER	Through WR Inclds Mndra	Total	Through ER(including NER)	Through WR	Total	Through ER(including NER)	Through WR	Total	
48.18	110.73	158.91	17.54	139.93	157.48	-30.63	29.20	-1.43	

**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		Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	-29		-31		0	33	0	1	-0.74

**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	1.71	13.58	65.94	75.43	7.86	3.16	0.01	NA

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
50.20	13.02	49.74	6.43	49.97	0.056	0.069	50.12	0.00

**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	404	23:53	397	11:24	0.0	0.0	0.0	0.0
Gorakhpur	400	418	21:44	405	17:45	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	421	04:31	403	11:21	0.0	0.0	0.1	0.0
Kanpur	400	411	03:01	406	11:21	0.0	0.0	0.5	0.0
Dadri	400	426	02:52	407	11:24	0.0	0.0	33.8	0.0
Ballabgarh	400	432	02:59	412	11:08	0.0	0.0	59.6	3.6
Bawana	400	431	20:14	410	11:09	0.0	0.0	45.9	0.2
Bassi	400	428	20:17	399	08:15	0.0	0.0	11.6	0.0
Hissar	400	426	20:16	402	11:12	0.0	0.0	10.7	0.0
Moga	400	424	02:49	404	11:10	0.0	0.0	22.0	0.0
Abdullapur	400	432	20:14	407	11:23	0.0	0.0	44.6	0.3
Nalagarh	400	436	20:57	410	11:08	0.0	0.0	48.0	24.9
Kishenpur	400	428	02:40	402	18:22	0.0	0.0	21.2	0.0
Wagoora	400	402	03:01	374	18:13	5.6	53.8	0.0	0.0
Amritsar	400	432	02:16	168	09:33	0.0	0.0	44.4	5.3
Kashipur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Hamirpur	400	429	02:16	405	11:09	0.0	0.0	52.9	0.0
Rishikesh	400	0	00:00	9999	00:00	0.0	0.0	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	776	20:14	745	08:33	0.0	0.0	0.0	0.0
Balia	765	761	00:00	761	00:00	0.0	0.0	0.0	0.0
Moga	765	811	20:14	771	11:12	0.0	0.0	22.3	0.0
Agra	765	796	20:14	759	11:21	0.0	0.0	0.0	0.0
Bhiwani	765	810	20:14	771	11:09	0.0	0.0	23.9	0.0
Unnao	765	788	19:27	746	11:21	0.0	0.0	0.0	0.0
Lucknow	765	787	05:02	762	17:46	0.0	0.0	0.0	0.0
Meerut	765	819	20:14	775	11:23	0.0	0.0	27.2	0.0
Jhatikara	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Anta	765	784	20:12	765	07:37	0.0	0.0	0.0	0.0
Phagi	765	798	20:15	761	07:51	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	505.29	1325.82	501.58	1166.44	173.61	477.28
Pong	426.72	384.05	414.55	656.23	409.10	464.36	56.04	383.41
Tehri	829.79	740.04	810.10	804.26	816.45	931.25	71.24	143.00
Koteswar	612.50	598.50	611.20	5.20	609.87	4.44	143.00	147.00
Chamera-I	760.00	748.75	759.50	0.00	0.00	0.00	54.17	50.65
Rihand	268.22	252.98	849.70	250.70	853.30	309.60	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	504.57	4.33	508.89	1.65	67.52	191.26

\* 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	-524	340	0	-849	287	0	-13.30	7.73	-5.57
Delhi	-1046	-29	0	-564	354	0	-17.03	5.50	-11.53
Haryana	-338	318	0	-364	307	0	-8.60	7.68	-0.92
HP	91	121	0	276	-24	0	6.78	-1.05	5.73
J&K	645	0	0	530	0	0	13.52	-0.58	12.93
CHD	-30	0	0	0	0	0	-0.24	0.06	-0.19
Rajasthan	-7	685	2	-7	520	2	8.69	15.46	24.15
UP	114	0	0	-139	0	0	-2.01	0.00	-2.01
Uttarakhand	194	194	0	225	126	0	4.81	6.04	10.85
<b>Total</b>	<b>-902</b>	<b>1628</b>	<b>2</b>	<b>-892</b>	<b>1571</b>	<b>2</b>	<b>-7.39</b>	<b>40.84</b>	<b>33.45</b>

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-510	-849	345	250	0	0
Delhi	-560	-1046	701	-115	0	0
Haryana	-338	-364	342	303	0	0
HP	412	91	121	-598	0	0
J&K	645	526	74	-191	0	0
CHD	0	-30	25	-51	0	0
Rajasthan	731	-7	877	70	2	2
UP	139	-223	0	0	0	0
Uttarakhand	225	194	490	126	0	0

**XI. System Constraints:**

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

**XIII. Weather Conditions For 08.12.2015 :**

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 :**