

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(एकमात्र की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 29.03.2016

Date of Reporting : 30.03.2016



I. Regional Availability/Demand:

Evening Peak (19:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Day Energy (Net MU)	
Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
34799	1877	36677	49.91	32010	752	32762	50.07	830.0	47.83

* Half hourly (two 15 minutes block—one block each before and after the designated time) average frequency

II. A. State's Load Details (At States periphery) in MUs:

State	State's Control Area Generation (Net MU)				Drawal Schedule (Net MU)	Actual Drawal (Net MU)	UI (Net MU)	Consumption (Net MU)	Shortages* (MU)
	Thermal	Hydro	Renewable/Others \$	Total					
Punjab	46.68	7.74		54.42	59.50	58.81	-0.69	113.23	0.00
Haryana	32.25	0.22		32.47	77.31	76.14	-1.16	108.61	0.00
Rajasthan	109.72	0.96	6.55	117.23	58.62	62.03	3.41	179.26	0.33
Delhi	4.24			4.24	59.29	61.38	2.09	65.61	0.31
UP	146.43	3.08		149.51	102.09	108.36	6.27	257.87	38.61
Uttarakhand		7.52		7.52	22.30	26.08	3.78	33.60	0.20
HP		8.31		8.31	14.75	16.25	1.50	24.56	0.00
J & K		10.85	0.00	10.85	28.56	32.84	4.28	43.70	8.39
Chandigarh				0.00	3.29	3.55	0.27	3.55	0.00
Total	339.31	38.69	6.55	384.55	425.70	445.44	19.75	829.99	47.83

* Shortage furnished by the respective constituent. \$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

State	Evening Peak (19:00 Hrs) MW				Off Peak (03:00 Hrs) MW				# Max(hourly) Demand Met of Day (MW)
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	4346	0	-143	-326	4012	0	-70	176	5262
Haryana	5455	0	-80	108	3383	0	111	53	6022
Rajasthan	6720	0	-342	572	7287	0	140	347	7999
Delhi	3066	0	-5	-71	2085	0	174	-741	3319
UP	10340	1265	43	282	11609	485	677	652	11644
Uttarakhand	1566	75	133	454	1219	0	152	311	1591
HP	969	0	-4	-206	734	0	97	72	1306
J&K	2149	537	464	267	1513	267	3	380	2168
Chandigarh	188	0	19	-20	109	0	19	-10	188
Total	34799	1877	85	1060	32010	752	1304	1241	37963

* STOA figures are at sellers boundary & PX figures are at regional boundary. # figures may not be at simultaneous hour.

Diversity is 1.04

III. Regional Entities :

Entity	Station/Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
				(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
A. NTPC	Singrauli STPS (5*200+2*500)	2000	900	1035	1020	22.98	957	21.58	1.40
	Rihand I STPS (2*500)	1000	569	809	422	13.44	569	13.40	0.04
	Rihand II STPS (2*500)	1000	946	1030	983	21.88	912	21.99	-0.11
	Rihand III STPS (2*500)	1000	946	1041	932	22.22	926	22.40	-0.18
	Dadri I STPS (4*210)	840	815	532	443	12.42	518	12.97	-0.55
	Dadri II STPS (2*490)	980	490	434	341	9.95	415	10.08	-0.13
	Unchahar I TPS (2*210)	420	350	325	377	7.95	331	8.06	-0.11
	Unchahar II TPS (2*210)	420	404	312	435	8.83	368	8.92	-0.10
	Unchahar III TPS (1*210)	210	163	156	212	3.50	146	3.63	-0.13
	ISTPP (Jhajhar) (3*500)	1500	950	465	301	7.35	306	7.53	-0.18
	Dadri GPS (4*130.19+2*154.51)	830	800	183	193	4.38	182	4.54	-0.16
	Anta GPS (3*88.71+1*153.2)	419	265	-1	-1	0.00	0	0.00	0.00
	Auraiya GPS (4*111.19+2*109.30)	663	653	0	0	0.00	0	0.00	0.00
	Dadri Solar(5)	5	1	0	0	0.02	1	0.02	0.00
	Unchahar Solar(10)	10	1	0	0	0.03	1	0.03	0.00
	Singrauli Solar(15)	15	2	0	0	0.07	3	0.06	0.01
	KHEP(4*200)	800	655	596	0	2.62	109	2.60	0.02
Sub Total (A)	12112	8911	6917	5658	138	5734	138	0	
B. NPC	NAPS (2*220)	440	402	438	448	9.72	405	9.65	0.07
	RAPS- B (2*220)	440	376	417	425	9.05	377	9.02	0.03
	RAPS- C (2*220)	440	415	448	451	9.69	404	9.96	-0.27
	Sub Total (B)	1320	1193	1303	1324	28.46	1186	28.63	-0.17
C. NHPC	Chamera I HPS (3*180)	540	534	538	0	2.44	102	2.30	0.14
	Chamera II HPS (3*100)	300	300	202	0	1.96	82	1.90	0.06
	Chamera III HPS (3*77)	231	235	230	0	1.20	50	1.16	0.04
	Bairasuli HPS(3*60)	180	179	187	62	3.22	134	3.16	0.05
	Satal-HPS (6*115)	690	332	449	423	8.67	361	7.98	0.68
	Tanakpur-HPS (3*40)	94	17	15	14	0.45	19	0.41	0.04
	Uri-I HPS (4*120)	480	475	469	472	11.44	476	11.40	0.04
	Uri-II HPS (4*60)	240	216	221	221	5.26	219	5.19	0.07
	Dhauliganga-HPS (4*70)	280	280	285	0	0.92	38	0.84	0.08
	Duilhasli-HPS (3*130)	390	387	404	0	4.22	176	4.00	0.22
	Sewa-II HPS (3*40)	120	119	125	122	2.95	123	2.86	0.09
	Parbati 3 (4*130)	520	138	131	0	0.60	25	0.53	0.02
	Sub Total (C)	4065	3213	3254	1315	43	1805	42	2
	D.SJVNL	NJPC (6*250)	1500	1350	1360	0	7.55	314	7.59
Rampur HEP (6*68.67)		412	375	352	0	2.15	89	2.10	0.04
Sub Total (D)		1912	1725	1712	0	9.69	404	9.69	0.00
E. THDC	Tehri HPS (4*250)	1000	465	450	0	5.35	223	5.48	-0.13
	Koteswar HPS (4*100)	400	114	304	91	2.76	115	2.73	0.03
	Sub Total (E)	1400	579	754	91	8.11	338	8.21	-0.10
F. BBMB	Bhakra HPS (2*108+3*126+5*157)	1379	518	960	383	12.68	529	12.44	0.25
	Dehar HPS (6*165)	990	230	495	165	5.62	234	5.51	0.11
	Pong HPS (6*66)	396	124	275	110	3.04	127	2.98	0.06
	Sub Total (F)	2765	872	1730	658	21.34	889	20.93	0.41
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.60	25	0.58	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	625	0	3.38	141	4.09	-0.71
	Malana Stg-II HPS (2*50)	100	0	0	0	0.36	15	0.34	0.02
	Shree Cement TPS (2*150)	300	0	294	296	7.03	293	7.10	-0.07
	Budhil HPS(IPP) (2*35)	70	0	35	0	0.12	5	0.14	-0.02
	Sub Total (G)	1662	0	954	296	11.48	478	12.24	-0.76
H. Total Regional Entities (A-G)		25237	16492	16624	9342	260.04	10835	259.31	0.73

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	3.65	152	
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	0	0	-0.02	-1	
	Guru Har Gobind Singh TPS(L.mbt) (2*210+2*250)	920	382	394	9.00	375	
	Goidwal(GVK)		280	270	6.03	251	
	Rajpura (2*700)	1400	610	460	13.78	574	
	Talwandi Saboo (2*660)	1320	410	308	14.25	594	
	Thermal (Total)	5360	1842	1592	46.68	1945	
	Total Hydro	1000	159	471	7.74	323	
	Total Punjab	6360	2001	2063	54.42	2267	
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	456	250	9.69	404
DCRTPP (Yamuna nagar) (2*300)		600	546	477	12.13	506	
Fardabad GPS (NTPC)		432	0	0	0.07	3	
RGTPP (khadar) (IPP) (2*600)		1200	573	393	10.36	432	
Masnun Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP) (2*660)		1320	0	0	0.00	0	
Thermal (Total)		4944	1575	1120	32.25	1344	
Total Hydro		62	4	10	0.22	9	
Total Haryana		5006	1579	1130	32.47	1353	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	873	767	19.66	819
		suratgarh TPS (6*250)	1500	199	229	5.21	217
		Chabra TPS (4*250)	1000	564	668	15.74	656
		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	216	218	5.46	228	
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0	
	Barsingsar (NLC) (2*125)	250	166	159	3.71	155	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	825	844	19.79	825	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	941	1123	26.24	1094	
	Kawail(Adani) (2*660)	1320	583	586	13.91	580	
	Thermal (Total)	8876	4367	4594	110	4572	
	Total Hydro	550	48	37	0.96	40	
	Wind power	3214	78	36	3.41	142	
	Biomass	99	18	18	0.44	18	
	Solar	730	0	0	2.71	113	
	Renewable/Others (Total)	4043	96	54	6.55	273	
	Total Rajasthan	13469	4511	4685	117.23	4885	
	UP	Anpara TPS (3*210+2*500)	1630	1384	1345	31.25	1302
		Obra TPS (2*50+2*94+5*200)	1194	410	301	8.90	371
		Paricha TPS (2*110+2*220+2*250)	1140	977	964	23.00	958
		Panki TPS (2*105)	210	72	77	1.70	71
Harduaganj TPS (1*60+1*105+2*250)		665	326	326	7.80	325	
Tanda TPS (NTPC) (4*110)		440	284	385	7.95	331	
Roza TPS (IPP) (4*300)		1200	815	815	19.44	810	
Anpara-C (IPP) (2*600)		1200	1072	1080	25.70	1071	
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	0	0	0.00	0	
Anpara-D(2*500)		500	313	285	6.28	262	
Lalitpur TPS(2*660)		1320	0	0	0.00	0	
Bara(2*660)		1320	0	0	0.00	0	
Thermal (Total)		11269	5653	5578	132	5501	
Vishnuparyag HPS (IPP)(4*110)		440	70	67	1.62	68	
Alakanada(4*82.5)		330	76	76	1.05	44	
Other Hydro		527	44	5	0.41	17	
Cogeneration		981	600	600	14.40	600	
Total UP	13547	6443	6326	150	6230		
Uttarakhand	Total Hydro	1398	417	347	7.52	313	
	Total Uttarakhand	1398	417	347	7.52	313	
Delhi	Raighat TPS (2*67.5)	135	0	0	-0.01	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	37	37	0.92	38	
	Pragati Gas Turbine (2x104+ 1x122)	330	-2	-2	-0.06	-2	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	-2	-3	-0.05	-2	
	Badarpur TPS (NTPC) (3*95+2*210)	705	161	161	3.44	143	
	Thermal (Total)	2917	194	193	4.24	177	
	Total Delhi	2917	194	193	4.24	177	
HP	Baspa HPS (IPP) (3*100)	300	0	30	0.98	41	
	Malana HPS (IPP) (2*43)	86	0	0	0.36	15	
	Other Hydro	878	287	273	6.98	291	
	Total HP	1264	287	303	8.31	346	
J & K	Baqilhar HPS (IPP) (3*150)	450	440	290	8.43	351	
	Other Hydro/IPP	560	122	72	2.43	101	
	Gas/Diesel/Others	190	0	0	0.00	0	
	Total J & K	1200	562	362	10.85	452	
Total State Control Area Generation		45161	15994	15409	384.55	16023	
J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))			6454.51	8290.34	194.18	8091	
Total Regional Availability(Gross)		70398	39072	33041	838.77	34949	

IV. Total Hydro Generation:

Regional Entities Hydro	12234	8671	2064	89.42	3726
State Control Area Hydro	6581	1667	1678	39	1612
Total Regional Hydro	18815	10338	3742	128.11	5338

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	
Vindhyachal(HVDC B/B)	250	-50	250	50	4.66	0.23	4.43
765 KV Gwalior-Agra (D/C)	2347	2517	3275	0	68.02	0.00	68.02
400 KV Zerda-Kankrol	-149	-121	0	243	0.00	3.61	-3.61
400 KV Zerda-Bhimmal	-79	-139	64	145	0.00	1.29	-1.29
220 KV Auraiya-Malampur	-15	21	58	38	0.35	0.00	0.35
220 KV Badod-Kota/Morak	-92	-14	11	92	0.00	0.56	-0.56
Mundra-Mohindergarh(HVDC Bipole)	2498	2103	2506	0	58.61	0.00	58.61
400 KV Vindhyachal - Rihand	0	0	0	0	0.00	0.00	0.00
765 kv Phagi-Gwalior (D/C)	847	941	1104	0	22.59	0.00	22.59
Sub Total WR	5607	5258			154.23	5.69	148.54
Pusaui Bypass/HVDC	400	400	400	0	9.00	0.00	9.00
400 KV MZP- GKP (D/C)	312	336	372	356	2.57	0.00	2.57
400 KV Patna-Balia(D/C) X 2	406	829	847	0	16.34	0.00	16.34
400 KV B'Sharif-Balia (D/C)	-12	196	217	31	3.29	0.00	3.29
765 KV Gaya-Balia	167	244	338	0	3.42	0.00	3.42
765 KV Gaya-Varanasi -1	0	0	0	0	0.00	0.00	0.00
220 KV Pusaui-Sahupuri	0	0	0	0	0.00	0.00	0.00
132 KV N'asa-Sahupuri	0	0	0	0	0.96	0.00	0.96
132 KV Son Ngr-Rihand	-20	-19	0	33	0.00	0.59	-0.59
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-309	7	124	309	0.00	0.83	-0.83
400 KV Barh -GKP (D/C)	388	536	540	0	10.55	0.00	10.55
400 kvB'Sharif - Varanasi (D/C)	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1332	2529			46.14	1.42	44.72
+/- 800 KV BiswanathChariali-Agra	-484	503	485	507	0.92	0.00	0.92
Sub Total NER	-484	503			0.92	0.00	0.92
Total IR Exch	6455	8290			201.29	7.11	194.18

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
40.92	0.29	41.20	1.52	-7.32	0.00	31.18	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	
42.73	142.70	185.43	45.63	148.54	194.18	2.90	5.84	8.75	

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 - Mahendamar	-20	-24	0	32	0	1	-0.66

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	0.32	5.12	36.56	64.99	22.99	7.23	0.65	0.00

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block		Freq Dev Index (% of Time)
Maximum	Minimum		MAX (Hz)				MIN (Hz)		
Freq	Time	Freq	Time	Hz					
50.26	13.01	49.75	19.33	50.02	0.048	0.067	0.00	0.00	35.01

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	404	15:05	400	19:16	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	416	09:01	406	05:08	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	418	18:00	401	11:37	0.0	0.0	0.0	0.0	0.0
Kanpur	400	417	16:03	404	19:11	0.0	0.0	0.0	0.0	0.0
Dadri	400	423	02:03	403	11:35	0.0	0.0	13.8	0.0	13.8
Balabgarh	400	428	01:56	408	11:35	0.0	0.0	61.2	0.0	61.2
Bawana	400	428	02:03	405	11:37	0.0	0.0	54.4	0.0	54.4
Bassi	400	425	18:00	402	19:18	0.0	0.0	4.1	0.0	4.1
Hissar	400	423	02:13	397	11:36	0.0	0.0	3.7	0.0	3.7
Moga	400	416	16:03	396	11:36	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	426	02:12	404	11:36	0.0	0.0	34.8	0.0	34.8
Nalagarh	400	433	02:04	404	11:36	0.0	0.0	58.1	8.8	58.1
Kishenpur	400	425	01:56	398	19:13	0.0	0.0	22.7	0.0	22.7
Wagooora	400	409	13:21	371	19:28	9.3	35.7	0.0	0.0	9.3
Aminisar	400	426	02:03	398	11:36	0.0	0.0	19.2	0.0	19.2
Kashipur	400	0	00:00	0	00:00	0.0	0.0	0.0	0.0	0.0
Hemipur	400	425	01:59	395	11:40	0.0	0.0	29.5	0.0	29.5
Rishikesh	400	0	00:00	0	00:00	0.0	0.0	0.0	0.0	0.0

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	766	16:02	740	19:23	0.0	0.8	0.0	0.0	0.0
Balia	765	771	09:10	749	19:12	0.0	0.0	0.0	0.0	0.0
Moga	765	794	16:03	752	11:37	0.0	0.0	0.0	0.0	0.0
Agra	765	787	18:15	749	11:37	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	803	02:11	768	19:20	30.6	30.6	4.2	0.0	34.8
Unnao	765	763	18:04	745	11:37	0.0	0.0	0.0	0.0	0.0
Lucknow	765	782	16:03	763	11:37	0.0	0.0	0.0	0.0	0.0
Meerut	765	810	18:02	758	11:39	0.0	0.0	10.0	0.0	10.0
Jhatikara	765	806	18:01	766	11:38	0.0	0.0	18.9	0.0	18.9
Bareilly 765 kV	765	786	18:00	757	11:37	0.0	0.0	0.0	0.0	0.0
Anta	765	780	17:58	762	11:38	0.0	0.0	0.0	0.0	0.0
Phagi	765	791	18:02	759	11:33	0.0	0.0	0.0	0.0	0.0

Note : '0' in Max / Min Col -> Telemetry Outage

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	480.72	474.82	480.36	468.02	190.71	396.38
Pong	426.72	384.05	396.52	151.67	402.63	281.22	67.59	230.44
Tehri	829.79	740.04	754.95	83.65	774.20	253.99	41.40	183.00
Koteswar	612.50	598.50	610.90	4.95	611.29	5.20	183.00	181.96
Chamera-I	760.00	748.75	757.45	0.00	0.00	0.00	114.49	67.74
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	0.00	0.00
RPS	352.50	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	496.24	2.24	509.10	2.92	68.22	52.11

* 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	5	171	0	-601	274	0	-2.09	5.66	3.57
Delhi	-700	-41	0	-619	548	0	-15.39	9.13	-6.25
Haryana	-161	214	0	-174	283	0	-5.10	5.97	0.87
HP	30	42	0	132	-338	0	3.52	-2.62	0.90
J&K	397	-17	0	295	-28	0	7.67	-1.08	6.59
CHD	0	-10	0	0	-20	0	0.00	-0.21	-0.21
Rajasthan	-11	359	0	-7	579	0	0.57	12.52	13.09
UP	166	486	0	282	0	0	2.49	2.73	5.22
Uttarakhand	194	118	0	223	232	0	4.77	4.57	9.34
Total	-79	1320	0	-470	1530	0	-3.55	36.67	33.12

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	5	-601	310	-284	0	0
Delhi	-591	-710	763	-51	0	0
Haryana	-161	-389	336	-192	0	0
HP	272	30	43	-744	0	0
J&K	397	174	-17	-219	0	0
CHD	0	0	0	-45	0	0
Rajasthan	186	-11	600	218	0	0
UP	353	-34	486	0	0	0
Uttarakhand	223	194	359	117	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	23.61%

(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 29.03.2016 :

Normal

XV. Synchronisation of new generating units :

I. Talwandi sabo unit-I (660 MW) synchronised first time at 0030 hrs. dated 29/03/16.

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

- I. 400/220 kV, 500 MVA ICT-I at Bagpat first time charged at 1906 hrs. dated 29/03/16.
- II. 400 kV Biharsharif-Varanasi-II first time charged along with line reactor at varanasi at 2346 hrs. dated 29/03/16.
- III. 400 kV Biharsharif-Varanasi-I first time charged along with line reactor at varanasi at 0043 hrs. dated 30/03/16.

XVII. Tripping of lines in pooling stations :

XVIII. Complete generation loss in a generating station :