

<p><b><u>CORESΟ Engineers</u></b></p> <p><b><u>North :</u></b> BROUTA Karl</p> <p><b><u>South :</u></b> BIVONA Ignazio</p>	<p><b>Day Ahead report for</b></p> <p><b>02 January 2018</b></p>
<p><b>Security Levels:</b></p> <p><b>CWE: No constraints detected.</b></p> <p><b>CEE: No critical constraints detected.</b></p> <p><b>CSE: No critical constraints detected, but coordination is needed in curative between TSOs.</b></p>	

#### Key overall conditions

#### Outages table

#### Exchange program forecasts

#### ELIA expected flows & PSTs tap position

#### CEE Renewable Power Generation & Forecast

#### CWE and CSE Renewable Power Forecast (D-1 and D-2)

#### RTE flows on cross-border lines

#### N state flows at 10:30 and 19:30

#### Special topologies at 10:30 and 19:30

#### North analyses results

Constraints on Elia, RTE (North) and 50HzT 400kV grids and tie-lines

Constraints greater than 100% on NL + Amprion 400kV grids and greater than 120% on DE, CZ, PL and SK 400kV grids

Constraints on ELIA 220/150kV grid at 10:30

50HzT DC loopflows sensitivity

#### South analyses results

#### N state flows Off-Peak & Peak

#### Special topologies

Sensitivity coefficients for the Pentalateral instruction

Constraints on APG, Eles, RTE (South), Swissgrid and Terna 400kV grids and tie-lines

Final PSTs settings

#### Conclusion

## Key overall conditions

Load & Generation margin forecast			Main generating units connected to the grid in DACF					
ELIA			Elia	Doel	Pmax (MW)	1000	1	1900
						450	2	
Peak load [MW]	9600	10:00		Tihange		1000	2	2900
						450	2	
Generation Margin	Sufficient			Coo		230	3	1170
						160	3	
			50HzT	Rostock	Pmax (MW)	530	1	530
				Janschwalde		500	6	3000
				Boxberg		500	2	1900
						900	1	
				Schw. Pumpe		800	2	1600
				Lippendorf		920	2	1840
RTE			RTE	Gravelines	Pmax (MW)	900	5	4500
Peak load [MW]	69800	19:00		Chooz		1500	1	1500
				Cattenom		1300	4	5200
Generation Margin	Sufficient			Fessenheim		900	1	900
				Penly		1300	2	2600
NATIONAL GRID (UK time)				Paluel		1300	3	3900
Peak load [MW]	46 600	17:30		Nogent s/ Seine		1300	2	2600
				Bugey		900	4	3600
Generation Margin	Sufficient			St Alban		1300	2	2600
				Cruas		900	3	2700
TERNA				Tricastin		900	4	3600
Peak load [MW]	41200	18:00						
			Generation Margin	Sufficient				

### Generation margin legend:

**Green:** Sufficient margin available. No risk for need of inter-TSO solicitation due to margin issues.

**Orange:** Tight margin available. Low risk for need of inter-TSO solicitation due to margin issues.

**Red:** Insufficient margin available. High risk for need of inter-TSO solicitation due to margin issues.

### Comments:

CWE / CEE

RTE: Chooz 2 and Cattenom 4 should be back on service tomorrow.

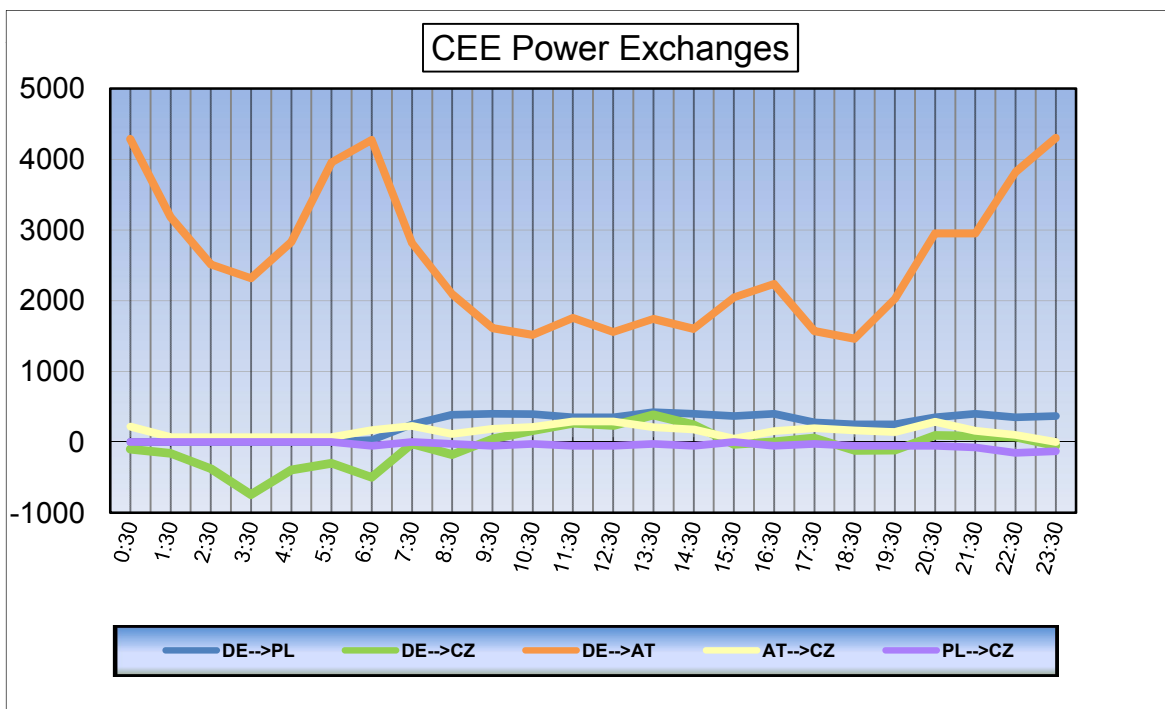
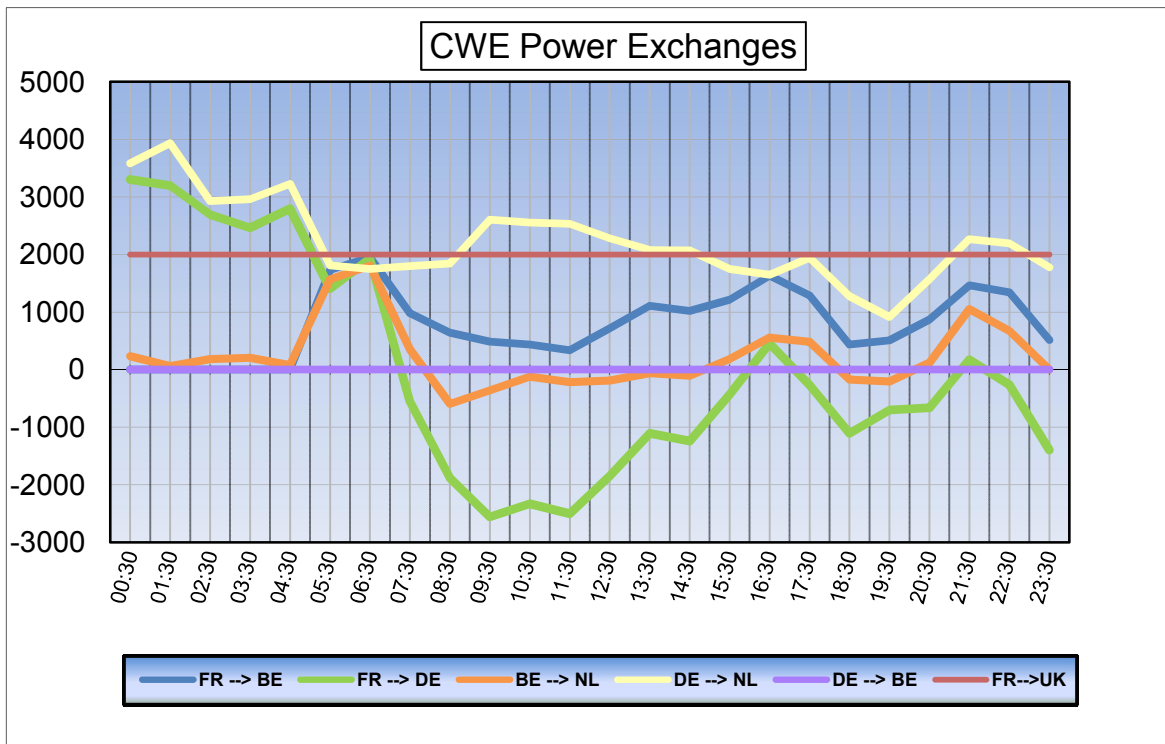
CSE

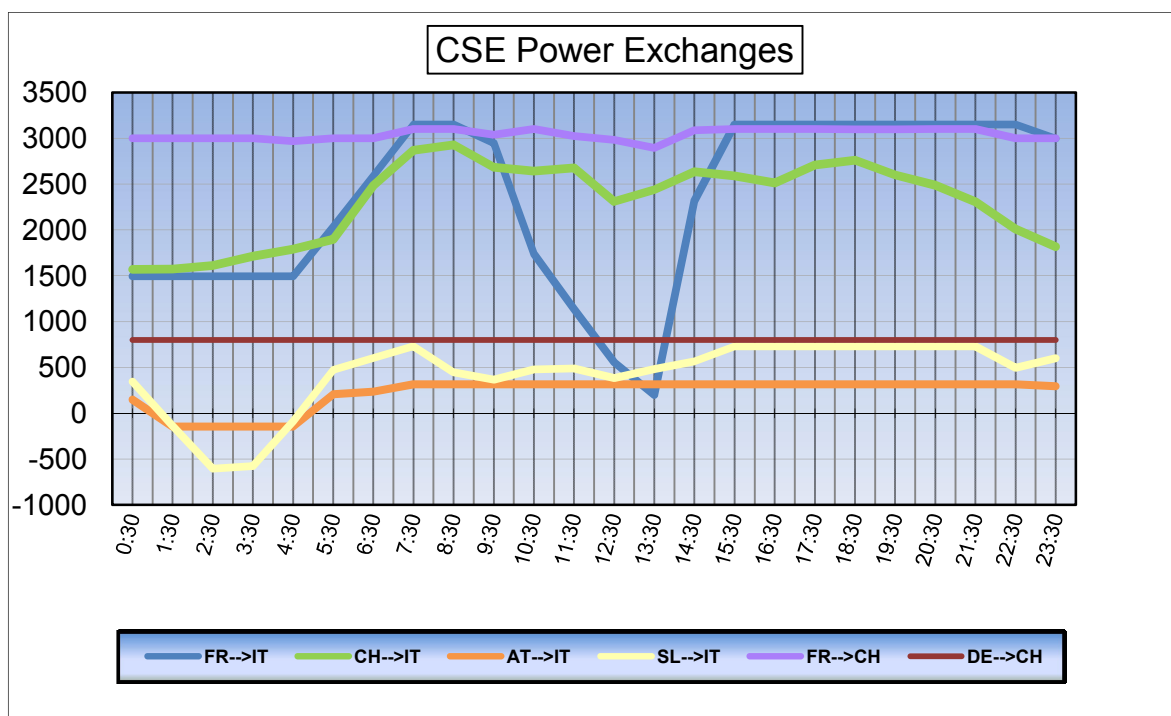
RTE: Tricastin 2 will be back on service on 2nd January.

## Outages table

OUTAGES					
Owner	Type of element	Line name	start	end	Comments
50HzT	Fossil.Gen	BOXBERG _ UNIT R 400 kV	24/12/2017	04/01/2018	630 MW
50HzT	Fossil.Gen	BOXBERG _ Unit N 400 kV	24/12/2017	02/01/2018	290 MW (reduced)
50HzT	Fossil.Gen	JANSCHWALDE _ Unit D 400 kV	23/12/2017	01/01/2018	500 MW
50HzT	Fossil.Gen	Moorburg _ Unit B 400 kV	22/12/2017	02/01/2018	800MW
50HzT	Hydro.Gen	MARKERSBACH _ Unit D 400 kV	28/09/2017	27/04/2018	160 MW
50HzT	Line	WOLMIRSTEDT _ WUSTERMARK 494 400 kV	24/12/2017	07/01/2018	
50HzT / PSE	Line	KRAJNIK _ VIERRADEN 507 225 kV	22/06/2016	31/05/2018	Long term outage
50HzT / PSE	Line	KRAJNIK _ VIERRADEN 508 225 kV	22/06/2017	31/05/2018	Long term outage
APG	Line	TAUERN _ PST 220 kV	14/12/2017	15/01/2018	
CEPS	Generation	MELNIK _ UNIT 400 kV	04/11/2017	31/01/2018	
ELIA	Line	GEZELLE _ STEVIN 111 400 kV	19/09/2017	26/01/2018	
ELIA	Line	GEZELLE _ STEVIN 112 400 kV	19/09/2017	26/01/2018	
ELIA	Nuc.Gen	DOEL _ Unit 3 (1000MW) 400 kV	23/09/2017	16/04/2018	Forced outage
PSE	Fossil.Gen	TUROW _ Unit 2 225 kV	01/03/2017	12/01/2018	
RTE	Line	BARNABOS _ TERRIER 1 400 kV	18/12/2017	05/01/2018	
RTE	Nuc.Gen	CRUAS _ Unit 2 (900MW) 400 kV	02/12/2017	30/03/2018	
RTE	Nuc.Gen	FESSENHEIM _ Unit 2 (900MW) 400 kV	01/01/2017	15/03/2018	
RTE	Nuc.Gen	PALUEL _ Unit 2 (1300MW) 400 kV	01/08/2015	15/04/2018	
S.GRID	Line	LIMMERN _ TIERFEHD 1 400 kV	28/01/2017	31/07/2018	
S.GRID	Nuc.Gen	BEZNAU _ BEZNAU G11 220 kV	13/03/2017	28/02/2018	182 MW
S.GRID	Nuc.Gen	BEZNAU _ BEZNAU G12 220 kV	13/03/2015	28/02/2018	182 MW

## Exchange program forecasts





## ELIA expected flows & PSTs tap position

		Node 1	Node 2	Order	00:30	03:30	04:30	07:30	10:30	11:30	12:30	15:30	17:30	19:30	22:30	23:30
BE	FR	ACHENE	LONNY	380.19	-175	-291	-225	82	312	368	216	-52	-64	114	-30	191
BE	FR	AUBANGE	MONT ST MARTIN	220.51	-162	-235	-231	-68	38	69	-10	-64	-19	-22	-69	-34
BE	FR	AUBANGE	MOULAIN	220.51	-150	-219	-213	-64	32	52	-21	-66	-22	-25	-68	-30
BE	FR	AVELGEM	AVELIN	380.80	-767	-717	-699	-395	-35	6	-49	-502	-599	-85	-491	-238
BE	FR	AVELGEM	MASTAING	380.79	-449	-381	-360	-294	-266	-234	-257	-358	-470	-230	-335	-188
BE	FR	MONCEAU	CHOOZ	220.48	-194	-161	-152	-155	-147	-134	-139	-152	-168	-124	-168	-121
BE	NL	VAN EYCK 1	MAASBRACHT	380.27	24	117	61	-293	-457	-478	-450	-260	-218	-314	-257	-347
BE	NL	VAN EYCK 2	MAASBRACHT	380.28	818	705	616	292	259	206	122	291	483	152	324	121
BE	NL	ZANDVLIET	BORSSELE	380.29	233	235	209	-82	-332	-375	-384	-246	-172	-403	-97	-206
BE	NL	ZANDVLIET	GEERTRUIDENBERG	380.30	850	880	824	303	108	61	63	271	370	95	375	166
BE	LU	BELVAL	SCHIFFLANGE	220.511	205	270	250	36	-72	-97	8	111	71	121	147	170

BE	FR	TOTAL		-1897	-2004	-1880	-894	-66	127	-260	-1194	-1342	-372	-1161	-420
BE	NL	TOTAL		1925	1937	1710	220	-422	-586	-649	56	463	-470	345	-266
BE	LU	TOTAL		205	270	250	36	-72	-97	8	111	71	121	147	170
TOTAL BELGIAN IMPORT/EXPORT				233	203	80	-638	-560	-556	-901	-1027	-808	-721	-669	-516

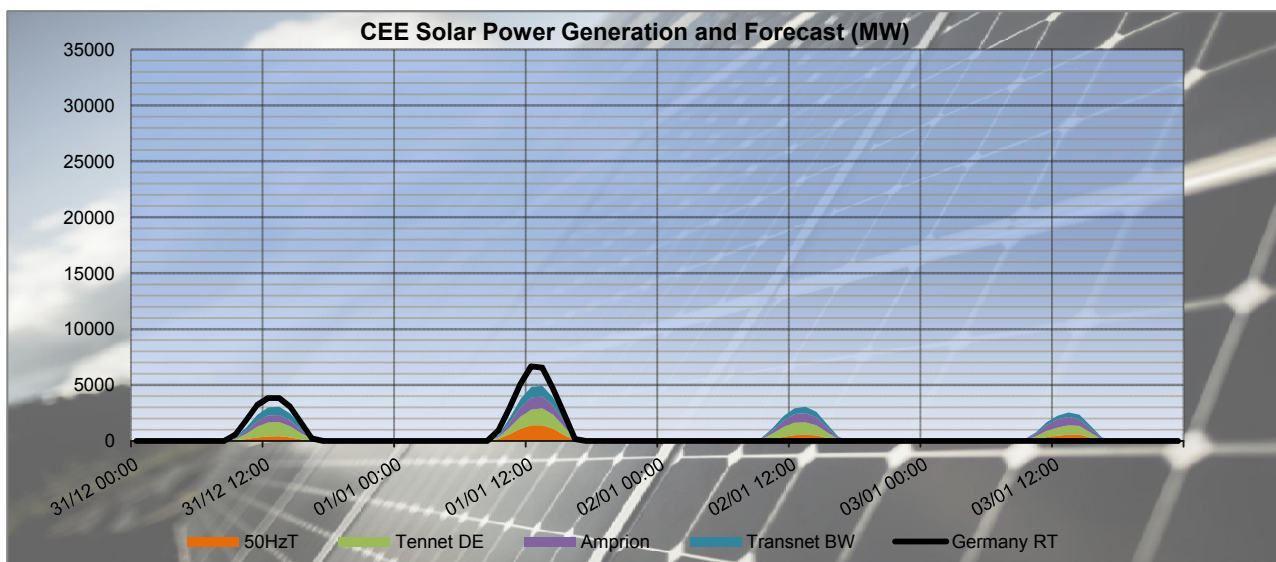
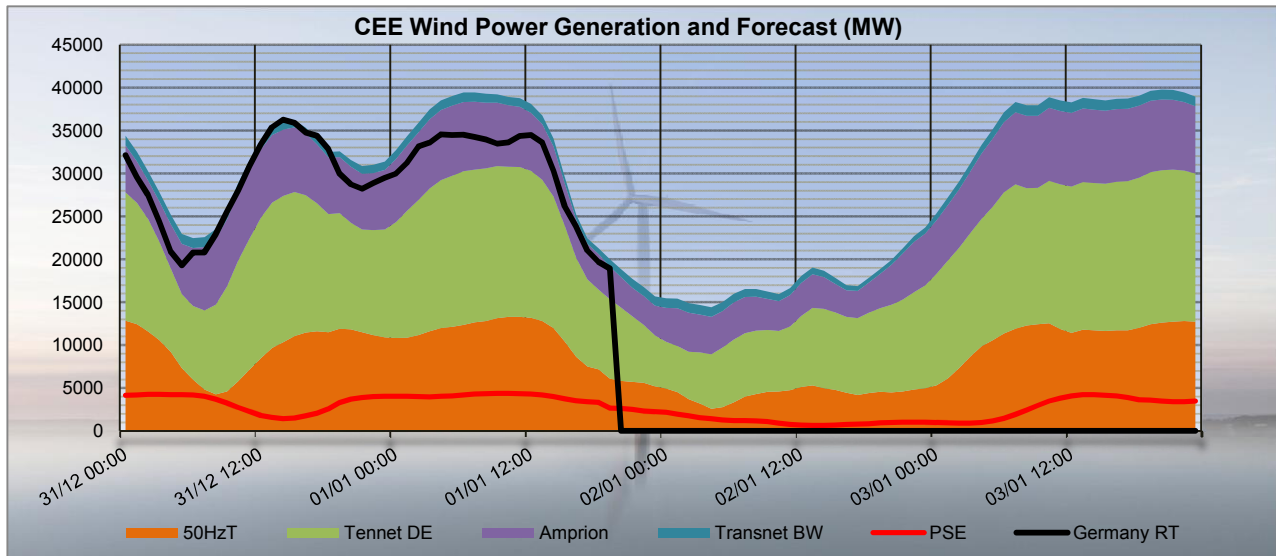
PST taps in DACF	Zandvliet 1	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	Zandvliet 2	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	Van Eyck 1	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Van Eyck 2	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Average	14	14	14	14	14	14	14	14	14	14	14	14	14	14

CREOS PST in DACF	Schiffange	17	17	17	17	17	17	17	17	17	17	17	17	17	17
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### Proposal for real time after D-1 studies

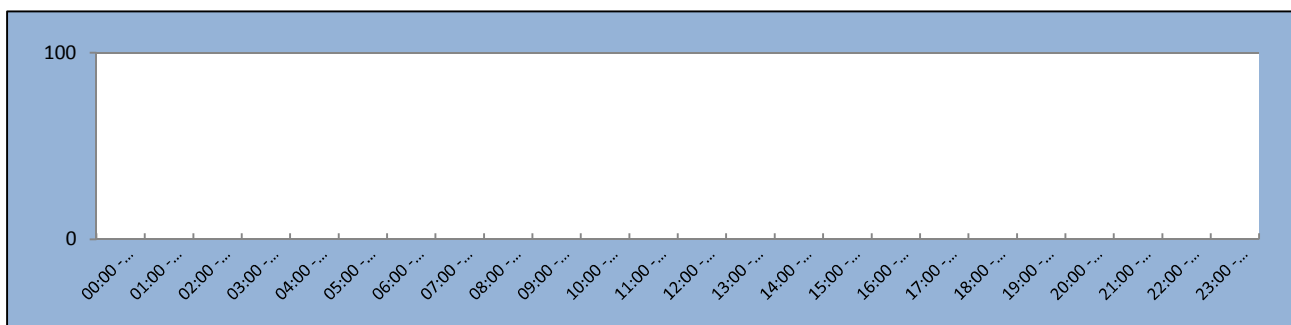
Timestamps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PSTs																								
Zandvliet PST 1	[1;35]	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Zandvliet PST 2	[1;35]	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Van Eyck PST 1	[1;35]	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Van Eyck PST 2	[1;35]	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Schiffange PST 1	[1;35]	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17

## CEE Renewable Power Generation & Forecast

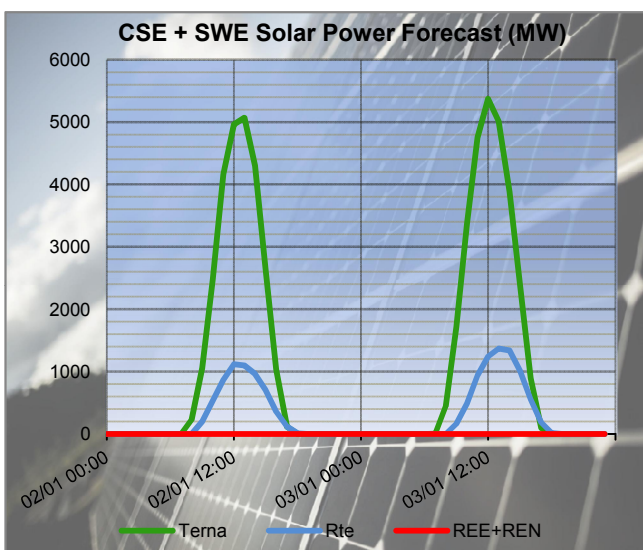
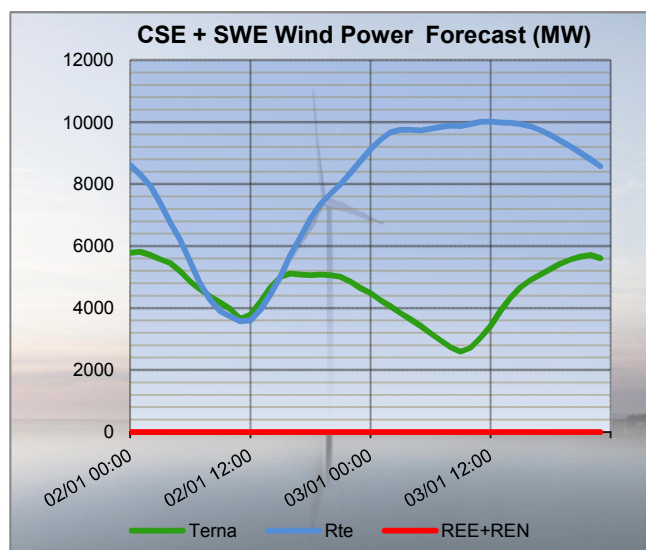
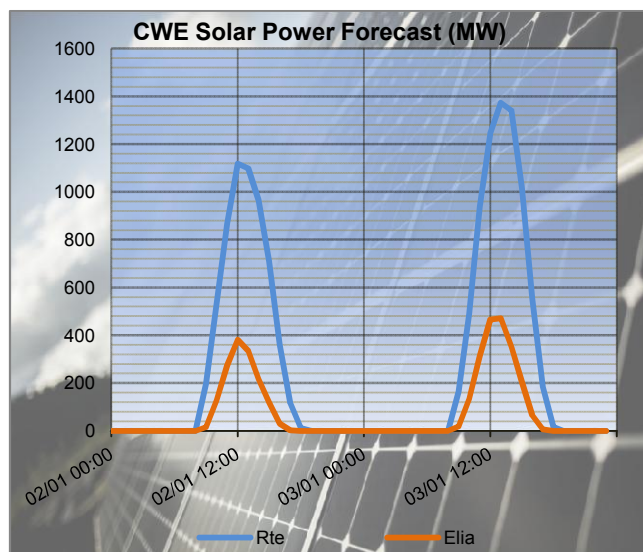
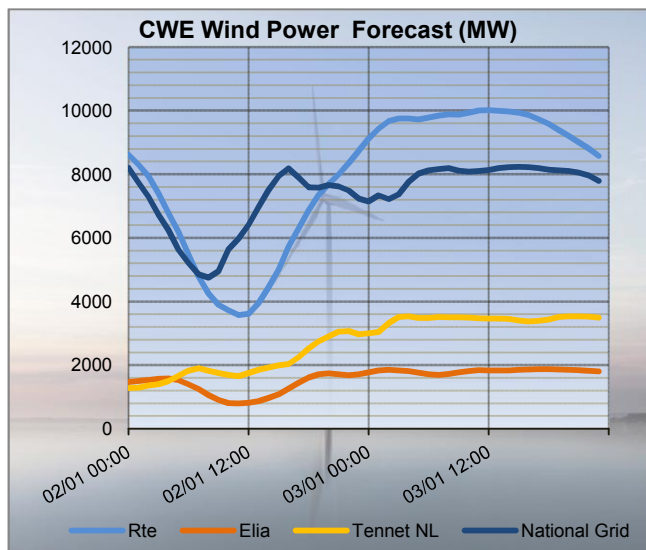


The charts above show the wind and solar generation forecasts for the TSOs in CEE (most significant) from D+1 until D-2 and the realised generation in Germany in real time. Source: Meteologica and 50HzT (RT)

## 50HzT Preventive Redispatch



## CWE and CSE Renewable Power Forecast (D-1 and D-2)



The charts above show the latest wind and solar generation forecasts for D-1 and D-2 for all the European TSOs in CWE, CSE and SWE with a significant installed capacity. Source: Meteologica



## RTE flows on cross-border lines

With last provided tap position on Belgian PSTs:

				03:30			07:30			10:30			12:30		
		Node 1	Node 2	DACF	Merge	Delta	DACF	Merge	Delta	DACF	Merge	Delta	DACF	Merge	Delta
FR	BE	LONNY	ACHENE	411	291	-120	91	-82	-173	127	-312	-439	184	-216	-400
FR	BE	MONT ST MARTIN	AUBANGE	40	235	195	2	68	66	73	-38	-111	78	10	-68
FR	BE	MOULAIN	AUBANGE	33	219	186	2	64	62	74	-32	-106	86	21	-65
FR	BE	AVELIN	AVELGEM	809	717	-92	511	395	-116	222	35	-187	254	49	-205
FR	BE	MASTAING	AVELGEM	472	381	-91	389	294	-95	387	266	-121	395	257	-138
FR	BE	CHOOZ	MONCEAU	171	161	-10	181	155	-26	200	147	-53	232	139	-93
FR	DE	MUHLBACH	EICHSTETTEN	393	456	63	419	628	209	-148	300	448	-168	243	411
FR	DE	VOGELGRUN	EICHSTETTEN	83	133	50	31	134	103	-73	59	132	-68	55	123
FR	DE	ST AVOLD	ENSDORF	0	0	0	0	0	0	0	0	0	0	0	0
FR	DE	VIGY	ENSDORF 1	541	705	164	141	338	197	-170	118	288	-187	168	355
FR	DE	VIGY	ENSDORF 2	577	758	181	157	378	221	-157	145	302	-174	204	378

				17:30			19:30			23:30		
		Node 1	Node 2	DACF	Merge	Delta	DACF	Merge	Delta	DACF	Merge	Delta
FR	BE	LONNY	ACHENE	269	64	-205	72	-114	-186	70	-191	-261
FR	BE	MONT ST MARTIN	AUBANGE	39	19	-20	7	22	15	5	34	29
FR	BE	MOULAIN	AUBANGE	41	22	-19	11	25	14	3	30	27
FR	BE	AVELIN	AVELGEM	846	599	-247	372	85	-287	575	238	-337
FR	BE	MASTAING	AVELGEM	648	470	-178	428	230	-198	414	188	-226
FR	BE	CHOOZ	MONCEAU	240	168	-72	186	124	-62	170	121	-49
FR	DE	MUHLBACH	EICHSTETTEN	377	715	338	417	682	265	324	561	237
FR	DE	VOGELGRUN	EICHSTETTEN	0	129	129	-4	103	107	13	87	74
FR	DE	ST AVOLD	ENSDORF	0	0	0	0	0	0	0	0	0
FR	DE	VIGY	ENSDORF 1	254	459	205	237	462	225	107	266	159
FR	DE	VIGY	ENSDORF 2	280	502	222	261	508	247	124	302	178

				03:30			07:30			10:30			12:30		
		Node 1	Node 2	DACF	Merge	Delta	DACF	Merge	Delta	DACF	Merge	Delta	DACF	Merge	Delta
FR	CH	SIERENTZ	ASPHARD	366	255	-111	438	328	-110	115	97	-18	56	48	-8
FR	CH	MAMBELIN	BASSECCOURT	3	47	44	-82	-35	47	-368	-270	98	-378	-296	82
FR	CH	SIERENTZ	BASSECCOURT	285	252	-33	323	342	19	356	378	22	380	354	-26
FR	CH	BOIS TOLLLOT	ROMANEL	153	111	-42	174	187	13	-4	-4	0	-7	-32	-25
FR	CH	SIERENTZ	LAUFENBURG	193	307	114	351	311	-40	114	106	-8	57	44	-13
FR	CH	CORNIER	RIDDES	-18	34	52	-9	69	78	-87	-20	67	-91	-40	51
FR	CH	CORNIER	ST TRIPHON	-2	45	47	-11	71	82	-99	-22	77	-80	-34	46
FR	CH	PRESSY	VALLORCINES	-115	-39	76	-106	8	114	-209	-107	102	-206	-131	75
FR	CH	BOIS TOLLLOT	VERBOIS	173	200	27	146	230	84	111	188	77	166	197	31
FR	CH	GENISSIAT	VERBOIS	191	191	0	189	233	44	127	164	37	150	154	4
FR	CH	GENISSIAT	VERBOIS	191	191	0	189	233	44	127	164	37	150	154	4
FR	IT	ALBERTVILLE	RONDISSONE	651	401	-250	1030	714	-316	683	509	-174	515	353	-162
FR	IT	ALBERTVILLE	RONDISSONE	652	366	-286	1031	697	-334	684	461	-223	515	320	-195
FR	IT	MENTON	CAMPOROSSO	258	209	-49	159	203	44	156	197	41	153	199	46
FR	IT	VILLARODIN	VENAUS	201	338	137	634	722	88	439	428	-11	169	188	19

				17:30			19:30			23:30		
		Node 1	Node 2	DACF	Merge	Delta	DACF	Merge	Delta	DACF	Merge	Delta
FR	CH	SIERENTZ	ASPHARD	312	325	13	357	331	-26	311	332	21
FR	CH	MAMBELIN	BASSECCOURT	-187	-83	104	-204	-125	79	-212	-99	113
FR	CH	SIERENTZ	BASSECCOURT	349	382	33	399	403	4	441	489	48
FR	CH	BOIS TOLLLOT	ROMANEL	156	137	-19	144	91	-53	130	89	-41
FR	CH	SIERENTZ	LAUFENBURG	295	287	-8	260	317	57	247	375	128
FR	CH	CORNIER	RIDDES	-36	32	68	-34	14	48	-64	-13	51
FR	CH	CORNIER	ST TRIPHON	-49	6	55	-57	-9	48	-61	-19	42
FR	CH	PRESSY	VALLORCINES	-164	-68	96	-158	-86	72	-191	-122	69
FR	CH	BOIS TOLLLOT	VERBOIS	154	217	63	156	210	54	163	203	40
FR	CH	GENISSIAT	VERBOIS	189	219	30	184	202	18	190	201	11
FR	CH	GENISSIAT	VERBOIS	189	219	30	184	202	18	190	201	11
FR	IT	ALBERTVILLE	RONDISSONE	973	791	-182	902	779	-123	714	634	-80
FR	IT	ALBERTVILLE	RONDISSONE	973	746	-227	902	735	-167	714	603	-111
FR	IT	MENTON	CAMPOROSSO	153	206	53	160	200	40	146	198	52
FR	IT	VILLARODIN	VENAUS	707	712	5	606	676	70	323	411	88

## N state flows at 10:30 and 19:30

The I<sub>max</sub> and load values in the table below are extracted from the merged TSOs' DACF.

TSO	Line (380 kV)	10:30		19:30	
		I <sub>max</sub> (A)	% of I <sub>max</sub>	I <sub>max</sub> (A)	% of I <sub>max</sub>
ELIA	Champion - Gramme (32)	2448	52	2448	37
	Doel - Mercator (51)	2239	24	2239	25
	Doel - Mercator (52)	2239	24	2239	25
	Doel - Mercator (54)	2448	24	2448	25
	Doel - Zandvliet (25)	2349	11	2349	8
	Mercator - Horta (73)	2569	22	2569	17
	Courcelles - Gramme (31)	2349	59	2349	42
	Mercator - Rodenhuize/Horta (74)	2349	25	2349	18
RTE	Attaques - Warande 2	3780	53	3780	53
	Avelin - Gavrelle	2622	36	2622	31
	Avelin - Warande	3458	11	3458	16
	Lonny - Seuil	4149	24	4149	20
	Mandarins - Warande 1	3780	50	3780	51
	Muhlbach - Scheer	2598	23	2598	35
	Revigny - Vigy	2596	36	2596	25
	Warande - Weppes	3458	16	3458	21

X < 50 % of I<sub>max</sub>
 50 ≤ X < 75 % of I<sub>max</sub>
 X ≥ 75 % of I<sub>max</sub>

TSO	Voltage	Line (380 kV)	10:30		19:30	
			I <sub>max</sub> (A)	% of I <sub>max</sub>	I <sub>max</sub> (A)	% of I <sub>max</sub>
50 HzT	380 kV	Eisenach - Mecklar (450-2)	2520	31	2520	18
		Hagenwerder - Mikulowa (567)	2520	24	2520	23
		Hagenwerder - Mikulowa (568)	2520	23	2520	23
		Remptendorf - Redwitz (413)	3440	44	3485	45
		Remptendorf - Redwitz (414)	3440	44	3485	45
		Röhrsdorf - Hradec (445)	2520	29	2520	28
		Röhrsdorf - Hradec (446)	2520	29	2520	28
		Vieselbach - Mecklar (449-1)	2520	32	2520	19
		Wolmirstedt - Helmstedt (491-1)	2400	15	2400	3
		Wolmirstedt - Helmstedt (492-2)	2400	15	2400	3
	220 kV	Vierraden - Krajnik (507)	1343	0	1343	0
		Vierraden - Krajnik (508)	1343	0	1343	0

X < 50 % of I<sub>max</sub>
 50 ≤ X < 75 % of I<sub>max</sub>
 X ≥ 75 % of I<sub>max</sub>

## Special topologies at 10:30 and 19:30

Nodes in North area				
			10:30	19:30
380 kV	Elia	Doel	1	1
		Avelgem	1	1
	Rte	Warande	1	1
		Cergy	2	2
		Terrier	1	1
		Plessis Gassot	1	1
		Mery/Seine	2	2
		Muhlbach	1	1
		Vigy	1	1
	Transnet bw	Eichstetten	1	1
	Amprion	Uchtelfangen	1	1
	Tennet DE	Redwitz	1	1
	50 HzT	Remptendorf	2	2
		Wolmirstedt	1	1
	CEPS	Hradec Vychod	1	1
220 kV	50 HzT	Pasewalk	1	1

## North analyses results

Security analyses have been performed for 24 timestamps.

All remedial actions have been agreed with concerned TSO during the day ahead process.

### Constraints on Elia, RTE (North) and 50HzT 400kV grids and tie-lines

TSO	Validity	Contingency				Constraint					Timestamps of max
		U (kV)	Substation 1	Substation 2	Code	Overload	U (kV)	Substation 1	Substation 2	Code	
50Hertz	17:00 - 20:00	400	Hamburg Nord	Hamburg Ost	axis	103%	400	Hamburg Nord	Hamburg Ost	Remaining	19:30
Preventive action: Redispatching											

### Constraints greater than 100% on NL + Amprion 400kV grids and greater than 120% on DE, CZ, PL and SK 400kV grids

TSO	Validity	Contingency				Constraint					Timestamps of max
		U (kV)	Substation 1	Substation 2	Code	Overload	U (kV)	Substation 1	Substation 2	Code	
No constraints detected.											

### Constraints on ELIA 220/150kV grid at 10:30

Contingency				Constraint					Comments
U (kV)	Substation 1	Substation 2	Code	Overload	U (kV)	Substation 1	Substation 2	Code	
No constraints detected.									

## 50HzT DC loopflows sensitivity

Vierraden-Krajnik 220kV axis in long term outage till 2018.

## South analyses results

Security analyses have been performed for these 2 timestamps:

- Off-peak period (23:00 – 07:00): **06:30**
- Peak period (07:00 – 23:00): **08:30**

Adaptations made on merged DACFs:

### Off-peak:

- SI → IT physical flow adapted to **800 MW**
- Mendrisio-Cagno flow adapted to this schedule : **140 MW**
- PST of Lienz adapted to **150 MW**
- PST of Camporosso adapted to **200 MW**

### Peak:

- SI → IT physical flow adapted to **800 MW**
- Mendrisio-Cagno flow adapted to this schedule : **140 MW**
- PST of Lienz adapted to: **140 MW**
- PST of Camporosso adapted to **200 MW**

## Special topologies

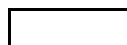
Nodes in South area				
			Off Peak	Peak
380 kV	Swissgrid	Sils	1	1
		Robbia	2	2
	Rte	Génissiat	1	1
		Albertville	1	1
		Grande Ile	2	2
	Terna	Turbigo	1	1
		Baggio	1	1
		Bovisio	1	2
		Ostiglia	1	1

## N state flows Off-Peak & Peak

The I<sub>max</sub> and load values in the table below are extracted from the **adapted** merged TSOs' DACF.

TSO	Voltage	Line (380 kV)	Off Peak		Peak	
			I <sub>max</sub> (A)	% of I <sub>max</sub>	I <sub>max</sub> (A)	% of I <sub>max</sub>
Terna	380 kV	Albertville - Rondissone 1	2370	49	2370	34
		Albertville - Rondissone 2	2370	48	2370	34
		Bulciago - Soazza	2300	24	2300	42
		Cagno - Mendrisio	855	24	855	28
		Musignano - Lavorgo	2270	36	2270	51
		Redipuglia - Divaca	2700	35	2700	34
		Robbia - San Fiorano	2530	34	2530	59
		Robbia - Gorlago	2530	22	2530	39
		Venaus - Villarodin	2715	41	2715	42
	220 kV	Airolo - Ponte	900	10	900	22
		Lienz - Soverzene	750	46	750	52
		Menton - Campo Rosso	1165	44	1165	43
		Padriciano - Divaca	960	39	960	39
		Riddes - Avise	1010	21	1010	24
		Riddes - Valpelline	1010	22	1010	26
		Serra - Pallanzeno	900	28	900	33

For Terna:



X < 50 % of I<sub>max</sub>



50 ≤ X < 75 % of I<sub>max</sub>



X ≥ 75 % of I<sub>max</sub>

### Sensitivity coefficients for the Pentalateral instruction

The amount of the control program curtailment on peak and off-peak can be calculated thanks to the sensitivities in the table below:

		FR → IT	CH → IT	AT → IT	SI → IT
Off Peak	Initial physical flows on adapted base case	2513	2436	121	801
	Compensation ratio (calculated from NTC)	37%	51%	3%	9%
	Pentalateral impact on physical flows	-26%	-58%	-2%	-14%
Peak	Initial physical flows on adapted base case	2082	3805	157	788
	Compensation ratio (calculated from NTC)	37%	50%	4%	9%
	Pentalateral impact on physical flows	-26%	-56%	-4%	-15%

## OFF PEAK

### Off Peak constraints on APG, Eles, RTE (South), Swissgrid and Terna 400kV grids and tie-lines

	TSO	Contingency				Constraint				
		U (kV)	Substation 1	Substation 2	Code	Overload	U (kV)	Substation 1	Substation 2	Code
Off Peak	RTE	380	Albertville	Grande Ile	N-2	109%	220	Albertville	Grande Ile	3
		<b>Curative actions:</b> 2 nodes in Grande Ile => 69% remaining								
	TERNA / RTE	380	Albertville	Rondissone	N-2	102%	380	La Praz	PST	
		<b>Curative actions:</b> Increase 4 taps on La Praz PST => 97% remaining								

## PEAK

### Peak constraints on APG, Eles, RTE (South), Swissgrid and Terna 400kV grids and tie-lines

	TSO	Contingency				Constraint				
		U (kV)	Substation 1	Substation 2	Code	Overload	U (kV)	Substation 1	Substation 2	Code
Peak	SWG	380	Filisur	Sils	N-1	101%	380	Robbia	La Punt	
		<b>Preventive actions:</b> Increase the flow from Slovenia to Italy up to 950 MW => 98% remaining								
	TERNA / ELES / APG	380	ATD Redipuglia	Planais	N-K	103%	380	Lienz	Soverzene	
		<b>Curative actions:</b> Decrease 1 tap on Lienz PST => 97% remaining								

## Final PSTs settings

The tables below present the tap positions and the physical flows on different PSTs with the adaptations described at the top of the page (IT-SI target flow...) and preventive actions (before Pentalateral reduction).

PST	Off Peak	
	Tap position	Physical flow to Italy (MW)
La Praz (1/33)	1	747
Rondissone 1 (1/33)	20	768
Rondissone 2 (1/33)	21	784
Camporosso (-32/32)	-3	207
Lienz (-32/32)	6	143
Padriciano (1/33)	11	145
Divaca (-32/32 each)	11	658

PST	Peak	
	Tap position	Physical flow to Italy (MW)
La Praz (1/33)	1	679
Rondissone 1 (1/33)	14	561
Rondissone 2 (1/33)	14	561
Camporosso (-32/32)	-10	209
Lienz (-32/32)	-14	167
Padriciano (1/33)	24	151
Divaca (-32/32 each)	-9	661

## Conclusion

CWE: No constraints detected.

CEE: No critical constraints detected.

CSE: No critical constraints detected, but coordination is needed in curative between TSOs.