

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण व्यापारिक प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 25.10.2015

Date of Reporting : 26.10.2015

I. Regional Availability/Demand:

Demand Met	Evening Peak (19:00 Hrs) MW			Demand Met	Off Peak (03:00 Hrs) MW			Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)		Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
37820	826	38646	50.15	33319	607	33926	50.07	823.5	24.00

* 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	42.88	10.71		53.59	42.02	40.45	-1.57	94.04	0.00
Haryana	61.84	0.31		62.15	55.03	54.88	-0.14	117.03	0.00
Rajasthan	129.78	4.57	11.46	145.81	61.63	62.26	0.63	208.07	0.00
Delhi	14.11			14.11	52.24	52.30	0.06	66.41	0.06
UP	129.10	7.79		136.89	110.72	107.93	-2.78	244.82	15.56
Uttarakhand		11.68		11.68	18.37	19.64	1.27	31.32	0.00
HP		7.21		7.21	15.34	15.93	0.59	23.13	0.00
J & K		8.47	0.00	8.47	27.67	26.93	-0.74	35.39	8.38
Chandigarh				0.00	3.61	3.25	0.27	3.25	0.00
Total	377.71	50.73	11.46	439.89	386.62	383.57	-2.41	823.46	24.00

* 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	4271	0	-368	-440	3820	0	-37	-496	4586
Haryana	6221	0	-93	-367	4088	0	60	-492	6221
Rajasthan	8458	0	-87	-365	9050	0	76	695	9608
Delhi	3274	0	50	-96	2386	0	-90	-171	3354
UP	10851	360	-79	25	10587	390	-94	171	11062
Uttarakhand	1574	0	64	285	1226	0	95	280	1574
HP	1133	0	28	-467	824	0	13	112	1180
J&K	1865	466	-15	161	1230	217	-90	161	1877
Chandigarh	173	0	-29	-65	109	0	-25	0	173
Total	37820	826	-529	-1330	33319	607	-92	259	37820

* STOA figures are at sellers boundary & PX figures are at regional boundary.

figures may not be at simultaneous hour.

Diversity is 1.05

III. Regional Entities :

Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI (OG:(+ve), UG: (-ve))	
								Net MU	Net MU
A. NTPC									
Singrauli STPS (5*200+2*500)	2000	1892	1625	2040	42.24	1760	40.78	1.47	
Rihand I STPS (2*500)	1000	870	658	706	16.53	689	15.86	0.67	
Rihand II STPS (2*500)	1000	930	705	791	16.53	689	16.08	0.45	
Rihand III STPS (2*500)	1000	480	375	331	9.29	387	8.91	0.39	
Dadri I STPS (4*210)	840	800	149	149	3.52	146	3.54	-0.02	
Dadri II STPS (2*490)	980	970	692	670	15.67	653	16.31	-0.64	
Unchahar I TPS (2*210)	420	200	145	144	3.41	142	3.44	-0.02	
Unchahar II TPS (2*210)	420	400	296	290	6.57	274	6.72	-0.15	
Unchahar III TPS (1*220)	210	200	131	142	3.10	129	3.36	-0.26	
ISTPP (Jhajjar) (3*500)	1500	960	623	626	13.63	568	13.82	-0.19	
Dadri GPS (4*130.19+2*154.51)	830	617	530	532	12.43	518	12.63	-0.20	
Anta GPS (3*88.71+1*153.2)	419	409	-1	-1	0.00	0	0.00	0.00	
Auraiya GPS (4*111.19+2*109.30)	663	641	256	263	6.07	253	6.14	-0.07	
Dadri Solar	5	1	0	0	0.02	1	0.02	0.00	
Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.03	
Singrauli Solar	15	3	0	0	0.03	1	0.08	-0.05	
KHEP	800	870	540	0	5.12	213	4.72	0.40	
Sub Total (A)	12112	10246	6724	6683	154	6425	152	2	
B. NPC									
NAPS (2*220)	440	399	432	441	9.55	398	9.58	-0.03	
RAPS- B (2*220)	440	394	438	445	9.55	398	9.46	0.10	
RAPS- C (2*220)	440	380	441	444	9.58	399	9.13	0.45	
Sub Total (B)	1320	1173	1311	1330	28.68	1195	28.16	0.52	
C. NHPC									
Chamera I HPS (3*180)	540	540	549	202	9.78	408	9.55	0.24	
Chamera II HPS (3*100)	300	300	240	0	2.15	90	2.01	0.14	
Chamera III HPS (3*77)	231	229	226	0	1.41	59	1.35	0.06	
Bairasuli HPS(3*60)	180	179	122	0	0.81	34	0.75	0.07	
Saikal-HPS (6*115)	690	254	342	307	6.91	288	6.08	0.82	
Tanakpur-HPS (3*40)	94	41	39	51	1.10	46	0.98	0.12	
Uri-I HPS (4*120)	480	300	347	240	8.09	337	7.21	0.88	
Uri-II HPS (4*60)	240	224	245	162	5.45	227	5.37	0.08	
Dhauliganga-HPS (4*70)	280	280	284	0	1.66	69	1.55	0.11	
Dulhasti-HPS (3*130)	390	387	400	123	5.96	248	5.50	0.46	
Sewa-II HPS (3*40)	120	119	108	0	0.75	31	0.65	0.10	
Parbati 3 (4*130)	520	260	24	0	0.81	34	0.65	0.16	
Sub Total (C)	4065	3113	2926	1085	45	1870	42	3	
D.SJVNL									
NJPC (6*250)	1500	1605	1310	0	11.77	490	11.71	0.06	
Rampur HEP (6*68.67)	412	360	370	0	3.29	137	3.17	0.12	
Sub Total (D)	1912	1965	1680	0	15.06	628	14.88	0.18	
E. THDC									
Tehri HPS (4*250)	1000	1080	985	0	5.46	228	5.23	0.23	
Koteshwar HPS (4*100)	400	92	101	90	2.24	93	2.20	0.04	
Sub Total (E)	1400	1172	1086	90	7.71	321	7.43	0.28	
F. BBMB									
Bhakra HPS (2*108+3*126+5*157)	1379	545	1062	388	13.61	567	13.08	0.53	
Dehar HPS (6*165)	990	211	660	140	5.27	220	5.06	0.21	
Pong HPS (6*66)	396	229	318	192	5.48	229	5.50	-0.01	
Sub Total (F)	2765	984	2040	720	24.36	1015	23.63	0.74	
G. IPP(s)/JV(s)									
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	95	42	0.85	36	0.82	0.03	
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	800	230	6.89	287	6.96	-0.07	
Malana Stg-II HPS (2*50)	100	0	0	0	0.33	14	0.31	0.02	
Shree Cement TPS (2*150)	300	0	260	261	6.20	258	6.23	-0.03	
Budhil HPS(IPP) (2*35)	70	0	75	0	0.34	14	0.34	0.00	
Sub Total (G)	1662	0	1230	534	14.62	609	14.67	-0.05	
H. Total Regional Entities (A-G)	25237	18653	16997	10442	289.52	12063	282.87	6.65	

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	3.42	143	
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	187	90	2.59	108	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	205	204	4.47	186	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura (2*700)	1400	621	720	14.62	609	
	Talwandi Saboo (2*660)	1320	733	875	17.77	740	
	Thermal (Total)	5360	1906	2049	42.88	1787	
	Total Hydro	1000	448	458	10.71	446	
Total Punjab	6360	2354	2507	53.59	2233		
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	432	442	10.25	427	
	DCRTPP (Yamuna nagar) (2*300)	600	553	480	11.19	466	
	Faridabad GPS (NTPC)	432	194	162	3.99	166	
	RGTTP (khedar) (IPP) (2*600)	1200	752	767	18.57	774	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP) (2*660)	1320	739	738	17.84	743	
	Thermal (Total)	4944	2670	2589	61.84	2577	
	Total Hydro	62	20	7	0.31	13	
	Total Haryana	5006	2690	2596	62.15	2590	
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1009	988	24.32	1013
		suratgarh TPS (6*250)	1500	983	986	23.95	998
Chabra TPS (4*250)		1000	59	193	2.20	92	
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	182	181	4.75	198	
RAPS A (NPC) (1*100+1*200)		300	158	158	3.95	165	
Barsingar (NLC) (2*125)		250	188	183	4.32	180	
Giral LTPS (2*125)		250	1	0	0.00	0	
Rajwest LTPS (IPP) (8*135)		1080	569	763	18.00	750	
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0	
Kalisindh Thermal(2*600)		1200	931	905	22.66	944	
Kawai(Adani) (2*660)		1320	928	1149	25.64	1068	
Thermal (Total)		8876	5008	5506	130	5408	
Total Hydro		550	159	159	4.57	190	
Wind power		3214	402	791	10.54	439	
Biomass		99	33	33	0.79	33	
Solar		730	0	0	0.12	5	
Renewable/Others (Total)		4043	435	824	11.46	477	
Total Rajasthan		13469	5602	6489	145.81	6075	
UP		Anpara TPS (3*210+2*500)	1630	1366	1266	31.70	1321
		Obra TPS (2*50+2*94+5*200)	1194	419	429	10.20	425
	Paricha TPS (2*110+2*220+2*250)	1140	630	648	15.10	629	
	Panki TPS (2*105)	210	140	126	3.00	125	
	Haridwar TPS (1*60+1*105+2*250)	665	518	527	12.50	521	
	Tanda TPS (NTPC) (4*110)	440	272	274	6.66	278	
	Roza TPS (IPP) (4*300)	1200	581	761	16.71	696	
	Anpara-C (IPP) (2*600)	1200	637	1083	17.68	737	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	59	256	3.61	151	
	Anpara-D(1*500)	500	0	0	0.00	0	
	Lalitpur TPS(1*660)	660	392	390	9.54	398	
	Thermal (Total)	9289	5014	5760	127	5279	
	Vishnuparyag HPS (IPP)(4*110)	440	157	152	3.78	157	
	Alakanada(4*82.5)	330	87	87	2.30	96	
	Other Hydro	527	84	47	1.71	71	
	Cogeneration	981	100	100	2.40	100	
	Total UP	11567	5442	6146	137	5704	
Uttarakhand	Total Hydro	1398	527	464	11.68	487	
	Total Uttarakhand	1398	527	464	11.68	487	
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.01	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	37	37	0.93	39	
	Pragati Gas Turbine (2x104+ 1x122)	330	151	155	3.66	153	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	250	250	5.96	249	
	Badarpur TPS (NTPC) (3*95+2*210)	705	160	158	3.56	148	
	Thermal (Total)	2917	598	600	14.11	588	
	Total Delhi	2917	598	600	14.11	588	
HP	Baspa HPS (IPP) (3*100)	300	60	60	1.96	82	
	Malana HPS (IPP) (2*43)	86	45	0	0.34	14	
	Other Hydro	878	215	201	4.90	204	
	Total HP	1264	320	261	7.21	300	
J & K	Baglihar HPS (IPP) (3*150)	450	240	240	6.12	255	
	Other Hydro/IPP	560	110	91	2.35	98	
	Gas/Diesel/Others	190	0	0	0.00	0	
	Total J & K	1200	350	331	8.47	353	
Total State Control Area Generation		43181	17883	19394	439.89	18329	
J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))			3410	4687	111.02	4626	
Total Regional Availability(Gross)		68418	38290	34523	840.43	35018	

IV. Total Hydro Generation:

Regional Entities Hydro	12234	9167	2167	105.22	4384
State Control Area Hydro	6581	2152	1966	51	2114
Total Regional Hydro	18815	11319	4133	155.95	6498

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)	-250	-250	0	250	0.00	6.07	-6.07
765 KV Gwalior-Agra (D/C)	1187	1587	1843	0	37.05	0.00	37.05
400 KV Zerda-Kankrol	-255	-216	0	333	0.00	4.77	-4.77
400 KV Zerda-Bhinmal	-212	-199	0	394	0.00	3.71	-3.71
220 KV Auraiya-Malanpur	-135	-139	0	161	0.00	2.79	-2.79
220 KV Badoh-Kota/Morak	-153	-170	0	146	0.00	3.76	-3.76
Mundra-Mohindergarh(HVDC Bipole)	2304	2303	2505	0	55.57	0.00	55.57
400 KV Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	218	417	318	0	10.80	0.00	10.80
Sub Total WR	2704	3333			103.42	21.09	82.33
Pusaali Bypass/HVDC	400	400	400	0	8.98	0.00	8.98
400 KV MZP- GKP (D/C)	134	176	326	134	2.93	0.00	2.93
400 KV Patna-Balia(D/C) X 2	312	303	392	0	7.63	0.00	7.63
400 KV B'Shanif-Balia (D/C)	-56	49	194	98	1.27	0.00	1.27
765 KV Gaya-Balia	32	88	211	0	1.19	0.00	1.19
765 KV Gaya-Fatehpur	-148	50	139	148	1.11	0.00	1.11
220 KV Pusaali-Sahupuri	130	142	181	0	3.35	0.00	3.35
132 KV K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
132 KV Son Ngr-Rihand	-24	-29	0	30	0.00	0.62	-0.62
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-304	-113	0	304	0.00	2.64	-2.64
400 KV Barh -GKP (D/C)	230	288	300	0	5.49	0.00	5.49
Sub Total ER	706	1354			31.96	3.26	28.69
+/- 800 KV BiswanathChariali-Agra	0	0	0	0	0.00	0.00	0.00
Sub Total NER	0	0			0.00	0.00	0.00
Total IR Exch	3410	4687			135.38	24.36	111.02

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

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)			Power Exchange Shdi (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Total	Through ER	Through WR	Through ER	Through WR
28.83	1.56	30.38	2.47	-21.34	13.07	-0.76	1.40	-1.40	
Total IR Schedule (MU)									
47.32	69.18	116.51	28.69	82.33	111.02	-18.63	13.14	-5.48	

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	0	0	0	0	0	0	0.00

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	0.20	12.35	59.58	70.81	12.96	3.99	0.00	0.00

<----- Frequency (Hz) ----->

Maximum				Minimum		Average Frequency Hz	Frequency Variation Index	Std. Dev. (Hz)	Frequency in 15 Min Block	
Freq	Time	Freq	Time	MAX (Hz)	MIN (Hz)					
50.19	18.01	49.76	1.22	49.98	0.049	0.068	50.20	49.93		

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	409	23:49	400	00:00	0.0	0.0	0.0	0.0
Gorakhpur	400	421	08:02	406	18:27	0.0	0.0	0.1	0.0
Bareilly	400	417	21:48	403	18:22	0.0	0.0	0.0	0.0
Kanpur	400	411	21:44	411	10:22	0.0	0.0	3.3	0.0
Dadri	400	422	02:48	408	18:20	0.2	0.2	6.8	0.0
Ballabhgarh	400	427	02:47	413	11:10	0.0	0.0	54.3	0.0
Bawana	400	425	01:57	410	18:20	0.0	0.0	31.6	0.0
Bassi	400	426	21:31	406	07:32	0.0	0.0	7.6	0.0
Hissar	400	420	02:57	404	18:22	0.0	0.0	0.0	0.0
Moga	400	423	03:45	408	18:21	0.0	0.0	11.5	0.0
Abdullapur	400	425	02:43	404	18:28	0.0	0.0	19.9	0.0
Nalagarh	400	434	02:59	412	18:43	0.0	0.0	72.5	15.3
Kishenpur	400	426	01:47	403	18:50	0.0	0.0	20.4	0.0
Wagoora	400	412	02:00	381	18:06	0.0	12.7	0.0	0.0
Amritsar	400	428	03:01	412	18:22	0.0	0.0	39.9	0.0
Kashipur	400	419	01:48	413	18:11	0.0	0.0	0.0	0.0
Hamirpur	400	426	03:17	406	18:40	0.0	0.0	31.1	0.0
Rishikesh	400	412	02:48	394	18:22	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	780	21:50	755	18:22	0.0	0.0	0.0	0.0
Balia	765	778	07:05	754	18:21	0.0	0.0	0.0	0.0
Moga	765	800	03:28	772	18:27	0.0	0.0	0.0	0.0
Agra	765	797	21:51	772	11:05	0.0	0.0	0.0	0.0
Bhiwani	765	803	03:15	782	18:11	0.0	0.0	22.9	0.0
Unnao	765	770	21:47	750	18:11	0.0	0.0	0.0	0.0
Lucknow	765	779	16:05	756	18:28	0.0	0.0	0.0	0.0
Meerut	765	809	02:57	781	11:10	0.0	0.0	27.6	0.0
Jhatikara	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly	765	782	05:03	775	04:50	0.0	0.0	0.0	0.0
Anta	765	784	21:30	765	09:10	0.0	0.0	0.0	0.0
Phagi	765	796	21:33	766	11:04	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 ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	509.67	1530.03	507.69	1440.82	253.72	363.93
Pong	426.72	384.05	419.03	848.35	414.39	656.23	72.77	323.49
Tehri	829.79	740.04	818.65	975.00	823.95	1086.79	86.84	123.00
Koteshwar	612.50	598.50	609.96	4.54	608.20	3.98	123.00	147.76
Chamera-I	760.00	748.75	756.48	0.00	0.00	0.00	135.11	264.41
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	512.10	3.47	510.48	2.94	160.77	216.75

* 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	-693	197	0	-699	258	0	-13.43	5.96	-7.47
Delhi	-160	-11	0	-160	64	0	-3.48	0.65	-2.83
Haryana	-548	56	0	-548	181	0	-13.15	0.10	-13.05
HP	-50	162	0	127	-594	0	1.34	-2.23	-0.89
J&K	161	0	0	161	0	0	3.98	-0.03	3.96
CHD	0	0	0	0	-65	0	0.00	-0.35	-0.35
Rajasthan	-5	699	2	-5	-361	2	1.63	12.78	14.41
UP	171	0	0	25	0	0	1.79	0.00	1.79
Uttarakhand	197	83	0	197	88	0	4.72	2.62	7.34
Total	-928	1186	2	-903	-428	2	-16.61	19.51	2.90

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-295	-699	293	179	0	0
Delhi	-51	-261	159	-187	0	0
Haryana	-548	-548	213	-656	0	0
HP	127	-50	174	-713	0	0
J&K	176	161	0	-15	0	0
CHD	0	0	0	-80	0	0
Rajasthan	190	-5	946	-533	2	2
UP	197	-37	0	0	0	0
Uttarakhand	197	197	379	-97	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 25.10.2015 :
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 :