

Monthly report



February 2010

Monthly provisional values as of 14 July 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	Water reservoirs Nordic	6
6	Load flows (night)	7
7	Load flows (day)	8
8	Unavailability of international tie lines (major events)	9
9	Network reliability (major events)	11
10	Highest and lowest load on the 3 rd Wednesday	12
11	Load diagrams on the 3 rd Wednesday	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	2782	2001	0	0	621	5404	703	355	5752	2,0
BA	0	704	800	0	0	0	1504	-527	0	977	4,5
BE ²	3581	3564	150	412	119	0	7707	-32	139	7536	4,7
BG	1273	1867	461	30	30	0	3631 ¹	-498	85	3048	-0,9
CH	2187	188	2402	118	2	0	4895 ¹	910	107	5698	1,6
CY	0	372	0	0	0	0	372	0	0	372	-1,5
CZ	2450	4317	225	38	23	0	7030 ¹	-1309	52	5669	1,9
DE	11141	33672	1472	5960	3507	0	52245 ¹	-3099	574	48572	5,0
DK	0	3024	2	743	517	0	3769 ¹	-657	0	3112	n.a.
EE	0	940	1	45	18	0	986	-233	0	753	n.a.
ES	4639	11671	4362	5360	4541	64	26096	-509	540	25047	13,5
FI	1824	3558	947	1009	20	64	7402 ¹	737	0	8139	n.a.
FR	36318	6815	5873	1343	968	0	50349	-1121	580	48648	4,6
GB	5166	23176	354	42	42	0	28738	936	0	29674	n.a.
GR	0	2600	942	228	197	0	3770 ¹	340	3	4107	-3,8
HR	0	426	811	11	9	1	1249	309	20	1538	0,7
HU	1376	1946	0	0	0	0	3322	173	0	3495	11,3
IE	0	2022	87	144	144	22	2275 ¹	99	44	2330	n.a.
IS	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IT	0	18140	3027	1256	845	0	22423	3929	396	25956	2,0
LT	0	510	106	24	12	0	640 ¹	271	106	805	n.a.
LU	0	245	116	14	6	0	375	317	146	546	8,8
LV	0	415	120	6	3	0	541	97	0	638	n.a.
ME ³	0	120	356	0	0	0	476	-113	0	363	n.a.
MK	0	405	232	0	0	0	637	146	0	783	5,5
NI ⁴	0	631	1	34	30	1	667	121	0	788	n.a.
NL	329	8323	0	683	371	0	9335	-249	0	9086	-6,1
NO	0	455	12071	65	65	0	12591 ¹	525	53	13063	n.a.
PL ⁵	0	11985	193	120	102	0	12298 ¹	-335	65	11898	3,2
PT	0	1477	1889	1149	982	0	4515 ¹	81	36	4560	7,9
RO	857	2365	1246	0	n.a.	0	4468	16	19	4465	4,6
RS	0	2638	1048	0	0	0	3686	-179	42	3465	2,6
SE	3890	1090	6270	1380	200	0	12630 ¹	1560	2	14188	n.a.
SI	468	397	223	0	0	0	1088	-100	0	988	5,0
SK	1171	581	316	45	1	0	2113 ¹	215	39	2289	1,2
ENTSO-E ⁶	76670	153421	48104	20259	12754	773	299227 ¹	2524	3403	298348	n.a.
UA_W	0	606	9	0	0	0	615	-219	0	396	13,5

¹ Including deliveries from industry

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

³ National monthly values as of February 2009

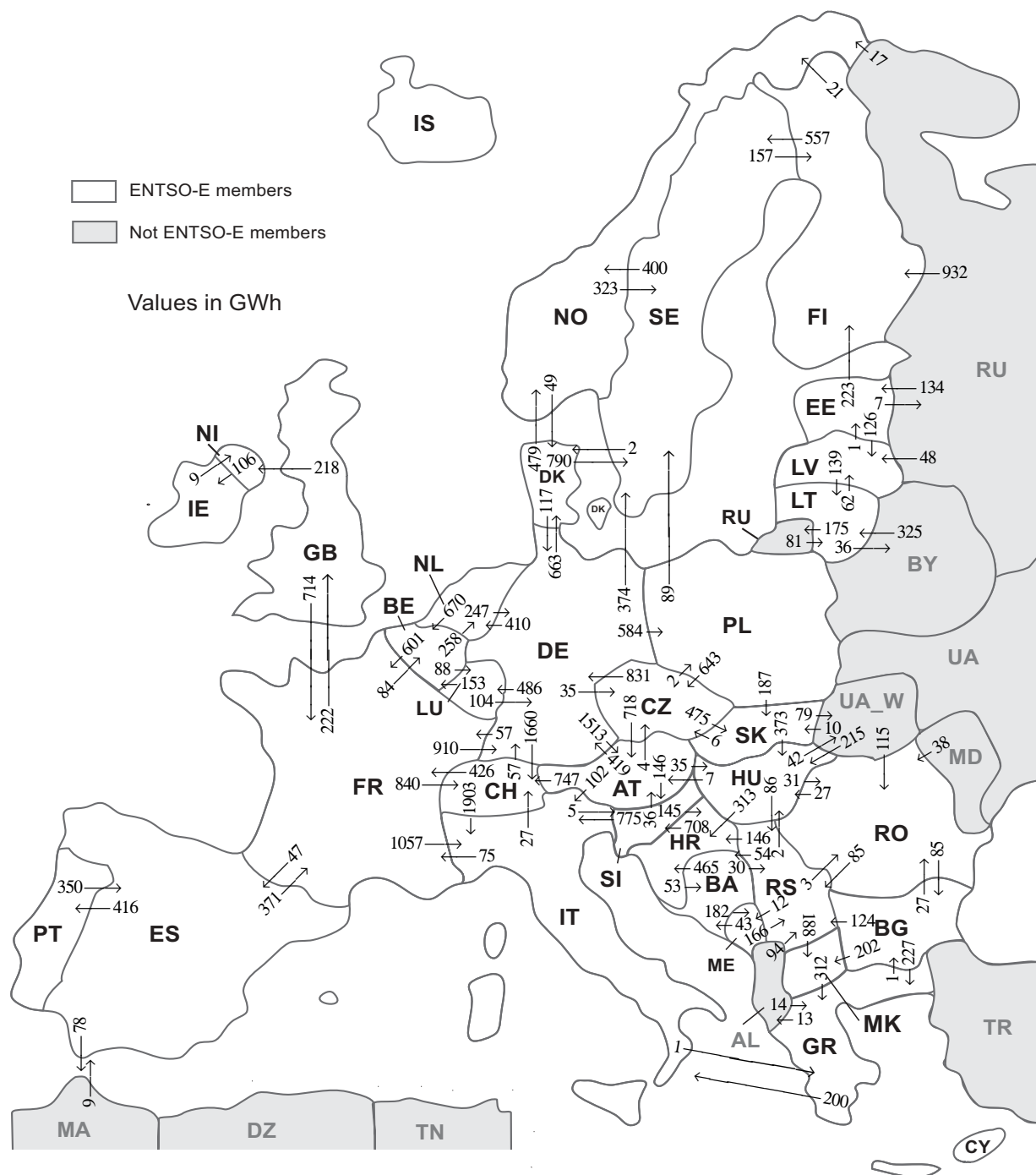
⁴ 9 Generating Units (1805MW) are capable of running on mixed fuels - The data has identified which fuel type these have been run on and been added into the appropriate fuel type

⁵ Operational data

⁶ Sum ENTSO-E without IS

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	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
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	91	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: **28699GWh**

Total physical energy flows: **31161GWh**

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.

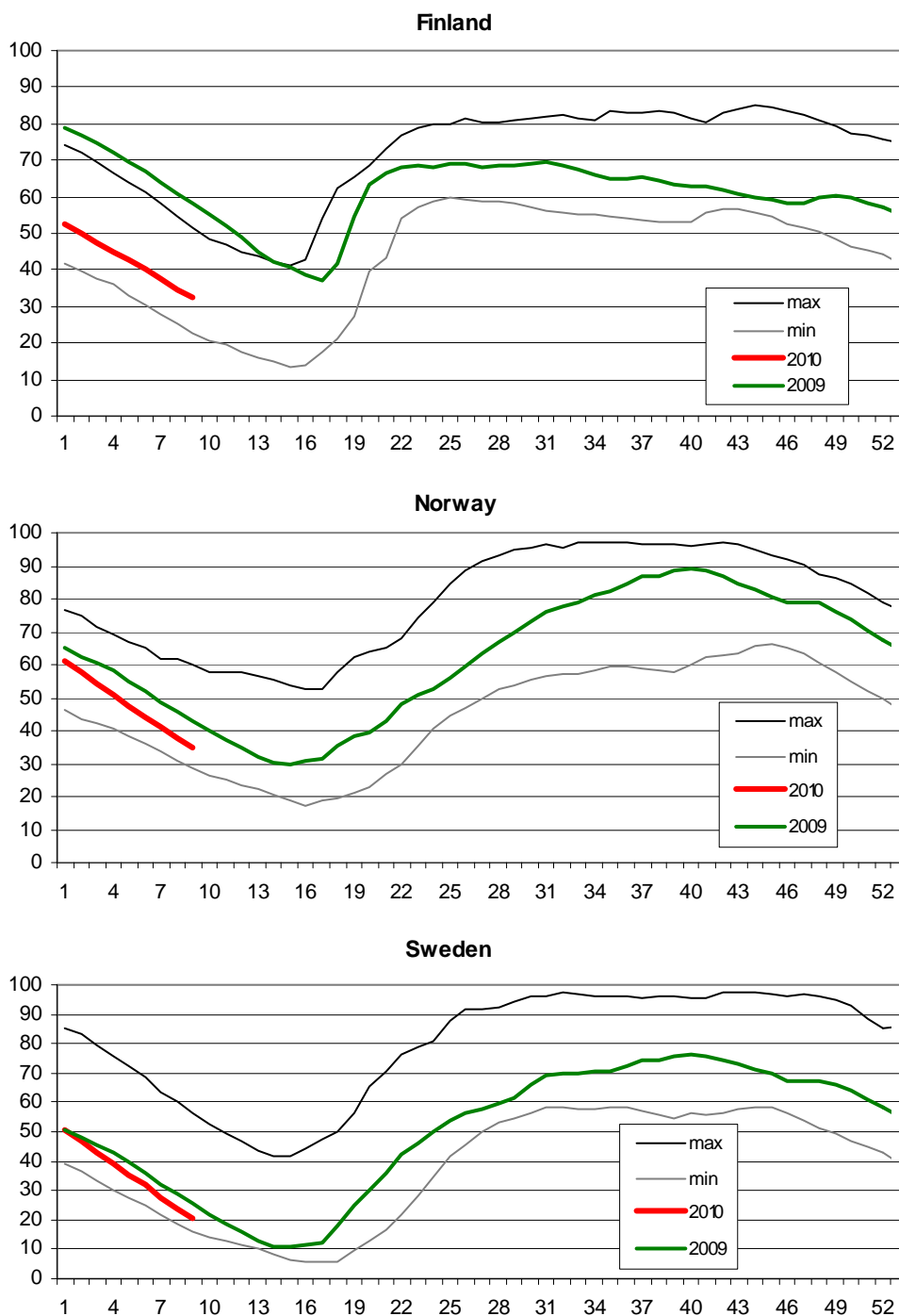
Overview of the monthly imports and exports in GWh

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	-	-	-	-	747	4	419	-	-	-	-	-	-	-	-	35	-	102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	146	-	-	
BA	-	-	-	-	-	-	-	-	-	-	-	-	-	465	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
BE	-	-	-	-	-	-	-	-	-	-	-	601	-	-	-	-	-	-	-	88	-	-	-	258	-	-	-	-	-	27	124	-	-	-	-	-		
BG	-	-	-	-	-	-	-	-	-	-	-	-	227	-	-	-	-	-	-	-	-	202	-	-	-	-	-	-	-	-	-	-	-	-	-	0		
CH	0	-	-	-	-	-	57	-	-	-	-	426	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
CZ	718	-	-	-	-	-	831	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	475	-	-		
DE	1513	-	-	-	1660	35	-	663	-	-	57	-	-	-	-	-	-	-	-	486	-	-	-	410	-	584	-	-	-	-	-	374	-	-	-			
DK	-	-	-	-	-	-	117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	479	-	-	-	-	-	-	-	790	-	-	-		
EE	-	-	-	-	-	-	-	-	-	223	-	-	-	-	-	-	-	-	-	-	126	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7		
ES	-	-	-	-	-	-	-	-	-	-	371	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	416	-	-	-	-	-	-	-	-	78		
FI	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	-	-	-	-	-	557	-	-	-	0			
FR	-	-	84	-	840	-	910	-	47	-	-	222	-	-	-	-	-	1057	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GB	-	-	-	-	-	-	-	-	-	-	714	-	-	-	-	-	-	-	-	-	-	-	-	218	-	-	-	-	-	-	-	-	-	-	-	-	-	
GR	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	13		
HR	-	53	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	708	-	-	-		
HU	7	-	-	-	-	-	-	-	-	-	-	-	-	313	-	-	-	-	-	-	-	-	-	-	-	-	31	86	-	-	-	0	42	-	-	-		
IE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	
IT	0	-	-	-	27	-	-	-	-	-	75	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-		
LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	211		
LU	-	-	153	-	-	-	104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LV	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	139	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0		
ME	-	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	166	-	-	-	n.a.		
MK	-	-	-	0	-	-	-	-	-	-	-	-	312	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	
NI	-	-	-	-	-	-	-	-	-	-	0	-	-	-	106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NL	-	-	670	-	-	-	247	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
NO	-	-	-	-	-	-	-	49	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	323	-	-	0	
PL	-	-	-	-	643	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89	-	187	-	0		
PT	-	-	-	-	-	-	-	-	350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RO	-	-	-	85	-	-	-	-	-	-	-	-	-	-	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	
RS	-	54	-	0	-	-	-	-	-	-	-	-	-	146	2	-	-	-	-	-	-	12	188	-	-	-	-	3	-	-	-	-	-	-	-	0	0	
SE	-	-	-	-	-	0	2	-	157	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	0	-	-	-	-	-	-	-	-	-	-	
SI	36	-	-	-	-	-	-	-	-	-	-	145	-	-	-	-	-	775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SK	-	-	-	-	6	-	-	-	-	-	-	-	-	-	373	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	79	-	-
UA_W	-	-	-	-	-	-	-	-	-	-	-	-	-	215	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	
Other III ¹	-	-	-	0	-	-	-	-	134	9	932	-	-	14	-	-	-	-	406	-	48	n.a.	-	-	-	17	0	-	38	94	-	-	-	-	-	-	-	

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

Sum of the monthly imports and exports in GWh

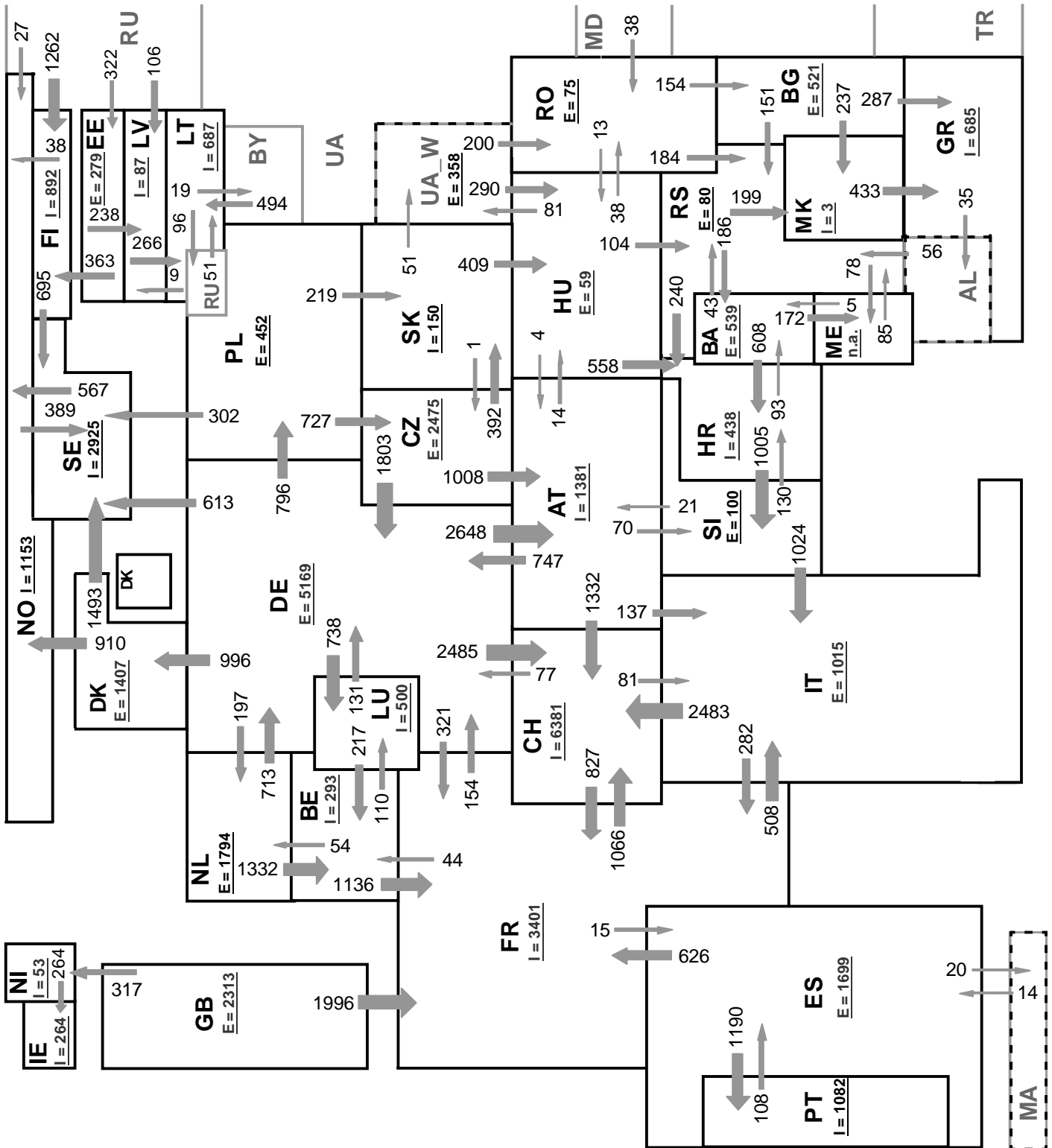
	import	export		import	export
AT	2274	1453	IT	4037	108
BA	150	677	LT	545	273
BE	907	947	LU	574	257
BG	86	580	LV	236	140
CH	3274	2386	ME	n.a.	n.a.
CZ	688	2026	MK	150	312
DE	2685	5782	NI	227	106
DK	714	1386	NL	668	917
EE	135	356	NO	917	372
ES	406	865	PL	586	919
FI	1312	578	PT	416	350
FR	2244	3160	RO	214	197
GB	222	932	RS	585	405
GR	554	214	SE	2133	559
HR	1069	761	SI	859	956
HU	652	479	SK	672	458
IE	106	9	UA_W	121	340



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



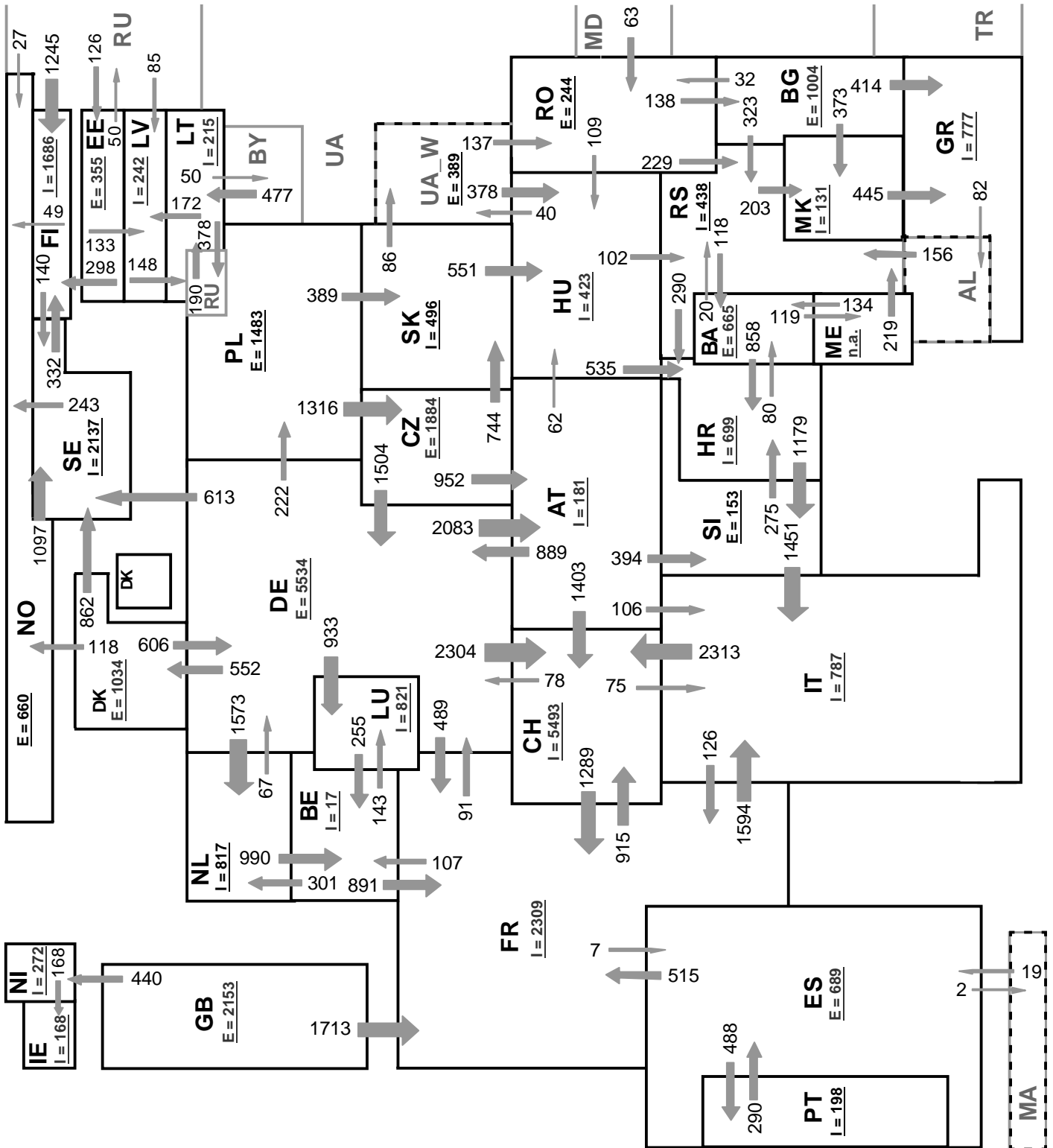
Sum of load flows in MW

ENTSO-E = 40468 MW

Total = 43868 MW

Synchronous operation with ENTSO-E region

I = Import balance
E = Export balance



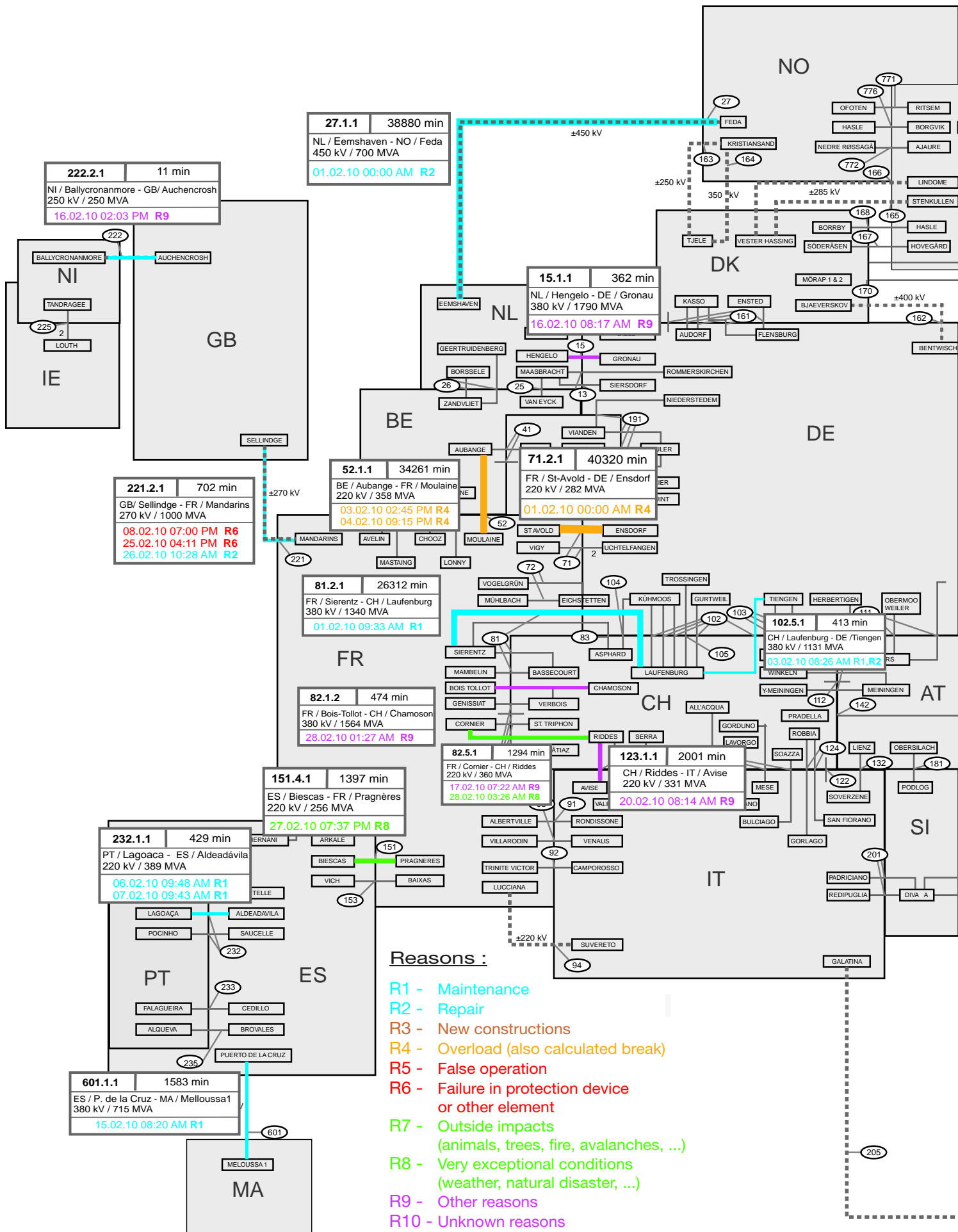
Sum of load flows in MW

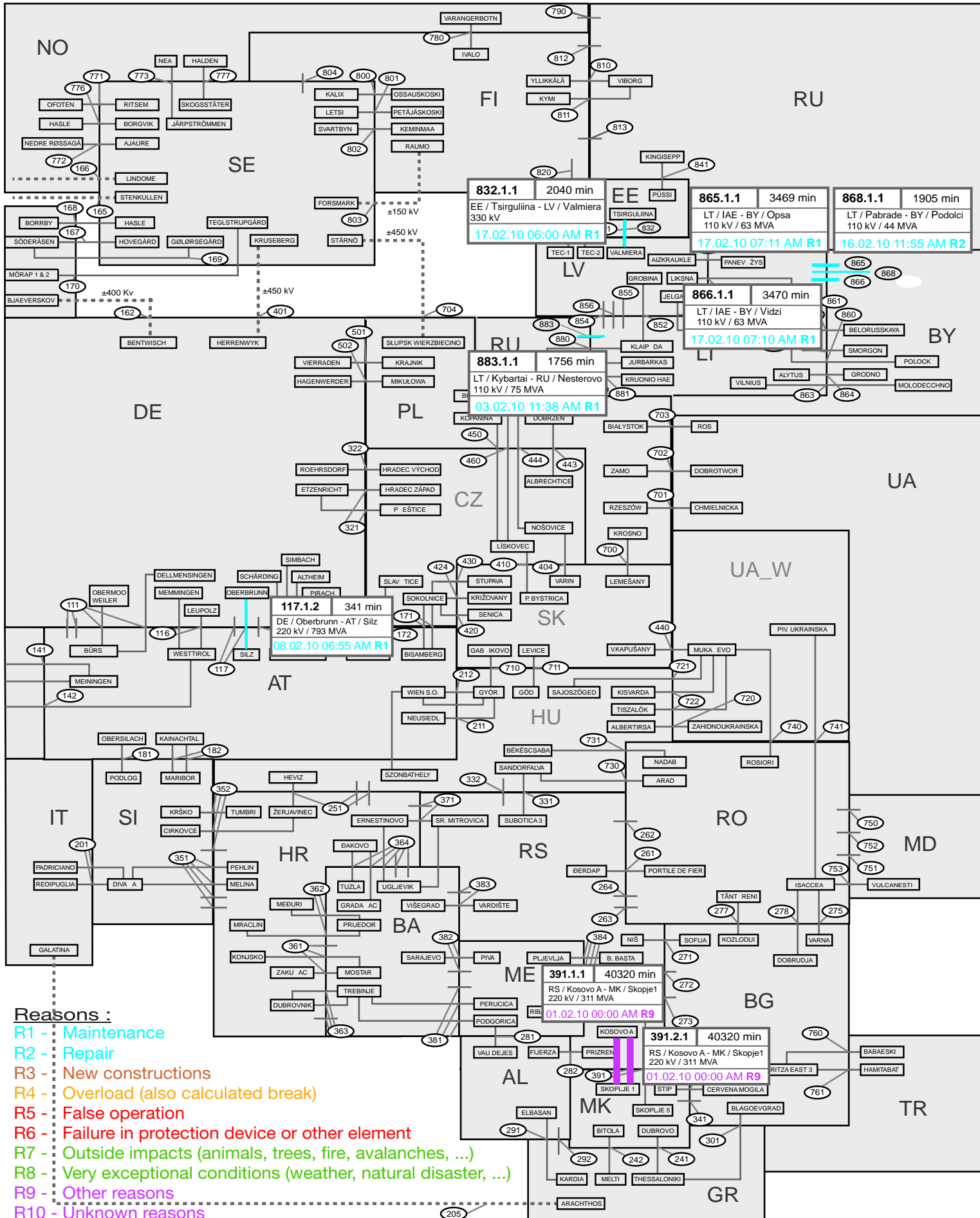
ENTSO-E = 41498 MW

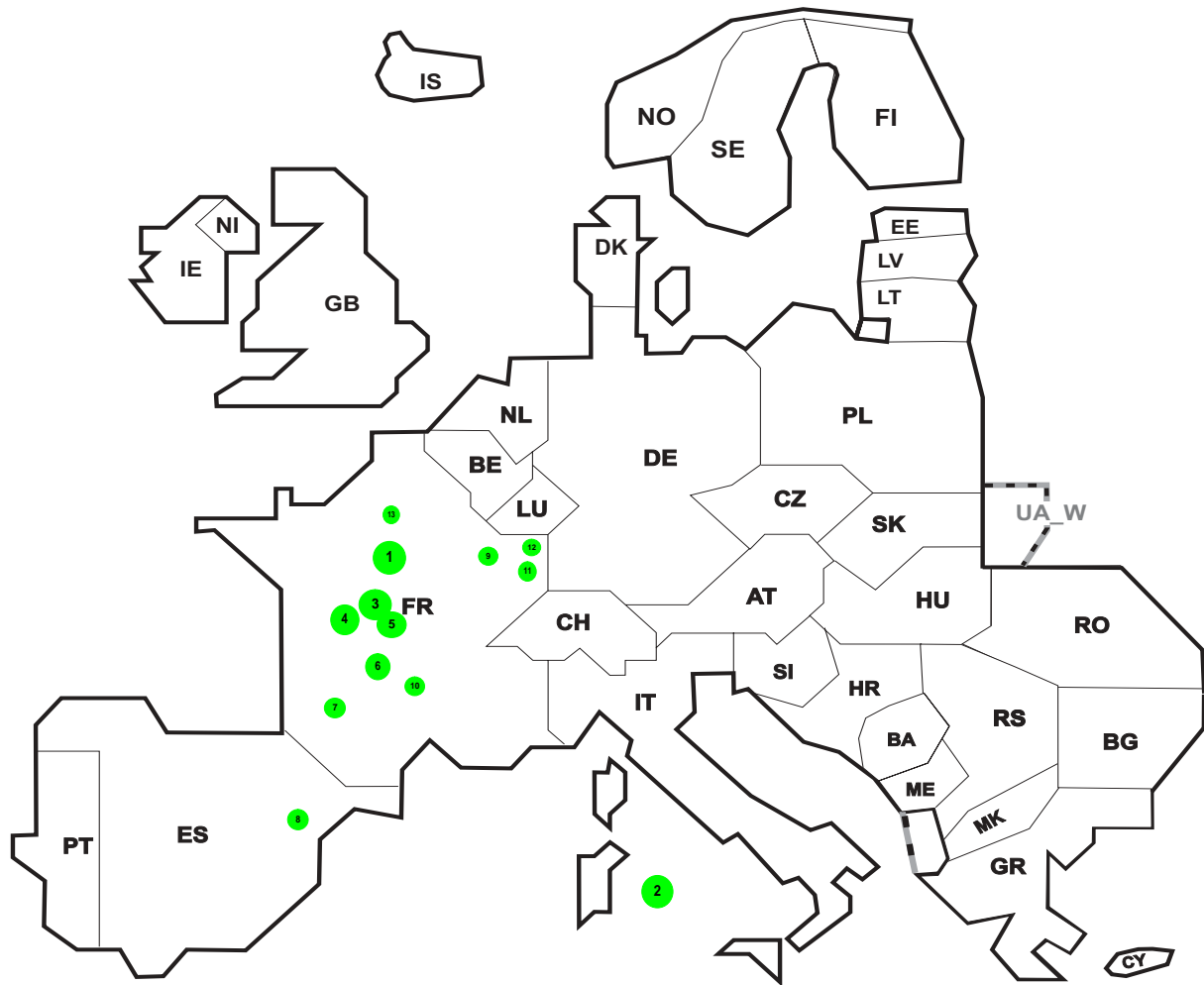
Total = 45370 MW

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	FR	Chateauneuf sur Loire	R8	193	30	386	0,207
2	FR	Airvault	R8	120	20	360	0,129
3	FR	Beaulieu	R8	108	12	540	0,116
4	FR	Airvault	R8	33	6	327	0,035
5	FR	Orangerie	R8	32	5	386	0,034
6	FR	Baragary	R8	32	2	960	0,034
7	FR	Riou	R8	24	2	581	0,026
8	ES	Aceriasa	R8	6	75	5	0,013
9	FR	Brabois	R8	6	17	20	0,006
10	FR	Enval	R8	5	7	45	0,005
11	FR	Creutzwald	R8	3	8	20	0,003
12	FR	Bergholz	R8	2	6	20	0,002
13	FR	Dugny	R8	1	2	20	0,001

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 17.02.2010 CET of each country

	Highest		Lowest		Load representativity %
	load MW	variation % ¹	load MW	variation % ¹	
AT	9066	-2,1	6018	-2,1	100
BA	1819	-2,4	1080	-1,5	100
BE ²	12855	3,0	10153	8,1	100
BG	6080	-5,4	4159	-7,5	100
CH	9858	1,7	7535	0,5	100
CY	721	-0,1	368	-0,1	100
CZ	9615	0,2	7656	-0,7	100
DE	79298	2,4	66347	6,0	91
DK	5735	n.a.	3525	n.a.	100
EE	1377	n.a.	977	n.a.	100
ES	41444	8,2	26101	2,8	98
FI	13407	n.a.	11150	n.a.	100
FR	84072	7,6	69239	14,0	100
GB	53227	n.a.	32985	n.a.	100
GR	7257	-7,6	4354	-9,3	100
HR	2809	-7,4	1612	-3,2	100
HU	5555	-9,1	3799	-9,2	100
IE	4417	n.a.	2583	n.a.	99
IS	2020	n.a.	1842	n.a.	100
IT	49142	-0,1	28286	1,1	100
LT	1462	n.a.	839	n.a.	100
LU	975	2,4	706	1,7	100
LV	1170	n.a.	690	n.a.	100
ME	567	-10,4	362	-13,8	100
MK	1235	-10,1	773	-13,5	100
NI	1514	n.a.	841	n.a.	100
NL	16441	4,4	10015	2,7	100
NO	21183	n.a.	16742	n.a.	100
PL ³	21021	0,3	14972	3,2	100
PT	9073	12,8	5157	3,2	97
RO	7955	3,6	5710	4,1	100
RS	6759	0,1	4762	3,6	100
SE	n.a.	n.a.	n.a.	n.a.	100
SI	1789	0,7	1141	6,6	100
SK	3981	-1,7	3101	-1,5	100
ENTSO-E	n.a.	n.a.	n.a.	n.a.	
UA_W	870	-3,4	602	0,2	100

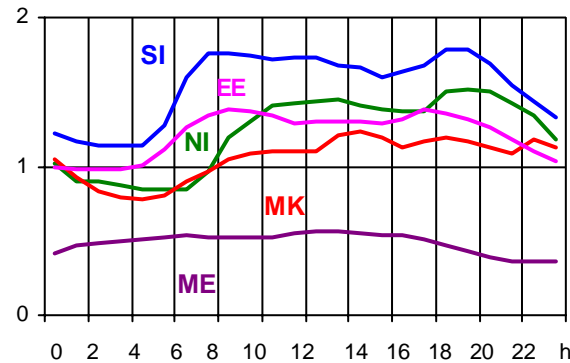
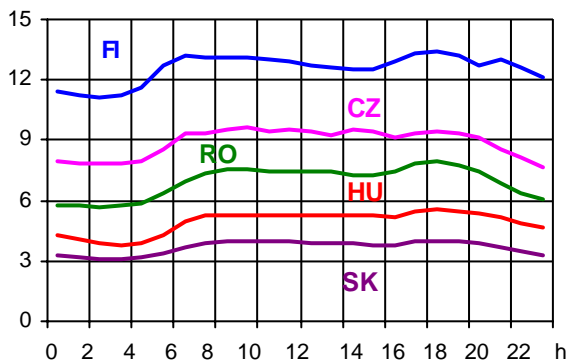
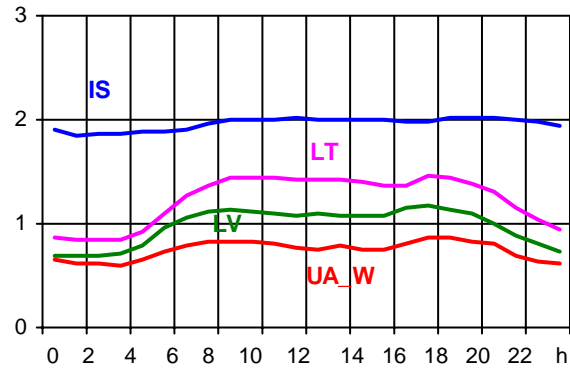
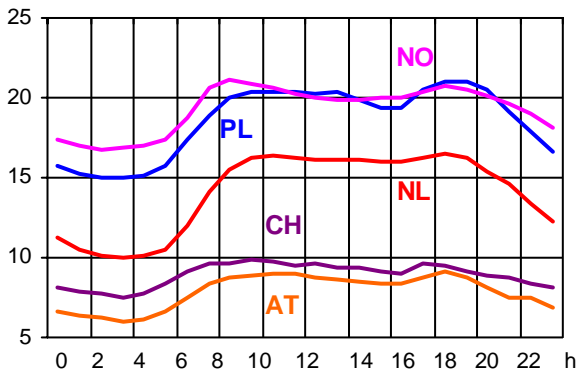
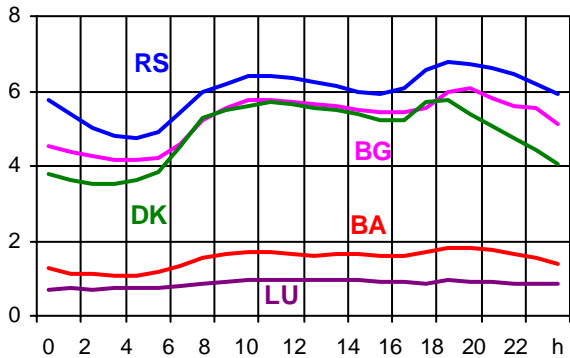
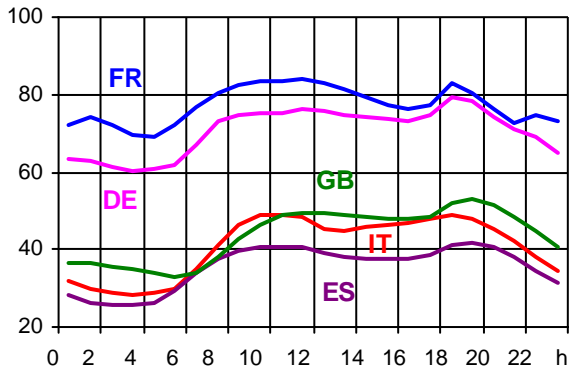
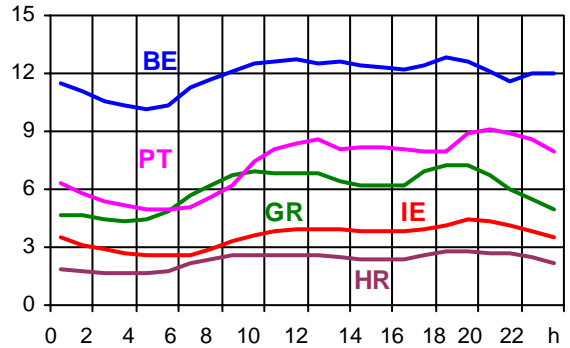
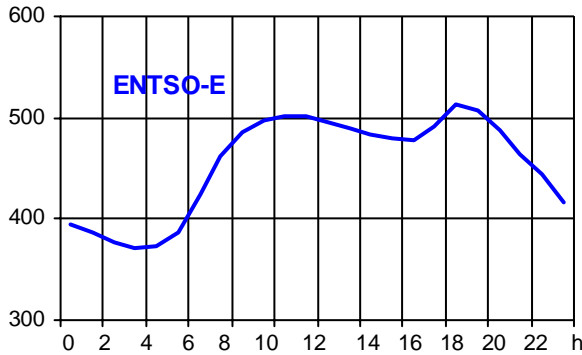
¹ Variation as compared to corresponding month of the previous year

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

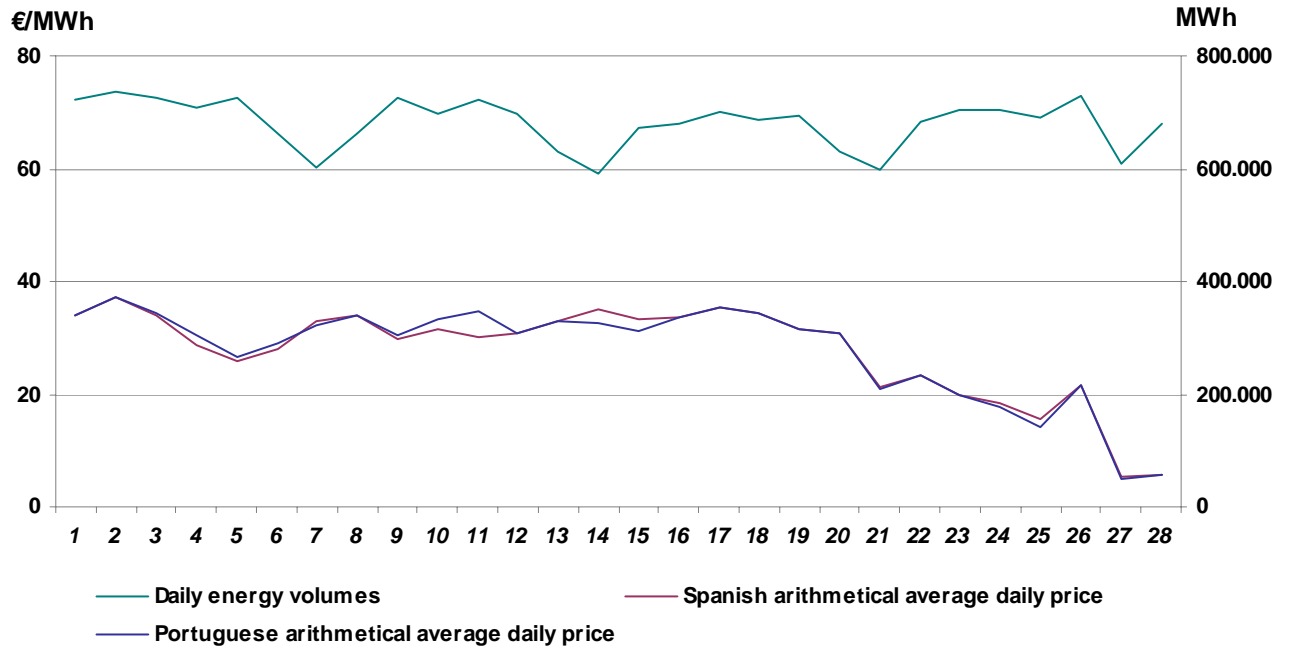
³ Operational data

Consumption hourly load curves on 20.01.2010 CET

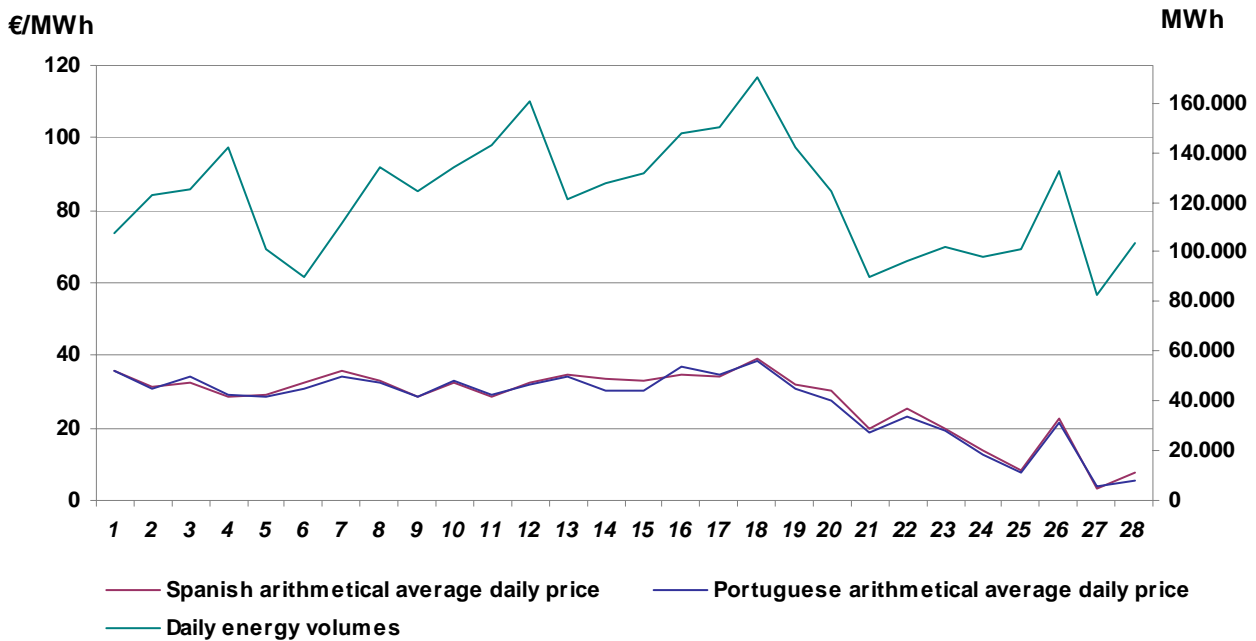
Values in GW



*Iberian Daily Market: prices and energy
February 2010*

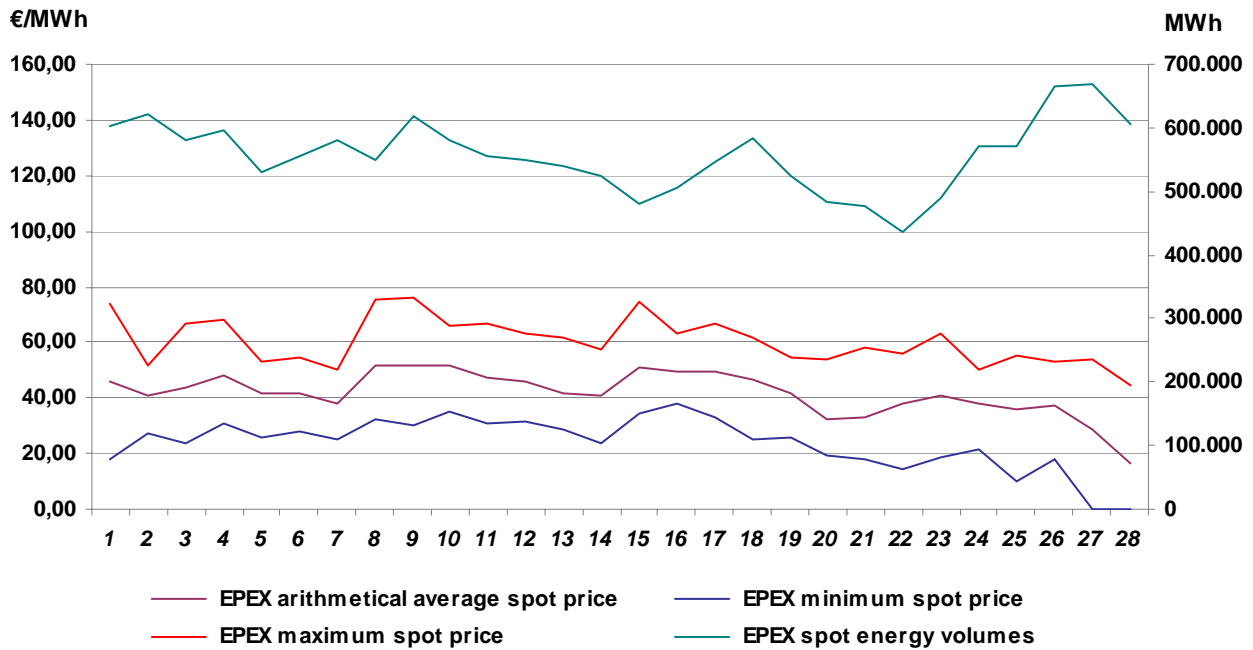


*Iberian Intraday Market: prices and energy
February 2010*

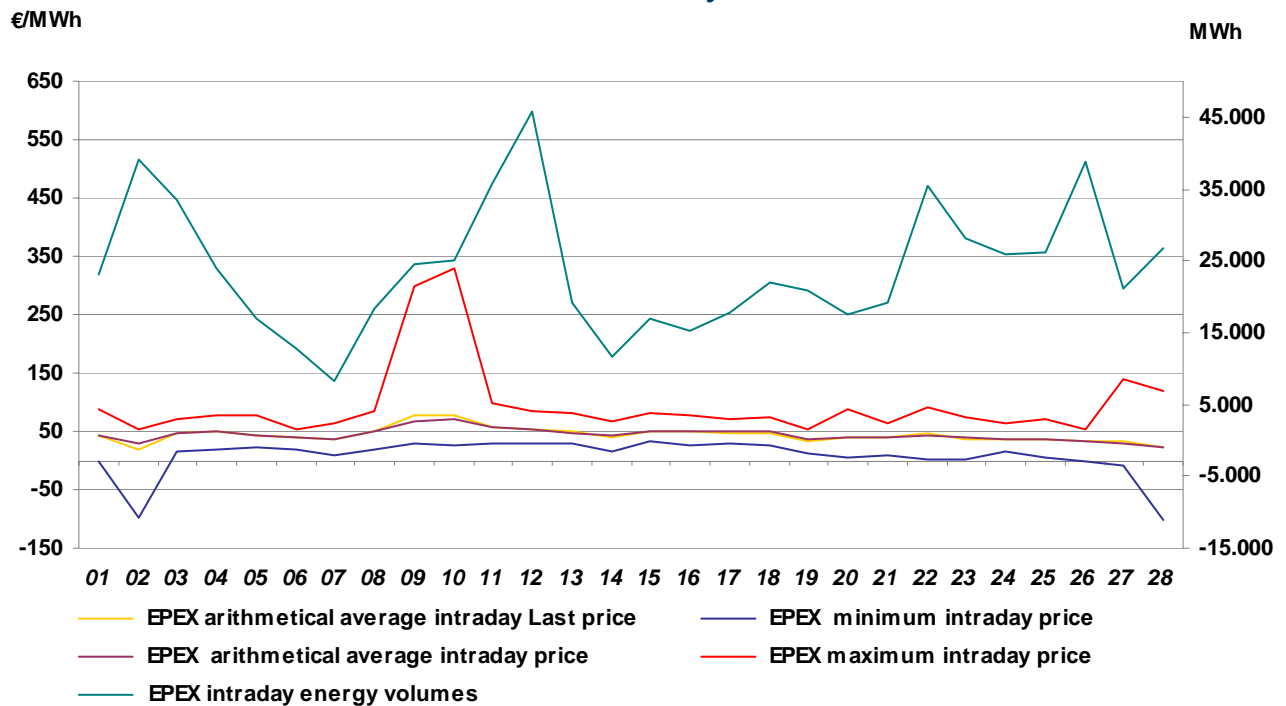


Source of the Iberian Market data: www.omel.es

**EPEX Spot Market: prices and energy
February 2010**

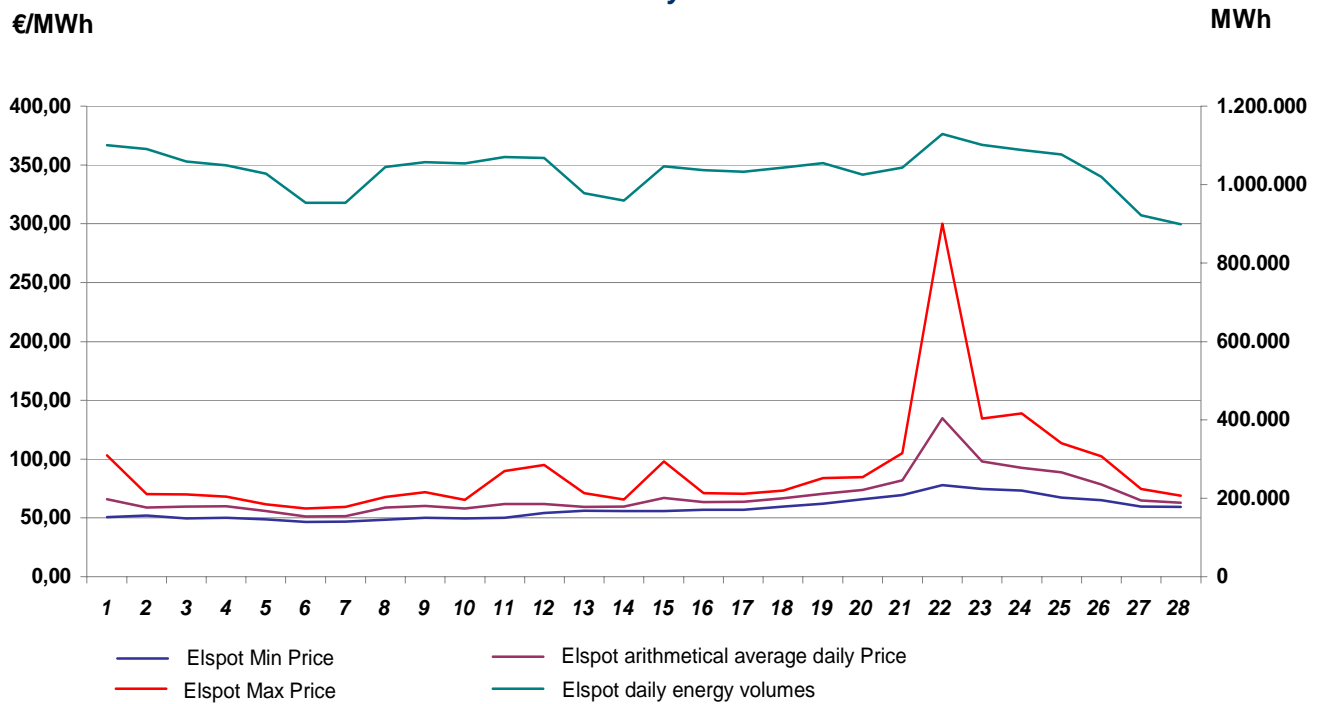


**EPEX Intraday Market: prices and energy
February 2010**



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

*Nord Pool Spot Market: prices and energy
February 2010*



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

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