

Monthly report



August 2011

Monthly provisional values as of 11 January 2012

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	Overview of the detailed physical energy flows	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

General remarks and abbreviations used in the tables

- All values of production and consumption on page 2, 11 and 12 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	
	Therm. nuclear	Fossil fuels	Hydro power	Other renew.	of which wind	of which solar	Non identifiable	Total			monthly [GWh]	var. [%]
AT	0	973	3555	0	0	0	766	5294	465	376	5383	2,7
BA	0	842	200	0	0	0	0	1042	-58	0	984	4,2
BE ²	4314	2304	115	537	144	159	0	7270 ¹	-471	144	6655	-0,8
BG	1421	1841	314	48	48	0	0	3624	-1066	99	2459	9,8
CH	1151	170	3518	115	5	0	0	4954 ¹	230	315	4869	-0,6
CY ³	0	483	0	9	9	0	0	492	0	0	492	-20,6
CZ	1963	3671	213	279	21	259	0	6126 ¹	-1290	81	4755	1,6
DE	8004	25034	1848	6710	2493	2239	0	41596 ¹	982	663	41915	-2,2
DK	0	1053	1	820	653	0	0	1874 ¹	875	0	2749	2,5
EE	0	822	2	84	18	0	0	908	-357	0	551	4,4
ES	5263	11263	1619	4328	2690	1085	27	22500	-200	211	22089	0,5
FI	1701	948	923	681	26	0	50	4303 ¹	1852	0	6155	-0,8
FR	31383	1772	3879	1369	680	208	0	38403	-5327	546	32530	-1,6
GB	5117	17736	562	1140	547	0	0	24555	827	330	25051	2,8
GR	3764	0	419	306	244	41	0	4489 ¹	394	21	4862	-10,7
HR	0	456	293	16	13	0	0	765	753	0	1518	4,5
HU	1453	1426	0	0	0	0	0	2879	587	0	3466	11,6
IE	0	1771	15	190	190	0	13	1989 ¹	39	0	2028	0,2
IS	0	0	1037	346	0	0	0	1383	0	0	1383	2,4
IT	0	17101	4114	2301	504	1355	0	23516	2611	154	25973	4,5
LT	0	168	91	46	32	0	0	305 ¹	596	73	828	1,8
LU	0	41	82	18	4	2	0	141	470	0	611	31,7
LV	0	179	82	15	5	0	0	276	264	0	540	-1,1
ME ⁴	0	120	25	0	0	0	0	145	188	0	333	n.a.
MK	0	334	87	0	0	0	0	421	226	0	647	5,5
NI	0	570	1	47	42	0	1	619	77	0	696	1,5
NL	317	6956	0	604	292	n.a.	0	7877	1210	0	9087	1,3
NO	0	310	10076	41	41	0	0	10427 ¹	-2147	116	8164	3,2
PL ⁵	0	11488	265	230	204	0	0	11983 ¹	-403	52	11528	2,8
PT	0	2523	432	827	581	26	0	3782 ¹	277	57	4002	-5,3
RO	944	2038	1241	114	99	0	0	4337	12	16	4333	0,3
RS	0	2337	657	0	0	0	0	2994	136	64	3066	-3,3
SE	4305	81	5630	872	344	0	0	10888 ¹	-1190	0	9698	0,4
SI	502	380	285	0	0	0	0	1167	-134	0	1033	7,5
SK	971	241	393	108	0	64	71	1784 ¹	130	17	1897	-5,6
ENTSO-E	72573	117432	41974	22201	9929	5438	928	255108 ¹	558	3335	252330	n.a.
UA_W	0	522	16	0	0	0	0	538	-187	0	351	13,2

¹ Including deliveries from industry

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

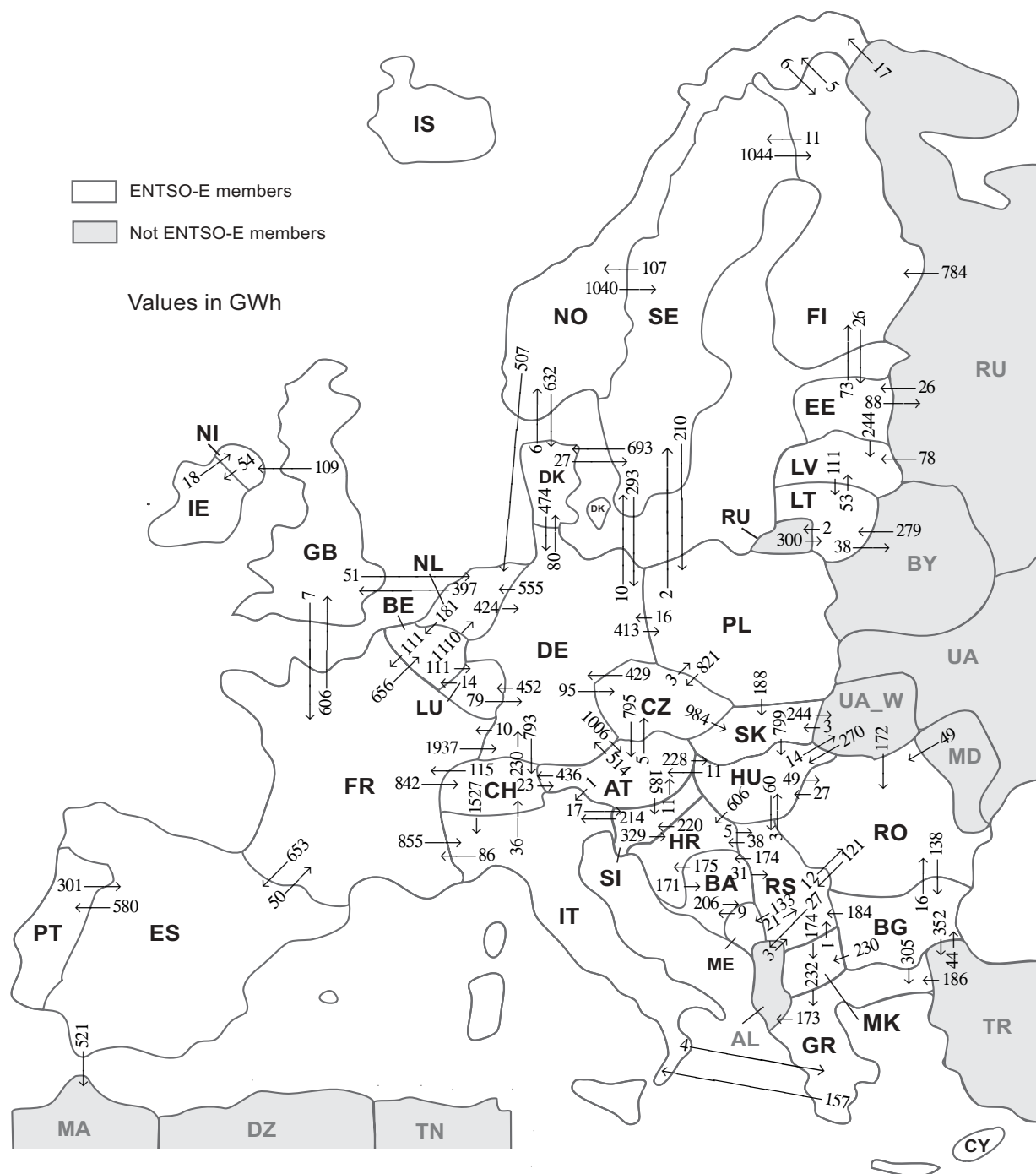
³ The demand was greater than the supply.

⁴ National monthly values as of August 2010

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	97	89	48	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	100	100	100	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	100	100	100	100	100
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: **29629GWh**

Total physical energy flows: **33299GWh**

Not ENTSO-E members:

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

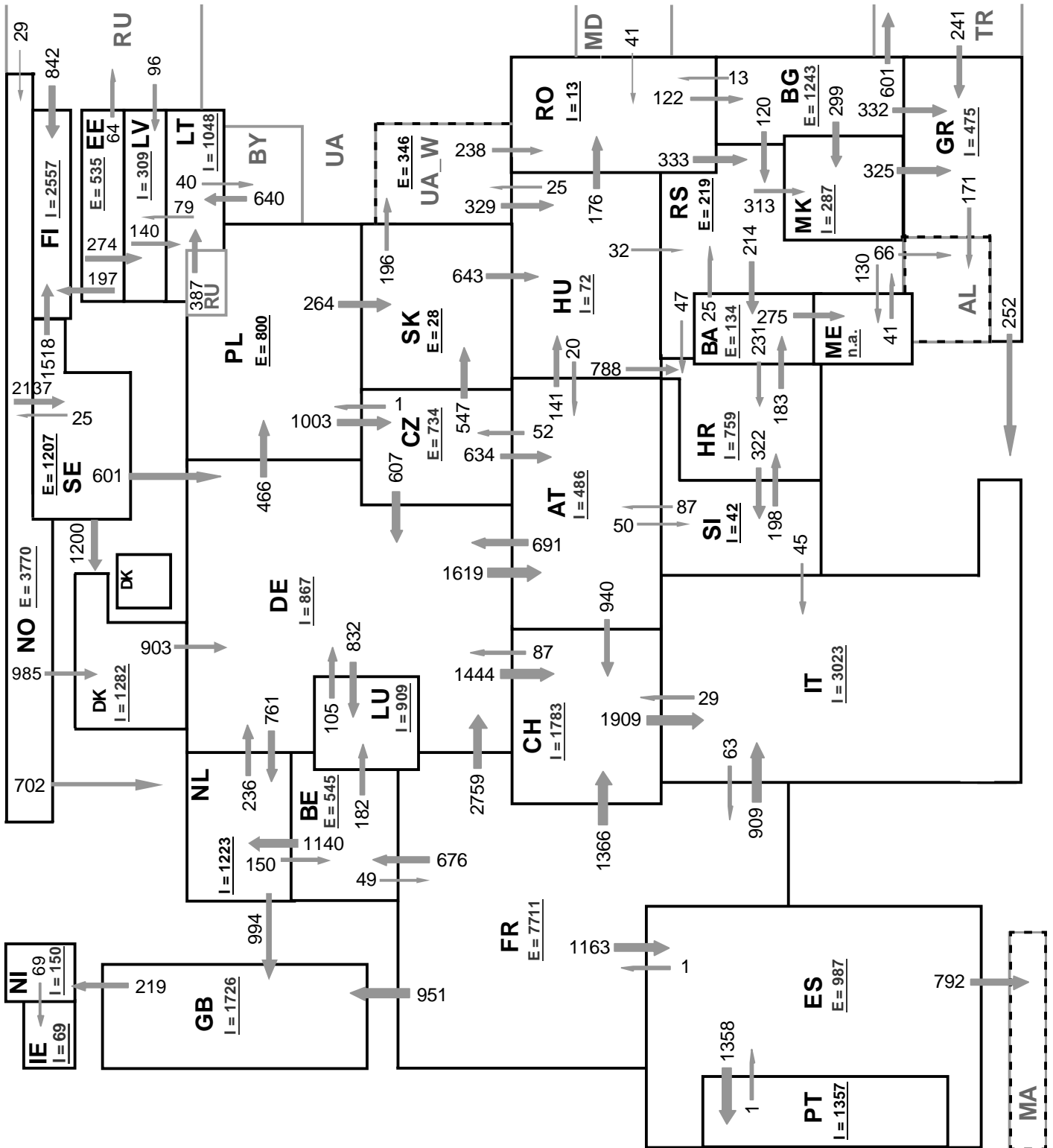
These physical energy flows were measured on the cross-frontier transmission lines (≤ 110 kV) listed in table characteristics of the cross-frontier lines published in the Statistical Yearbook. These values may differ from the official statistics and the exchange balances on page 2.

Outside flows	Inside flows of the countries																											UA_W	Other III ¹							
	AT	BA	BE	BG	CH	CZ	DE	DK	EE	ES	FI	FR	GB	GR	HR	HU	IE	IT	LT	LU	LV	ME	MK	NL	NO	PL	PT			RO	RS	SE	SI	SK		
AT	-	-	-	-	436	5	514	-	-	-	-	-	-	-	-	228	-	1	-	-	-	-	-	-	-	-	-	-	-	-	185	-	-			
BA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	175	-	-	-	-	-	-	206	-	-	-	-	-	-	31	-	-	-				
BE	-	-	-	-	-	-	-	-	-	-	-	111	-	-	-	-	-	-	-	111	-	-	-	-	-	-	-	-	-	-	-	-				
BG	-	-	-	-	-	-	-	-	-	-	-	-	305	-	-	-	-	-	-	-	-	230	-	-	-	-	-	16	184	-	-	-	-			
CH	23	-	-	-	-	-	230	-	-	-	-	115	-	-	-	-	-	1527	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
CZ	795	-	-	-	-	-	429	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	984	-			
DE	1006	-	-	-	793	95	-	80	-	-	-	10	-	-	-	-	-	-	-	452	-	-	-	-	555	413	-	-	-	10	-	-	-			
DK	-	-	-	-	-	-	474	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	27	-	-	-			
EE	-	-	-	-	-	-	-	-	-	-	73	-	-	-	-	-	-	-	-	244	-	-	-	-	-	-	-	-	-	-	-	-	-	88		
ES	-	-	-	-	-	-	-	-	-	-	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	580	-	-	-	-	-	-	521		
FI	-	-	-	-	-	-	-	-	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	11	-	-	-	0		
FR	-	-	656	-	842	-	1937	-	-	653	-	-	606	-	-	-	-	855	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GB	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	109	51	-	-	-	-	-	-	-	-		
GR	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	157	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	173		
HR	-	171	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	220	-	-	-		
HU	11	-	-	-	-	-	-	-	-	-	-	-	-	-	606	-	-	-	-	-	-	-	-	-	-	-	49	60	-	-	0	14	-	-		
IE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
IT	0	-	-	-	36	-	-	-	-	-	-	86	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	-	-		
LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53	-	-	-	-	-	-	-	-	-	-	-	-	-	40	
LU	-	-	14	-	-	-	79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LV	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
ME	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	-	-	-	n.a.		
MK	-	-	-	0	-	-	-	-	-	-	-	-	232	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-		
NL	-	-	-	-	-	-	-	-	-	-	-	0	-	-	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NO	-	-	181	-	-	-	424	-	-	-	-	397	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	0	
PL	-	-	-	-	821	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
PT	-	-	-	-	-	-	-	-	301	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
RO	-	-	-	138	-	-	-	-	-	-	-	-	-	-	-	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
RS	-	174	-	0	-	-	-	-	-	-	-	-	-	-	38	3	-	-	-	-	133	174	-	-	-	-	-	-	12	-	-	-	-	27		
SE	-	-	-	-	-	-	293	693	-	1044	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107	210	-	-	-	-	-	-	-	-	
SI	11	-	-	-	-	-	-	-	-	-	-	-	-	-	329	-	-	214	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SK	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	799	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	244	-
UA_W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-
Other III ¹	-	-	-	44	-	-	-	-	26	0	784	-	-	186	-	-	-	-	579	-	78	17	-	-	-	0	0	-	49	3	-	-	-	-	-	

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

Sum of the monthly energy flows inside and outside of each country in GWh

	flows inside	flows outside		flows inside	flows outside
AT	1846	1369	IT	2754	143
BA	354	412	LT	690	93
BE	851	1332	LU	563	93
BG	182	1087	LV	375	111
CH	2107	1895	ME	n.a.	n.a.
CZ	921	2211	MK	404	233
DE	4396	3414	NI	127	54
DK	1405	507	NL	2223	1002
EE	52	405	NO	135	2185
ES	954	1151	PL	626	1027
FI	1907	42	PT	580	301
FR	379	5549	RO	298	286
GB	1003	167	RS	426	561
GR	727	330	SE	1090	2347
HR	1148	396	SI	422	554
HU	1327	740	SK	1175	1043
IE	54	18	UA_W	258	445



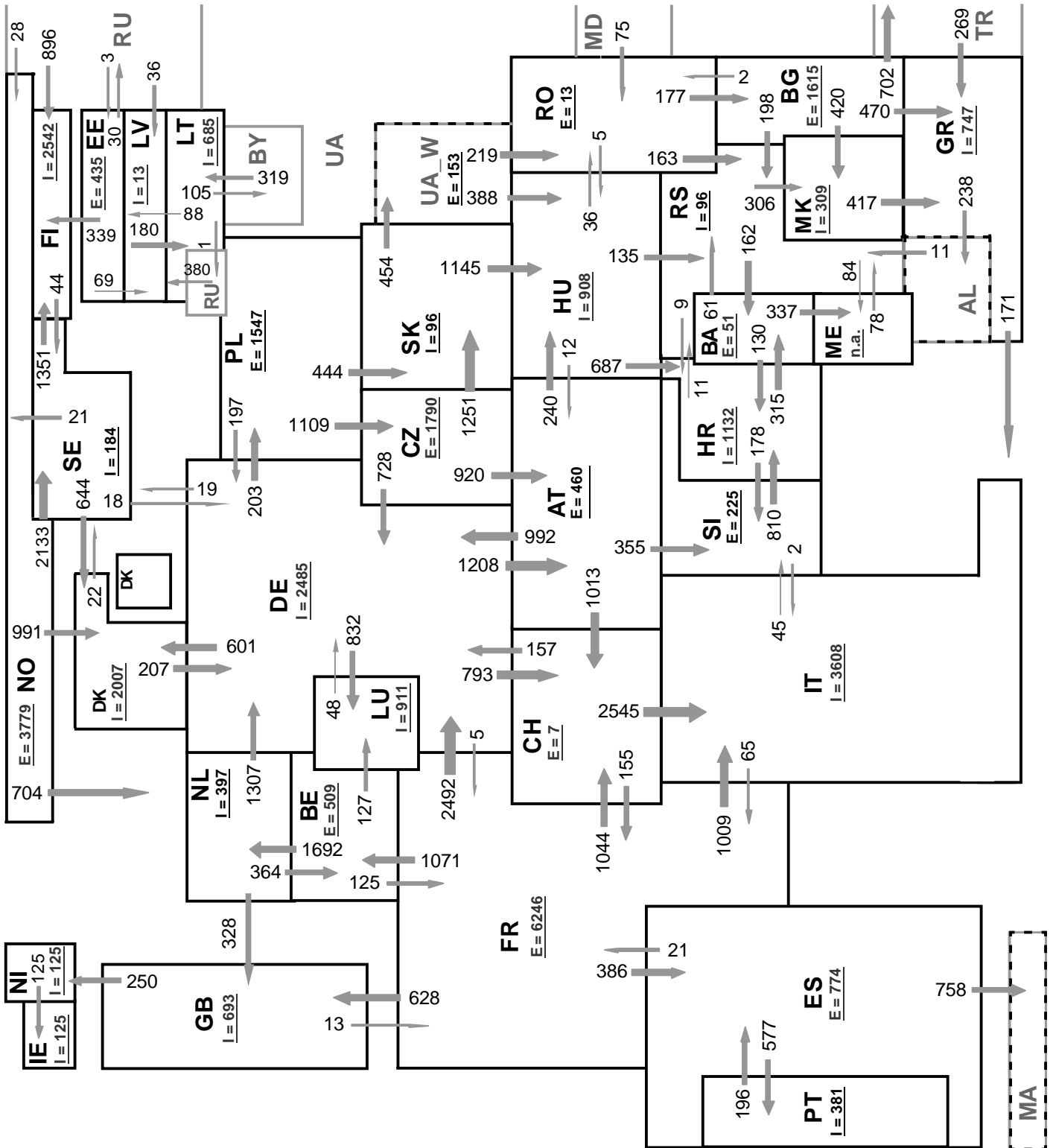
Sum of load flows in MW

ENTSO-E = 38795 MW

Total = 43593 MW

Synchronous operation with ENTSO-E region

I = Import balance
E = Export balance



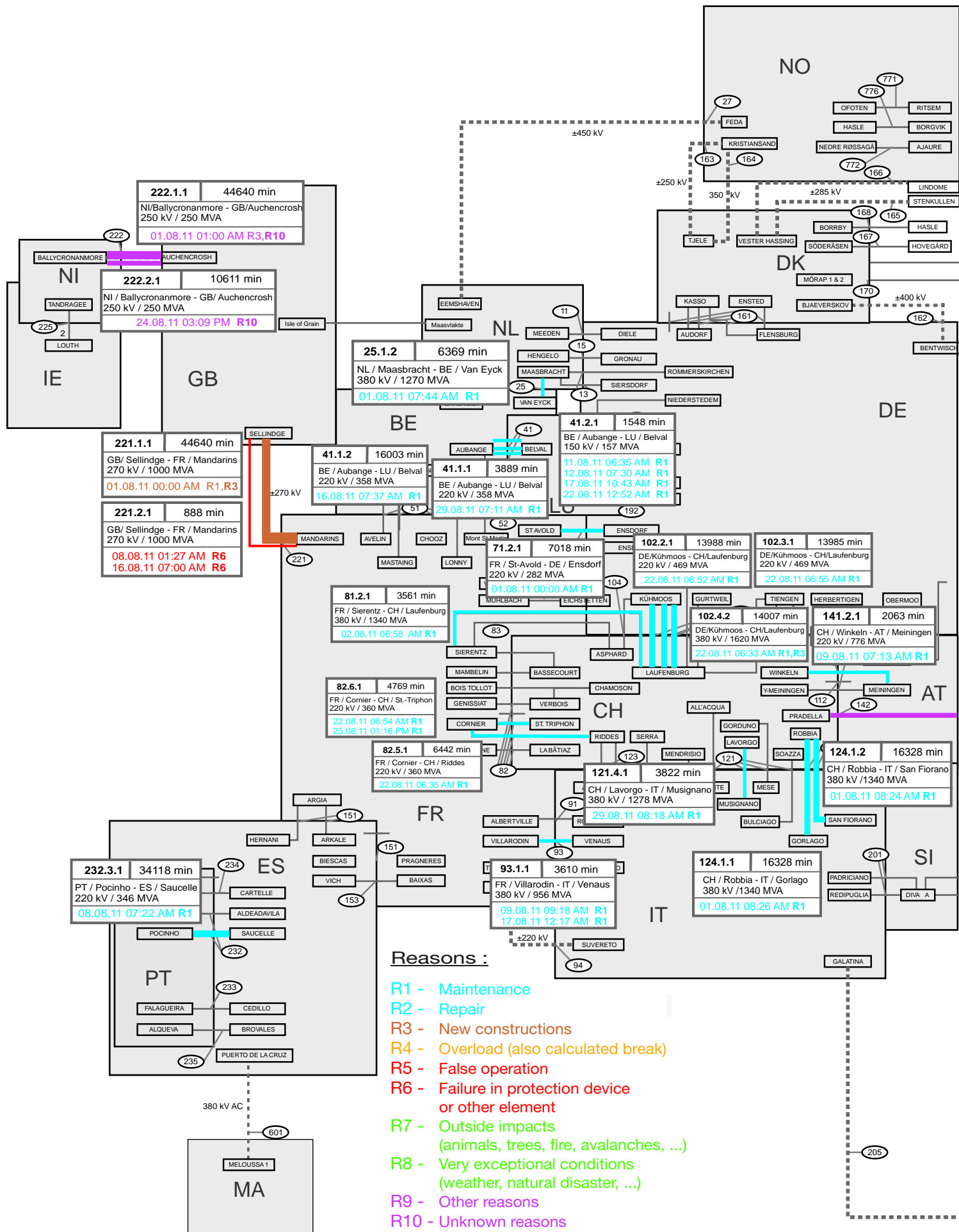
Sum of load flows in MW

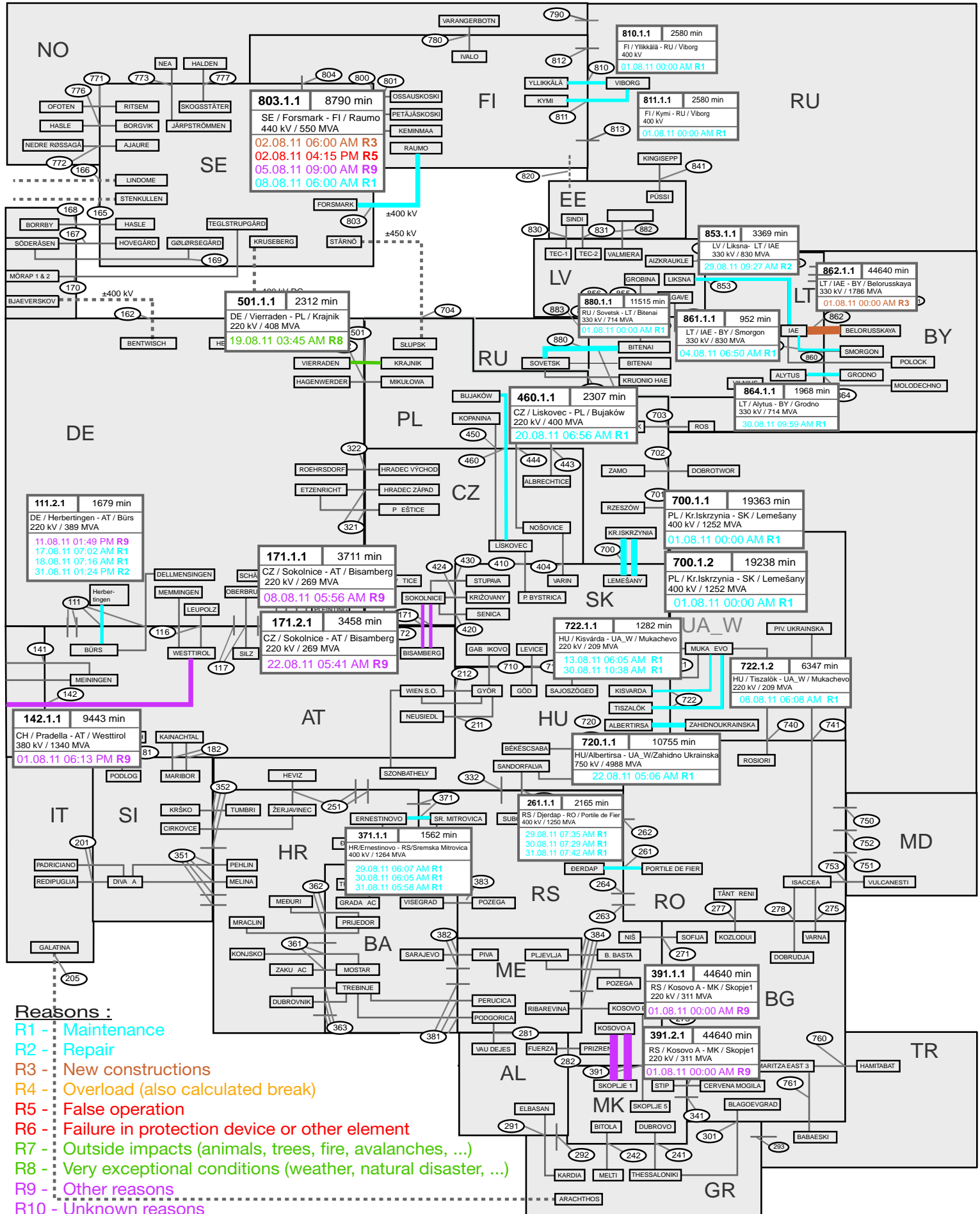
ENTSO-E = 38952 MW

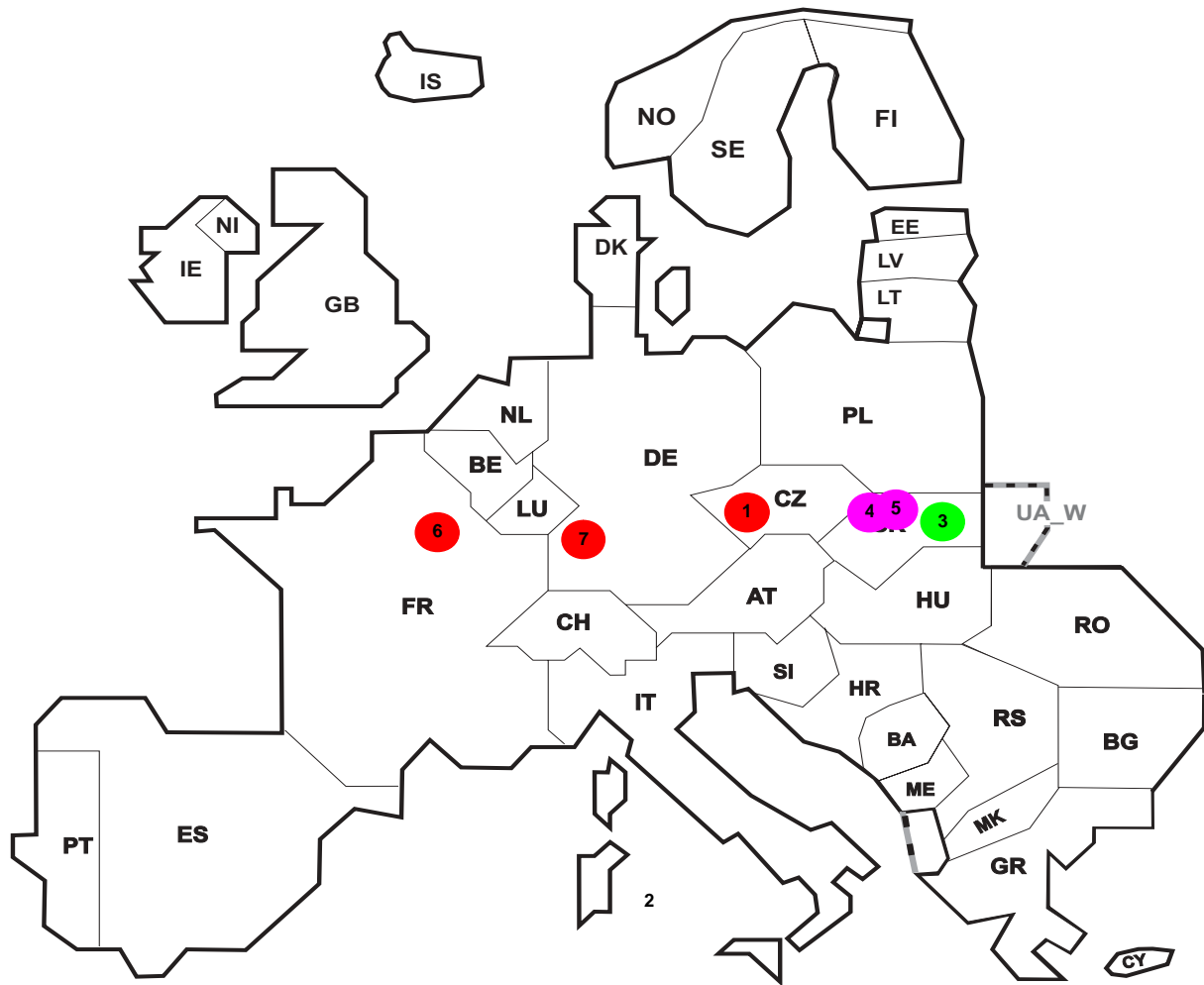
Total = 43933 MW

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	CZ	Krasikov	R6	54	101	15	0,449
2	CZ	Otrokovice	R9	52	102	59	0,434
3	SK	R. Sobota	R7	6	55	6	0,108
4	SK	Sučany	R10	4	38	6	0,074
5	SK	Sučany	R10	1	21	4	0,027
6	FR	Folies	R6	18	105	10	0,019
7	DE	Diefflen	R6	7	0	28	0,006

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 17.08.2011 CET of each country

	Highest load MW	variation % ¹	Lowest load MW	variation % ¹	Load representativity %
AT	7988	0,9	4580	0,9	100
BA	1630	3,2	1028	6,3	100
BE ²	10690	-6,2	7654	-1,0	100
BG	4566	-0,2	3114	2,0	100
CH	8367	-1,0	5047	0,6	100
CY ³	563	-42,7	465	10,3	100
CZ	7714	3,5	5520	4,0	100
DE	51845	-29,9	37938	-23,0	91
DK	4811	-1,6	2768	0,3	100
EE	929	-3,2	568	-2,6	100
ES	36331	5,0	23806	6,6	98
FI	9651	1,3	7435	2,8	100
FR	50795	-1,5	35416	-2,2	100
GB	38990	-4,2	23026	-3,4	100
GR	7673	-13,3	5077	-13,5	100
HR	2541	1,8	1609	12,0	100
HU	4954	2,8	3231	-1,6	100
IE	3426	1,0	1891	2,2	100
IS	1949	3,1	1812	3,4	100
IT	37326	6,9	25013	7,4	100
LT	1360	-0,5	846	1,4	100
LU	763	-1,5	563	3,3	100
LV	874	-4,9	495	-3,1	100
ME ⁴	541	n.a.	331	n.a.	100
MK	1095	1,1	685	6,2	100
NI	1259	0,2	621	-3,7	100
NL	14851	-0,4	9503	1,8	100
NO	12604	1,1	9842	4,2	100
PL ⁵	18502	3,8	12787	1,9	100
PT	6234	-2,2	4180	-3,7	100
RO	6680	-2,4	4740	-5,0	100
RS	4691	-1,5	2738	-2,3	100
SE	15759	-1,6	11355	1,4	100
SI	1689	7,6	1080	-6,7	100
SK	3390	3,4	2492	0,0	100
ENTSO-E	374651	n.a.	260829	n.a.	
UA_W	696	8,8	452	23,5	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.

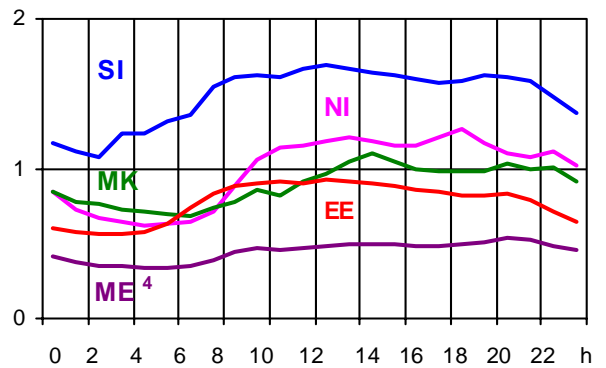
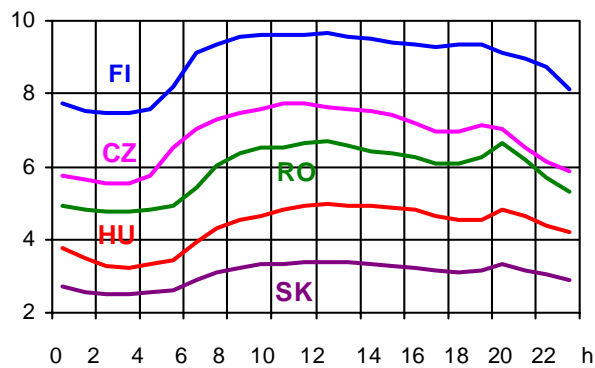
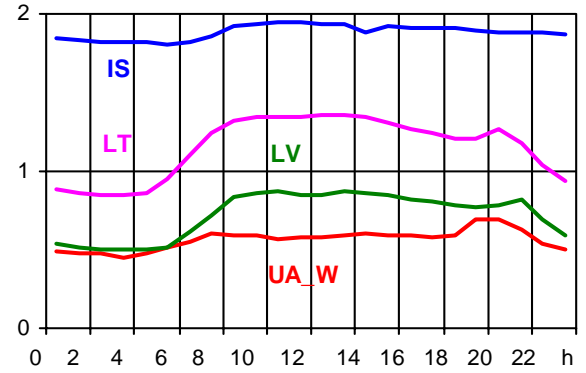
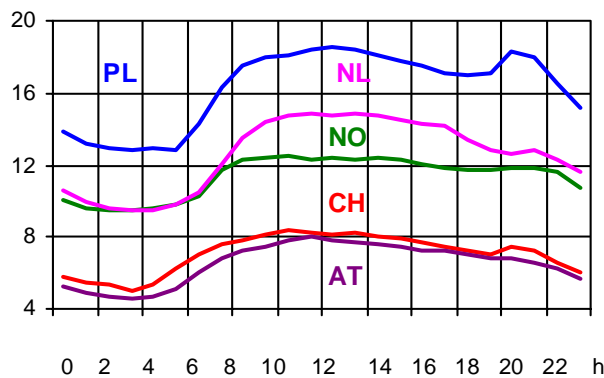
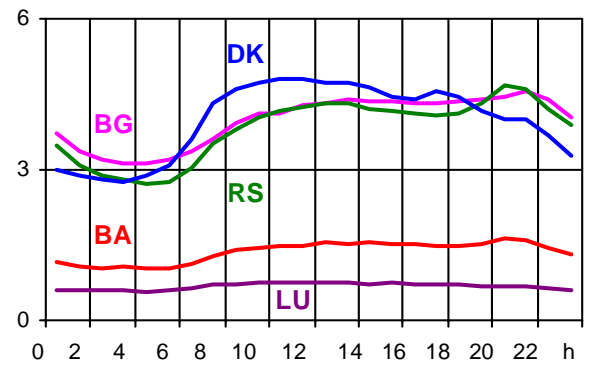
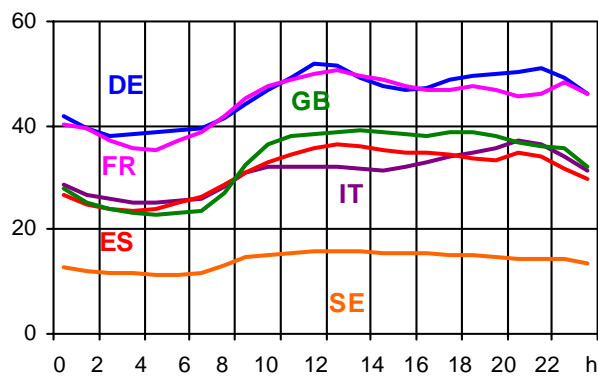
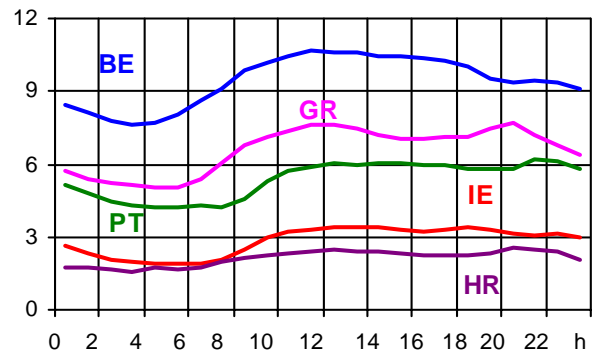
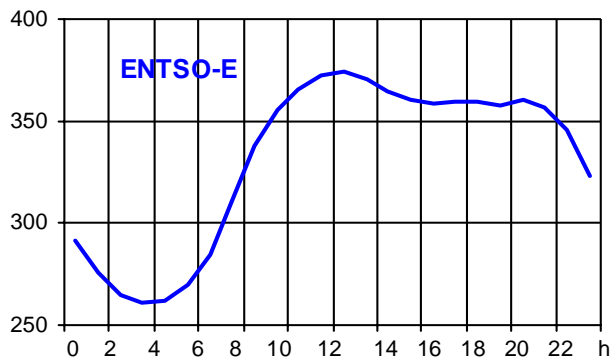
³ Only highest and lowest load value available.

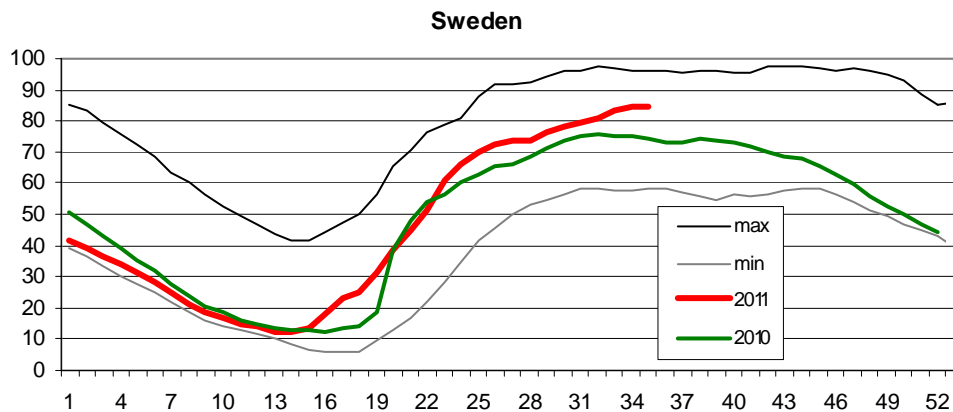
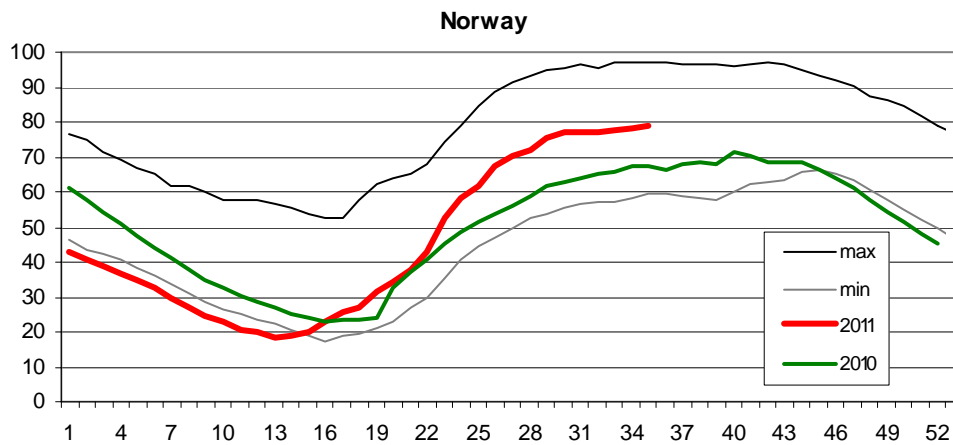
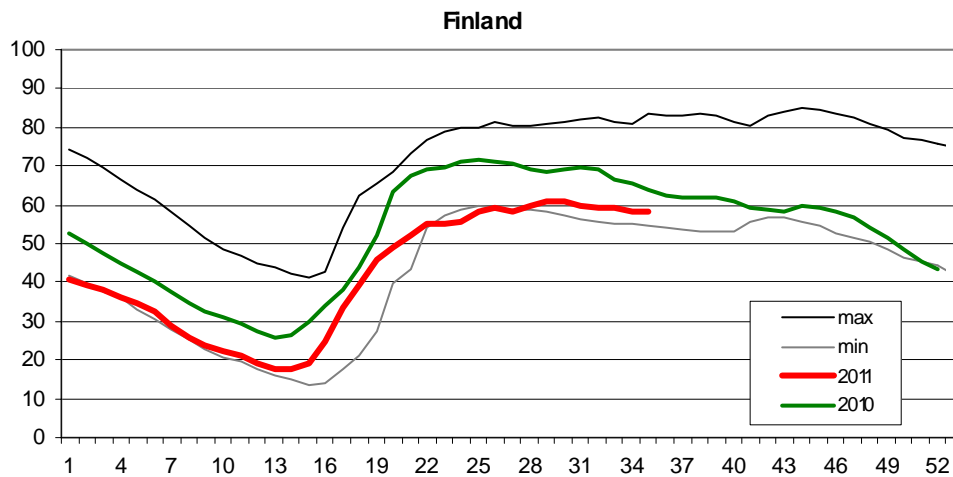
⁴ Monthly load values as of 18 August 2010

⁵ Operational data

Consumption hourly load curves on 17.08.2011 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

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