

Monthly report



July 2010

Monthly provisional values as of 06 December 2010

European Network of
Transmission System Operators
for Electricity



Table of contents		Page
1	Electricity supply situation of the countries	2
2	Electricity supply representativity of the countries	3
3	Physical energy flows	4
4	Monthly imports and exports	5
5	Load flows (night)	6
6	Load flows (day)	7
7	Unavailability of international tie lines (major events)	8
8	Network reliability (major events)	10
9	Highest and lowest load on the 3 rd Wednesday	11
10	Load diagrams on the 3 rd Wednesday	12
11	Water reservoirs Nordic	13
12	Market information	14

General remarks and abbreviations used in the tables

- All values of production and consumption in chapter 1, 9, 10 and 11 are calculated to represent 100% of the national values.
- UA_W Ukraine West represents the so-called Burshtyn Island synchronously interconnected with ENTSO-E
- CET Central European Time

Countries	Net generation in GWh							Exchange balance in GWh	Pump in GWh	Consumption in GWh	
	Therm. nuclear	Fossil fuels	Hydro prod	Other renew.	of which wind	Non identifiable	Total			monthly	variation [%]
AT	0	1522	3657	0	0	920	6099	-233	473	5393	4,0
BA	0	522	381	0	0	0	903	27	1	929	7,6
BE ²	3701	3007	119	396	59	0	7223 ¹	-319	158	6746	5,3
BG	1416	1447	449	24	24	0	3336	-149	74	3113	27,8
CH	2129	188	4227	119	2	0	6663 ¹	-1383	361	4919	4,1
CY	0	549	0	0	0	0	549	0	0	549	-1,5
CZ	2226	3769	234	103	17	0	6332 ¹	-1649	77	4606	2,7
DE	10831	26802	1916	5453	1650	0	45002 ¹	-28	754	44220	3,6
DK	0	1272	1	622	421	0	1895 ¹	678	0	2573	n.a.
EE	0	817	1	32	13	0	850	-334	0	516	n.a.
ES	5399	12362	3113	4172	2748	33	25079	-1006	213	23859	3,1
FI	1934	1016	996	690	23	53	4689 ¹	1252	0	5941	n.a.
FR	31744	2990	5451	926	487	0	41111	-4586	442	36083	2,3
GB	4153	18590	401	368	368	0	23512	784	640	23656	n.a.
GR	0	3995	560	168	139	0	4723 ¹	619	0	5342	-2,5
HR	0	438	489	13	11	0	940	607	8	1539	3,9
HU	1112	1584	0	0	0	0	2696	886	0	3582	11,6
IE	0	1758	21	260	260	19	2058 ¹	-18	7	2033	n.a.
IS	0	1	990	347	0	0	1338	0	0	1338	n.a.
IT	0	21309	5050	892	386	0	27251	4470	269	31452	5,4
LT	0	181	79	18	6	0	278 ¹	542	65	755	n.a.
LU	0	237	84	14	3	0	335	346	117	564	6,6
LV	0	80	152	6	2	0	238	306	0	544	n.a.
ME ³	0	1	73	0	0	0	74	-226	0	-152	n.a.
MK	0	430	113	0	0	0	543	59	0	602	10,7
N ⁴	0	419	0	70	65	1	490	173	0	663	n.a.
NL	350	6554	0	490	178	0	7394	1413	0	8807	0,4
NO	0	499	7303	64	64	0	7866 ¹	-131	199	7536	n.a.
PL ⁵	0	11007	266	121	100	0	11394 ¹	60	85	11369	6,0
PT	0	2496	741	800	585	0	4037 ¹	586	22	4601	6,6
RO	840	1792	1973	0	n.a.	0	4605	-375	16	4214	2,4
RS	0	2195	918	0	0	0	3113	219	100	3232	-11,4
SE	4427	341	4954	811	235	0	10533 ¹	-1495	0	9038	n.a.
SI	499	335	280	0	0	0	1114	-78	0	1036	10,9
SK	922	405	457	36	0	0	1820 ¹	283	43	2060	5,0
ENTSO-E	71683	130910	45449	17015	7846	1026	266083¹	1300	4124	263258	n.a.
UA_W	0	278	17	0	0	0	295	-5	0	290	0,7

¹ Including deliveries from industry

² The reported figures are best estimates based on actual measurements and extrapolations.

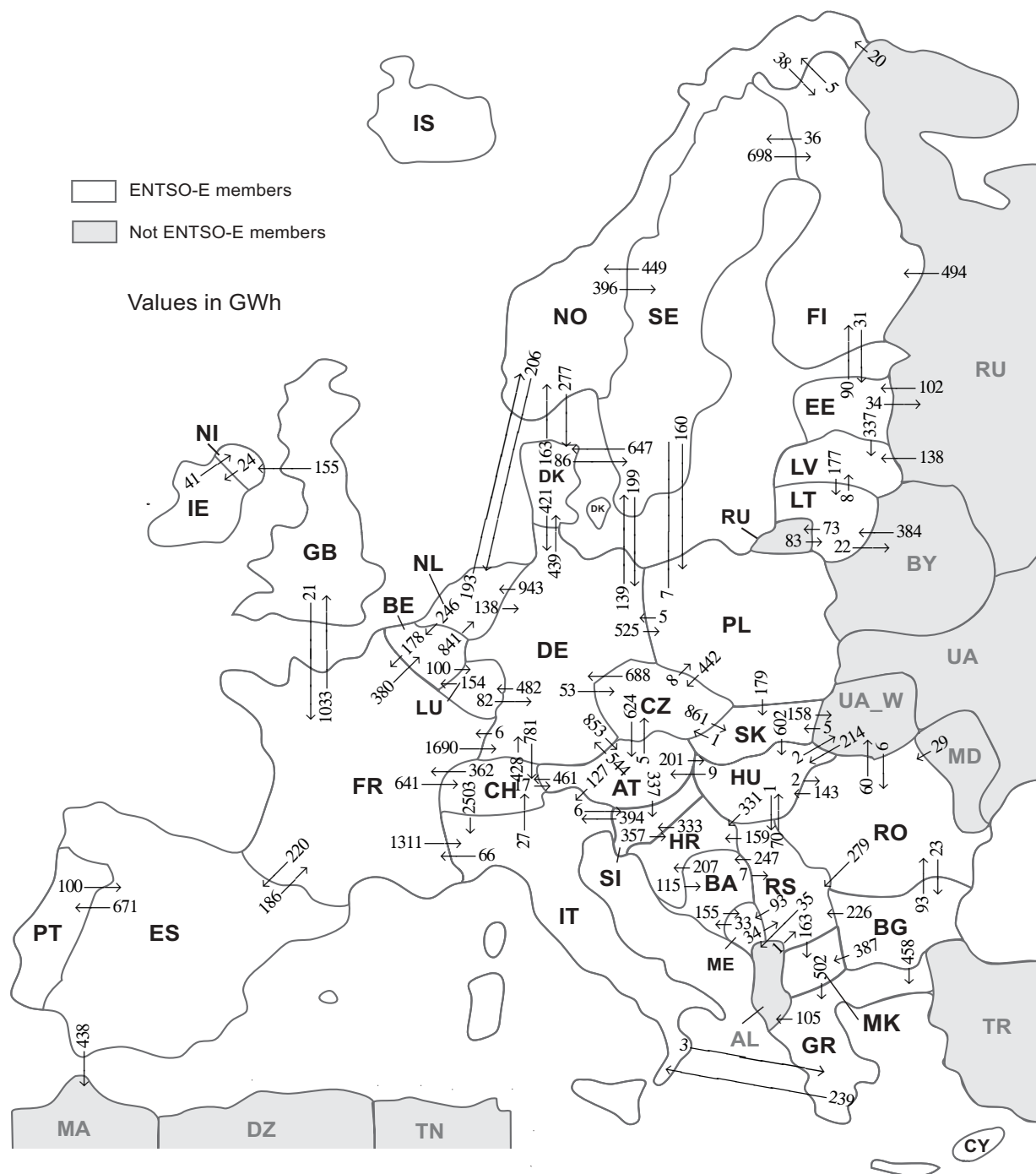
³ National monthly values as of July 2009

⁴ 9 Generating Units (1805MW) are capable of running on mixed fuels - The data has identified which fuel type these have been run on and been added into the appropriate fuel type.

⁵ Operational data

All representativities of the national generation and consumption values on page 2 used to calculate values at a representativity of 100% as stated in the table above:

Countries	Representativities of the national values in %					Consumption
	Thermal nuclear	Fossil fuels	Hydro prod	Other renewable	Non identifiable	
AT	100	100	100	100	100	100
BA	100	100	100	100	100	100
BE	100	100	100	100	100	100
BG	100	100	100	100	100	100
CH	100	100	100	100	100	100
CY	100	100	100	100	100	100
CZ	100	100	100	100	100	100
DE	100	100	100	100	100	100
DK	100	100	100	100	100	100
EE	100	100	100	100	100	100
ES	100	97	100	95	100	98
FI	100	100	100	100	100	100
FR	100	100	100	100	100	100
GB	100	100	100	100	100	100
GR	100	100	100	100	100	100
HR	100	100	100	100	100	100
HU	100	100	100	100	100	100
IE	100	100	100	100	100	100
IS	100	100	100	100	100	100
IT	100	100	100	100	100	100
LT	100	99	98	99	100	100
LU	100	100	100	100	100	100
LV	100	100	100	100	100	100
ME	100	100	100	100	100	100
MK	100	100	100	100	100	100
NI	100	100	100	100	100	100
NL	100	100	100	100	100	100
NO	100	100	100	100	100	100
PL	100	100	100	100	100	100
PT	100	94	100	100	100	97
RO	100	100	100	100	100	100
RS	100	100	100	100	100	100
SE	100	100	100	100	100	100
SI	100	100	100	100	100	100
SK	100	100	100	100	100	100
UA_W	100	100	100	100	100	100



Sum of physical energy flows between ENTSO-E countries: **30614GWh**

Total physical energy flows: **33017GWh**

Not ENTSO-E members:

Albania, Belarus, Morocco, Republic of Moldavia, Republic of Turkey, Russia, Ukraine and Ukraine West

These physical energy flows were measured on the cross-frontier transmission lines (≤ 110 kV) listed in table characteristics of the cross-frontier lines published in the Statistical Yearbook. These values may differ from the official statistics and the exchange balances in chapter 1.

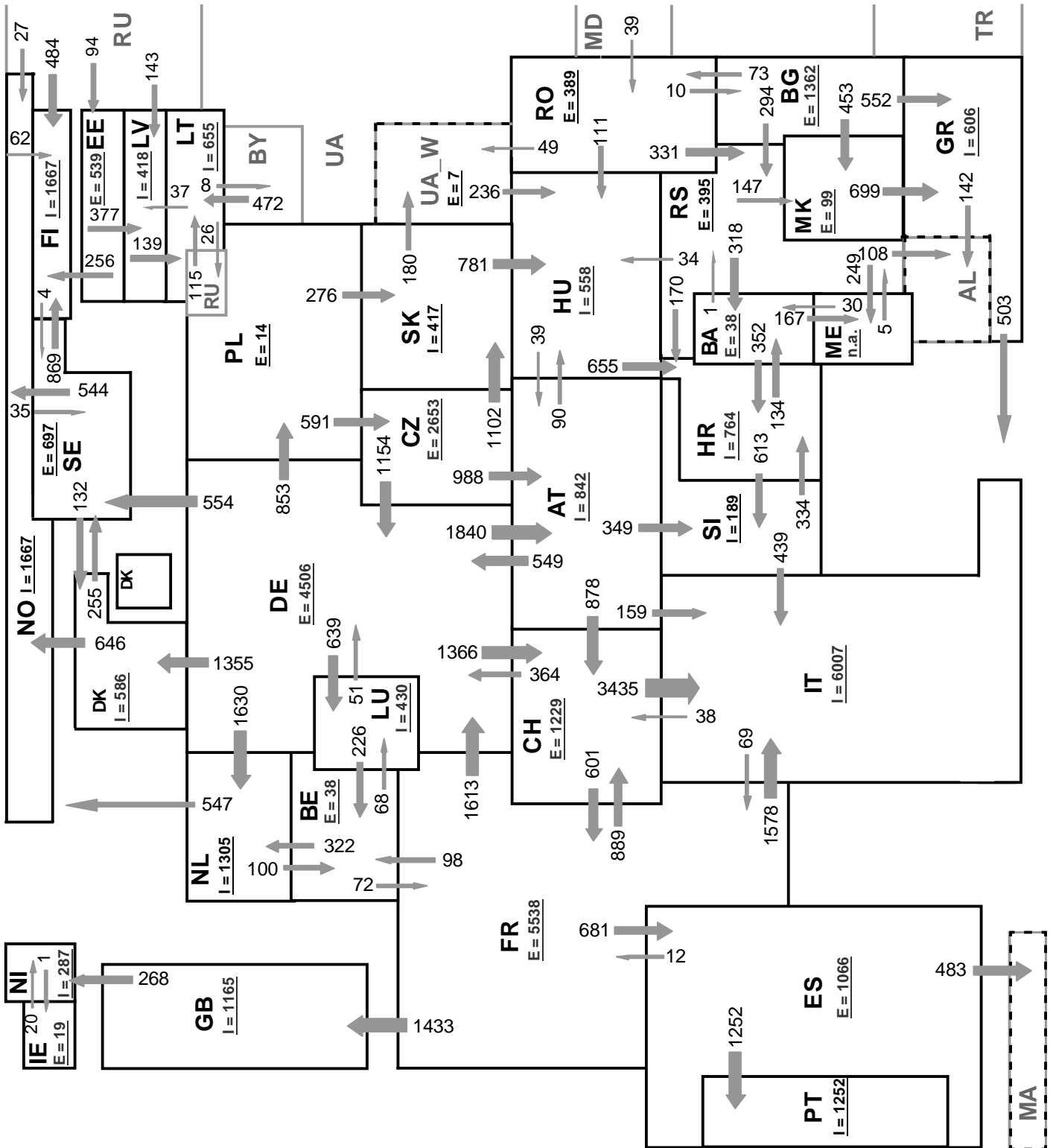
Overview of the monthly imports and exports in GWh

Exporting countries	Importing countries																																						
	AT	BA	BE	BG	CH	CZ	DE	DK	EE	ES	FI	FR	GB	GR	HR	HU	IE	IT	LT	LU	LV	ME	MK	NI	NL	NO	PL	PT	RO	RS	SE	SI	SK	UA_W	Other III ¹				
AT	-	-	-	-	461	5	544	-	-	-	-	-	-	-	-	201	-	127	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	337	-	-		
BA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	207	-	-	-	-	-	-	155	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
BE	-	-	-	-	-	-	-	-	-	-	-	178	-	-	-	-	-	-	-	100	-	-	-	-	841	-	-	-	-	-	-	-	7	-	-	-			
BG	-	-	-	-	-	-	-	-	-	-	-	-	-	458	-	-	-	-	-	-	-	387	-	-	-	-	-	-	93	226	-	-	-	-	-	0			
CH	17	-	-	-	-	-	-	-	-	-	-	362	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
CZ	624	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	861	-			
DE	853	-	-	-	781	53	-	439	-	-	-	6	-	-	-	-	-	-	-	482	-	-	-	-	943	-	525	-	-	-	-	139	-	-	-				
DK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	163	-	-	-	-	-	-	86	-	-	-			
EE	-	-	-	-	-	-	-	-	-	-	90	-	-	-	-	-	-	-	-	-	337	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34		
ES	-	-	-	-	-	-	-	-	-	-	-	186	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	671	-	-	-	-	-	-	-	-	438		
FI	-	-	-	-	-	-	-	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	36	-	-	-	0			
FR	-	-	380	-	641	-	1690	-	-	220	-	-	1033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GB	-	-	-	-	-	-	-	-	-	-	21	-	-	-	-	-	-	-	-	-	-	-	-	155	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GR	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	105		
HR	-	115	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	333	-	-	-			
HU	9	-	-	-	-	-	-	-	-	-	-	-	-	-	331	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	0	2	-	-			
IE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	-	-	-	-	-	-	-	-	-	-	-	-		
IT	0	-	-	-	27	-	-	-	-	-	-	66	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-			
LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	95		
LU	-	-	154	-	-	-	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
LV	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0		
ME	-	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	n.a.		
MK	-	-	-	0	-	-	-	-	-	-	-	-	502	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
NI	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
NL	-	-	246	-	-	-	138	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	193	-	-	-	-	-	-	-	-	-	-		
NO	-	-	-	-	-	-	-	277	-	-	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	206	-	-	-	-	-	-	-	-	396	-	0		
PL	-	-	-	-	442	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	179	0		
PT	-	-	-	-	-	-	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RO	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RS	-	247	-	0	-	-	-	-	-	-	-	-	-	-	159	70	-	-	-	-	-	-	93	163	-	-	-	-	-	0	-	-	-	-	-	279	-	60	0
SE	-	-	-	-	-	-	199	647	-	-	698	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35	
SI	0	-	-	-	-	-	-	-	-	-	-	-	-	-	357	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SK	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	602	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	158	
UA_W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	214	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	
Other III ¹	-	-	-	0	-	-	-	-	102	0	494	-	-	0	-	-	-	-	467	-	138	n.a.	-	-	-	20	0	-	29	1	-	-	-	-	-	-	-		

Other III¹: Albania, Belarus, Morocco, Republic of Moldavia, Republic of Turkey, Russia and Ukraine

Sum of the monthly imports and exports in GWh

	import	export		import	export
AT	1503	1675	IT	4574	102
BA	395	369	LT	644	103
BE	780	1119	LU	582	236
BG	23	1164	LV	483	177
CH	1910	3310	ME	n.a.	n.a.
CZ	501	2181	MK	550	502
DE	4195	4221	NI	196	24
DK	1363	670	NL	1990	577
EE	133	461	NO	830	917
ES	320	1295	PL	693	633
FI	1320	72	PT	671	100
FR	819	5275	RO	130	505
GB	1033	176	RS	548	767
GR	963	344	SE	664	2153
HR	1054	448	SI	676	751
HU	1230	345	SK	1045	761
IE	24	41	UA_W	220	225



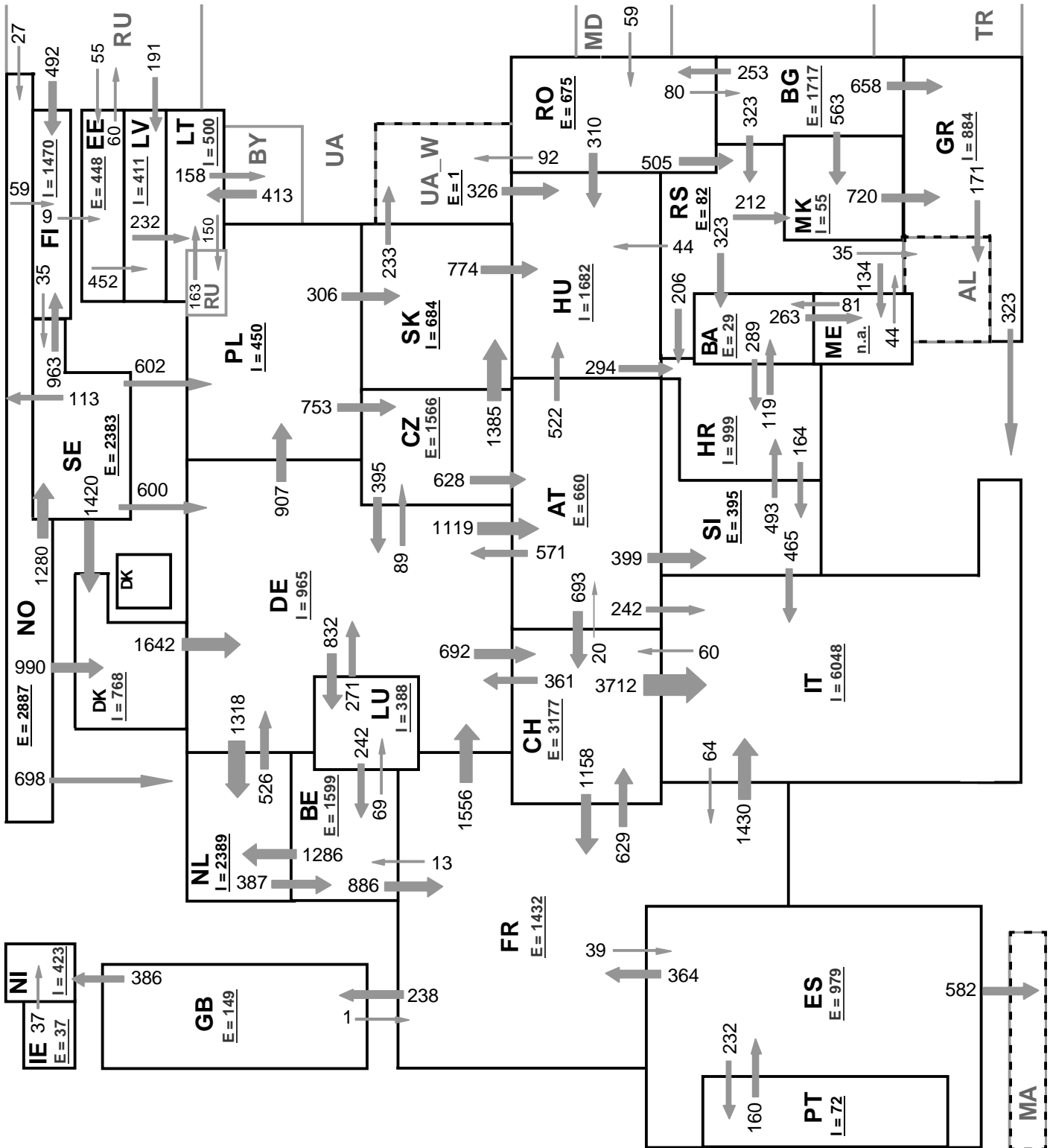
Sum of load flows in MW

ENTSO-E = 38961 MW

Total = 41567 MW

Synchronous operation with ENTSO-E region

I = Import balance
E = Export balance



Sum of load flows in MW

ENTSO-E = 41261 MW

Total = 44920 MW

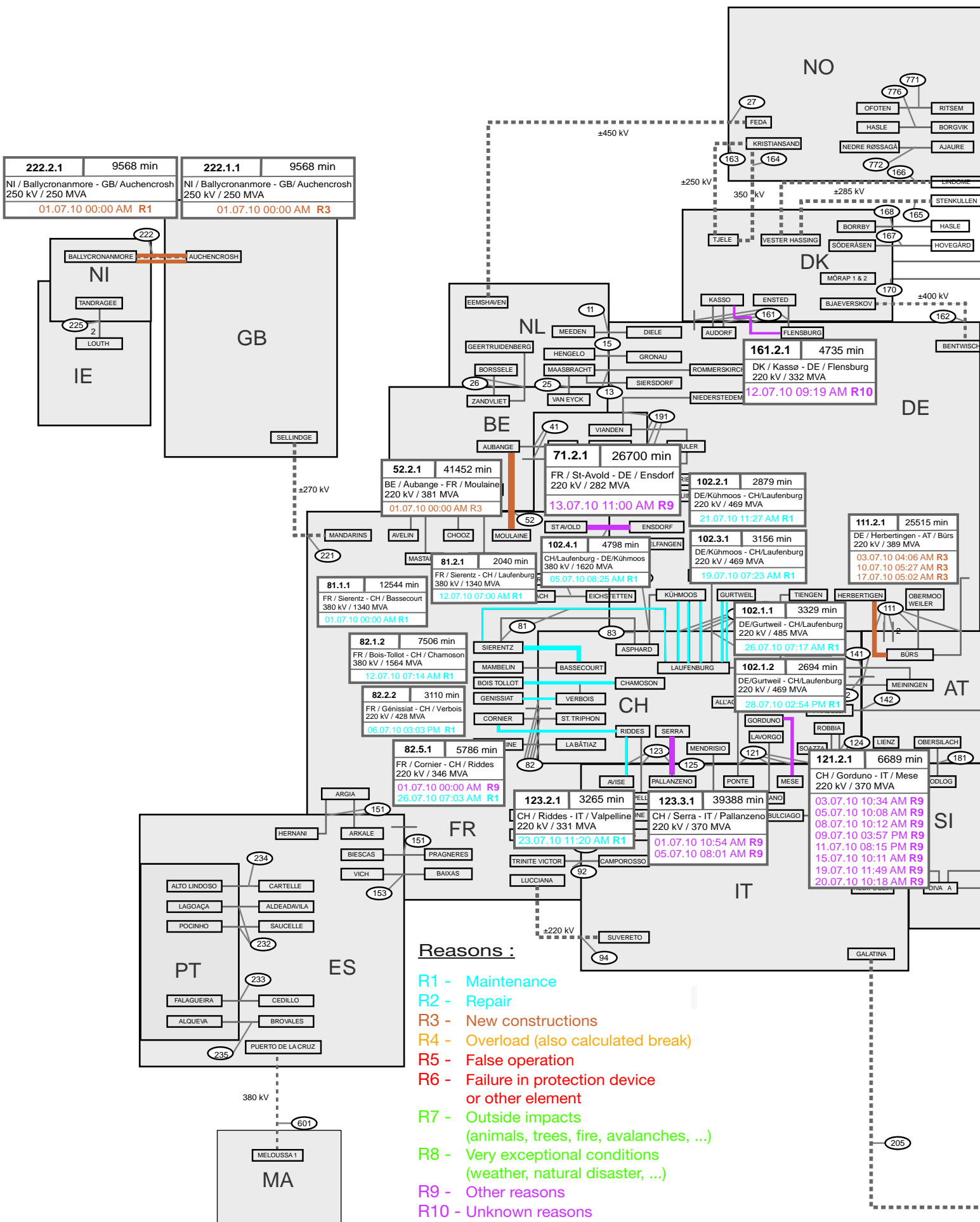
Synchronous operation with ENTSO-E region

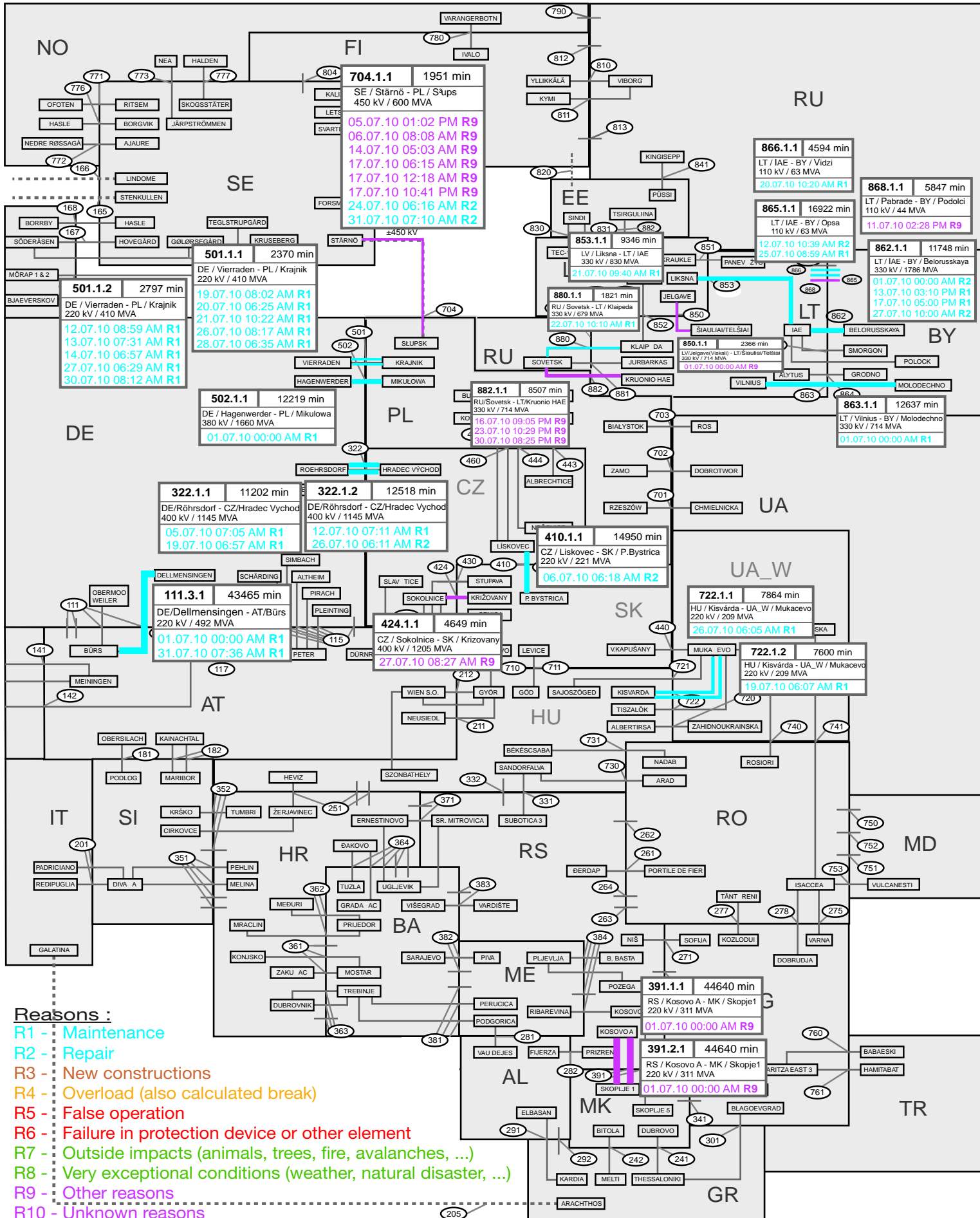
I = Import balance
E = Export balance

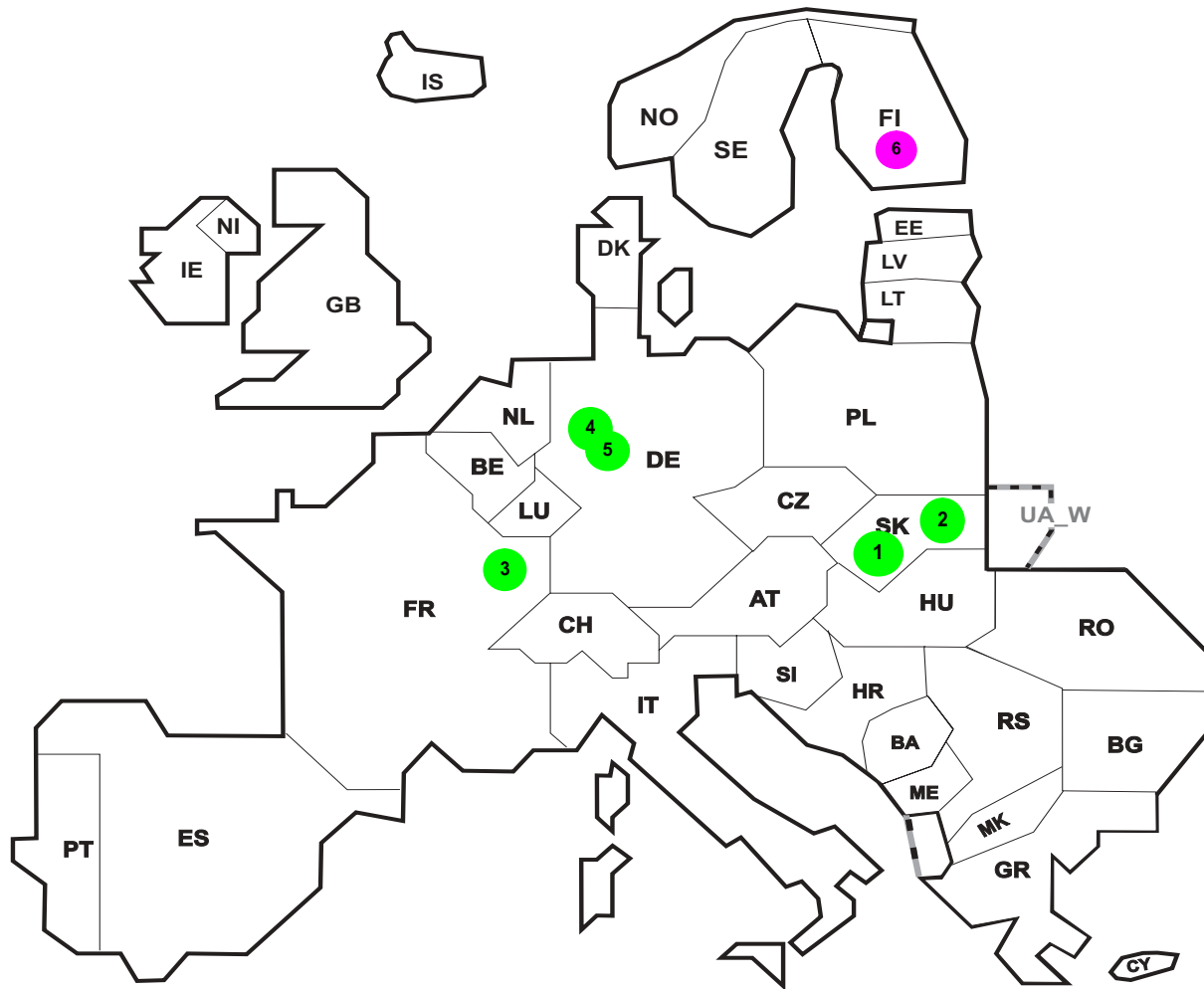
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Unavailability of international tie lines (major events with sum over 1800 minutes)

July 2010







Reasons:

- R4** Overload (also calculated break)
- R5** False operation
- R6** Failure in protection device or other element
- R7** Outside impacts (animals, trees, fire, avalanches, ...)
- R8** Very exceptional conditions (weather, natural disaster, ...)
- R9** Other reasons
- R10** Unknown reasons

No	Country	Substation	Reason	Energy not supplied [MWh]	Total loss of power [MW]	Average interruption duration [min]	Equivalent time of interruption ¹
1	SK	R. Sobota	R7	43	37	31	0,863
2	SK	P. Biskupice	R7	13	0	26	0,261
3	FR	Jeuxey	R8	144	66	131	0,152
4	DE	Witten	R8	60	60	59	0,058
5	DE	Edelstahl	R8	40	15	162	0,039
6	FI	Vajukoski	R9	1	3	12	n.a.

Information about incidents in other countries are not shown with energy not supply equal zero or unavailable in the database.

¹ (year [in min] * energy not supplied) / consumption last 12 months

Highest and lowest load on the 21.07.2010 CET of each country

	Highest		Lowest		Load representativity %
	load MW	variation % ¹	load MW	variation % ¹	
AT	8091	-0,8	4715	1,8	100
BA	1551	3,5	961	7,5	100
BE ²	8720	-18,7	6937	-4,9	100
BG	4477	2,1	3047	3,9	100
CH	8369	0,7	5036	-1,0	100
CY ³	936	n.a.	522	n.a.	100
CZ	7651	1,1	5361	1,4	100
DE	70861	2,1	49578	16,6	91
DK	4245	n.a.	2556	n.a.	100
EE	880	n.a.	490	n.a.	100
ES	40024	1,9	25616	4,5	98
FI	8939	n.a.	6970	n.a.	100
FR	58746	1,8	41502	12,1	100
GB	40664	n.a.	24121	n.a.	100
GR	9698	8,5	6061	12,2	100
HR	2679	5,1	1565	7,6	100
HU	5525	-5,1	3636	-4,9	100
IE	3396	n.a.	1851	n.a.	100
IS	1860	n.a.	1742	n.a.	100
IT	54641	7,7	34847	11,3	100
LT	1261	n.a.	756	n.a.	100
LU	905	-2,1	595	-11,1	100
LV	910	n.a.	497	n.a.	100
ME ⁴	493	n.a.	270	n.a.	100
MK	1019	10,4	607	13,5	100
NI	1200	n.a.	603	n.a.	100
NL	15506	11,9	9836	10,2	100
NO	11607	n.a.	8816	n.a.	100
PL ⁵	18451	3,8	12377	5,0	100
PT	7424	5,0	4956	7,6	97
RO	6848	7,7	4775	7,3	100
RS	4767	2,0	2811	4,8	100
SE	13156	n.a.	9172	n.a.	100
SI	1662	1,2	1242	25,6	100
SK	3442	5,1	2507	3,9	100
ENTSO-E	428857	n.a.	288747	n.a.	
UA_W	590	0,5	348	-5,4	100

¹ Variation as compared to corresponding month of the previous year

² The reported figures are best estimates based on actual measurements and extrapolations

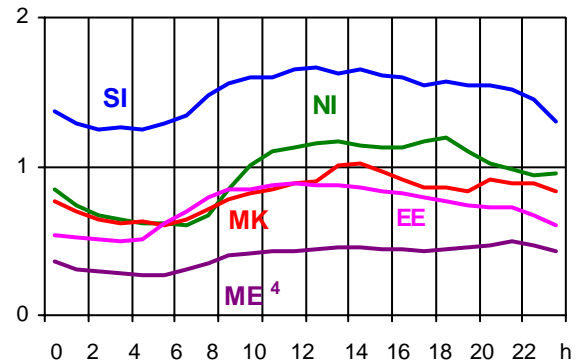
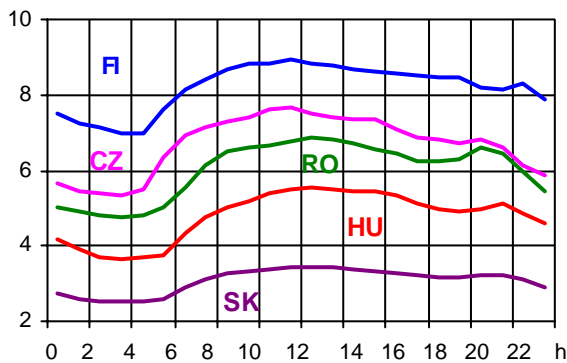
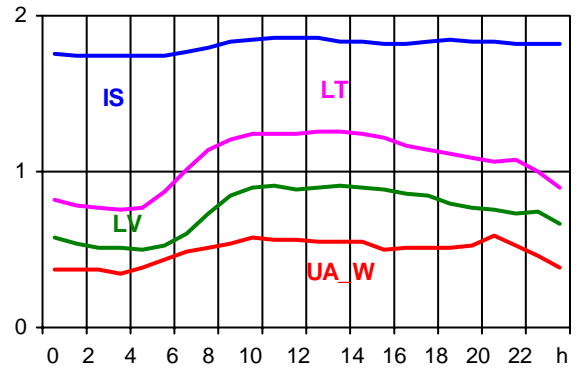
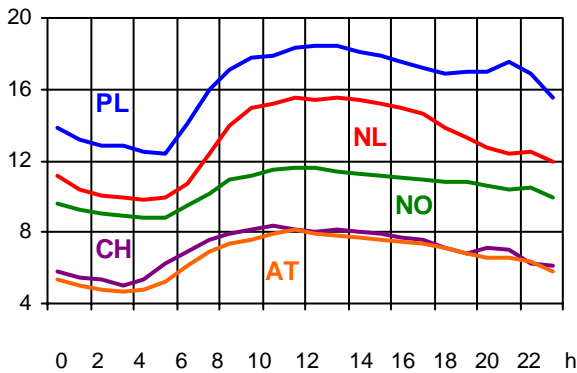
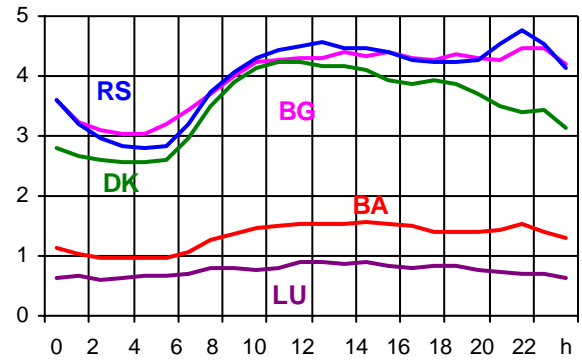
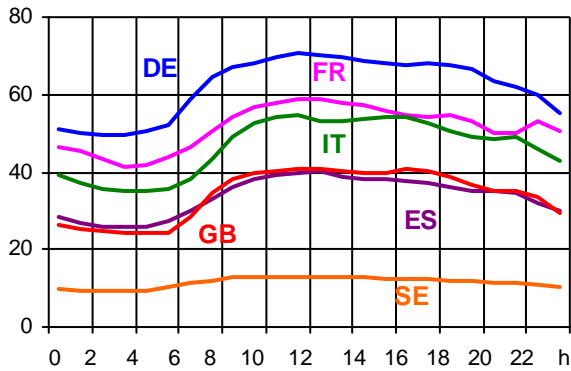
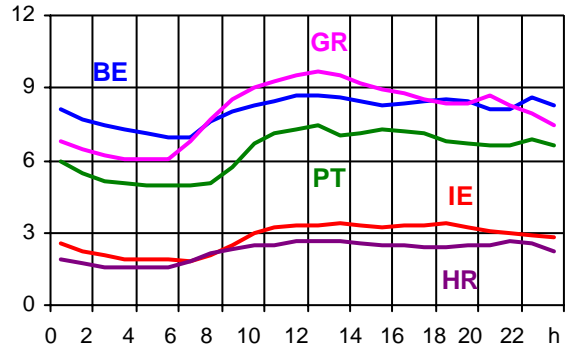
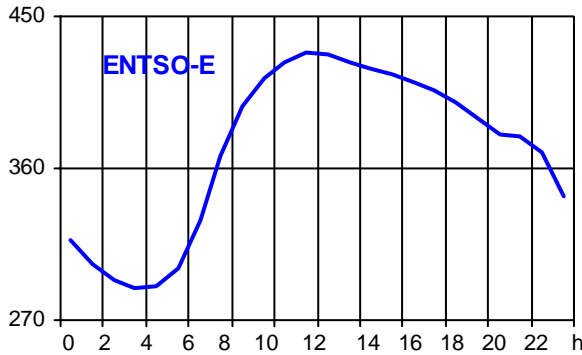
³ Only highest and lowest load value available

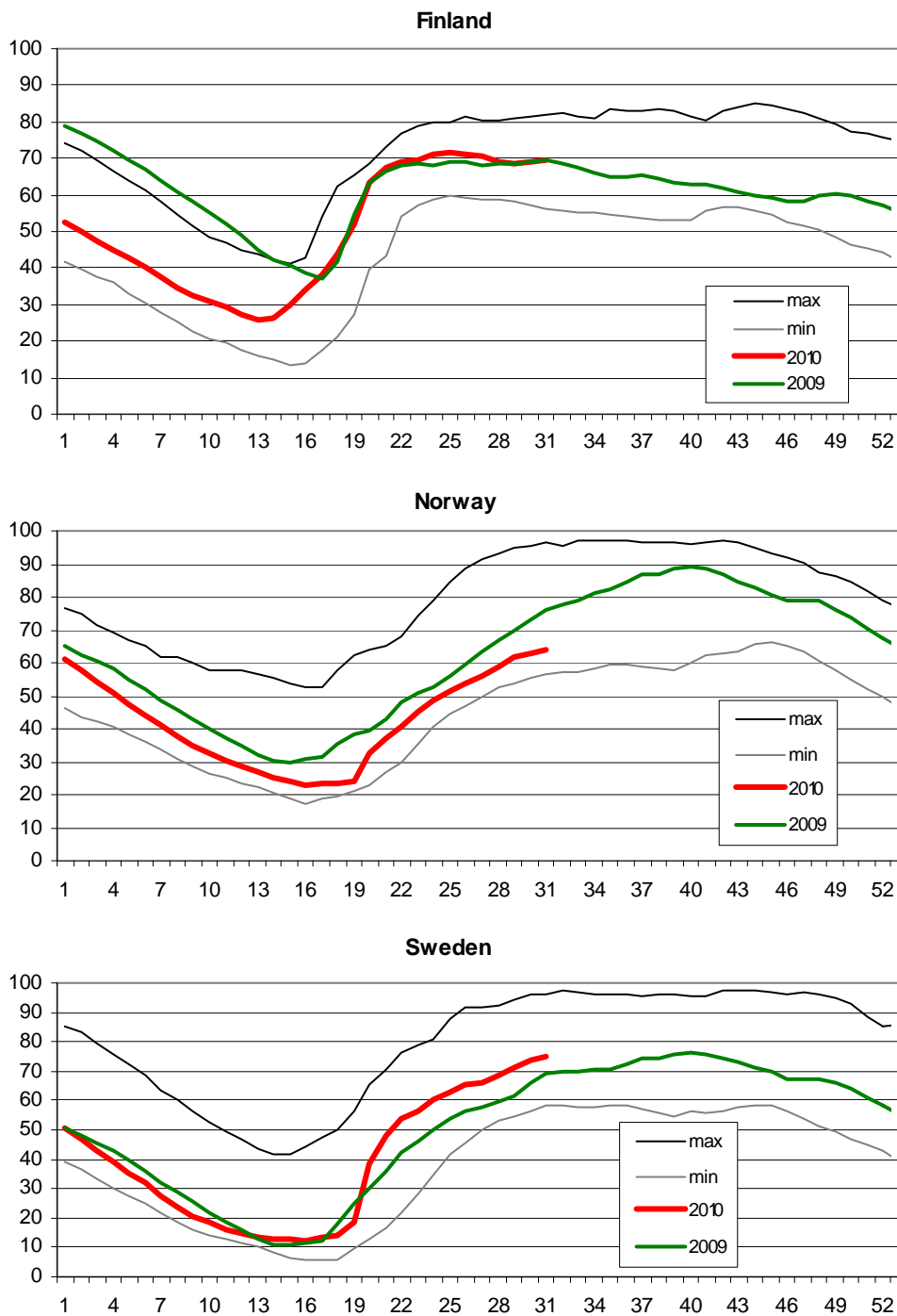
⁴ Highest and lowest load values as of July 2009

⁵ Operational data

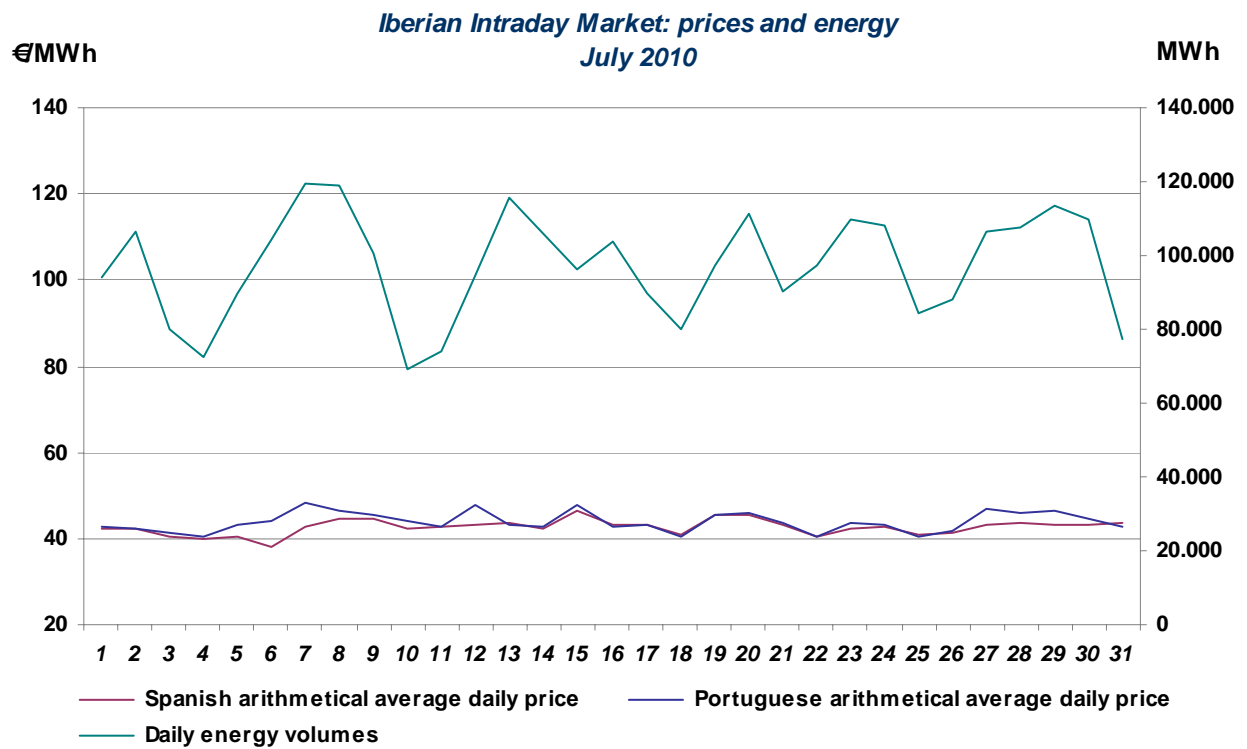
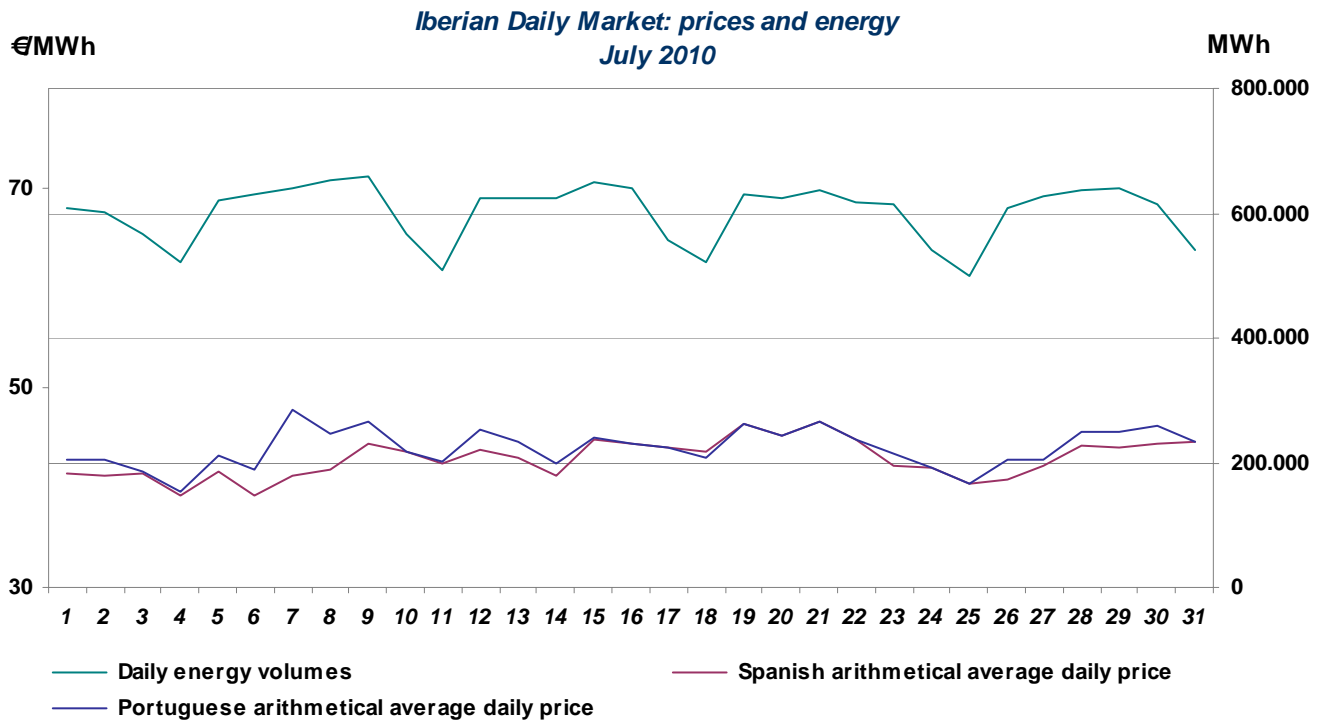
Consumption hourly load curves on 21.07.2010 CET

Values in GW

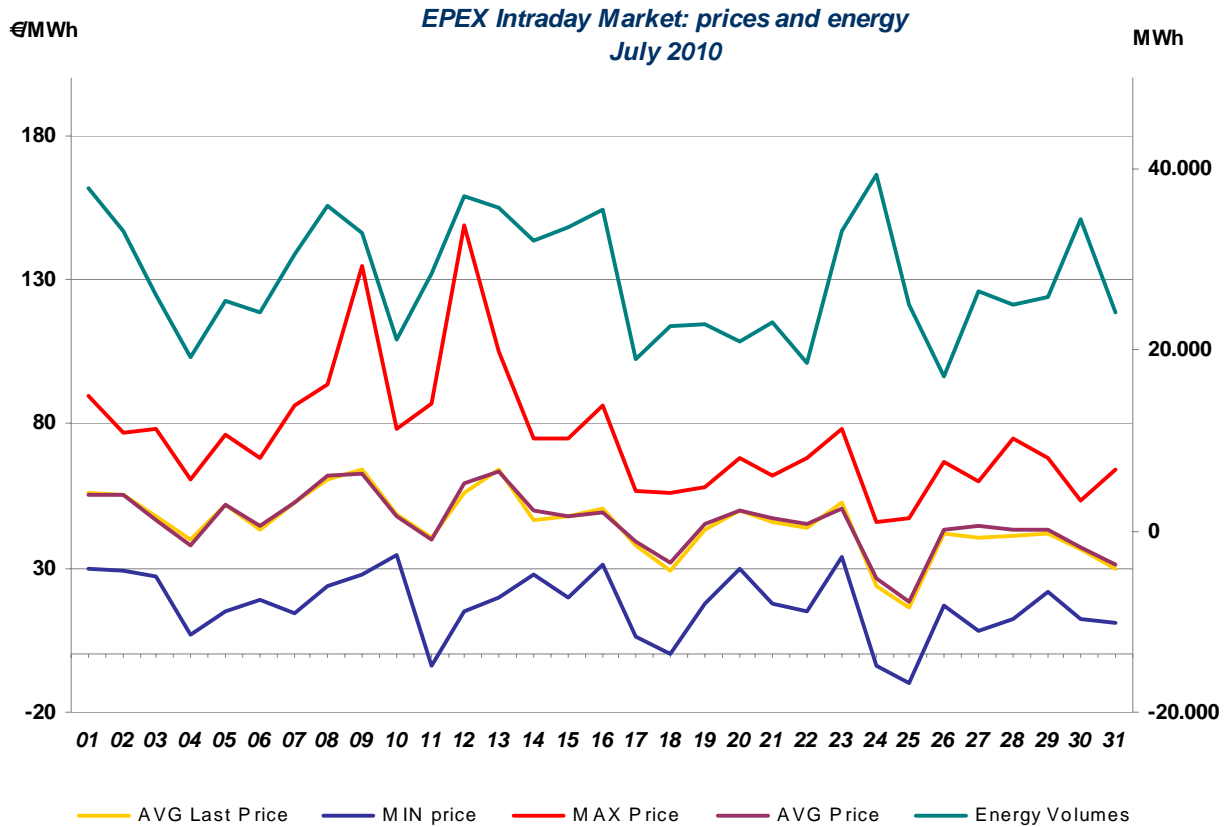
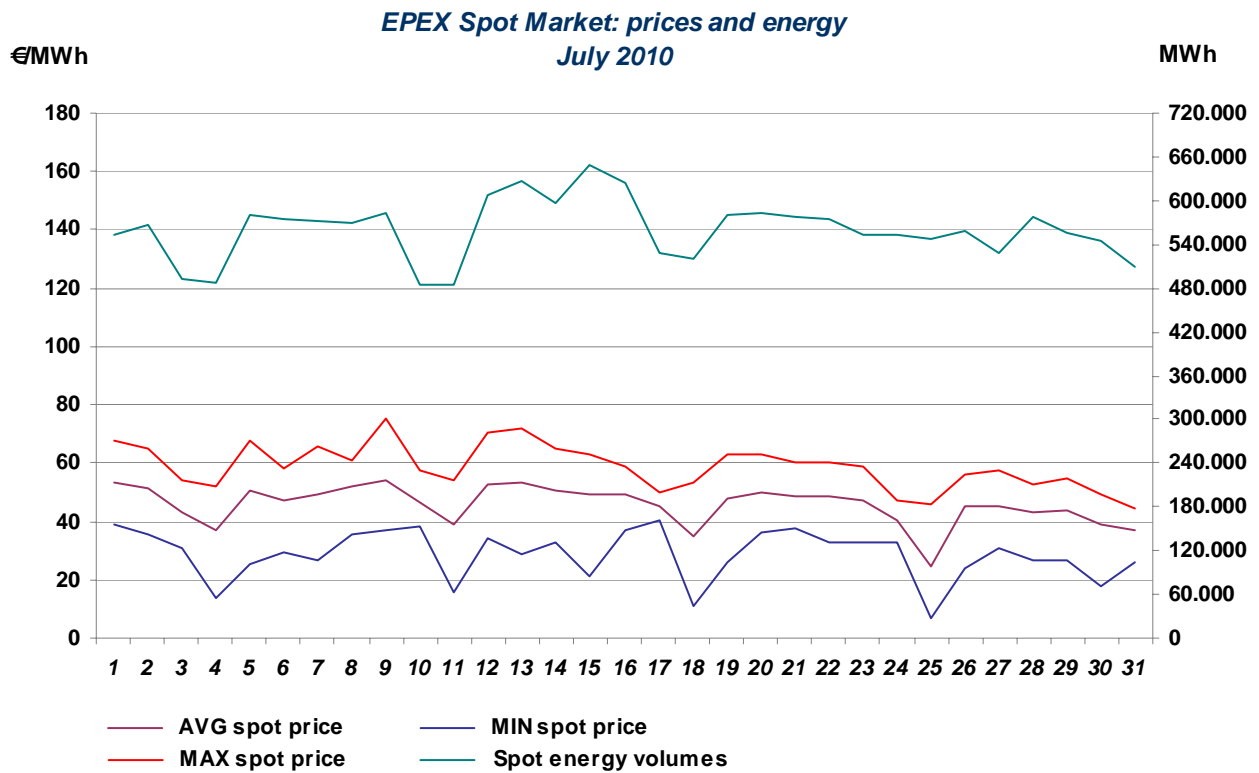




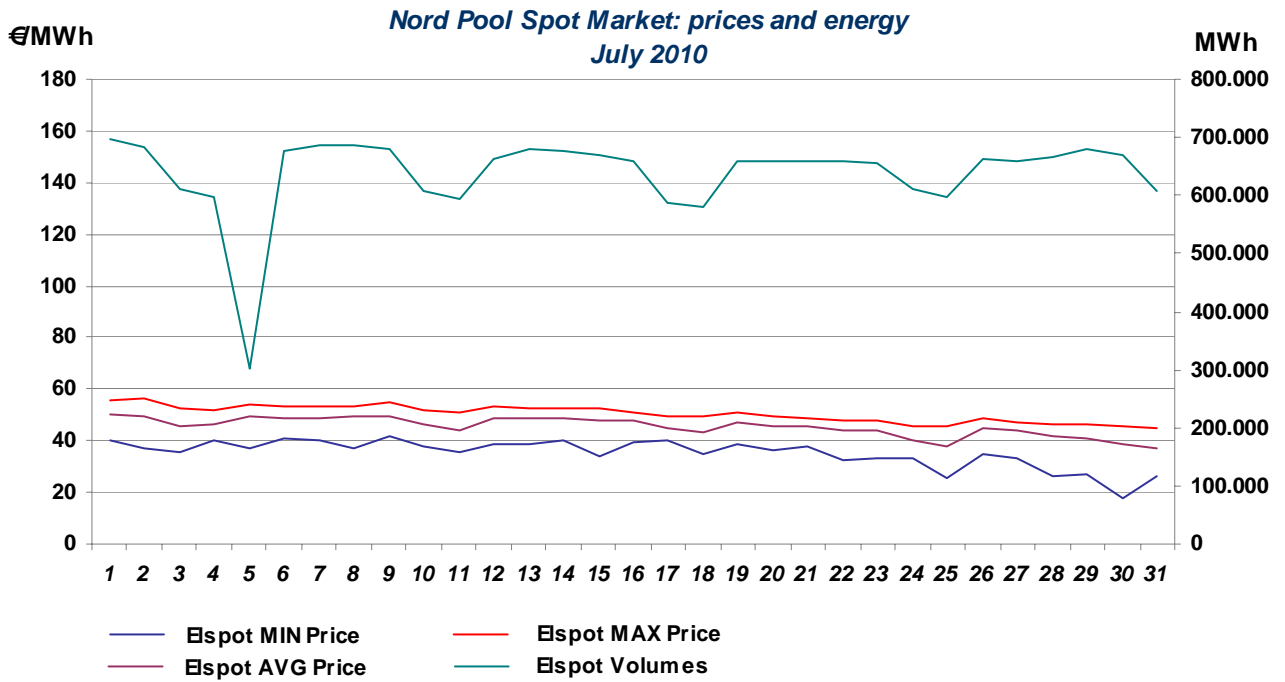
- Finland:** Reservoir capacity: 5.530 GWh
Minimum and maximum limits are based on values for the years 1990-2002
- Norway:** Reservoir capacity: 81.729 GWh
The statistics are supposed to cover 97.1 percent of the total reservoir capacity.
The total reservoir capacity is 84 147 GWh
Minimum and maximum limits are based on values for the years 1990-2003
- Sweden:** Reservoir capacity: 33.758 GWh
Minimum and maximum limits are based on values for the years 1950-2006



Source of the Iberian Market data: www.omel.es



Source of the EPEX Market data: www.eex.com



Source of Nord Pool Market data: www.nordpoolspot.com

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