

Monthly report



March 2010

Monthly provisional values as of 30 August 2010

European Network of
Transmission System Operators
for Electricity



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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	2286	2626	0	0	782	5694	748	412	6030	2,8
BA	0	652	957	0	0	0	1609	-594	0	1015	5,4
BE ²	4142	3370	157	437	137	0	8106	-111	146	7849	7,7
BG	1394	1615	550	33	33	0	3592 ¹	-490	84	3018	-5,5
CH	2412	187	2319	118	2	0	5036 ¹	1082	150	5968	4,5
CY	0	358	0	0	0	0	358	0	0	358	-1,5
CZ	2403	4668	311	83	41	0	7465 ¹	-1566	68	5831	2,0
DE	11679	30940	1715	7328	4345	0	51662 ¹	-2440	539	48683	3,0
DK	0	2893	3	913	677	0	3809 ¹	-612	0	3197	n.a.
EE	0	963	2	65	27	0	1030	-292	0	738	n.a.
ES	4896	7778	6084	5560	4507	32	24350	-560	527	23263	9,3
FI	2020	3432	894	1053	27	72	7471 ¹	325	0	7796	n.a.
FR	35984	7209	6161	1585	1169	0	50939	-2121	643	48175	8,5
GB	5945	22411	414	93	93	0	28863	1283	0	30146	n.a.
GR	0	2513	1076	217	180	0	3806 ¹	519	0	4325	-1,7
HR	0	435	892	11	10	0	1338	260	19	1579	1,6
HU	1374	2000	0	0	0	0	3374	258	0	3632	8,9
IE	0	2087	58	233	233	24	2402 ¹	61	48	2415	n.a.
IS	0	1	1006	377	0	0	1384	0	0	1384	n.a.
IT	0	19008	3447	1167	739	0	23622	4401	441	27582	3,7
LT	0	346	148	33	20	0	527 ¹	404	128	804	n.a.
LU	0	257	118	17	8	0	392	355	149	598	18,7
LV	0	347	335	10	6	0	692	-40	0	652	n.a.
ME ³	0	138	297	0	0	0	435	-29	0	406	n.a.
MK	0	293	275	0	0	0	568	145	0	713	-6,6
NI ⁴	0	569	1	62	57	1	633	190	0	823	n.a.
NL	353	8856	0	722	410	0	9931	-490	0	9441	-5,2
NO	0	547	10554	84	0	0	11185 ¹	1296	56	12425	n.a.
PL ⁵	0	12340	313	178	157	0	12831 ¹	-157	57	12617	3,4
PT	0	1274	2326	1110	915	0	4710 ¹	32	34	4708	12,4
RO	906	2248	1560	0	n.a.	0	4714	20	14	4720	5,5
RS	0	2591	1250	0	0	0	3841	-66	94	3681	-4,8
SE	5090	910	4900	1530	280	0	12430 ¹	1431	2	13859	n.a.
SI	517	496	274	0	0	0	1287	-238	0	1049	7,5
SK	1297	552	479	34	1	0	2362 ¹	66	38	2362	3,2
ENTSO-E	80412	146570	51502	23053	14074	911	302448 ¹	3070	3649	301870	n.a.
UA_W	0	382	12	0	0	0	394	-7	0	387	0,0

¹ Including deliveries from industry

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

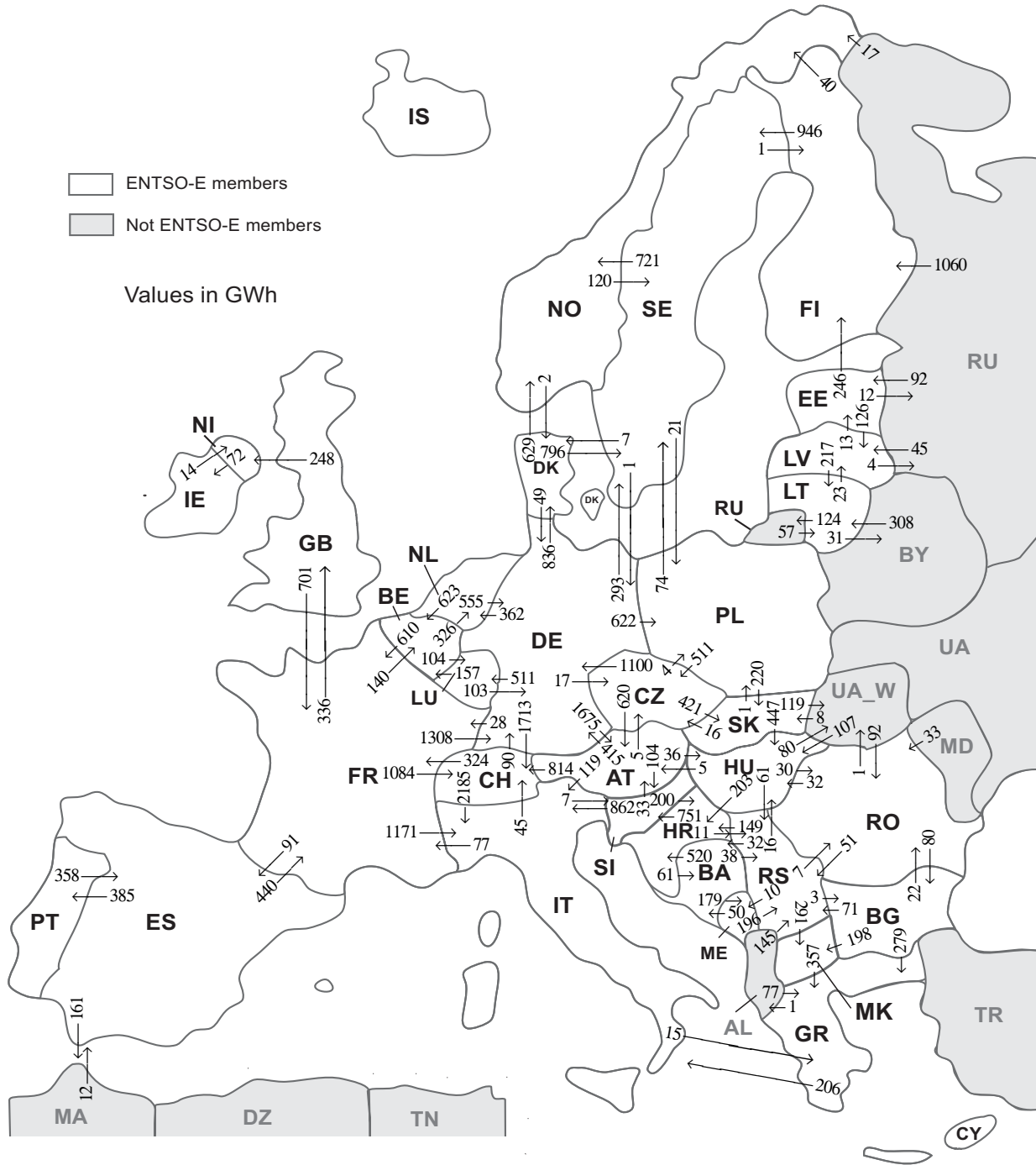
³ National monthly values as of March 2009

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	89	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: **31495GWh**

Total physical energy flows: **34081GWh**

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 9 of the Statistical Yearbook. These values may differ from the official statistics and the exchange balances in chapter 1.

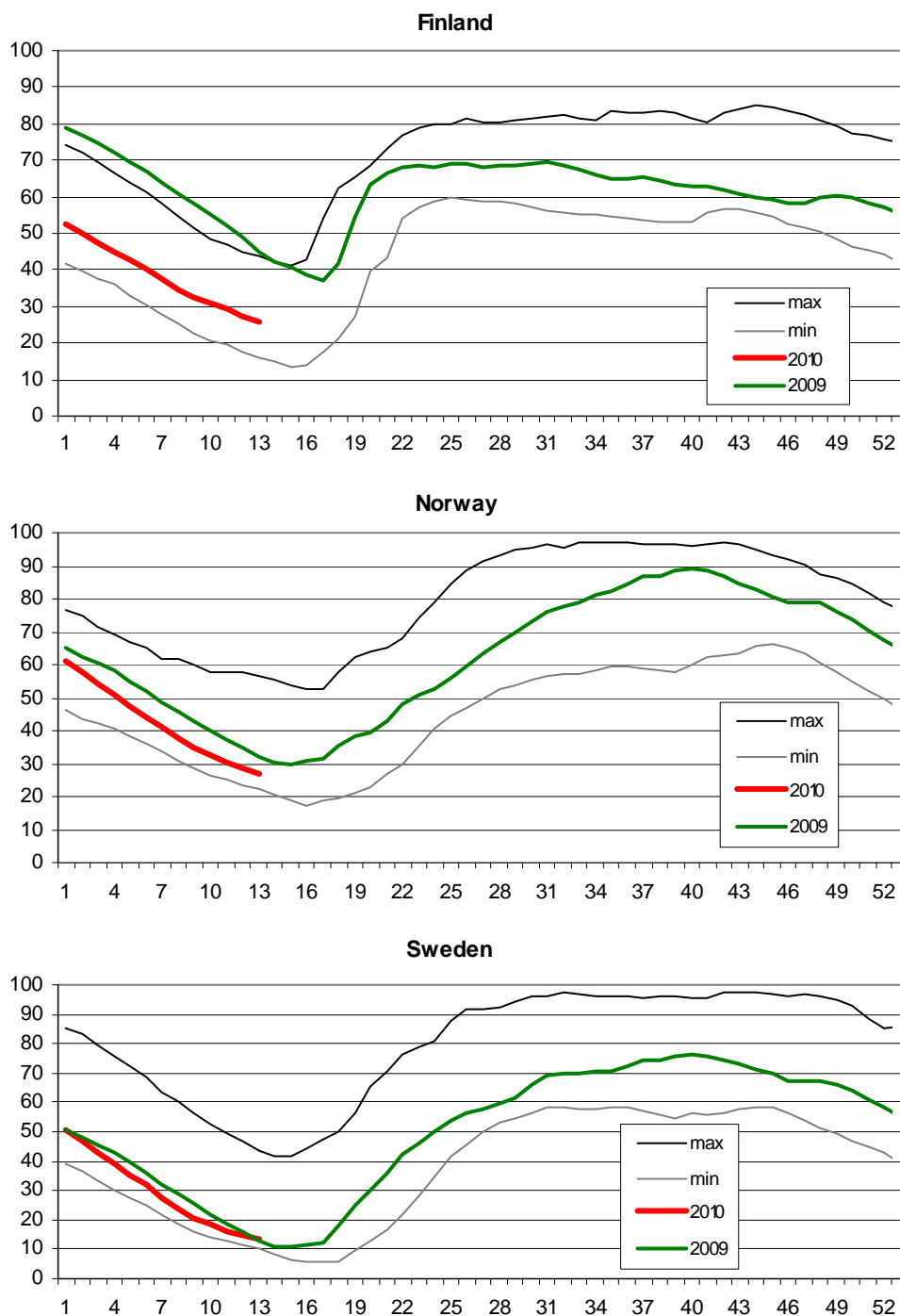
Overview of the monthly imports and exports in GWh

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	-	-	-	-	814	5	415	-	-	-	-	-	-	-	-	36	-	119	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104	-	-	-		
BA	-	-	-	-	-	-	-	-	-	-	-	-	-	520	-	-	-	-	-	-	-	179	-	-	-	-	-	-	-	-	38	-	-	-	-			
BE	-	-	-	-	-	-	-	-	-	-	-	610	-	-	-	-	-	-	-	104	-	-	-	-	326	-	-	-	-	-	-	-	-	-	-			
BG	-	-	-	-	-	-	-	-	-	-	-	-	-	279	-	-	-	-	-	-	-	198	-	-	-	-	-	-	22	71	-	-	-	-	-	0		
CH	0	-	-	-	-	-	90	-	-	-	-	324	-	-	-	-	-	2185	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
CZ	620	-	-	-	-	-	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	421	-	-	-		
DE	1675	-	-	-	1713	17	-	836	-	-	28	-	-	-	-	-	-	-	-	511	-	-	-	-	362	622	-	-	-	-	293	-	-	-	-			
DK	-	-	-	-	-	-	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	629	-	-	-	-	-	796	-	-	-	-	-		
EE	-	-	-	-	-	-	-	-	-	246	-	-	-	-	-	-	-	-	-	-	126	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12		
ES	-	-	-	-	-	-	-	-	-	-	440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	385	-	-	-	-	-	-	-	-	161		
FI	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40	-	-	-	-	-	946	-	-	-	-	0		
FR	-	-	140	-	1084	-	1308	-	91	-	-	336	-	-	-	-	-	1171	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GB	-	-	-	-	-	-	-	-	-	-	701	-	-	-	-	-	-	-	-	-	-	-	-	248	-	-	-	-	-	-	-	-	-	-	-	-	-	
GR	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	206	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
HR	-	61	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HU	5	-	-	-	-	-	-	-	-	-	-	-	-	203	-	-	-	-	-	-	-	-	-	-	-	-	-	30	61	-	-	-	0	80	-	-		
IE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	
IT	0	-	-	-	45	-	-	-	-	-	77	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-		
LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	155	
LU	-	-	157	-	-	-	103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LV	-	-	-	-	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	217	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
ME	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	196	-	-	n.a.	
MK	-	-	-	0	-	-	-	-	-	-	-	-	357	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	
NI	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NL	-	-	623	-	-	-	555	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
NO	-	-	-	-	-	-	-	2	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	0	
PL	-	-	-	-	511	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74	-	220	-	0
PT	-	-	-	-	-	-	-	-	358	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RO	-	-	-	80	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0
RS	-	32	-	3	-	-	-	-	-	-	-	-	-	149	16	-	-	-	-	-	-	10	291	-	-	-	-	-	7	-	-	-	-	-	-	-	0	
SE	-	-	-	-	-	-	1	7	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SI	33	-	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-	862	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SK	-	-	-	-	-	16	-	-	-	-	-	-	-	-	447	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	119	-
UA_W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-
Other III ¹	-	-	-	0	-	-	-	-	92	12	1060	-	-	77	-	-	-	-	365	-	45	n.a.	-	-	-	17	0	-	33	145	-	-	-	-	-	-	-	-

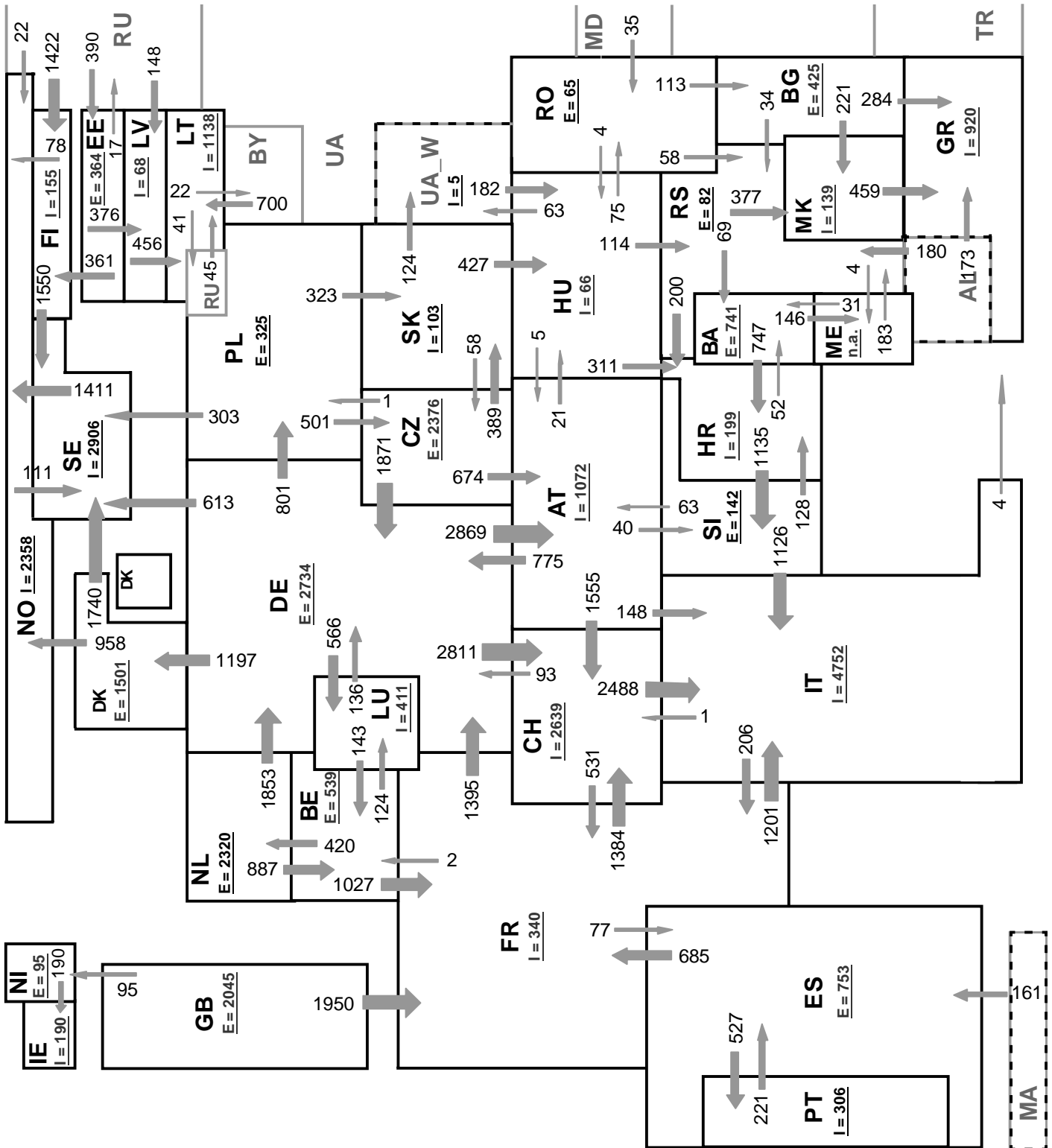
Other III¹: Albania, Belarus, Morocco, Republic of Moldavia, Republic of Turkey, Russia and Ukraine

Sum of the monthly imports and exports in GWh

	import	export		import	export
AT	2333	1493	IT	4543	144
BA	143	737	LT	582	178
BE	920	1040	LU	615	260
BG	83	570	LV	194	234
CH	3656	2599	ME	n.a.	n.a.
CZ	549	2145	MK	143	357
DE	3621	6057	NI	262	72
DK	845	1474	NL	688	1178
EE	105	384	NO	1407	122
ES	461	986	PL	648	805
FI	1307	986	PT	385	358
FR	2180	4130	RO	184	164
GB	336	949	RS	573	508
GR	728	207	SE	2229	751
HR	1072	823	SI	862	1095
HU	638	379	SK	649	583
IE	72	14	UA_W	200	207



- 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



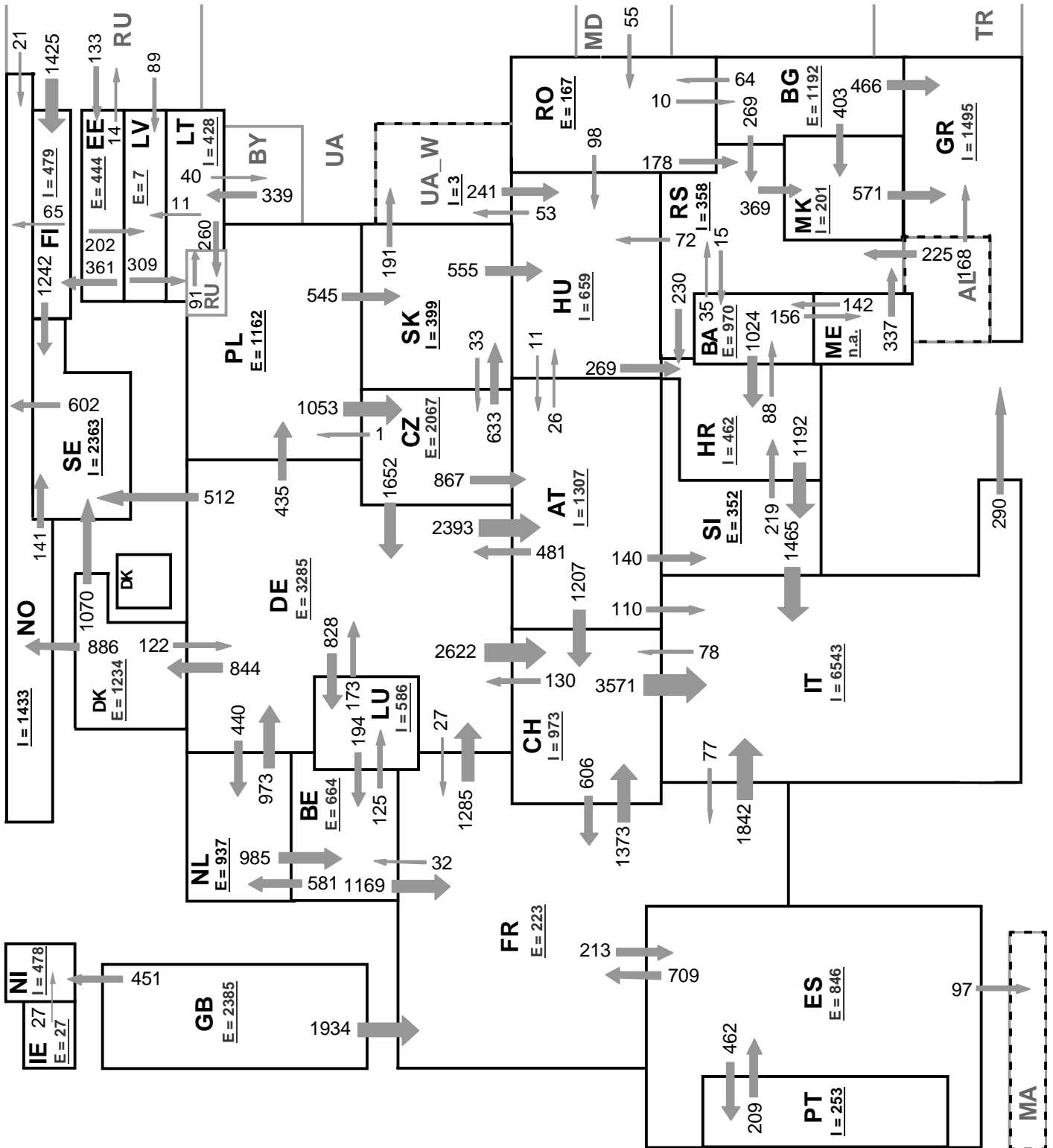
Sum of load flows in MW

ENTSO-E = 44188 MW

Total = 48289 MW

Synchronous operation with ENTSO-E region

I = Import balance
E = Export balance



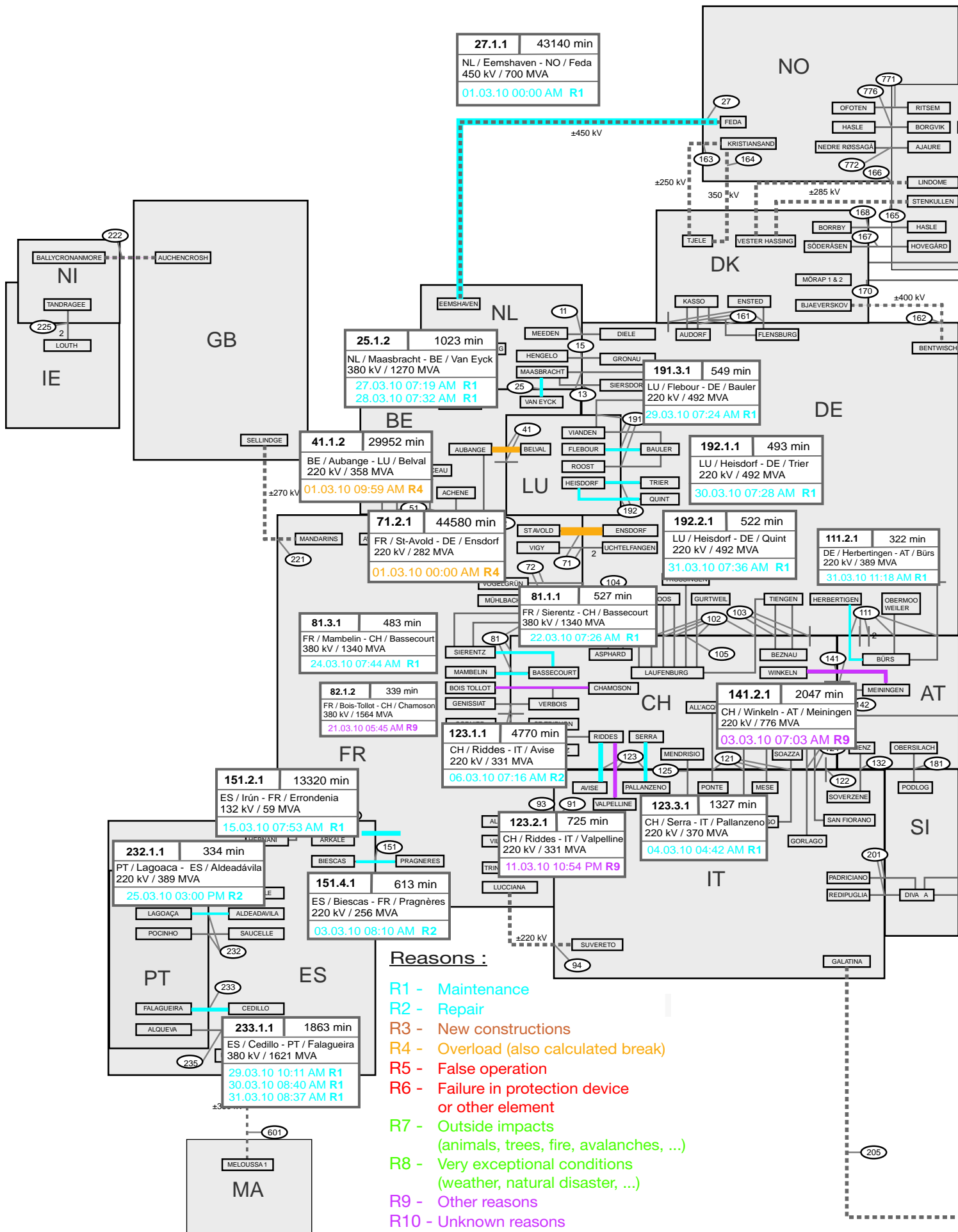
Sum of load flows in MW

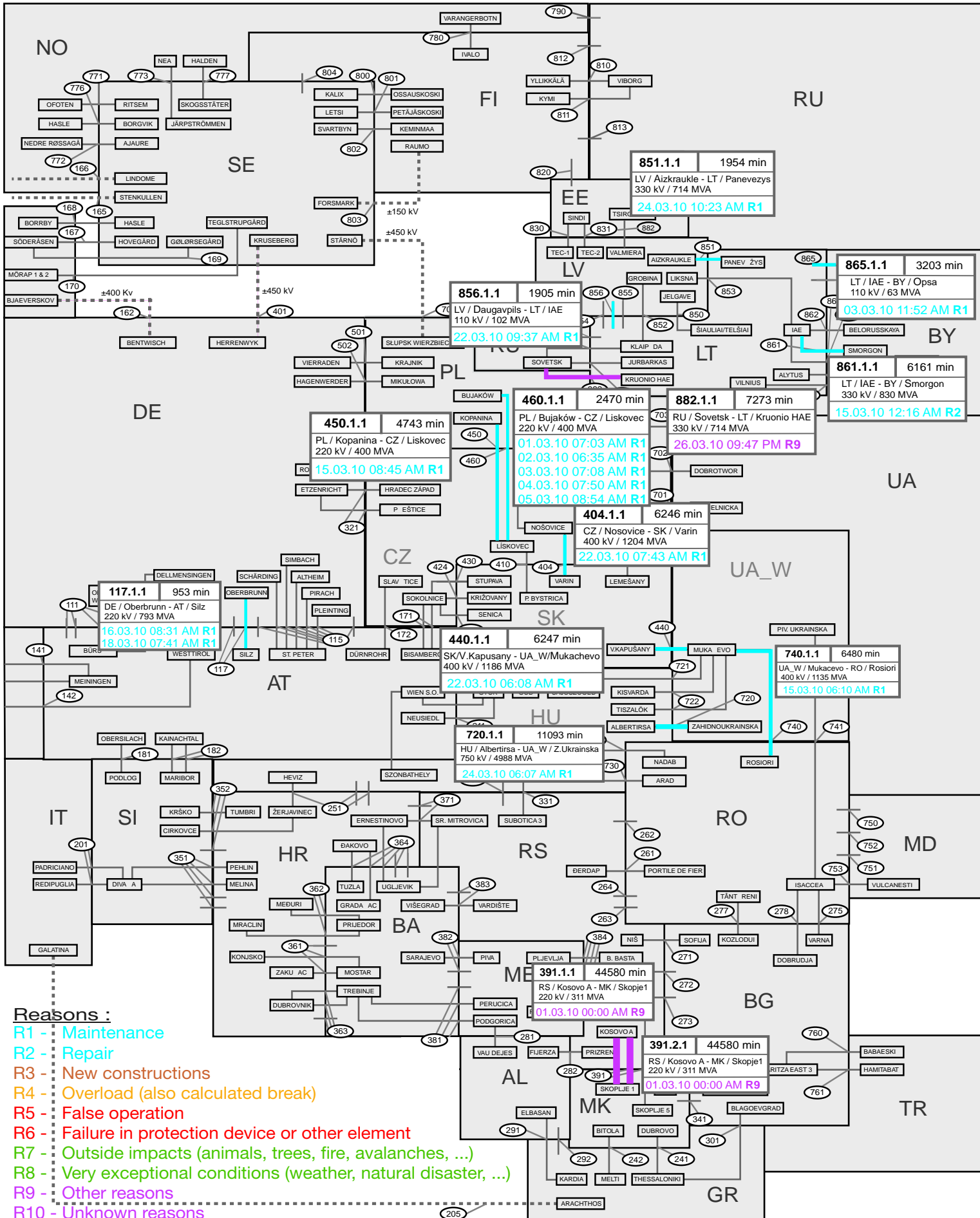
ENTSO-E = 45076 MW

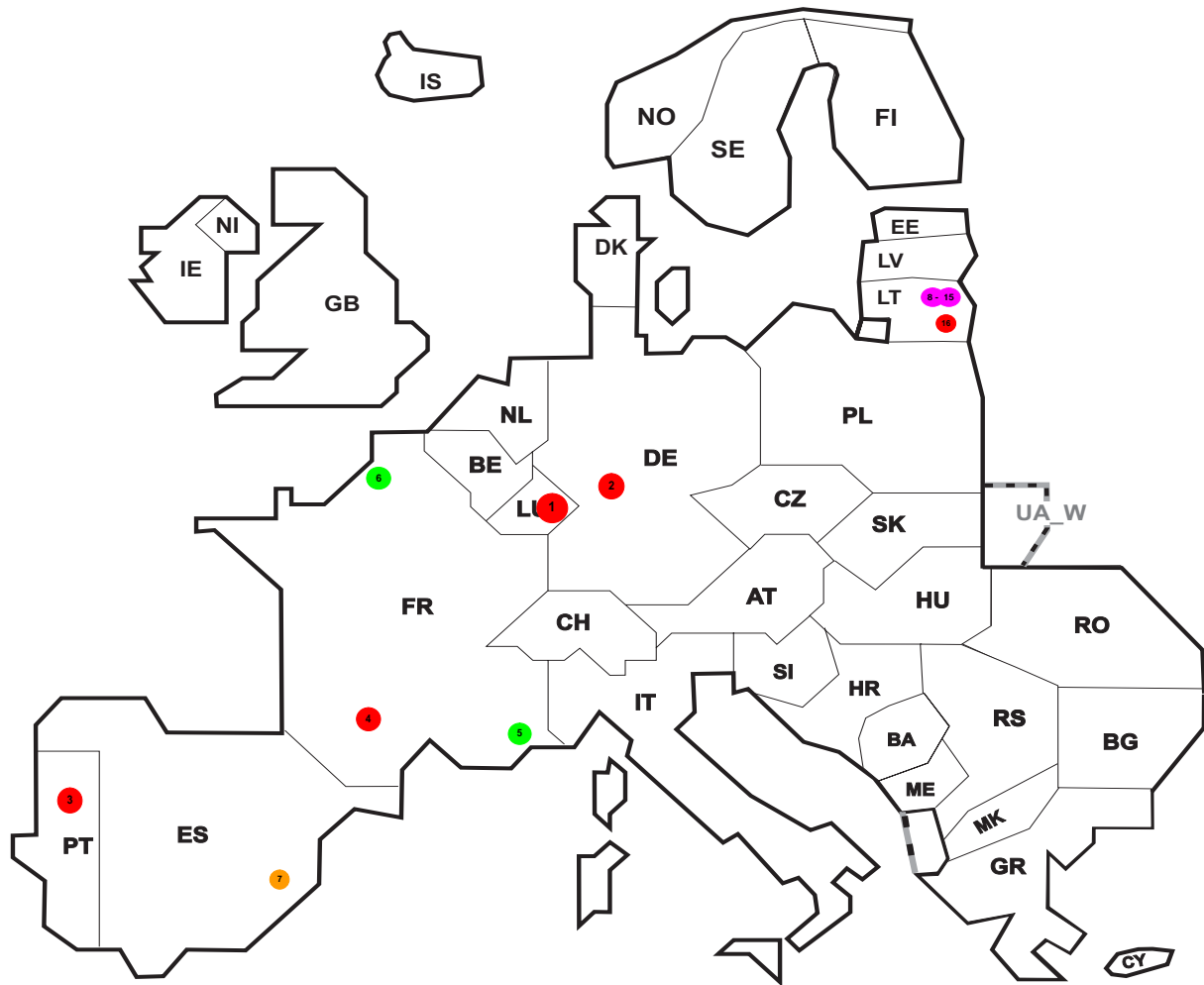
Total = 49029 MW

Synchronous operation with ENTSO-E region

I = Import balance
E = Export balance







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	LU	Schiffange	R6	26	90	17	2,147
2	DE	Pfungstadt	R6	2135	700	183	2,114
3	PT	SUBESTAÇÃO DE FANHÕES	R6	18	0	9	0,185
4	FR	Cissac	R6	20	74	16	0,021
5	FR	Lingostiere	R8	14	14	60	0,015
6	FR	Contes	R8	13	30	26	0,014
7	ES	Saladas	R4	0	10	185	0,001
8	LT	Lietuvos E	R6	0	164	51	0,000
9	LT	VE-2	R9	0	16	1252	0,000
10	LT	Lifosa (Nevėžis)	R9	0	30	110	0,000
11	LT	Panevėžis E	R9	0	29	76	0,000
12	LT	Lifosa (Nevėžis)	R9	0	21	20	0,000
13	LT	Kauno HE	R9	0	13	30	0,000
14	LT	Panevėžis E	R9	0	28	76	0,000
15	LT	VE-2	R10	0	16	61	0,000
16	LT	VE-2	R6	0	18	395	0,000

Information about incidents in other countries is unavailable.

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

Highest and lowest load on the 17.03.2010 CET of each country

	Highest		Lowest		Load representativity %
	load MW	variation % ¹	load MW	variation % ¹	
AT	8788	4,6	5805	6,8	100
BA	1780	4,6	1033	5,1	100
BE ²	11935	6,1	9080	10,9	100
BG	5850	-4,5	3797	-6,6	100
CH	9464	9,5	7204	11,1	100
CY ³	664	-17,0	350	12,0	100
CZ	9068	4,2	7147	7,2	100
DE	76300	5,9	63537	14,5	91
DK	5313	n.a.	3247	n.a.	100
EE	1265	n.a.	810	n.a.	100
ES	38495	12,7	25768	14,8	98
FI	11757	n.a.	10077	n.a.	100
FR	73221	15,2	58900	20,2	100
GB	47460	n.a.	29032	n.a.	100
GR	7209	-4,4	4345	-1,6	100
HR	2763	4,1	1563	8,0	100
HU	5381	-8,0	3632	-7,7	100
IE	3468	n.a.	2385	n.a.	99
IS	2006	n.a.	1843	n.a.	100
IT	47118	7,3	28411	8,9	100
LT	1317	n.a.	795	n.a.	100
LU	1006	5,2	677	-6,1	100
LV	1078	n.a.	679	n.a.	100
ME ⁴	651	n.a.	437	n.a.	100
MK	1182	-6,4	723	-6,9	100
NI	1340	n.a.	803	n.a.	100
NL	15200	5,5	9617	1,4	100
NO	18915	n.a.	15091	n.a.	100
PL ⁵	20935	3,6	14556	6,3	100
PT	8069	15,5	5139	14,8	97
RO	7782	4,1	5600	7,5	100
RS	6421	1,3	4268	0,7	100
SE	21276	n.a.	16957	n.a.	100
SI	1781	9,0	1130	15,7	100
SK	3888	4,2	2993	5,7	100
ENTSO-E	471657	n.a.	344061	n.a.	
UA_W	860	0,1	521	1,0	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

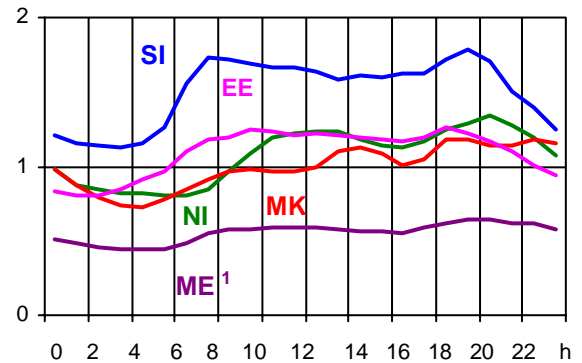
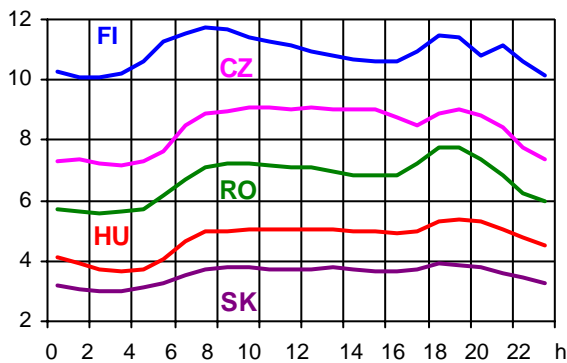
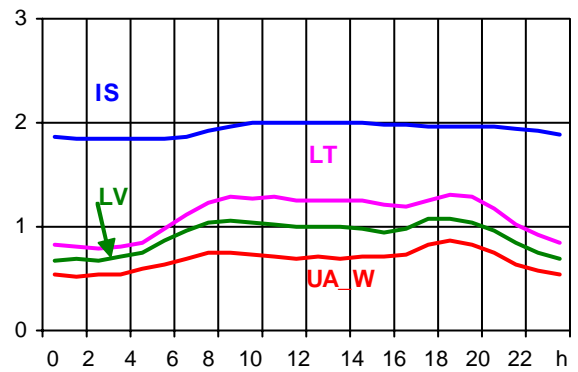
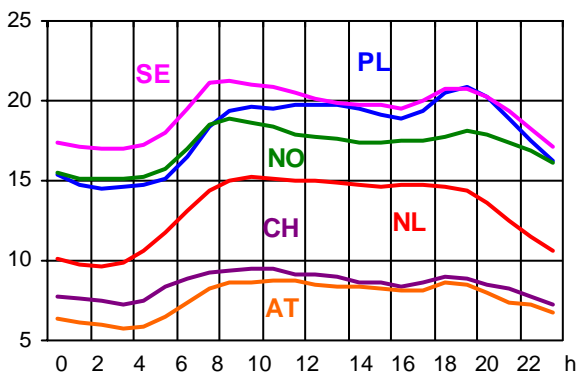
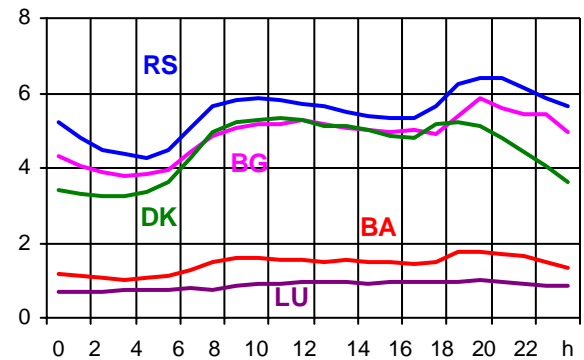
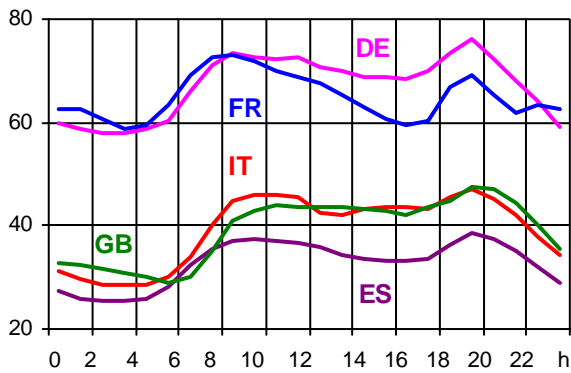
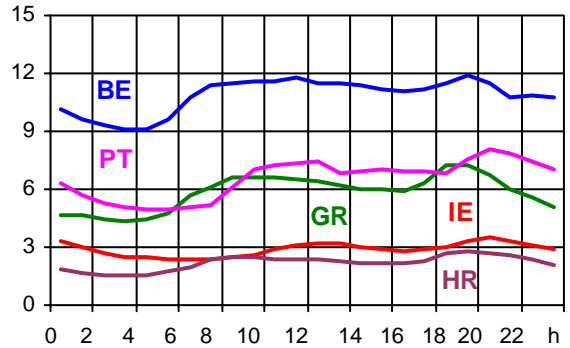
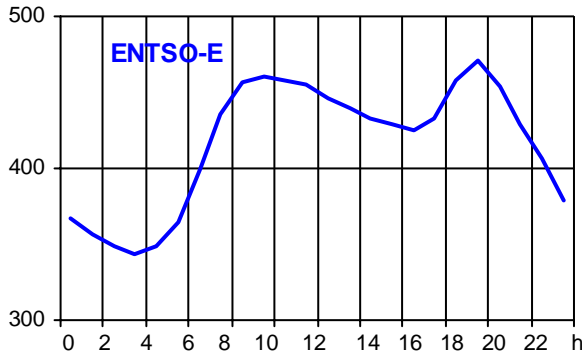
³ Only highest and lowest load value available

⁴ Highest and lowest load values as of March 2008

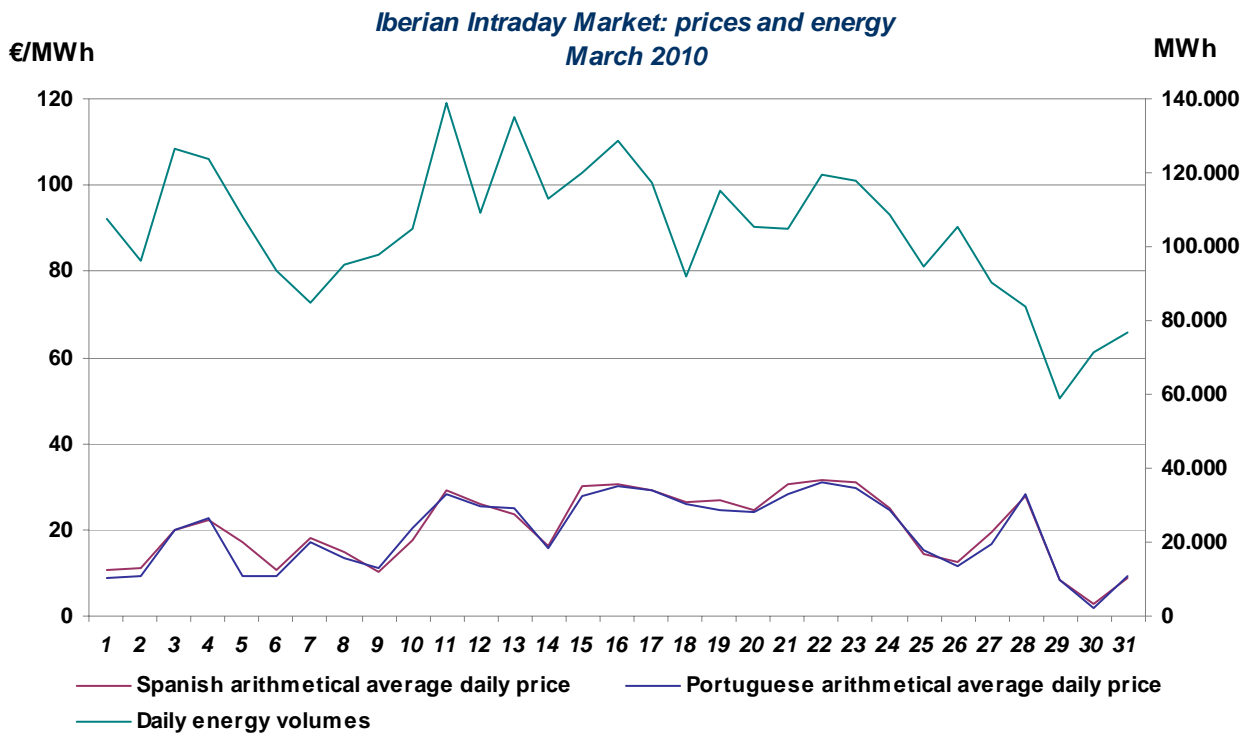
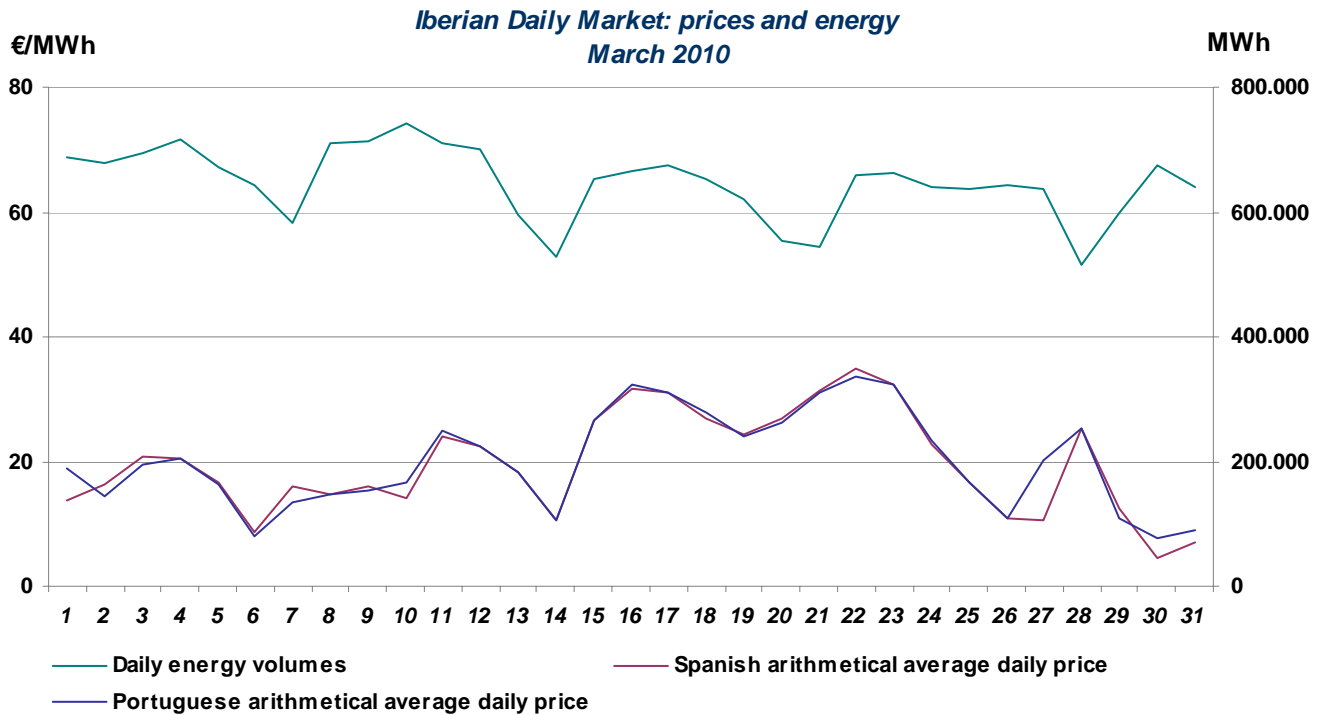
⁵ Operational data

Consumption hourly load curves on 17.03.2010 CET

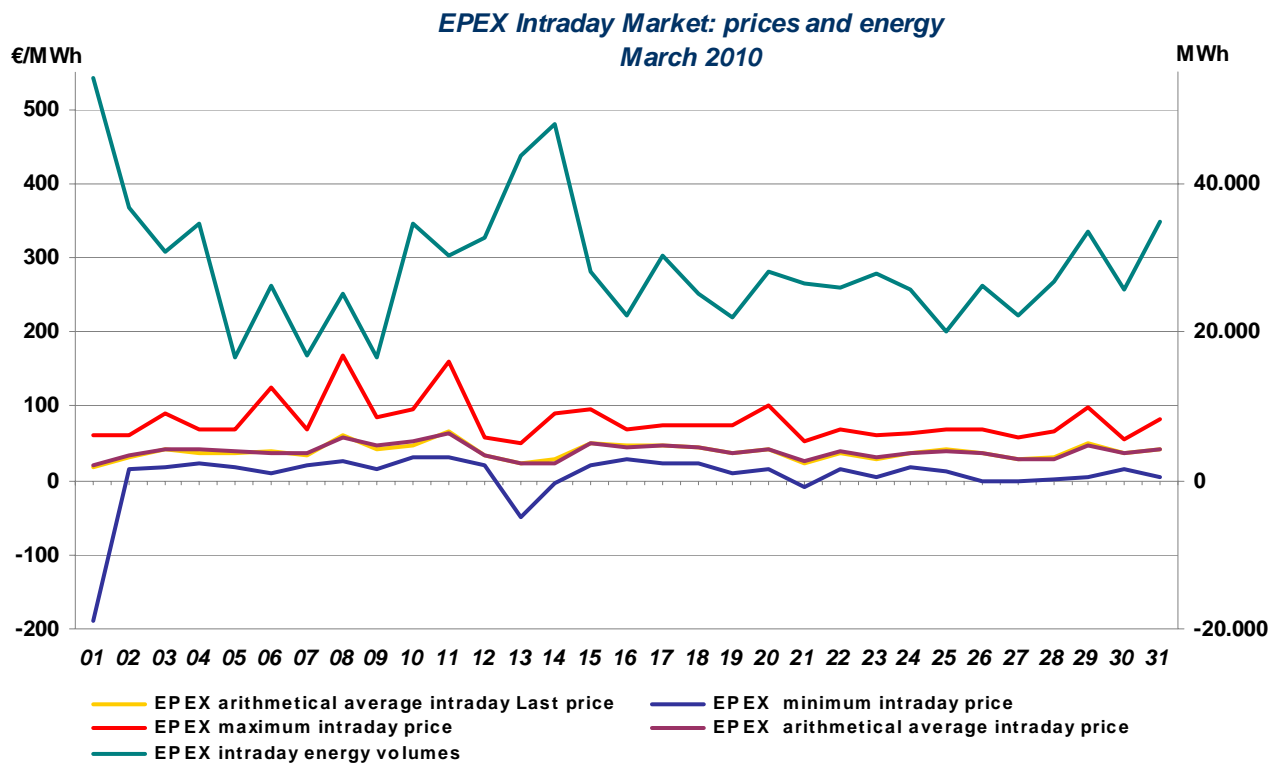
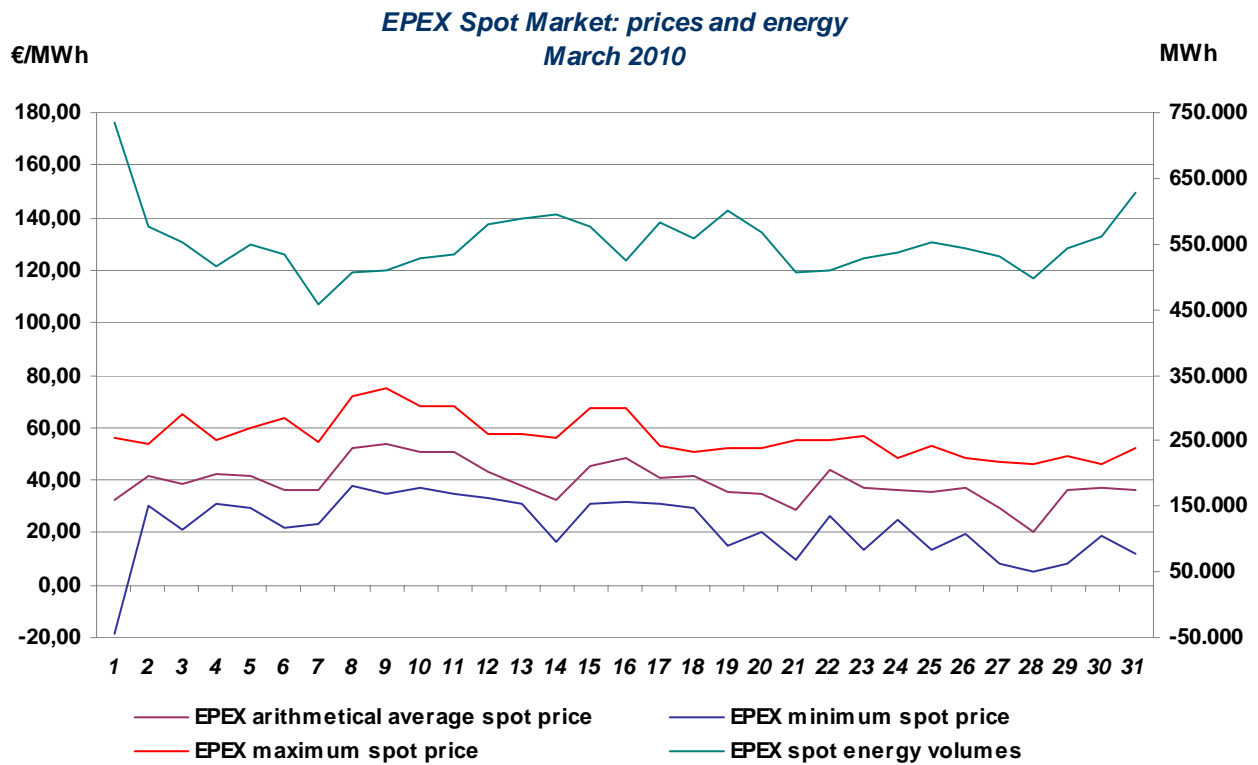
Values in GW



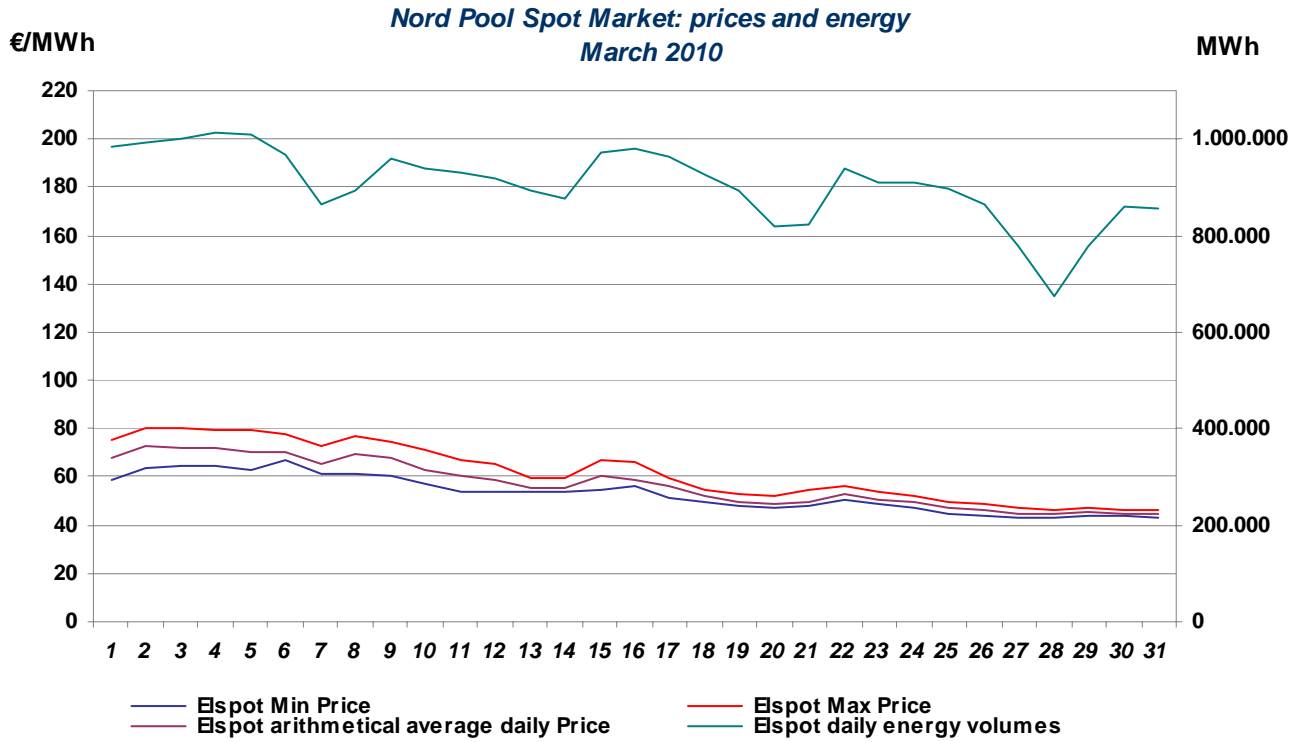
¹ Load values as of 19 March 2008



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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