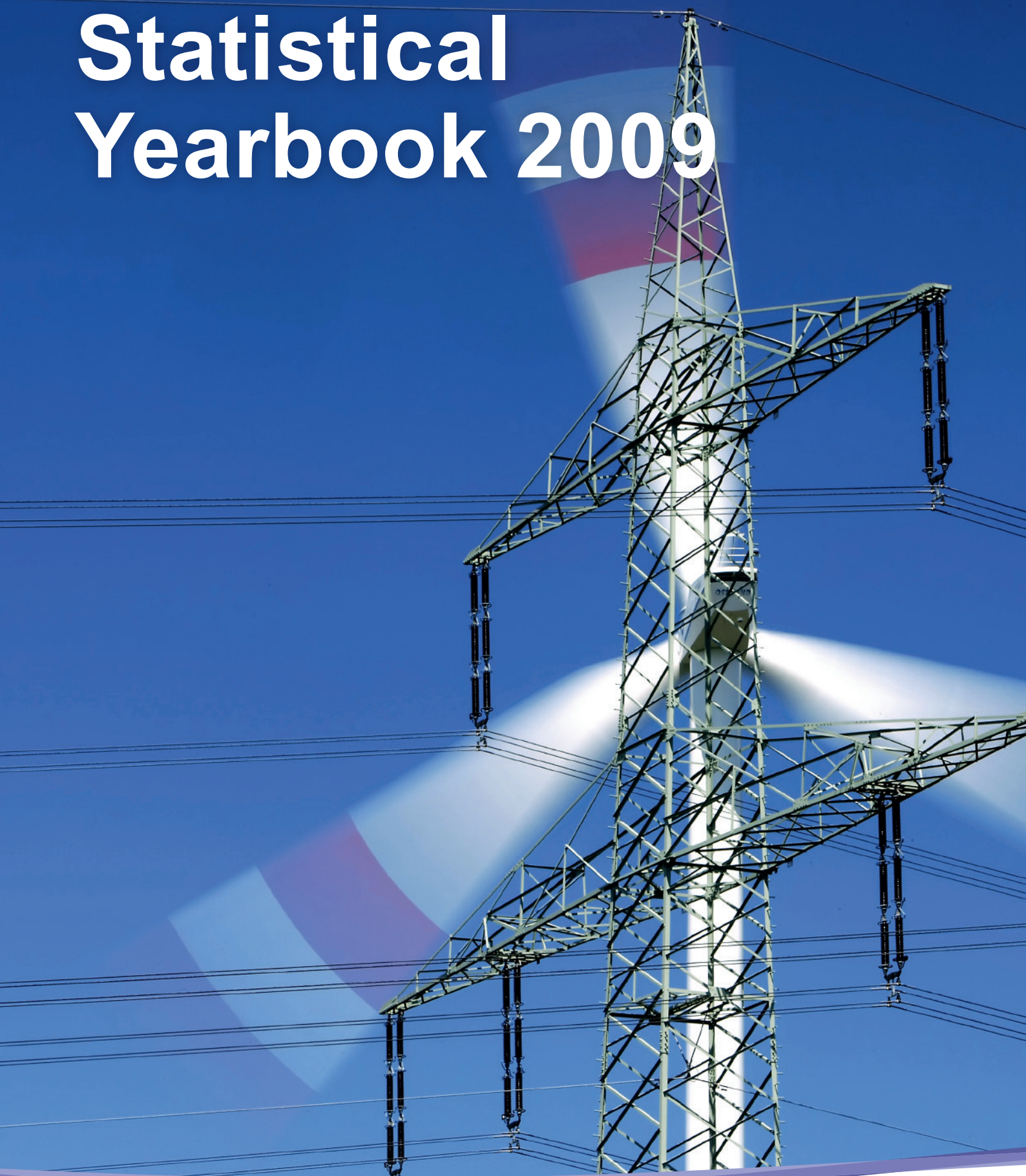


# Statistical Yearbook 2009



European Network of  
Transmission System Operators  
for Electricity





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# Introduction

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## Background on the ENTSO-E Statistical Yearbook 2009

Although the Statistical Yearbook is a report with a long history, originally issued by UCTE, the 2009 edition is the first issue, covering all 42 ENTSO-E members, across 34 countries.

The ENTSO-E Statistical Yearbook brings a wide spectrum of retrospect figures on power systems of member transmission system operators (TSOs), among which production, consumption, cross-border exchanges and network components.

Throughout the years 2009 and 2010, the ENTSO-E Data Expert Group has been working intensively on consolidating the collection of statistical data from all member TSOs. In order to allow for reporting continuity, some extent of ad-hoc data collections had been required throughout 2010.

As a consequence, while the overall quality of data has significantly improved, the detail and amount of information is not yet entirely consistent across all ENTSO-E countries. By trend TSOs from Continental Europe, with a long history of collecting and communicating data have been able to provide more abundant data than TSOs from other regions. The report is therefore split into two main parts: ENTSO-E, on one hand, and Continental Europe, providing more detailed information, on the other hand. The first year for which the report is expected to be fully consolidated is 2010.

Baltic and Nordic regions used to publish their own detailed annual statistical reports in the past. Those were “Annual Report” for BALTSO and “Annual Statistics” for NORDEL. These activities have been stopped and the last reports, which are available on the ENTSO-E website are “Annual Statistics 2008” for NORDEL and “Annual Report 2009” for BALTSO.

Activities related to harmonization of data processes, data definitions and IT tools are ongoing within ENTSO-E working groups.

## What is ENTSO-E?

ENTSO-E is the European Network of Transmission System Operators for Electricity, representing 42 Transmission System Operators (TSOs) from 34 countries. Founded in December 2008, it became fully operational on 1 July 2009 and replaced all predecessor associations: ATSOI, BALTSO, NORDEL, UCTE, ETSO and UKTSOA. With important tasks given to it by Regulation (EC) 714/2009 – most notably the development of ten-year network development plans and of legally binding network codes, ENTSO-E's mission is to promote important aspects of energy policy in the face of significant challenges: Security - it pursues coordinated, reliable and secure operations of the electricity transmission network. Adequacy - it promotes the development of the interconnected European grid and investments for a sustainable power system. Market - it offers a platform for the market by proposing and implementing standardized market integration and transparency frameworks that facilitate competitive and truly integrated continental-scale wholesale and retail markets. Sustainability - it facilitates secure integration of new generation sources, particularly growing amounts of renewable energy and thus the achievement of the EU's greenhouse gases reduction goals.

## Principles of data handling, data correspondents and Data Expert Group

Data Expert Group, Statistical Data Correspondents and the ENTSO-E Secretariat are in charge of statistical data in terms of methodological development, data processing and the production of various reports including this Statistical Yearbook.

Statistical data is regularly collected by data correspondents at member TSOs. The data is stored in the ENTSO-E statistical database, which can be accessed directly through web-based queries or via reports published on the website.

The figures indicated for various countries may differ from some other national statistics published because ENTSO-E statistics only describe that part of the electricity supply system, which concerns interconnected system operation.

Consequently, this data may not represent the entire interconnected system in some countries. A corresponding representativeness factor is provided wherever necessary.

## Statistical Data Correspondents

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The following Statistical Data Correspondents provided the data and can give additional information on the contents and interpretation of the statistics:

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## **I. ENTSO-E 2009**

## **II. ENTSO-E Regional Group**

### **Continental Europe (RG CE)**

## **III. Glossary of terms**





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## Overview ENTSO-E in figures 2009

Regional Group		Continental Europe									
Countries		AT	BA	BE <sup>1</sup>	BG	CH	CZ	DE <sup>3</sup>	DK_W <sup>5</sup>	ES	FR
<b>Net production "All values are calculated to represent 100% of the national values"</b>											
Nuclear power	GWh	0	0	44960	14256	26119	25665	127953	0	50422	389999
Fossil fuels	GWh	20686	8037	35179	20407	2029	46983	330218	16153	147428	54818
Hydro power	GWh	38627	5954	1749	3880	37136	2969	21453	18	28719	61753
Other renewable	GWh	0	0	6393	0	1210	373	68747	6637	43742	12232
- of which wind power	GWh	0	0	980	0	24	289	37812	5128	35956	7779
Non-identifiable	GWh	9495	0	0	0	0	0	0	0	421	0
Total net generation	GWh	68808	13991	88281	38543	66494	75990	548371 <sup>4</sup>	22808	270732	518802

<b>Consumption "All values are calculated to represent 100% of the national values"</b>											
Consumption	GWh	65635	11001	84555	32576	63012 <sup>2</sup>	61598	526865	20617	258881	486393
Variation (compared with 2008)	%	-4,0	-5,0	-6,3	-5,4	-2,2	-5,4	-5,4	-5,0	-4,4	-1,6

<b>Net generation capacity as of 31 December 2009</b>											
<b>"All values are identical with the national values and there representativity"</b>											
NGC Nuclear	MW	0	0	5902	2000	3220	3597	20300	0	7465	63130
NGC Fossil fuels	MW	7389	1957	8590	6523	355	10647	71300	5063	42918	26158
NGC Hydro power	MW	12665	2064	1413	2993	13464	2180	10400	9	19044	25341
NGC Renewable energy sources	MW	1031	0	1758	361	328	658	37500	3123	22627	5606
NGC Other sources	MW	0	0	0	0	212	n.a.	0	23	48	0
NGC Total	MW	21085	4021	17663	11877	17579	17082	139500	8218	92102	120235
Representativity of the values	%	100	100	100	99	100	100	100	100	100	100

Regional Group		Nordic					Baltic			CY
Countries		DK	FI	IS	NO	SE	EE	LT	LV	CY
<b>Net production "All values are calculated to represent 100% of the national values"</b>										
Nuclear power	GWh	0	22601	0	0	50023	0	10025	0	0
Fossil fuels	GWh	25284	24869	0	3555	4822	7032	2188	1605	176
Hydro power	GWh	20	12573	12300	128282	65251	98	1060	3425	0
Other renewable	GWh	9119	8529	4600	1007	13603	405	218	87	0
- of which wind power	GWh	6728	277	0	1007	2523	173	141	49	0
Non-identifiable	GWh	38	636	0	0	43	0	0	260	0
Total net generation	GWh	34461	69207	16900	132843	133742	7535	13492	5376	176

<b>Consumption "All values are calculated to represent 100% of the national values"</b>										
Consumption	GWh	34793	81292	16300	121604	138346	7112	9554	7029	120
Variation (compared with 2008)	%	-4,0	-6,8	-2,2	-5,6	-3,9	-4,4	-9,3	-7,3	2,8

<b>Net generation capacity as of 31 December 2009</b>										
<b>"All values are identical with the national values and there representativity"</b>										
NGC Nuclear	MW	0	2646	0	0	9354	0	1183	0	0
NGC Fossil fuels	MW	9159	8815	120	900	5502	2252	2539	867	1349
NGC Hydro power	MW	9	3074	1882	29617	16203	4	850	1543	0
NGC Renewable energy sources	MW	4151	2054	575	442	4661	167	89	41	0
NGC Other sources	MW	44	85	0	0	0	0	62	0	0
NGC Total	MW	13363	16674	2577	30959	35720	2423	4723	2451	1349
Representativity of the values	%	100	100	100	100	100	100	98	100	100

## Overview ENTSO-E in figures 2009

### Continental Europe

GR	HR	HU <sup>6</sup>	IT	LU	ME <sup>7</sup>	MK	NL <sup>8</sup>	PL <sup>9</sup>	PT	RO	RS	SI	SK	UA_W <sup>10</sup>
0	0	14570	0	0	0	0	4018	0	0	10810	0	5458	13097	0
41617	5190	15817	216196	2809	621	5009	93971	135759	29367	26901	30027	4696	6277	6509
5613	6775	222	52843	824	2053	1243	98	2897	8720	15548	11093	4272	4683	121
2280	52	1904	12179	163	0	0	9910	1259	9468	13	0	0	389	0
1909	43	300	6485	64	0	0	4578	1051	7491	13	0	0	5	0
0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
49510	12024	32513	281218	3796	2674	6252	107997	139915	47555	53272	41120	14426	24446	6630
53492	17507	38026	320268	6195	1244	7796	112898	136816	51404	50649	40854	11337	25436	3964
-5,0	-2,0	-7,9	-5,7	-7,2	-72,9	-9,8	-6,0	-4,2	-1,5	-8,3	4,8	-10,6	-8,0	-4,6
0	0	1822	0	0	0	0	485	0	0	1300	0	700	1820	0
8284	1810	6154	73360	498	210	907	22902	29728	7834	8772	5115	1315	2742	2225
3200	2086	50	21371	1128	660	503	37	2327	4984	5904	2846	879	2478	27
1144	107	549	6716	80	0	0	3031	719	3940	22	0	0	61	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12628	4003	8575	101447	1706	870	1410	26455	32774	16758	15998	7961	2894	7101	2252
100	100	100	100	100	100	100	100	100	97	100	100	100	100	100

GB, IE, NI			Sum of
GB	IE	NI	ENTSO-E
65044	0	0	875021
244411	22118	6970	1639225
6064	1244	10	549468
1092	3149	806	219566
1089	2979	2	124875
0	87	0	10987
316612	26598	7786	3294266
314600	26248	8820	3250873
-6,0	26,2	8,8	n.a.
13920	0	0	138844
58454	5461	2286	448235
4681	512	0	196401
1519	1260	304	104624
0	186	0	660
78574	7419	2590	888759
100	100	100	

<sup>1</sup> The installed NGC fossil fuel power stations burning a mixture of fossil fuels and renewable energy sources totaled 1654 MW. Only 1387 MW of this capacity is attributed to fossil fuel.

<sup>2</sup> Calculations based on the ENTSO-E database differ from the official values from the Swiss Federal Office of Energy.

<sup>3</sup> 100% available as total of 12 monthly values.

<sup>4</sup> Electricity generation and consumption also comprise shares of generation from industry's own power stations and feed-in from private generators (total of 12 monthly values). The part of net electricity generation relevant to primary control power amounts to 521,6 TWh.

<sup>5</sup> DK\_W represents the Western part of Denmark synchronously inter-connected with ENTSO-E (former UCTE) (Jutland and Fünen).

<sup>6</sup> NGC Renewable includes equivalent capacity of biomass co-firing.

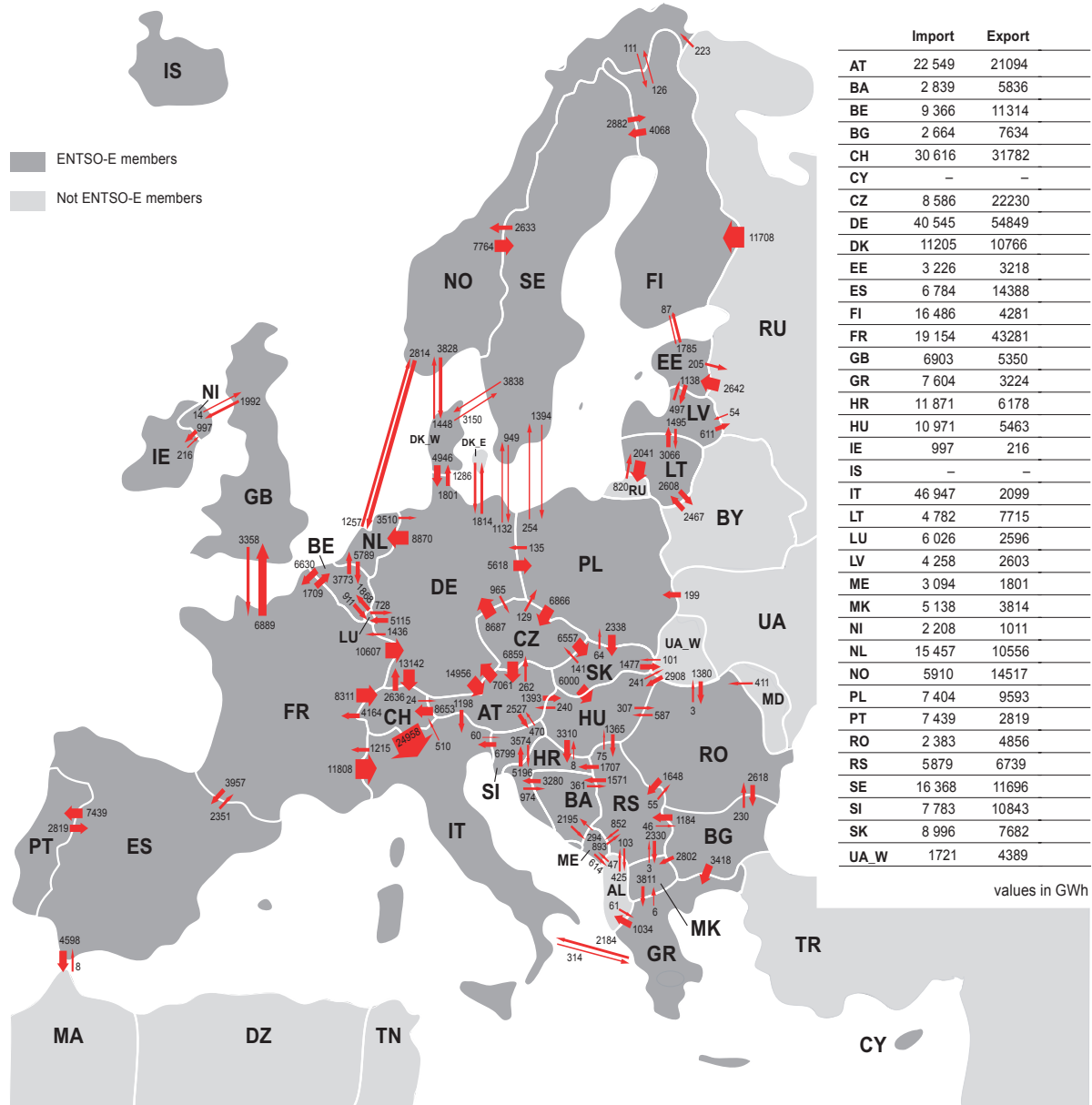
<sup>7</sup> NGC values as of 31 December 2008

<sup>8</sup> Official data from the Statistical Bureau of The Netherlands (CBS).

<sup>9</sup> Operational data; NGC fossil fuel and renewable: Energy from co-firing (biomass combustion in lignite/hard coal power stations) is classified as energy from fossil fuels installations.

<sup>10</sup> UA\_W represents the so-called Burshtyn Island synchronously inter-connected with ENTSO-E (former UCTE).

## Physical energy flows 2009 - graphical overview



Sum of physical energy flows between ENTSO-E countries = 341585 GWh<sup>2</sup>

Total physical energy flows = 375474 GWh<sup>2</sup>

<sup>1</sup> Consolidated yearly values might differ from detailed flow data from the ENTSO-E database due to ex-post consolidation taking into account national statistical resources.

<sup>2</sup> Calculation based on the detailed physical energy flows in the table on page 13.

# Detailed physical energy flows 2009 in GWh

	Importing countries																																				
Exporting countries	AT	BA	BE	BG	CH	CZ	DE	DK	DK_W	EE	ES	FI	FR	GB	GR	HR	HU	IE	IT	LT	LU	LV	ME	MK	N	NL	NO	PL	PT	RO	RS	SE	SI	SK	UA_W	Other¹	
AT	-	-	-	-	8653	262	7061	-	-	-	-	-	-	-	-	-	1393	-	1198	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2527	-	-	
BA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
BE	-	-	-	-	-	-	-	-	-	-	-	-	6630	-	-	-	-	-	-	-	911	-	-	-	-	-	3773	-	-	-	-	-	-	-	-	-	
BG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3418	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
CH	24	-	-	-	-	2636	-	-	-	-	-	-	4164	-	-	-	-	-	24958	-	-	-	-	-	-	-	-	129	-	-	-	-	-	-	6557	-	
CZ	6859	-	-	-	-	8887	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DE	14956	-	-	-	13142	965	-	1801	-	-	-	-	1436	-	-	-	-	-	-	5115	-	-	-	-	-	-	8870	-	5618	-	-	-	1132	-	-	1814	
DK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DK_W	-	-	-	-	-	-	4946	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EE	-	-	-	-	-	-	-	-	-	-	-	1785	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	205	
ES	-	-	-	-	-	-	-	-	-	-	-	-	2351	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4598	
FI	-	-	-	-	-	-	-	-	-	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
FR	-	1709	-	-	8311	-	10607	-	-	-	3957	-	-	6889	-	-	-	-	11608	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GB	-	-	-	-	-	-	-	-	-	-	-	-	3358	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GR	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2184	-	-	-	-	-	-	1992	-	-	-	-	-	-	-	-	-	
HR	-	974	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	5196	-	-	
HU	240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3310	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	307	1365	-	0	241	
IE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
IT	0	-	-	-	510	-	-	-	-	-	-	-	1215	-	314	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	-	-	
LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LU	-	1868	-	-	-	-	728	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LV	-	-	-	-	-	-	-	-	-	497	-	-	-	-	-	-	-	-	-	-	1495	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4649
ME	-	294	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	611	
MK	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	3811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	893	-	-	614	
NI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	-	-	997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	
NL	-	5789	-	-	-	-	3510	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1257	-	-	-	-	-	-	-	-	
NO	-	-	-	-	-	-	-	3828	-	-	-	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
PL	-	-	-	-	-	-	6866	135	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2338	-	0	
PT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RO	-	-	-	2618	-	-	-	-	-	-	-	-	-	-	-	-	587	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	0
RS	-	1571	-	46	-	-	-	-	-	-	-	-	-	-	-	1707	75	-	-	-	-	-	-	-	-	-	-	-	-	-	55	-	-	-	-	103	
SE	-	-	-	-	-	-	949	3838	-	-	-	2882	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SI	470	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3574	-	-	6799	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SK	-	-	-	-	-	141	-	-	-	-	-	-	-	-	-	-	6000	-	-	-	-	-	-	-	-	-	-	64	-	-	-	-	-	-	-	1477	
UA_W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2908	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	101	
Other¹	-	-	-	0	-	-	1286	-	-	2642	8	11708	-	-	61	-	-	-	-	3287	-	54	47	-	-	-	-	223	199	-	411	425	-	-	-	-	

<sup>1</sup> Other: Albania, Belarus, Demark East, Morocco, Republic of Moldavia, Russia, Republic of Turkey, Ukraine

## Annual maximum load in each country 2009

### National annual maximum load in each country <sup>1</sup>

Country	Date	Day	Time	MW	$\Delta$ % <sup>2</sup>
AT <sup>3</sup>	16 December	Wednesday	05:00 p.m.	10821	4,7
BA	05 January	Monday	06:00 p.m.	2033	- 4,0
BE <sup>4</sup>	08 January	Thursday	06:00 p.m.	13933	1,5
BG	13 January	Tuesday	06:00 p.m.	7188	2,2
CH	16 December	Wednesday	12:00 a.m.	10261	4,1
CY <sup>5</sup>	28 July	Tuesday	01:15 p.m.	1103	8,0
CZ	14 January	Wednesday	05:00 p.m.	10266	2,5
DE	02 December	Wednesday	06:00 p.m.	73000	- 4,9
DK	05 January	Monday	06:00 p.m.	6287	- 1,9
EE	18 December	Friday	03:30 p.m.	1513	- 0,8
ES	13 January	Tuesday	08:00 p.m.	44440	3,4
FI	17 December	Thursday	08:00 a.m.	14077	2,3
FR <sup>6</sup>	07 January	Wednesday	07:00 p.m.	92400	9,5
GB	06 January	Tuesday	06:30 p.m.	58561	1,6
GR <sup>7</sup>	24 July	Friday	01:00 p.m.	9762	- 4,5
HR	21 December	Monday	06:00 p.m.	3120	3,7
HU	13 January	Tuesday	05:00 p.m.	5997	0,3
IE	07 January	Wednesday	06:45 p.m.	4890	0,1
IS	23 December	Wednesday	01:00 p.m.	2072	0,5
IT	17 July	Friday	12:00 a.m.	51873	- 5,7
LT	05 January	Monday	05:00 p.m.	1713	7,6
LU	02 December	Wednesday	07:00 p.m.	1037	- 1,6
LV	n.a.	n.a.	n.a.	n.a.	n.a.
ME	16 December	Wednesday	08:00 p.m.	578	n.a.
MK	04 January	Sunday	06:00 p.m.	1512	n.a.
NI	07 January	Wednesday	07:00 p.m.	1643	- 0,7
NL	06 January	Tuesday	05:30 p.m.	17557	- 5,0
NO	18 February	Wednesday	10:00 a.m.	21953	2,0
PL <sup>8</sup>	21 December	Monday	05:00 p.m.	22852	- 2,0
PT	12 January	Monday	07:45 p.m.	9217	2,7
RO	17 December	Thursday	05:00 p.m.	8247	- 4,2
RS <sup>9</sup>	21 December	Monday	06:00 p.m.	7448	- 0,8
SE	n.a.	n.a.	n.a.	n.a.	n.a.
SI	17 December	Thursday	06:00 p.m.	1935	- 3,0
SK	28 January	Wednesday	05:00 p.m.	4131	- 4,9
UA_W	18 December	Friday	05:00 p.m.	1008	- 39,0

<sup>1</sup> The maximum load values of each country are specified in the System Adequacy Retrospect 2009 published on 30 June 2010.

<sup>2</sup> As compared to the last year.

<sup>3</sup> Peak load is not available. Therefore peak load at 3rd Wednesdays was taken.

<sup>4</sup> Although the mean temperature in January, February and December 2009 was below the average decennial temperature (2000-2009), the maximum Belgian peak load measured in January for 2009 remained below the maximum historic peak level measured the 17th of December 2007. The impact of the financial and economic crisis had a significant impact on the loads measured in 2009. The monthly peak load used for the Belgian assessment is the maximum value of the real measurements and estimates of a particular month and not the maximum value of the hourly average values of real measurements and estimates that are entered on the ENTSO-E webpages. Several load-shedding contracts with industrial customers are in force. The estimated contribution for 2009 is 261 MW. These contracts are part of the system services reserve and were in 2009 activated four times, namely 07/01/2009, 17/04/2009, 08/09/2009 and 19/12/2009.

<sup>5</sup> Average temperature is the summer weekly temperature that peak load was occurred.

<sup>6</sup> The demand record of year 2009 was set at 7pm on Wednesday, the 7th of January 2009, with a peak of 92400 MW. Three new historical peaks (90200 MW; 91500 MW; 92400 MW) were successively recorded around 7pm on the 5th, the 6th and the 7th of January 2009. The previous historical record of 88960 MW dated from December 2007.

<sup>7</sup> There is a reduction up to 200 MW to the annual peak load.

<sup>8</sup> Measuring step: 15minutes

<sup>9</sup> Value for peak load is hourly average value in 18th hour. Referent point for observation temperature deviation is average temperature for December for time interval of 20 years.

# ENTSO-E System Adequacy Retrospect 2009, Power Data <sup>1</sup>

Net values at the reference time 11.00 a.m. on the 3<sup>rd</sup> Wednesday of December 2008 and 2009

	17 December 2008 MW	16 December 2009 MW
1. Nuclear Power	126648	126713
2. Fossil Fuels	417624	429177
- of which Lignite sources	60948	56044
- of which Hard coal sources	111307	116649
- of which Gas sources	148157	161727
- of which Oil sources	39308	42888
- of which Mixed Fuels	40253	34573
3. Renewable energy sources (Other than Hydro)	77098	97625
- of which Wind	56398	68329
- of which Solar	8150	13587
- of which Biomass	1383	10440
4. Hydro power capacity (total)	174853	178447
5. Not clearly identifiable energy sources capacity	3548	7270
<b>6. Net Generating Capacity</b>	<b>799771</b>	<b>839233</b>
7. Non-usable capacity	139171	152037
8. Maintenance and Overhauls	17984	27634
9. Outages	18439	19113
10. System Services Reserve	31902	29677
<b>11. Unavailable Capacity (total)</b> (11 = 7+8+9+10)	<b>207496</b>	<b>228461</b>
<b>12. Reliably Available Capacity (12 = 6-11)</b>	<b>592275</b>	<b>610772</b>
<b>13. Load</b>	<b>402027</b>	<b>428097</b>
<b>14. Remaining Capacity (14 = 12-13)</b>	<b>190248</b>	<b>182675</b>
15. Margin Against Monthly Peak Load	36090	25885
<b>16. Remaining Margin (16 = 14-15)</b>	<b>154158</b>	<b>156790</b>
17. Physical Imports	40768	39461
18. Physical Exports	40424	36974
<b>19. Exchanges (19=17-18)</b>	<b>344</b>	<b>2083</b>

<sup>1</sup> All data are provided in the System Adequacy Retrospect Report 2009 ( SAR 2009 ) on the ENTSO-E website on 30 June 2010 ([www.entsoe.eu/Resources/Publication](http://www.entsoe.eu/Resources/Publication))

	AT	BA	BE	BG	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GR	HR	HU	IE	IS
1. Nuclear power	-	-	45,0	14,3	26,1	-	25,7	127,6	-	-	50,4	22,6	390,0	65,0	-	-	14,6	-	-
2. Fossil Fuels	20,8	8,0	35,2	20,4	2,0	5,1	47,0	336,6	25,3	7,1	143,0	24,6	54,8	244,4	41,6	5,2	15,8	22,1	0,0
- of which Lignite	-	8,0	-	-	-	-	36,3	134,2	-	-	-	-	-	-	30,5	-	4,7	2,3	0,0
- of which Hard Coal	3,8	-	3,5	-	-	-	4,9	100,2	16,8	-	21,9	10,6	20,7	98,7	-	1,5	1,0	3,3	-
- of which Gas	12,0	-	26,8	-	-	-	4,2	74,6	8,3	-	-	9,2	24,0	136,4	9,4	2,0	9,6	15,8	0,0
- of which Oil	1,1	-	0,1	-	-	5,1	0,2	11,3	0,2	-	6,4	0,5	7,4	9,4	1,7	1,0	0,5	0,7	0,0
- of which Mixed Fuels	-	-	2,4	-	-	-	1,4	-	-	-	-	4,4	-	-	-	0,7	-	-	-
3. Renewable Energy Sources (other than Hydro)	-	-	6,4	0,3	1,2	-	0,4	72,2	9,1	0,4	41,6	8,4	12,2	1,1	2,3	0,1	1,9	3,2	4,6
- of which Wind	-	-	1,0	0,3	0,0	-	0,3	37,8	6,7	0,2	36,0	0,3	7,8	1,1	1,9	0,1	0,3	3,0	-
- of which Solar	-	-	0,2	-	-	-	0,1	6,2	-	-	5,5	-	0,1	-	0,0	-	-	-	-
- of which Biomass	-	-	5,2	-	-	-	-	28,2	2,4	-	-	8,1	3,6	0,0	0,2	-	1,6	0,2	-
4. Hydro Power	38,7	5,9	1,7	3,9	37,1	-	3,0	24,1	0,02	-	28,7	12,6	61,8	6,1	5,6	6,8	0,2	1,2	12,3
- of which Run of River	25,9	-	0,3	-	-	-	-	17,4	0,02	-	8,6	12,6	30,2	2,4	-	1,8	0,2	0,9	-
- of which Storage Pumped Storage	12,8	5,9	1,4	-	-	-	0,6	6,7	-	-	20,1	-	31,6	3,7	5,6	4,9	-	0,3	-
- of which Renewable Hydro Generation	-	-	-	-	-	-	-	1,2	-	-	17,5	-	26,9	-	0,7	4,5	-	-	12,3
5. Non-Identifiable Energy Sources	9,4	-	-	-	-	-	-	-	0,04	-	0,4	0,6	-	-	-	-	-	0,1	-
<b>6. Total Generation</b>	<b>68,8</b>	<b>14,0</b>	<b>88,3</b>	<b>38,8</b>	<b>66,5</b>	<b>5,1</b>	<b>76,0</b>	<b>560,5</b>	<b>34,5</b>	<b>7,5</b>	<b>264,1</b>	<b>68,7</b>	<b>518,8</b>	<b>316,6</b>	<b>49,5</b>	<b>12,0</b>	<b>32,5</b>	<b>26,6</b>	<b>16,8</b>
7a. Physical imports	19,6	2,9	9,5	2,7	30,6	-	8,6	40,5	11,2	3,2	6,8	15,5	19,4	6,6	7,6	6,5	11,0	0,9	-
7b. Physical exports	18,8	5,9	11,3	7,6	31,8	-	22,2	54,8	10,9	3,2	14,4	3,4	45,1	4,3	3,2	0,8	5,5	0,2	-
<b>7. Exchange</b>	<b>7,8</b>	<b>-3,0</b>	<b>-1,9</b>	<b>-4,9</b>	<b>-1,2</b>	<b>--13,6</b>	<b>-14,3</b>	<b>0,3</b>	<b>0,0</b>	<b>-7,6</b>	<b>12,1</b>	<b>-25,7</b>	<b>1,3</b>	<b>4,4</b>	<b>5,7</b>	<b>5,5</b>	<b>0,7</b>	<b>-</b>	<b>-</b>
8. Pumped Storage	4,0	-	1,9	0,8	2,5	-	0,7	7,3	-	-	3,8	6,7	6,7	-	0,4	-	1,2	0,6	-
<b>9. Consumption</b>	<b>65,7</b>	<b>11,0</b>	<b>84,6</b>	<b>33,0</b>	<b>62,8</b>	<b>5,1</b>	<b>61,6</b>	<b>538,9</b>	<b>34,8</b>	<b>7,5</b>	<b>252,8</b>	<b>80,8</b>	<b>486,4</b>	<b>317,9</b>	<b>53,5</b>	<b>17,5</b>	<b>38,0</b>	<b>26,8</b>	<b>16,8</b>

<sup>1</sup> All data are provided in the System Adequacy Retrospect Report 2009 ( SAR 2009)  
on the ENTSO-E website on 30 June 2010 ([www.entsoe.eu/Resources/Publication](http://www.entsoe.eu/Resources/Publication))



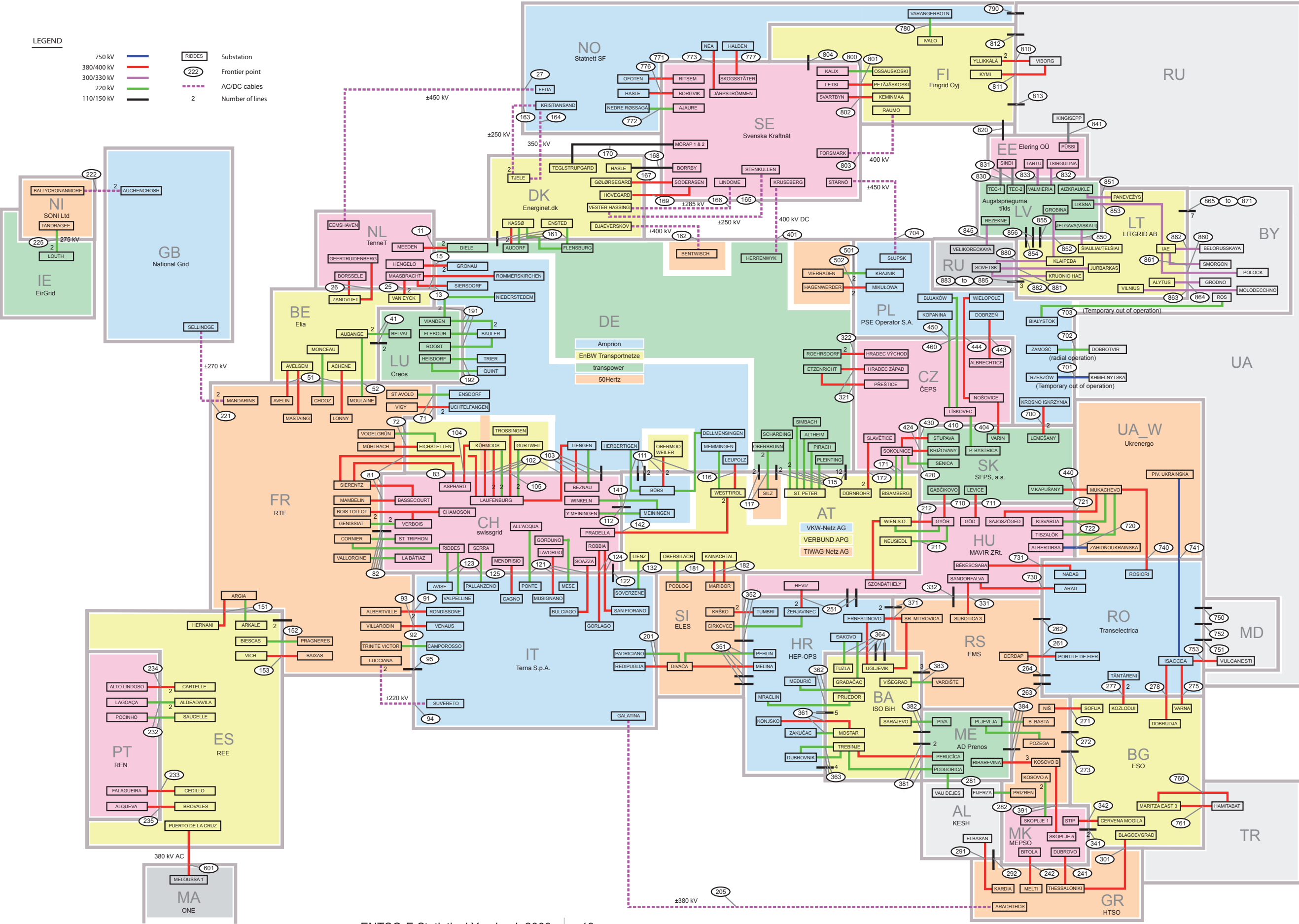
	IT	LT	LU	LV	ME	MK	NI	NL <sup>2</sup>	NO	PL	PT	RO	RS	SE	SI	SK	UA_W
1. Nuclear power	-	10,8	-	-	-	-	-	4,0	-	-	-	10,8	-	n.a	5,5	13,1	-
2. Fossil Fuels	216,2	3,1	2,8	1,6	0,6	5,0	7,0	94,0	3,6	135,8	27,8	26,9	30,0	n.a	4,7	6,3	6,5
- of which Lignite	-	-	-	-	0,6	4,8	-	-	-	47,0	-	16,2	-	-	3,7	1,9	-
- of which Hard Coal	35,9	-	-	-	-	-	1,4	21,7	-	84,9	11,9	3,2	-	-	1,0	1,0	-
- of which Gas	143,1	0,2	2,8	1,6	-	-	5,6	72,3	-	3,9	13,0	0,8	-	-	0,0	1,6	-
- of which Oil	14,3	0,2	-	-	-	-	0,0	-	-	-	2,3	-	-	-	-	-	-
- of which Mixed Fuels	22,9	2,7	-	-	-	-	-	-	-	-	0,5	6,6	-	-	-	-	6,5
3. Renewable Energy Sources (other than Hydro)	12,2	0,3	0,2	0,1	-	-	0,8	9,9	1,0	1,3	9,5	0,0	-	n.a	-	0,4	-
- of which Wind	6,5	0,2	0,1	0,1	-	-	0,8	4,6	1,0	1,1	7,5	0,0	-	-	-	0,0	-
- of which Solar	0,7	-	-	-	-	-	-	0,0	-	-	0,1	-	-	-	-	-	-
- of which Biomass	-	0,1	-	0,1	-	-	-	5,3	-	-	-	-	-	-	-	0,4	-
4. Hydro Power	52,8	1,1	0,8	3,4	1,1	1,2	0,0	0,1	128,3	2,9	8,7	15,6	11,1	n.a	4,3	4,7	-
- of which Run of River	17,5	0,4	0,1	3,4	0,0	-	0,0	0,1	-	1,5	5,4	9,2	9,6	-	4,3	2,4	-
- of which Storage-Pumped-Storage	35,3	0,7	-	-	-	1,2	-	-	128,3	1,3	3,3	6,3	1,5	-	-	2,2	-
- of which Renewable Hydro Generation	-	-	-	-	-	-	-	-	128,3	0,5	-	0,2	-	-	-	1,9	-
5. Non-Identifiable Energy Sources	-	-	-	-	0,3	-	0,0	-	-	-	-	-	-	n.a	-	0,1	-
<b>6. Total Generation</b>	<b>281,2</b>	<b>15,3</b>	<b>3,8</b>	<b>5,4</b>	<b>1,7</b>	<b>6,2</b>	<b>7,8</b>	<b>108,0</b>	<b>132,8</b>	<b>139,9</b>	<b>46,0</b>	<b>53,3</b>	<b>41,1</b>	<b>n.a</b>	<b>14,5</b>	<b>24,4</b>	<b>6,6</b>
7a. Physical imports	47,0	4,8	6,0	4,3	3,1	5,1	2,2	15,5	5,8	7,4	7,4	2,4	5,8	n.a	7,8	9,0	1,7
7b. Physical exports	2,1	7,7	2,6	2,6	1,8	3,8	1,0	10,6	14,9	9,6	2,8	4,8	6,7	n.a	10,8	7,7	4,4
<b>7. Exchange</b>	<b>44,9</b>	<b>-2,9</b>	<b>3,4</b>	<b>1,7</b>	<b>1,3</b>	<b>16,0</b>	<b>1,2</b>	<b>4,9</b>	<b>-9,1</b>	<b>-2,2</b>	<b>4,6</b>	<b>-2,5</b>	<b>-0,9</b>	<b>n.a</b>	<b>-3,1</b>	<b>1,3</b>	<b>-2,7</b>
8. Pumped Storage	5,7	1,0	1,0	-	-	-	-	-	-	0,9	0,9	0,2	0,9	n.a	-	0,3	-
<b>9. Consumption</b>	<b>320,3</b>	<b>9,6</b>	<b>6,2</b>	<b>7,0</b>	<b>3,0</b>	<b>7,6</b>	<b>8,9</b>	<b>112,9</b>	<b>123,7</b>	<b>136,8</b>	<b>49,7</b>	<b>50,6</b>	<b>39,4</b>	<b>n.a</b>	<b>11,4</b>	<b>25,4</b>	<b>4,0</b>

<sup>1</sup> All data are provided in the System Adequacy Retrospect Report 2009 ( SAR 2009)  
on the ENTSO-E website on 30 June 2010 ([www.entsoe.eu/Resources/Publication](http://www.entsoe.eu/Resources/Publication))

<sup>2</sup> Official data from the Statistical Bureau of The Netherlands (CBS) published after 30 June 2010



Simplified diagram of the cross-frontier transmission lines of the synchronous area of ENTSO-E as of 31 December 2009



Observations	
[ 1 ]	Limited by phase shifting transformer in Meeden
[ 2 ]	Limited by phase shifting transformer in Meeden
[ 3 ]	Transformer in Borssele
[ 4 ]	DC submarine cable; Unit is MW instead of MVA
[ 5 ]	Transducer
[ 6 ]	Installed in Verbois
[ 7 ]	Cross-border power station ( 220/130 )
[ 8 ]	Cross-border power station ( 220/130 )
[ 9 ]	Cross-border power station ( 220/130 )
[ 10 ]	Line property EnBW Netz in Germany partielly on the same tower as line Asphard-Kühmoos or Sierentz-Laufenburg; Line owned and operated by EnBW in Germany
[ 11 ]	DC link with three connections
[ 12 ]	Transforming station of Lucciana in Corsica
[ 13 ]	DC link with three connections
[ 14 ]	Transforming station of Lucciana in Corsica
[ 15 ]	Partially on the same tower as the Laufenbourg-Engstlatt line (No. 105.1)
[ 16 ]	On the same tower as line No. 81 Laufenburg-Sierentz 380 kV
[ 17 ]	From Kühmoos to Laufenbourg on the same tower
[ 18 ]	Limited by measuring transducer at Laufenbourg
[ 19 ]	From Kühmoos to Laufenbourg on the same tower
[ 20 ]	On the same tower as line Sierentz-Laufenburg
[ 21 ]	On CH side 220 kV
[ 22 ]	Limited by switching devices in Austria
[ 23 ]	Disconnected till approx. 2010; afterwards line will be dismantled
[ 24 ]	Cable at Braunau
[ 25 ]	Cable at Braunau

Circuit ID (Frontier point.Line.Circuit)	Connection between:						Voltage of the circuit		Conventional trans- mission capacity of the connection (thermal)*		Limited by the transformers or by the substations			
	From substation			to substation			Forecast	Present	Forecast	Present	of circuits		of lines	
	Country	Name	Operated by	Country	Name	Operated by					at	Voltage	Transmission capacity	Voltage
Nr.							kV	kV	MVA	MVA	MVA	kV	MVA	kV
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
11.1.1	DE	Diele	transpower	NL	Meeden	TenneT TSO B.V.		380		1382	1000 [1]			
11.1.2	DE	Diele	transpower	NL	Meeden	TenneT TSO B.V.		380		1382	1000 [2]			
13.1.1	DE	Siersdorf	Amprion	NL	Maasbracht	TenneT TSO B.V.		380		1645				
13.1.2	DE	Rommerskirchen	Amprion	NL	Maasbracht	TenneT TSO B.V.		380		1698				
15.1.1	DE	Gronau	Amprion	NL	Hengelo	TenneT TSO B.V.		380		1790				
15.1.2	DE	Gronau	Amprion	NL	Hengelo	TenneT TSO B.V.		380		1790				
25.1.1	BE	Van Eyck	Elia	NL	Maasbracht	TenneT TSO B.V.		380		1207				
25.1.2	BE	Van Eyck	Elia	NL	Maasbracht	TenneT TSO B.V.		380		1270				
26.1.1	BE	Zandvliet	Elia	NL	Geertruidenberg	TenneT TSO B.V.		380		1476				
26.2.1	BE	Zandvliet	Elia	NL	Borssele	TenneT TSO B.V.		380		1476	450 [3]			
27.1.1	NO	Feda	Statnett	NL	Eemshaven	TenneT TSO B.V.		450		700 [4]				
41.1.1	BE	Aubange	Elia	LU	Belval	SOTEL		220		358				
41.1.2	BE	Aubange	Elia	LU	Belval	SOTEL		220		358				
41.2.1	BE	Aubange	Elia	LU	Belval	SOTEL		150		157	100			
41.3.1	BE	Aubange	Elia	LU	Belval	SOTEL		150		157	100			
51.1.1	BE	Monceau	Elia	FR	Chooz	RTE		220		356				
51.2.1	BE	Avelgem	Elia	FR	Mastainq	RTE		380		1207				
51.2.2	BE	Avelgem	Elia	FR	Avelin	RTE		380		1367				
51.3.1	BE	Achène	Elia	FR	Lonny	RTE		380		1177				
52.1.1	BE	Aubange	Elia	FR	Moulaine	RTE		220		381				
71.1.1	DE	Uchtelfangen	Amprion	FR	Vigy	RTE		380		1790				
71.1.2	DE	Uchtelfangen	Amprion	FR	Vigy	RTE		380		1790				
71.2.1	DE	Ensdorf	Amprion	FR	St-Avoid	RTE		220		261				
72.1.1	DE	Eichstetten	EnBW Transportnetze	FR	Vogelgrün	RTE	380	220		338 [5]		220		
72.1.2	DE	Eichstetten	EnBW Transportnetze	FR	Muhlbach	RTE		380		1684				
81.1.1	CH	Bassecourt	swissgrid	FR	Sierentz	RTE		380		1186				
81.2.1	CH	Laufenburg	swissgrid	FR	Sierentz	RTE		380		1167				
81.3.1	CH	Bassecourt	swissgrid	FR	Mambelin	RTE		380		1046				
82.1.1	CH	Verbois	swissgrid	FR	Bois-Tollot	RTE		380		1211	800	220 [6]		
82.1.2	CH	Chamoson	swissgrid	FR	Bois-Tollot	RTE		380		1409	600			
82.2.1	CH	Verbois	swissgrid	FR	Génissiat	RTE		220		315				11 [7]
82.2.2	CH	Verbois	swissgrid	FR	Génissiat	RTE		220		315				11 [8]
82.3.1	CH	Verbois	EOS	FR	Chancy-Pougny	SFM C-P		130		52	42			11 [9]
82.4.1	CH	La Bâtie	swissgrid	FR	Vallorcine	RTE		220		266				
82.5.1	CH	Riddes	swissgrid	FR	Cornier	RTE		220		275				
82.6.1	CH	St-Triphon	swissgrid	FR	Cornier	RTE		220		275				
83.1.1 [10]	CH/DE	Asphard	swissgrid/EnBW Tr.netze Strom	FR	Sierentz	RTE		380		1167				
91.1.1	FR	Albertville	RTE	IT	Rondissone	Terna		380		1244				
91.1.2	FR	Albertville	RTE	IT	Rondissone	Terna		380		1244				
92.1.1	FR	Trinite Victor	RTE	IT	Camporosso	Terna		220		320				
93.1.1	FR	Villarodin	RTE	IT	Venaus	Terna		380		956				
94.1.1 [11]	FR	Lucciana	EDF	IT	Suvereto	Terna		220 [12]		300			50	
94.1.2 [13]	FR	Lucciana	EDF	IT	Suvereto	Terna		220 [14]		300			50	
95.1.1	FR	Bonifacio	EDF	IT	Santa Teresa	Terna		150		53				
102.1.1 [15]	CH	Laufenburg	swissgrid	DE	Gurtweil	EnBW Transportnetze		220		469		220		
102.1.2	CH	Laufenburg	swissgrid	DE	Gurtweil	EnBW Transportnetze		220		469		220		
102.2.1 [16]	CH	Laufenburg	swissgrid	DE	Kühmoos	EnBW Transportnetze		220		410				
102.3.1 [17]	CH	Laufenburg	swissgrid	DE	Kühmoos	EnBW Transportnetze	380	220		430		220		
102.3.2	CH	Laufenburg	swissgrid	DE	Kühmoos	EnBW Transportnetze		380		1620	1580			
102.4.1	CH	Laufenburg	swissgrid	DE	Kühmoos	EnBW Transportnetze		380		1620	1580			
102.4.2	CH	Laufenburg	swissgrid	DE	Kühmoos	Amprion		380		1620	1265 [18]			
102.5.1 [19]	CH	Laufenburg	swissgrid	DE	Tiengen	Amprion		380		1131				
103.1.1	CH	Beznau	swissgrid	DE	Tiengen	Amprion		380		1158				
103.1.2	CH	Beznau	swissgrid	DE	Tiengen	Amprion	380	220		335				
103.1.3	CH	Klingnau	AWAG	DE	Tiengen	Amprion	380	110		57	40			
104.1.1 [20]	CH	Asphard	swissgrid	DE	Kühmoos	EnBW Transportnetze		380		1340				
105.1.1	CH	Laufenburg	swissgrid	DE	Trossingen	EnBW Transportnetze		380		1580				
107.1.1 [21]	CH	Laufenburg 220kV	swissgrid	DE	Laufenburg 110 kV	ED		110		200				
111.1.1	AT	Bürs	VIW	DE	Obermoosweiler	EnBW Transportnetze		380		1369				
111.1.2	AT	Bürs	VIW	DE	Obermoosweiler	EnBW Transportnetze		380		1369				
111.2.1	AT	Bürs	VIW	DE	Herbertingen	Amprion		220		389				
111.3.1	AT	Bürs	VIW	DE	Dellmensingen	Amprion		220		492	457 [22]			
111.4.1	AT	Rieden	VKW -Netz	DE	Lindau	VKW -Netz		110		84				
111.4.2	AT	Hörbranz	VKW -Netz	DE	Lindau	VKW -Netz		110		84				
111.5.1	AT	Vordenwald	VKW -Netz	DE	Weiler	VKW -Netz		110		127				
112.1.1	AT	Feldkirch	VKW -Netz	LI	Eschen	LKW		110		130				
115.1.1	AT	Braunau	ÖBK	DE	Neuötting	transpower		110		90 [23]			82 [24]	
115.2.1	AT	Braunau	ÖBK	DE	Stammham	transpower		110		102			82 [25]	

\*The conventional transmission capacity of cross-frontier tie-lines is based upon parameters standardised within former UCTE for the calculation of the thermal load capability of each line. For areal lines these are : ambient temperature of + 35°C, wind velocity of 0,56 m/s at a right angle to the line as well as the voltage value stated in column 10 or 11. The conditions relevant to system operation in various countries at various time of the year can strongly differ from those above. Because the real allowable load capability of the line depends on many other factors, such as load flow distribution, upholding of voltage, real ambient conditions, limits of stability, n-1 security, etc., the conventional transmission capacity has no relevance from the point of view of system operation or economics but allows just a comparison of order of magnitude of the various lines. Adding together the conventional transmission capacity of several tie-lines does not allow to infer on the real total transmission capability and leads to irrelevant results from the point of view of system operation.

Observations		
[ 26 ]	Transducer at Ering	
[ 27 ]	Transducer at Ering	
[ 28 ]	Isolator in St. Peter	
[ 29 ]	Isolator in St. Peter	
[ 30 ]	Only temporary line; from December 2005 till summer 2006; afterwards disconnected till approx.2010	
[ 31 ]	No international interconnector	
[ 32 ]	CFT blocker at St. Peter	
[ 33 ]	No international interconnector	
[ 34 ]	CFT blocker at St. Peter	
[ 35 ]	Switching device at Oberbrunn	
[ 36 ]	Switching device at Oberbrunn	
[ 37 ]	Possible to lay a second circuit	
[ 38 ]	New substation with 400kV near spanish frontier: replace Cantegrit	
[ 39 ]	Limited by transformer in Enstedt	
[ 40 ]	Limited by transformer in Kassø	
[ 41 ]	Transducer at Kassø	
[ 42 ]	Transducer at Kassø	
[ 43 ]	DC submarine and underground cable	
[ 44 ]	DC submarine and underground cable	
[ 45 ]	DC submarine and underground cable	
[ 46 ]	Under water cable	
[ 47 ]	Under water cable	
[ 48 ]	Under water cable	

Circuit ID (Frontier point.Line.Circuit)	Connection between:						Voltage of the circuit		Conventional trans- mission capacity of the connection (thermal)*		Limited by the transformers or by the substations			
	From substation			to substation			Forecast	Present	Forecast	Present	of circuits		of lines	
	Country	Name	Operated by	Country	Name	Operated by					at	Voltage	Transmission capacity	Voltage
Nr.							kV	kV	MVA	MVA	MVA	kV	MVA	kV
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
115.4.1	AT	Antiesenhofen	Verbund - APG	DE	Egglfing	transpower		110		102				
115.5.1	AT	St. Peter	Verbund - APG	DE	Altheim	transpower		220		301				
115.6.1	AT	St. Peter	Verbund - APG	DE	Simbach	transpower		220		301				
115.7.1	AT	St. Peter	Verbund - APG	DE	Ering	transpower		110		152	137		114 [26]	
115.7.2	AT	St. Peter	Verbund - APG	DE	Ering	transpower		110		152	137		114 [27]	
115.8.1	AT	St. Peter	Verbund - APG	DE	Egglfing	transpower		110		105				
115.9.1	AT	St. Peter	Verbund - APG	DE	Pirach	transpower		220		518	457 [28]			
115.10.1	AT	St. Peter	Verbund - APG	DE	Pleinting	transpower		220		449	457 [29]			
115.11.1	AT	Ranna	EAGÖÖ-Netz	DE	Passau/Hauzenberg	transpower		110		90 [30]				
115.12.1	AT	Oberaudorf	ÖBK	DE	Rosenheim	transpower		110		93				
115.13.1	AT	Oberaudorf	ÖBK	DE	Kiefersfelden	transpower		110		102				
115.14.1	AT	Antiesenhofen	EAGÖÖ-Netz	DE	Weidach	Thüga		110		130				
115.14.2	AT	Antiesenhofen	EAGÖÖ-Netz	DE	Weidach	Thüga		110		130				
115.15.1	AT	Aigerding	Verbund - APG/EAGÖÖ-Netz	DE	Passau	ÖBK		110		102				
115.16.1 [31]	AT	St. Peter	Verbund - APG	DE	Schärding	ÖBK		220		301			229 [32]	
115.16.2 [33]	AT	St. Peter	Verbund - APG	DE	Schärding	ÖBK		220		301			229 [34]	
115.17.1	AT	Kufstein	TIWAG-Netz	DE	Oberaudorf	transpower		110		90				
115.17.2	AT	Ebbs	TIWAG-Netz	DE	Oberaudorf	transpower		110		127				
116.1.1	AT	Westtirol	Verbund - APG	DE	Leupolz	Amprion		380		1316				
116.2.1	AT	Westtirol	Verbund - APG	DE	Memmingen	Amprion		220		762				
117.1.1	AT	Silz	TIWAG-Netz	DE	Oberbrunn	transpower		220		793	762 [35]			
117.1.2	AT	Silz	TIWAG-Netz	DE	Oberbrunn	transpower		220		793	762 [36]			
117.3.1	AT	Reutte	TIWAG-Netz	DE	Füssen	EW Reutte		110		127				
117.3.2	AT	Reutte	TIWAG-Netz	DE	Füssen	EW Reutte		110		127				
121.1.1	CH	All'Acqua	swissgrid	IT	Ponte	Terna		220		278				
121.2.1	CH	Gorduno	swissgrid	IT	Mese	Terna		220		278				
121.3.1	CH	Soazza	swissgrid	IT	Bulciago	Terna		380		1224				
121.4.1	CH	Lavorgo	swissgrid	IT	Musignano	Terna		380		1204				
122.1.1 [37]	CH	Campocologno	RE	IT	Poschiavino	Terna		150		103	42			
123.1.1	CH	Riddes	swissgrid	IT	Avise	Terna		220		309				
123.2.1	CH	Riddes	swissgrid	IT	Valpelline	Terna		220		309				
123.3.1	CH	Serra	swissgrid	IT	Pallanzeno	Terna		220		278				
124.1.1	CH	Robbia	swissgrid	IT	Gorlago	Terna		380		1340				
124.1.2	CH	Robbia	swissgrid	IT	San Fiorano	Terna		380		1340				
125.1.1	CH	Mendrisio	swissgrid	IT	Cagno	Terna		380		450			200	
132.1.1	AT	Lienz	Verbund - APG	IT	Soverzene	Terna		220		257				
141.1.1	AT	Meiningen	VKW-Netz	CH	Y-Meiningen	swissgrid		220		501				
141.2.1	AT	Meiningen	VKW-Netz	CH	Winkeln	swissgrid		220		776				
142.1.1	AT	Westtirol	Verbund - APG	CH	Pradella	swissgrid		380		1340				
142.2.1	AT	Westtirol	Verbund - APG	CH	Pradella	swissgrid		380		1340				
151.1.1	ES	Hernani	REE	FR	Argia [38]	RTE		380		1136				
151.2.1	ES	Irún	REE	FR	Errondenia	RTE		132		56				
151.3.1	ES	Arkale	REE	FR	Argia	RTE		220		340				
151.4.1	ES	Biescas	REE	FR	Pragnères	RTE		220		237				
152.1.1	ES	Benós	REE	FR	Lac d'Oo	RTE		110		63				
153.1.1	ES	Vic	REE	FR	Baixas	RTE		380		1105				
161.1.1	DE	Flensburg	transpower	DK	Ensted	Energinet.dk		220		332	305 [39]			
161.2.1	DE	Flensburg	transpower	DK	Kassø	Energinet.dk		220		332	305 [40]			
161.3.1	DE	Audorf	transpower	DK	Kassø	Energinet.dk		380		1078	658 [41]			
161.3.2	DE	Audorf	transpower	DK	Kassø	Energinet.dk		380		1078	658 [42]			
161.4.1	DE	Flensburg UW Nord	transpower	DK	Ensted	Energinet.dk		150		150				
162.1.1 [43]	DE	Bentwisch	50Hertz	DK	Bjæverskov	Energinet.dk		400		600				
163.1.1 [44]	NO	Kristiansand	Statnett SF	DK	Tiele	Energinet.dk		250		250				
163.1.2 [45]	NO	Kristiansand	Statnett SF	DK	Tjele	Energinet.dk		250		250				
164.1.1 [46]	NO	Kristiansand	Statnett SF	DK	Tiele	Energinet.dk		350		350				
165.1.1 [47]	SE	Stenkullen	Svenska Kraftnät	DK	Vester Hassing	Energinet.dk				125				
166.1.1 [48]	SE	Lindome	Svenska Kraftnät	DK	Vester Hassing	Energinet.dk				360				
167.1.1	SE	Söderåsen	Svenska Kraftnät	DK	Gørløsegård	Energinet.dk				125				
168.1.1	SE	Borby	Svenska Kraftnät	DK	Bornholm	Energinet.dk		60		360				
169.1.1	SE	Söderåsen	Svenska Kraftnät	DK	Hovegård	Energinet.dk		400						
170.1.1	SE	Mörarp 1and 2	Svenska Kraftnät	DK	Teglstrupgård	Energinet.dk		130						
171.1.1	AT	Bisamberg	Verbund - APG	CZ	Sokolnice	CEPS		220		251				
171.2.1	AT	Bisamberg	Verbund - APG	CZ	Sokolnice	CEPS		220		251				
172.1.1	AT	Dürnrohr	Verbund - APG	CZ	Slavetice	CEPS		380		1481				
172.1.2	AT	Dürnrohr	Verbund - APG	CZ	Slavetice	CEPS		380		1481				
181.1.1	AT	Obersielach	Verbund - APG	SI	Podlog	ELES		220		351				
182.1.1	AT	Kainachtal	Verbund - APG	SI	Maribor	ELES		380		1514				
182.2.1	AT	Kainachtal	Verbund - APG	SI	Maribor	ELES		380		1514	450			

\*The conventional transmission capacity of cross-frontier tie-lines is based upon parameters standardised within former UCTE for the calculation of the thermal load capability of each line. For arial lines these are : ambient temperature of + 35°C, wind velocity of 0,56 m/s at a right angle to the line as well as the voltage value stated in column 10 or 11. The conditions relevant to system operation in various countries at various time of the year can strongly differ from those above. Because the real allowable load capability of the line depends on many other factors, such as load flow distribution, upholding of voltage, real ambient conditions, limits of stability, n-1 security, etc., the conventional transmission capacity has no relevance from the point of view of system operation or economics but allows just a comparison of order of magnitude of the various lines. Adding together the conventional transmission capacity of several tie-lines does not allow to infer on the real total transmission capability and leads to irrelevant results from the point of view of system operation.

Observations	
[ 49 ]	Generator line in radial operation - interconnected operation impossible
[ 50 ]	Installed at Vianden
[ 51 ]	Generator line in radial operation - interconnected operation impossible
[ 52 ]	Installed at Vianden
[ 53 ]	Generator line in radial operation - interconnected operation impossible
[ 54 ]	Installed at Vianden
[ 55 ]	The 400kV DC link between GR-IT is composed of an overhead line and a submarine cable
[ 56 ]	DC submarine cable
[ 57 ]	Unit is MW instead of MVA
[ 58 ]	DC submarine cable
[ 59 ]	Unit is MW instead of MVA
[ 60 ]	In May 2007 out of operation 150 kV line Bitola1-Amyndeo; from June 2007 the new 400 kV line Bitola2-Meliti in operation
[ 61 ]	Limited by the connected network
[ 62 ]	Nominal voltage in Croatia
[ 63 ]	Limited by the connected network
[ 64 ]	Nominal voltage in Croatia
[ 65 ]	Built for 750 kV
[ 66 ]	4500 MVA at 750 kV
[ 67 ]	In the near future this line will be decommissioned.
[ 68 ]	Limited by the Albanian network
[ 69 ]	Capacity of current transformers at Bistrica
[ 70 ]	Disconnected in Serbia



Circuit ID	Connection between:						Voltage of the circuit		Conventional trans- mission capacity of the connection (thermal)*		Limited by the transformers or by the substations			
	From substation			to substation							of circuits		of lines	
	(Frontier point.Line.Circuit)	Country	Name	Operated by	Country	Name	Operated by	Forecast	Present	Forecast	Present	at	Voltage	Transmission capacity
Nr.							kV	kV	MVA	MVA	MVA	kV	MVA	kV
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
191.1.1	DE	Niederstedem	Amprion	LU	Vianden	SEO		220		490	460 [49,50]			
191.1.2	DE	Niederstedem	Amprion	LU	Vianden	SEO		220		490	230			
191.2.1	DE	Bauler	Amprion	LU	Vianden	SEO		220		730	345 [51,52]			
191.2.2	DE	Bauler	Amprion	LU	Vianden	SEO		220		730	230 [53,54]			
191.3.1	DE	Bauler	Amprion	LU	Flebour	Creos Luxembourg		220		490			260	
191.4.1	DE	Bauler	Amprion	LU	Roost	Creos Luxembourg		220		490			260	
192.1.1	DE	Trier	Amprion	LU	Heisdorf	Creos Luxembourg		220		490				
192.2.1	DE	Quint	Amprion	LU	Heisdorf	Creos Luxembourg		220		490				
201.1.1	IT	Redipuglia	Terna	SI	Divča	ELES		380		1619				
201.2.1	IT	Padriciano	Terna	SI	Divča	ELES		220		305				
205.1.1 [55]	IT	Galatina	Terna	GR	Arachthos	HTSO		380		500				
211.1.1	AT	Wien Süd-Ost	Verbund - APG	HU	Győr	MAVIR		220		209				
211.1.2	AT	Neusiedl	Verbund - APG	HU	Győr	MAVIR		220		209				
212.1.1	AT	Wien Süd-Ost	Verbund - APG	HU	Győr	MAVIR		380		1514				
221.1.1	FR	Mandarins	RTE	GB	Sellindge	National Grid		270 [56]		1000 [57]				
221.1.1	FR	Mandarins	RTE	GB	Sellindge	National Grid		270 [58]		1000 [59]				
222.2.1	NI	Ballycronanmore	SONI Ltd	GB	Auchencrosh	National Grid		250		250				
222.2.1	NI	Ballycronanmore	SONI Ltd	GB	Auchencrosh	National Grid		250		250				
225.2.1	NI	Tandragee	SONI Ltd	IE	Louth	EirGrid		275						
225.2.1	NI	Tandragee	SONI Ltd	IE	Louth	EirGrid		275						
231.1.1	ES	Las Conchas	REE	PT	Lindoso	REN		132		90				
232.1.1	ES	Aldeadávila	REE	PT	Lagoaça 3	REN		220		374				
232.2.1	ES	Aldeadávila	REE	PT	Lagoaça 2	REN		220		374				
232.3.1	ES	Sauçelle	REE	PT	Pocinho	REN		220		346				
233.1.1	ES	Cedillo	REE	PT	Falagueira	REN		380		1300				
234.1.1	ES	Cartelle	REE	PT	Alto Lindoso	REN		380		1330				
234.1.2	ES	Cartelle	REE	PT	Alto Lindoso	REN		380		1330				
235.1.1	ES	Brovales	REE	PT	Alqueva	REN		400		1280				
241.1.1	MK	Dubrovo	MEPSO	GR	Thessaloniki	HTSO		400		1300				
242.1.1 [60]	MK	Bitola	MEPSO	GR	Meliti	HTSO		400		1300				
251.1.1	HU	Lenti	MAVIR	HR	Nedeljanec	HEP-OPS		120		79	50 [61]	110 [62]		
251.2.1	HU	Siklos	MAVIR	HR	Donji Miholjac	HEP-OPS		120		114	50 [63]	110 [64]		
251.3.1	HU	Hévíz	MAVIR	HR	Zerjavinec	HEP-OPS		400		1246				
251.3.2	HU	Hévíz	MAVIR	HR	Zerjavinec	HEP-OPS		400		1246				
261.1.1	RS	Djerdap	EMS	RO	Portile de Fier	Transelectrica		400		1135			1107	
262.1.1	RS	Kikinda 1	EMS	RO	Jimbolia	Transelectrica		110		65			57	
263.1.1	RS	Kusijak	EMS	RO	Ostrovu Mare	Transelectrica		110		90				
264.1.1	RS	Šip	EMS	RO	Gura Vail	Transelectrica		110		87			19	
271.1.1	BG	Sofia Zapad	ESO	RS	Niš	EMS		380		1309				
272.1.1	BG	Breznik	ESO	RS	HE Vrla 1	EMS		110		97				
273.1.1	BG	Kula	ESO	RS	Zajecar	EMS		110		90				
275.1.1	RO	Isaccea	Transelectrica	BG	Varna	ESO	750	400 [65]	4500	2168 [66]			750	
277.1.1	RO	Tântareni	Transelectrica	BG	Kozlodui	ESO		400		1300		1000		
277.1.2	RO	Tântareni	Transelectrica	BG	Kozlodui	ESO		400		1300		1107		
278.1.1	RO	Isaccea	Transelectrica	BG	Dobrudja	ESO		400		1135			830	
281.1.1	AL	Vau i Dejës	KESH	ME	Podgorica 2	AD Prenos		220		276				
282.1.1	AL	Fierza	KESH	RS	Prizren	EMS		220		270				
291.1.1	AL	Elbassan	KESH	GR	Kardia	HTSO		400		1300	250 [68]			
292.1.1	AL	Bistrica	KESH	GR	Mourtos	HTSO		150		120	40 [69]			
293.1.1	TR	Babaeski	TEIAS	GR	Didymoticho	HTSO		150		185				
301.1.1	BG	Blagoevgrad	ESO	GR	Thessaloniki	HTSO		400		1300	700			
321.1.1	CZ	Hradec Zapad	CEPS	DE	Etzenricht	transpower		380		1295				
321.1.2	CZ	Prestice	CEPS	DE	Etzenricht	transpower		380		1295				
322.1.1	CZ	Hradec Vychod	CEPS	DE	Röhrsdorf	50Hertz		380		1145				
322.1.2	CZ	Hradec Vychod	CEPS	DE	Röhrsdorf	50Hertz		380		1145				
331.1.1	HU	Sándorfalva	MAVIR	RS	Subotica 3	EMS		380		1295	1050			
332.1.1	HU	Szeged	MAVIR	RS	Subotica	EMS		110		79 [70]	62			
341.1.1	BG	Skakavica	ESO	MK	Kriva Palanka	MEPSO		110		123				
341.2.1	BG	Petric	ESO	MK	Sušica	MEPSO		110		123				
342.1.1	BG	Cervena Mogila	ESO	MK	Stip	MEPSO		400		1309				
351.1.1	HR	Melina	HEP -OPS	SI	Divča	ELES		380		1264				
351.2.1	HR	Pehlin	HEP -OPS	SI	Divča	ELES		220		366				
351.3.1	HR	Buje	HEP -OPS	SI	Koper	ELES		110		89				
351.4.1	HR	Matulji	HEP -OPS	SI	Ilirska Bistrica	ELES		110		53				
352.1.1	HR	Tumbri	HEP -OPS	SI	Krško	ELES		380		1316				
352.1.2	HR	Tumbri	HEP -OPS	SI	Krško	ELES		380		1316				

\*The conventional transmission capacity of cross-frontier tie-lines is based upon parameters standardised within former UCTE for the calculation of the thermal load capability of each line. For arial lines these are : ambient temperature of + 35°C, wind velocity of 0,56 m/s at a right angle to the line as well as the voltage value stated in column 10 or 11. The conditions relevant to system operation in various countries at various time of the year can strongly differ from those above. Because the real allowable load capability of the line depends on many other factors, such as load flow distribution, upholding of voltage, real ambient conditions, limits of stability, n-1 security, etc., the conventional transmission capacity has no relevance from the point of view of system operation or economics but allows just a comparison of order of magnitude of the various lines. Adding together the conventional transmission capacity of several tie-lines does not allow to infer on the real total transmission capability and leads to irrelevant results from the point of view of system operation.

Observations

[ 71 ]	Destroyed line
[ 72 ]	Out of operation
[ 73 ]	Destroyed line and substation
[ 74 ]	Destroyed line
[ 75 ]	Destroyed line
[ 76 ]	New line 400 kV between RS (EMS) and BA (NOS) Ugljevik - Sremska Mitrovica is operational from EMS side
[ 77 ]	Line is destroyed, currently under construction
[ 78 ]	Line is destroyed, currently under construction
[ 79 ]	DC submarine cable
[ 80 ]	Monopol
[ 81 ]	Limited by the measuring transformer of current
[ 82 ]	On Polish side 400 kV line (internal designation between VE-T and PSE Operator)
[ 83 ]	On Polish side 400 kV line (internal designation between VE-T and PSE Operator)
[ 84 ]	Submarine cable
[ 85 ]	Submarine cable
[ 86 ]	Limited by current transformer at Krosno
[ 87 ]	Limited by current transformer at Krosno
[ 88 ]	Temporary out of operation
[ 89 ]	Limeted by HF attenuator at UA side
[ 90 ]	Radial operation
[ 91 ]	Temporary out of operation
[ 92 ]	Submarine cable

Circuit ID (Frontier point.Line.Circuit)	Connection between:						Voltage of the circuit		Conventional trans- mission capacity of the connection (thermal)*		Limited by the transformers or by the substations			
	From substation			to substation			Forecast	Present	Forecast	Present	of circuits		of lines	
	Country	Name	Operated by	Country	Name	Operated by					at	Voltage	Transmission capacity	Voltage
Nr.							kV	kV	MVA	MVA	MVA	kV	MVA	kV
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
352.2.1	HR	Zerjavinec	HEP -OPS	SI	Cirkovce	ELES		220		297				
352.3.1	HR	Nedeljanec	HEP -OPS	SI	Formin	ELES		110		115				
361.1.1	BA	Mostar	NOS BiH	HR	Konjsko	HEP-OPS		400		1316				
361.2.1	BA	Mostar	NOS BiH	HR	Zakucac	HEP-OPS		220		311				
361.3.1	BA	Grahovo	NOS BiH	HR	Knin	HEP-OPS		110		90				
361.4.1	BA	Buško Blato	NOS BiH	HR	Kraljevac	HEP-OPS		110		115				
361.5.1	BA	Buško Blato	NOS BiH	HR	Peruca	HEP-OPS		110		90				
361.6.1	BA	Grude	NOS BiH	HR	Imotski	HEP-OPS		110		72				
361.7.1	BA	Kulen Vakuf	NOS BiH	HR	Gracac	HEP-OPS		110		120	101			
362.1.1	BA	Jajce	NOS BiH	HR	Miracilin	HEP-OPS		220		297 [71]				
362.2.1	BA	Prijedor	NOS BiH	HR	Meduric	HEP-OPS		220		297				
363.1.1	BA	Trebinje	NOS BiH	HR	Dubrovnik	HEP-OPS		220		460 [72]				
363.2.1	BA	Trebinje	NOS BiH	HR	Dubrovnik	HEP-OPS		220		460				
363.3.1	BA	Capljina	NOS BiH	HR	Opuzen	HEP-OPS		110		84				
363.4.1	BA	Neum	NOS BiH	HR	Opuzen	HEP-OPS		110		84				
363.5.1	BA	Neum	NOS BiH	HR	Ston	HEP-OPS		110		76				
363.6.1	BA	Trebinje	NOS BiH	HR	Komolac	HEP-OPS		110		84				
364.1.1	BA	Ugljevik	NOS BiH	HR	Ernestinovo	HEP-OPS		400		1264 [73]				
364.2.1	BA	Gradacac	NOS BiH	HR	Đakovo	HEP-OPS		220		229 [74]				
364.3.1	BA	Tuzla	NOS BiH	HR	Đakovo	HEP-OPS		220		229				
364.4.1	BA	Bosanski Brod	NOS BiH	HR	Slavonski Brod 2	HEP-OPS		110		115 [75]				
364.5.1	BA	Orasje	NOS BiH	HR	Zupania	HEP-OPS		110		76				
371.1.1	HR	Ernestinovo	HEP-OPS	RS	Sremska Mitrovica	EMS		380		1264				
371.2.1	HR	Nijemci	HEP-OPS	RS	Šid	EMS		110		76				
371.3.1	HR	Beli Manastir	HEP-OPS	RS	Apatin	EMS		110		78				
381.1.1	BA	Trebinje	NOS BiH	ME	Podgorica 2	AD Prenos		380		1264				
381.2.1	BA	Trebinje	NOS BiH	ME	Perucica	AD Prenos		220		276				
381.3.1	BA	Trebinje	NOS BiH	ME	Herceg Novi	AD Prenos		110		90				
381.4.1	BA	Bileca	NOS BiH	ME	Vilusi	AD Prenos		110		84				
382.1.1	BA	Sarajevo 20	NOS BiH	ME	Piva	AD Prenos		220		366				
382.2.1	BA	Goražde	NOS BiH	ME	Piljevija	AD Prenos		110		90				
383.1.1	BA	Višegrad	NOS BiH	RS	Pozega	EMS		220		311				
383.2.1	BA	Bijeljina	NOS BiH	RS	Lešnica	EMS		110		123				
383.3.1	BA	Zvornik	NOS BiH	RS	HE Zvornik	EMS		110		123				
383.4.1	BA	Višegrad	NOS BiH	RS	Zamrsten	EMS		110		90				
383.5.1	BA	Ugljevik	NOS BiH	RS	Sremska Mitrovica	EMS		380		1264 [76]				
384.1.1	ME	Ribarevine	AD Prenos	RS	Kosovo B	EMS		380		1264				
384.2.1	ME	Piljevija 2	AD Prenos	RS	Bailina Basta	EMS		220		350				
384.3.1	ME	Piljevija 2	AD Prenos	RS	Pozega	EMS		220		365				
384.4.1	ME	Piljevija 1	AD Prenos	RS	Zamrsten	EMS		110		70				
391.1.1	MK	Skopje 1	MEPSO	RS	Kosovo A	EMS		220		311 [77]				
391.2.1	MK	Skopje 1	MEPSO	RS	Kosovo A	EMS		220		311 [78]				
391.3.1	MK	Skopje 5	MEPSO	RS	Kosovo B	EMS		380		1218				
401.1.1 [79,80]	DE	Herrenwyk	transpower	SE	Kruseberg	Sydkraft/Vattenfall		450		600				
404.1.1	CZ	Nosovice	CEPS	SK	Varin	SEPS		400		1205				
410.1.1	CZ	Liskovec	CEPS	SK	Pov. Bystrica	SEPS		220		221				
420.1.1	CZ	Sokolnice	CEPS	SK	Senica	SEPS		220		213				
424.1.1	CZ	Sokolnice	CEPS	SK	Krizovany	SEPS		400		1205				
430.1.1	CZ	Sokolnice	CEPS	SK	Stupava	SEPS		400		1363				
440.1.1	SK	V.Kapusany	SEPS	UA W	Mukachevo	NPC Ukrenergo		400		1186	831 [81]			
443.1.1	CZ	Albrechtice	CEPS	PL	Dobrzeń	PSE Operator S.A.		400		1088				
444.1.1	CZ	Nošovice	CEPS	PL	Wielopole	PSE Operator S.A.		400		1088				
450.1.1	CZ	Liskovec	CEPS	PL	Kopanina	PSE Operator S.A.		220		399				
460.1.1	CZ	Liskovec	CEPS	PL	Bujaków	PSE Operator S.A.		220		399				
501.1.1	DE	Vierraden	50Hertz	PL	Krainik	PSE Operator S.A.		220		402				
501.1.2	DE	Vierraden	50Hertz	PL	Krainik	PSE Operator S.A.		220		402				
502.1.1	DE	Hagenwerder	50Hertz	PL	Mikulowa	PSE Operator S.A.		380 [82]		1302				
502.1.2	DE	Hagenwerder	50Hertz	PL	Mikulowa	PSE Operator S.A.		380 [83]		1302				
601.1.1 [84]	ES	Puerto de la Cruz	REE	MA	Melloussa 1	ONE		380		715				
601.1.2 [85]	ES	Puerto de la Cruz	REE	MA	Melloussa 2	ONE		380		715				
700.1.1	PL	Krosno Iskrzynia	PSE Operator S.A.	SK	Lemešany	SEPS		400		1252	831 [86]			
700.1.2	PL	Krosno Iskrzynia	PSE Operator S.A.	SK	Lemešany	SEPS		400		1252	831 [87]			
701.1.1	PL	Rzeszów	PSE Operator S.A.	UA	Chmielnicka	NPC Ukrenergo		750		2676 [88]	1949 [89]			
702.1.1	PL	Zamość	PSE Operator S.A.	UA	Dobrotwor	NPC Ukrenergo		220		309 [90]				
703.1.1	PL	Białystok	PSE Operator S.A.	BY	Ros	Grodnoenergo		220		215 [91]				
704.1.1	PL	Slupsk	PSE Operator S.A.	SE	Ståmø	SvK		450		600 [92]				

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Observations	
[ 93 ]	Limited by the measuring transformer of current
[ 94 ]	Limited by the measuring transformer of current
[ 95 ]	Out of operation
[ 96 ]	Limited by HF attenuator
[ 97 ]	Passive island operation limit
[ 98 ]	Passive island operation limit
[ 99 ]	Passive island operation limit
[ 100 ]	Not in operation
[ 101 ]	DC
[ 102 ]	Used only for import to Finland
[ 103 ]	Used only for import to Finland
[ 104 ]	Used only for import to Finland
[ 105 ]	Used only for import to Finland
[ 106 ]	Used only for import to Finland
[ 107 ]	DC
[ 108 ]	Limited by the relay protection circuits
[ 109 ]	Limited by the relay protection circuits
[ 110 ]	Limited by the current transformers
[ 111 ]	Limited by the relay protection circuits
[ 112 ]	Limited by the relay protection circuits
[ 113 ]	Limited by the relay protection circuits
[ 114 ]	Limited by the relay protection circuits
[ 115 ]	Limited by the current transformers
[ 116 ]	Limited by the relay protection circuits
[ 117 ]	Limited by the high frequency filters
[ 118 ]	Limited by the high frequency filters

Circuit ID (Frontier point.Line.Circuit)	Connection between:						Voltage of the circuit		Conventional trans- mission capacity of the connection (thermal)*		Limited by the transformers or by the substations			
	From substation			to substation			Forecast	Present	Forecast	Present	of circuits		of lines	
	Country	Name	Operated by	Country	Name	Operated by					at	Voltage	Transmission capacity	Voltage
Nr.							kV	kV	MVA	MVA	MVA	kV	MVA	kV
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
710.1.1	HU	Győr	MAVIR	SK	Gabcikovo	SEPS		400		1330				
711.1.1	HU	Göd	MAVIR	SK	Levice	SEPS		400		1330				
720.1.1	HU	Albertirsa	MAVIR	UA W	Zahidno Ukrainska	NPC Ukrenergo		750		4010	1400			
721.1.1	HU	Sajószöged	MAVIR	UA W	Mukacevo	NPC Ukrenergo		400		1390	693 [93]			
722.1.1	HU	Kisvárdá	MAVIR	UA W	Mukacevo	NPC Ukrenergo		220		209	305			
722.1.2	HU	Tiszaók	MAVIR	UA W	Mukacevo	NPC Ukrenergo		220		209	305			
730.1.1	HU	Sándorfalva	MAVIR	RO	Arad	TRANSELECTRICA		400		1135	1109		1107	
731.1.1	HU	Békéscsaba	MAVIR	RO	Nadab	TRANSELECTRICA		400		1300				
740.1.1	RO	Rosiori	Transelectrica	UA W	Mukacevo	NPC Ukrenergo		400		1135 [94]			1107	
741.1.1	RO	Isaccea	Transelectrica	UA W	PivdennoUkrainska AES	NPC Ukrenergo		750		4064 [95]	2100		2595 [96]	
750.1.1	RO	Stânca	Transelectrica	MD	Costesti	Moldenergo		110		119			90 [97]	
751.1.1	RO	Husi	Transelectrica	MD	Cioara	Moldenergo		110		87			65 [98]	
752.1.1	RO	Tutora	Transelectrica	MD	Ungheni	Moldenergo		110		87			76 [99]	
753.1.1	RO	Issaccea	Transelectrica	MD	Vulcanesti	Moldenergo		400		1135			830	
760.1.1	BG	Maritsa3	ESO	TR	Babaeski	TEIAS		400		1309 [100]				
761.1.1	BG	Maritsa3	ESO	TR	Hamitabat	TEIAS		400	1962	900				
770.1.1	NO	Sildvik	Statnett SF	SE	Tornehamm	Svenska Kraftnät		132						
771.1.1	NO	Ofoten	Statnett SF	SE	Ritsem	Svenska Kraftnät		420						
772.1.1	NO	Røssåga	Statnett SF	SE	Ajaure	Svenska Kraftnät		220						
773.1.1	NO	Nea	Statnett SF	SE	Järpströmmen	Svenska Kraftnät		420						
776.1.1	NO	Hasle	Statnett SF	SE	Borgvik	Svenska Kraftnät		420						
777.1.1	NO	Halden	Statnett SF	SE	Skogssäter	Svenska Kraftnät		420						
780.1.1	NO	Varangerbotn	Statnett SF	FI	Ivalo	Fingrid		220		100				
790.1.1	NO	Kirkenes	Statnett SF	RU	Boris Gleb	JSC FGC UES		154						
800.1.1	FI	Ossauskoski	Fingrid	SE	Kalix	Svenska Kraftnät		220						
801.1.1	FI	Petäjäskoski	Fingrid Ovi	SE	Letsi	Svenska Kraftnät		400						
802.1.1	FI	Keminmaa	Fingrid	SE	Svartbyn	Svenska Kraftnät		400						
803.1.1	FI	Raumo	Fingrid	SE	Forsmark	Svenska Kraftnät		400		550 [101]				
804.1.1	FI	Tingsbacka (Åland)	Kraftnät Åland AB	SE	Senneby	Svenska Kraftnät		110		80				
810.1.1 [102]	FI	Yliikkala	Fingrid	RU	Viborg	JSC FGC UES		400						
810.1.2 [103]	FI	Yliikkala	Fingrid	RU	Viborg	JSC FGC UES		400						
811.1.1 [104]	FI	Kymi	Fingrid	RU	Viborg	JSC FGC UES		400						
812.1.1 [105]	FI	Nellimö	Inergia Oy	RU	Kaitakoski	JSC FGC UES		110		60				
813.1.1 [106]	FI	Imatra	Fortum Corporation	RU	GES 10	JSC FGC UES		110		100				
820.1.1	FI	Espoo	Fingrid	EE	Harku	Elering OÜ		150		350 [107]				
830.1.1	LV	TEC-1	Augstsprieguma tīkls	EE	Sindi	Elering OÜ		330		350				
831.1.1	LV	TEC-2	Augstsprieguma tīkls	EE	Sindi	Elering OÜ		330		350				
832.1.1	LV	Valmiera	Augstsprieguma tīkls	EE	Valmiera	Elering OÜ		330		350				
833.1.1	LV	Valmiera	Augstsprieguma tīkls	EE	Valmiera	Elering OÜ		330		350				
841.1.1	RU	Kingisepp	JSC FGC UES	EE	Püssi	Elering OÜ				350				
845.1.1	RU	Velikoreckaya	JSC FGC UES	LV	Rezekne	Augstsprieguma tīkls		330		350				
850.1.1	LT	Šiauliai/Telšiai	LITGRID AB	LV	Jelgava (Viskai)	Augstsprieguma tīkls		330		714	572 [108]			
851.1.1	LT	Panevėžys	LITGRID AB	LV	Aizkraukle	Augstsprieguma tīkls		330		714	686 [109]			
852.1.1	LT	Klaipėda	LITGRID AB	LV	Grobina	Augstsprieguma tīkls		330		714	572 [110]			
853.1.1	LT	IAE	LITGRID AB	LV	Līksna	Augstsprieguma tīkls		330		830				
854.1.1	LT	Parovėja	LITGRID AB	LV	Nereta	Augstsprieguma tīkls		110		75				
855.1.1	LT	Zarasai	LITGRID AB	LV	Daugavpils	Augstsprieguma tīkls		110		86				
856.1.1	LT	IAE	LITGRID AB	LV	Daugavpils	Augstsprieguma tīkls		110		102				
860.1.1	LT	IAE	LITGRID AB	BY	Polock	Belenergo		330		966	857 [111]			
861.1.1	LT	IAE	LITGRID AB	BY	Smorgon	Belenergo		330		830				
862.1.1	LT	IAE	LITGRID AB	BY	Belorusskaya	Belenergo		330		1786	857 [112]			
863.1.1	LT	Vilnius	LITGRID AB	BY	Molodechno	Belenergo		330		714				
864.1.1	LT	Alytus	LITGRID AB	BY	Grodno	Belenergo		330		714				
865.1.1	LT	IAE	LITGRID AB	BY	Opsa	Belenergo		110		63				
866.1.1	LT	IAE	LITGRID AB	BY	Vidzi	Belenergo		110		63				
867.1.1	LT	Didžiūsalis	LITGRID AB	BY	Kaziani	Belenergo		110		44	29 [113]			
868.1.1	LT	Pabrade	LITGRID AB	BY	Podolci	Belenergo		110		44	30 [114]			
869.1.1	LT	Kalveliai	LITGRID AB	BY	Asmena	Belenergo		110		63	38 [115]			
870.1.1	LT	Šalcininkai	LITGRID AB	BY	Voronovo	Belenergo		110		86	46 [116]			
871.1.1	LT	Leipalingis	LITGRID AB	BY	Grodno	Belenergo		110		75				
880.1.1	LT	Klaipėda	LITGRID AB	RU	Sovetsk	UES-SO-CDA		330		679	572 [117]			
881.1.1	LT	Jurbarkas	LITGRID AB	RU	Sovetsk	UES-SO-CDA		330		714	572 [118]			
882.1.1	LT	Kruonio HAE	LITGRID AB	RU	Sovetsk	UES-SO-CDA		330		714				
883.1.1	LT	Kybartai	LITGRID AB	RU	Nesterovo	UES-SO-CDA		110		75				
884.1.1	LT	Pagegiai	LITGRID AB	RU	Sovetsk	UES-SO-CDA		110		75				
885.1.1	LT	Pagegiai	LITGRID AB	RU	Sovetsk	UES-SO-CDA		110		75				

\*The conventional transmission capacity of cross-frontier tie-lines is based upon parameters standardised within former UCTE for the calculation of the thermal load capability of each line. For arial lines these are : ambient temperature of + 35°C, wind velocity of 0,56 m/s at a right angle to the line as well as the voltage value stated in column 10 or 11. The conditions relevant to system operation in various countries at various time of the year can strongly differ from those above. Because the real allowable load capability of the line depends on many other factors, such as load flow distribution, upholding of voltage, real ambient conditions, limits of stability, n-1 security, etc., the conventional transmission capacity has no relevance from the point of view of system operation or economics but allows just a comparison of order of magnitude of the various lines. Adding together the conventional transmission capacity of several tie-lines does not allow to infer on the real total transmission capability and leads to irrelevant results from the point of view of system operation.

## Abbreviations used of grid operators

<b>AT</b>	<b>Austria</b>	Verbund - APG TIWAG Netz AG VKW - Netz AG	Verbund - Austria Power Grid AG TIWAG Netz AG VKW - Netz AG	<b>NO</b>	<b>Norway</b>	Statnett	Statnett SF
<b>BA</b>	<b>Bosnia - Herzegovina</b>	ISO BiH	Nezavisni operator sustava u Bosni i Hercegovini	<b>PL</b>	<b>Poland</b>	PSE Operator S.A.	PSE Operator S.A.
<b>BE</b>	<b>Belgium</b>	Elia	Elia System Operator SA	<b>PT</b>	<b>Portugal</b>	REN	Rede Eléctrica Nacional, S.A.
<b>BG</b>	<b>Bulgaria</b>	ESO	Electroenergien Sistemen Operator EAD	<b>RO</b>	<b>Romania</b>	Transelectrica	C.N. Transelectrica S.A.
<b>CH</b>	<b>Switzerland</b>	swissgrid	swissgrid ag	<b>RS</b>	<b>Serbia</b>	EMS	JP Elektromreža Srbije
<b>CZ</b>	<b>Czech Republic</b>	CEPS	CEPS, a.s.	<b>SE</b>	<b>Sweden</b>	Svenska Kraftnät	Affärsverket Svenska Kraftnät
<b>DE</b>	<b>Germany</b>	Amprion EnBW Transportnetze transpower  50Hertz	Amprion GmbH EnBW Transportnetze AG transpower stromübertragungsnetz gmbh ( since October 2010 TenneT GmbH ) 50Hertz Transmission GmbH	<b>SI</b>	<b>Slovenia</b>	ELES	Elektro Slovenija d.o.o.
<b>DK</b>	<b>Denmark</b>	Energinet.dk	Energinet.dk	<b>SK</b>	<b>Slovak Republic</b>	SEPS	Slovenska elektrizacna prenosova sustava, a.s.
<b>EE</b>	<b>Estonia</b>	Elering OÜ	Elering OÜ	<b>UA_W</b>	<b>Ukraine West</b>	NPC Ukrenergo	NPC Ukrenergo
<b>ES</b>	<b>Spain</b>	REE	Red Eléctrica de España S.A.	<b>AL</b>	<b>Albania</b>	KESH	Albanian Electroenergetic Corporation
<b>FI</b>	<b>Finland</b>	Fingrid	Fingrid Oyj	<b>BY</b>	<b>Belarus</b>	Grodnoenergo	Grodnoenergo
<b>FR</b>	<b>France</b>	RTE	Réseau de Transport d'Electricité	<b>MA</b>	<b>Morocco</b>	ONE	Office National de l'Electricité
<b>GB</b>	<b>Great Britain</b>	National Grid SONI ( <b>NI</b> ) SSE SP Transmission	The National Grid Company plc System Operation Northern Ireland Ltd Scottish and Southern Energy plc Scottish and Power Transmission plc	<b>MD</b>	<b>Republic of Moldavia</b>	Moldenergo	Moldenergo
<b>GR</b>	<b>Greece</b>	HTSO	Hellenic Transmission System Operator S.A.	<b>RU</b>	<b>Russia</b>	JSC FGC UES	Federal Grid Company
<b>HR</b>	<b>Croatia</b>	HEP-OPS	HEP-Operator prijenosnog sustava d.o.o.	<b>TR</b>	<b>Republic of Turkey</b>	TEIAS	Türkiye Elektrik İletim A.S.
<b>HU</b>	<b>Hungary</b>	MAVIR ZRt.	MAVIR Magyar Villamosenergia-ipari Átviteli Rendszerirányító Zártkörűen Működő Részvénytársaság	<b>UA</b>	<b>Ukraine</b>	NPC Ukrenergo	NPC Ukrenergo
<b>IE</b>	<b>Ireland</b>	EirGrid	EirGrid plc				
<b>IT</b>	<b>Italy</b>	Terna	Terna - Rete Elettrica Nazionale SpA				
<b>LT</b>	<b>Lithuania</b>	LITGRID AB	LITGRID AB				
<b>LU</b>	<b>Luxembourg</b>	Creos Luxembourg	Creos Luxembourg S.A.				
<b>LV</b>	<b>Latvia</b>	Augstsprieguma tīkls	AS Augstsprieguma tīkls				
<b>ME</b>	<b>Montenegro</b>	AD Prenos	AD Prenos				
<b>MK</b>	<b>FYROM</b>	MEPSO	Macedonian Transmission System Operator AD				
<b>NL</b>	<b>The Netherlands</b>	TenneT TSO B.V.	TenneT TSO B.V.				

## Inventory of transmission network installations as of 31 December 2009 - Circuit lengths in km

Country	< 220 kV	of which cable	220-275 kV	of which cable	330 kV	of which cable	380/400 kV	of which cable	750 kV	of which cable
AT			3716	5			2668	54		
BA			1544	0			867	0		
BE			425	n.a.			1324	n.a.		
BG			2745	0			2336	0	85	0
CH			4845	23			1788	8		
CY	1227	120								
CZ			1910	0			3479	0		
DE <sup>1</sup>			15630	33			20131	70		
DK			n.a.	n.a.			n.a.	n.a.		
DK_W <sup>1</sup>			500	0			1387	28		
EE	3434	41	184	0			1541	0		
ES			17053	186			18015	55		
FI			2482	0			4363	100		
FR			26538	970			21282	3		
GB			1731	536			8216	0		
GR <sup>2</sup>			11734	267			4434	160		
HR <sup>3</sup>			1145	0			1159	0		
HU			1545	0			2395	0	268	0
IE			1932	115			439	0		
IS			851	0			0	0		
IT			11350	431			10694	466		
LT	5000	39			1670	0				
LU			259	11			0	0		
LV					1249	0				
ME			318	0			254	0		
MK			103	0			594	0		
NI	1282	85	805	2						
NL <sup>4</sup>			653	2			2031	1		
NO			445	0			8355	442		
PL <sup>5</sup>			7919	0			5274	127	114	0
PT			3247	42			1609	0		
RO			4096	0			4740	0	155	0
RS			2234	0			1692	0		
SE			508	174			1682	729		
SI			328	0			508	0		
SK			962	0			1776	0		
<b>ENTSO-E <sup>6</sup></b>	<b>10943</b>	<b>285</b>	<b>129738</b>	<b>2797</b>	<b>2919</b>	<b>0</b>	<b>135033</b>	<b>2243</b>	<b>622</b>	<b>0</b>
UA_W <sup>7</sup>			594	0			339	0	251	0

<sup>1</sup> Values as of 31 December 2008

<sup>2</sup> The 220kV network corresponds to 150kV Greek network.

<sup>3</sup> Values as of 31 December 2004

<sup>4</sup> NorNed cable has not been included in part 1 (= 290 km 450 kV DC).

<sup>5</sup> The length of the cable concerns 450kV DC link between PL and SE (SwePol Link) and it is half of total length of this cable.

<sup>6</sup> Sum of ENTSO-E is calculated with the reported data from Denmark West (DK\_W).

<sup>7</sup> Ukraine West represent the so-called Burshtyn Island synchronously interconnected with Regional Group Continental Europe.

# Number of circuits < 220 kV, 220 kV and over 220 kV on cross-frontier lines between ENTSO-E

	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
AT					- 2 2	- 2 2	19 11 3									2 1	- 1 -															- 1 2			
BA															11 7 2							3 2 1								3 1 1					
BE												- 2 3									2 2 -				- - 4										
					BG									- 1								2 - 1							- 4 1	2 1					
					CH	2 5 7					1 5 5						1 5 5																		
					CZ	- - 4																					- 2 2						- 2 3		
					DE	1 2 2					- 2 4										- 8 -				- - 6		2 2				- 1 2				
					DK																					- 2 1					2 - 2				
					EE				1 - -													- - 4													
					ES						2 2 2																1 3 4								
					FI																				- 1 -						1 1 3				
												FR					1 3 3																		
													GB											- 2 -											
													GR			- 1							- 2												
													HR	2 - 2																2 - 1		3 2 3			
																														- 2 1	1 1 4				

< 220 kV
220 kV (including 275 kV)
330, 380, 400 kV and 750 kV

As of 31.12.2009



## Main grid development

Country	Name of line or equipment	Voltage in kV	Main characteristics and comments impact on interconnection capacity
AT	Wien Süd Ost (AT) - Kainachtal (AT)	400	Extension from Wien Süd Ost to Kainichtal and new substation Oststeiermark
BA	Prijedor (BA) - Mraclin (HR)	220	Operation in March 2009.
CH	Campocologno (CH) - Tirano (IT)	150	Connected by trafos to 220 and 380 kV grid in CH/IT; 180 MW of additional transmission capacity (not NTC)
CY	TRFR4	66	Step down TRFR (66/11kV)
	(10.5/15MVA) AT S/S XEROPOTAMOS		
	TRFR2 (12.5/16MVA) AT S/S EPISKOPHI	132	Step down TRFR (132/11kV)
	TRFR3 (31.5/40MVA)	132	Step down TRFR (132/11kV)
	AT S/S HADJIPASCHALIS		
	TRFR2 (31.5/40MVA)	132	Step down TRFR (132/11kV)
	AT S/S HADJIPASCHALIS		
	TRFR2 (12.5/16MVA) AT S/S PISSOURI	132	Step down TRFR (132/11kV)
ES	UNDERGROUND CABLES (23.26km)	132	Total end of the year 2009
	OVERHEAD LINES (0.03km)	132	Total end of the year 2009
	L/ GUILLENA-PUEBLA DE GUZMAN	400	
	S/ CARMONA	220	
	CASAQUEMADA	220	
	S/ CEREAL	400	
	REQUENA	400	
	PESOS	400	
	S/ LA ESTRELLA	220	
	S/ HARO	220	
	S/ EL SAUBALS	220	
	L/ GUADAME (CABRA) - TAJO	400	I/O CARTAMA
	L/ CORDOVILLA-ORCOYEN	220	I/O MURUARTE
	L/ PUERTO REAL-CASARES	220	I/O GAZULES
	L/ VENTAS-VILLAVERDE	220	Underground
	L/ BENEJAMA-PETREL 1	220	I/O NOVELDA
	L/ NOVELDA-SALADAS	220	
	L/ NOVELDA-SALADAS	220	Underground
	L/ VICALVARO-LA ESTRELLA	220	Underground
	S/ CARTAMA	400	Network meshed
	S/ CARTAMA	220	Network meshed
	S/ CARMONA	400	Network meshed

## Main grid development

Country	Name of line or equipment	Voltage in kV	Main characteristics and comments impact on interconnection capacity
HR	DV 220 kV Mraclin - Prijedor	220	Al / Fe 3x 360/57 mm <sup>2</sup> ; total length 110 km; Current limit 810 A. The line has insignificant impact on interconnection capacity.
IE	Aghada - Glanagow	220	3,5km of 1 x 1600mm 574MVA XLPE copper cable
IT	Substations	380/220/150/132	Total of 20 substations of which one at 380kV and five at 220kV
	Transformers	380/220/132	Total of 700 MVA
	Capacitors and Reactors bank	380/220/150	Total of 108MVar of capacitors and 200MVar of reactors
	Lines	380/220	Two 380 kV lines (total length 34,7Km). Eight 220kV lines (total length 307,5km)
	Lines	150/132	Total of 30 lines of which 12 at 150kV
NL	BritNed-cable		The construction activities for the 1000 MW BritNed-cable were started. This cable will connect the Isle of Grain in Kent and Maasvlakte, near Rotterdam in The Netherlands. End of 2010 its foreseen that this cable will be tested and will be operational in 2011.
PL	New national lines	400	2 new national lines were put into operation with the length 213 km: Ostrow – Rogowiec (125 km) Ostrow – Trebaczew (131 km) (in place of Rogowiec – Trebaczew 400 kV line, 43 km)
	New transformers / autotransformers	400	- of power units: 570 MVA, Lagisza TB10;
		400/220	- in the network: 500 MVA, Lagisza A2;
		400/220	500 MVA, Krajnik A3;
		400/110	330 MVA, Lagisza A3;
		400/110	330 MVA, Milosna A3;
		400/110	330 MVA, Mosciska A3;
		220/110	160 MVA, Bierun A1;
		220/110	160 MVA, Moszczenica A4.
PT	Lagoaça 2 (PT) - Aldeadávila (ES)	220	374 MVA
	Lagoaça 3 (PT) - Aldeadávila (ES)	220	374 MVA

**I. ENTSO-E 2009**

**II. ENTSO-E Regional Group**

**Continental Europe (RG CE)**

**III. Glossary of terms**



# Monthly values operation and exchange balance

## OPERATION AND PHYSICAL EXCHANGE BALANCE PER COUNTRY FOR THE YEARS 1999, 2008, 2009

Statistical database as of 31 August 2010

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Third countries	1999	2008	2009
Albania ( AL )	AL	AL	AL
Bulgaria ( BG )	BG		
Belarus ( BY )		BY	BY
Denmark ( DK )	DK		
Denmark East ( DK_E )		DK_E	DK_E
Great Britain ( GB )	GB	GB	GB
Morocco ( MA )	MA	MA	MA
Republic of Moldavia ( MD )		MD	MD
Norway ( NO )		NO	NO
Romania ( RO )	RO		
Sweden ( SE )	SE	SE	SE
Republic of Turkey ( TR )		TR	TR
Ukraine ( UA )		UA	UA

Remark: When summing up the values, rounding deviations may occur.

<sup>1</sup> Denmark West represents the Western part of Denmark synchronously interconnected with former UCTE (Jutland and Funen); from June 2007 full member of the former UCTE association.

<sup>2</sup> FYROM = Former Yugoslav Republic of Macedonia

<sup>3</sup> Generation and load values are operational data.

<sup>4</sup> The country code RG CE represents the ENTSO-E Regional Group Continental Europe (former all countries of the Union for the Co-ordination of Transmission of Electricity).

<sup>5</sup> Ukraine West represents the so-called Burshtyn Island synchronously interconnected with former UCTE.

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	0
			2008	0
			2009	0
Fossil fuels net generation	GWh	$\Sigma$	1999	12159
			2008	21553
			2009	20686
Hydraulic net generation	GWh	$\Sigma$	1999	39009
			2008	36861
			2009	38627
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	2008	0
			2009	0
- of which wind	GWh	$\Sigma$	2008	0
			2009	0
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	2008	8358
			2009	9495
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999	59476
			2008	66772
			2009	68808
Physical import	GWh	$\Sigma$	1999	11544
			2008	22033
			2009	22549
Physical export	GWh	$\Sigma$	1999	13863
			2008	16528
			2009	21094
Total physical import/export balance	GWh	$\Sigma$	1999	-1978
			2008	4879
			2009	789
Consumption of pumps	GWh	$\Sigma$	1999	1485
			2008	3273
			2009	3962
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	56013
			2008	68378
			2009	65635
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	6556
			2008	6339
			2009	6379
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	9197
			2008	8917
			2009	9343
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	9517
			2008	9149
			2009	9675
Time of highest load on the 3rd Wednesday	CET		1999	18:00
			2008	18:00
			2009	18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	9315

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Austria

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1851	1828	1174	640	354	239	323	251	547	1223	1873	1856
2463	2387	2007	1499	912	991	1282	1347	1907	2320	2174	2264
2581	2329	1844	1200	1039	948	972	919	1541	2556	2257	2500
2416	2249	3162	3334	4300	4365	4253	3809	3336	2950	2476	2359
2384	2135	2877	3129	4016	4149	4240	3948	2828	2481	2246	2428
2162	1920	3090	3917	4497	4101	4275	3867	3284	2843	2176	2495
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
674	566	686	701	762	689	711	713	631	611	712	902
616	684	798	836	919	877	891	813	782	765	745	769
4961	4740	4983	4620	5348	5352	5320	4776	4567	4852	5056	4901
5521	5088	5570	5329	5690	5829	6233	6008	5366	5412	5132	5594
5359	4933	5732	5953	6455	5926	6138	5599	5607	6164	5178	5764
1195	1064	1121	1078	596	546	653	632	921	1022	1235	1481
2620	2407	2363	1968	1468	1064	1017	1072	1391	1952	2234	2477
2664	2370	2046	1363	945	1398	1321	1542	1852	1947	2551	2550
1134	976	1082	1139	1333	1361	1406	996	1206	1212	1111	907
1414	1312	1585	1495	1452	1304	1605	1637	932	1104	1179	1509
1283	1259	1597	2025	2053	2061	1928	1797	1866	2013	1519	1693
296	231	28	-76	-852	-927	-769	-357	-136	-122	97	609
1109	987	710	469	22	-238	-582	-570	397	749	952	874
1261	1012	402	-639	-1099	-686	-627	-280	-82	-160	939	748
48	39	96	125	226	178	199	197	113	78	67	119
274	196	216	195	349	246	203	194	279	397	322	402
362	308	269	305	331	274	323	328	314	358	399	391
5209	4932	4915	4419	4270	4247	4352	4222	4318	4652	5086	5391
6356	5879	6064	5603	5363	5345	5448	5244	5484	5764	5762	6066
6258	5637	5865	5009	5025	4966	5188	4991	5211	5646	5718	6121
6241	<b>6556</b>	5704	5308	4451	4385	4536	4251	4580	5464	6090	6217
<b>6118</b>	6339	5998	5570	5092	5135	5086	4977	5281	5307	6020	5833
6036	6349	5581	4628	4600	4583	4858	4627	4786	5556	5243	<b>6379</b>
9129	<b>9197</b>	8637	8118	7370	7639	7873	7560	7757	8389	9137	9124
<b>8917</b>	8496	8442	7914	7883	7844	7798	7880	8011	8123	8782	8627
9115	9158	8349	7537	7542	7688	7954	7766	7854	8486	8355	<b>9343</b>
9129	9197	8637	8146	7520	7708	7934	7667	7862	8431	<b>9517</b>	9447
<b>9149</b>	8687	8586	8039	8060	7961	7975	8108	8149	8208	8997	8868
9326	9261	8400	7694	7684	7854	8157	7983	7991	8530	8641	<b>9675</b>
11:00	11:00	11:00	12:00	12:00	12:00	12:00	12:00	12:00	19:00	<b>18:00</b>	18:00
<b>18:00</b>	19:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	18:00	18:00
18:00	19:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	18:00	<b>18:00</b>
7404	8172	8786	7548	8457	<b>9315</b>	8349	7985	7394	8532	9040	7797

Physical exchanges in interconnected operation <sup>1</sup>

MM_YY	Total_EXP								Total_IMP								RG CE_EXP	RG CE_IMP	Total_IMP	AT_RG CE	AT_Total
	Export (-)								Import (+)												
	AT→CH	AT→CZ	AT→DE	AT→HU	AT→IT	AT→SI			CH→AT	CZ→AT	DE→AT	HU→AT	IT→AT	SI→AT							
I.99	400	1	289	0	133	311	1134	1134	339	631	224	0	0	0	1195	1195	61	61			
II.99	278	3	299	0	117	279	976	976	296	551	211	0	0	0	1064	1064	88	88			
III.99	324	7	343	9	132	267	1082	1082	2	281	169	0	0	0	1121	1121	39	39			
IV.99	370	11	265	7	135	351	1139	1139	8	240	168	0	0	0	1078	1078	-61	-61			
V.99	200	17	580	13	141	382	1333	1333	28	216	300	52	0	0	596	596	-737	-737			
VI.99	185	18	672	20	163	303	1361	1361	16	167	286	77	0	0	546	546	-815	-815			
VII.99	200	5	676	7	160	358	1406	1406	17	274	211	150	0	1	653	653	-753	-753			
VIII.99	145	4	549	5	78	215	996	996	66	165	178	223	0	0	632	632	-364	-364			
IX.99	203	2	519	2	167	313	1206	1206	99	357	273	192	0	0	921	921	-285	-285			
X.99	217	0	489	0	158	348	1212	1212	69	436	299	218	0	0	1022	1022	-190	-190			
XI.99	288	0	380	0	155	288	1111	1111	38	409	586	202	0	0	1235	1235	124	124			
XII.99	335	0	282	2	148	140	907	907	25	456	864	132	0	4	1481	1481	574	574			
1999	3145	68	5343	65	1687	3555	13863	13863	375	3636	5510	2018	0	5	11544	11544	-2319	-2319			
I.08	779	0	332	113	114	76	1414	1414	0	682	1778	19	0	141	2620	2620	1206	1206			
II.08	738	0	271	121	107	75	1312	1312	0	608	1692	10	0	97	2407	2407	1095	1095			
III.08	838	4	476	88	124	55	1585	1585	0	501	1707	42	0	113	2363	2363	778	778			
IV.08	817	0	440	53	115	70	1495	1495	0	516	1344	45	0	63	1968	1968	473	473			
V.08	627	4	473	61	121	166	1452	1452	3	440	991	25	0	9	1468	1468	16	16			
VI.08	339	10	660	40	114	141	1304	1304	18	369	583	71	0	23	1064	1064	-240	-240			
VII.08	452	5	811	72	110	155	1605	1605	10	422	533	36	0	16	1017	1017	-588	-588			
VIII.08	553	12	642	122	120	188	1637	1637	0	345	697	16	0	14	1072	1072	-565	-565			
IX.08	334	3	360	48	90	97	932	932	68	114	1056	103	1	49	1391	1391	459	459			
X.08	540	3	338	27	112	84	1104	1104	2	159	1475	203	0	113	1952	1952	848	848			
XI.08	618	5	339	44	120	53	1179	1179	5	563	1455	99	0	112	2234	2234	1055	1055			
XII.08	814	10	465	50	120	50	1509	1509	0	616	1686	52	0	123	2477	2477	968	968			
2008	7449	56	5607	839	1367	1210	16528	16528	106	5335	14997	721	1	873	22033	22033	5505	5505			
I.09	680	3	364	68	116	52	1283	1283	3	732	1722	40	0	167	2664	2664	1381	1381			
II.09	677	6	404	52	106	14	1259	1259	0	584	1566	46	0	174	2370	2370	1111	1111			
III.09	723	9	530	174	119	42	1597	1597	0	573	1382	2	0	89	2046	2046	449	449			
IV.09	770	51	789	97	126	192	2025	2025	0	346	985	27	0	5	1363	1363	-662	-662			
V.09	569	84	842	207	101	250	2053	2053	1	243	698	3	0	0	945	945	-1108	-1108			
VI.09	768	34	936	96	17	210	2061	2061	2	467	916	12	0	1	1398	1398	-663	-663			
VII.09	535	19	774	143	76	381	1928	1928	8	539	766	7	0	1	1321	1321	-607	-607			
VIII.09	611	19	627	186	70	284	1797	1797	3	564	969	5	0	1	1542	1542	-255	-255			
IX.09	770	11	461	138	106	380	1866	1866	6	557	1261	28	0	0	1852	1852	-14	-14			
X.09	783	17	643	141	124	305	2013	2013	1	593	1310	38	0	5	1947	1947	-66	-66			
XI.09	846	3	342	33	126	169	1519	1519	0	879	1627	27	0	18	2551	2551	1032	1032			
XII.09	921	6	349	58	111	248	1693	1693	0	782	1754	5	0	9	2550	2550	857	857			
2009	8653	262	7061	1393	1198	2527	21094	21094	24	6859	14956	240	0	470	22549	22549	1455	1455			

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".



MM_YY	Export (-)					Import (+)					Total_IMP	BA_RG CE	BA_Total
	BA→HR	BA→ME	BA→RS	BA→YUGO	RG CE_EXP	Total_EXP	HR→BA	ME→BA	RS→BA	YUGO→BA			
I.99	0			0	0	0	0				0	0	0
II.99	1			0	1	1	0				0	-1	-1
III.99	0			0	0	0	0				0	0	0
IV.99	67			0	67	67	0				0	-67	-67
V.99	6			171	177	177	0				80	-97	-97
VI.99	53			140	193	193	0				35	-158	-158
VII.99	41			119	160	160	0				52	-108	-108
VIII.99	30			143	173	173	0				62	-111	-111
IX.99	40			176	216	216	0				51	-165	-165
X.99	9			205	214	214	0				68	-146	-146
XI.99	0			210	210	210	0				93	-117	-117
XII.99	0			288	288	288	0				69	-219	-219
1999	247			1452	1699	1699	0				510	-1189	-1189
I.08	191	213	22		426	426	64	26	245		335	-91	-91
II.08	184	229	26		439	439	74	25	220		319	-120	-120
III.08	282	123	22		427	427	50	29	223		302	-125	-125
IV.08	261	109	9		379	379	33	28	197		258	-121	-121
V.08	163	151	25		339	339	56	11	180		247	-92	-92
VI.08	162	197	21		380	380	55	7	138		200	-180	-180
VII.08	259	153	18		430	430	55	10	215		280	-150	-150
VIII.08	127	234	30		391	391	111	2	193		306	-85	-85
IX.08	176	189	5		370	370	62	41	144		247	-123	-123
X.08	280	148	17		445	445	47	16	259		322	-123	-123
XI.08	263	165	21		449	449	61	21	219		301	-148	-148
XII.08	316	171	42		529	529	69	23	145		237	-292	-292
2008	2664	2082	258		5004	5004	737	239	2378		3354	-1650	-1650
I.09	322	202	27		551	551	73	43	142		258	-293	-293
II.09	450	177	23		650	650	73	55	92		190	-460	-460
III.09	345	246	36		627	627	68	16	120		204	-423	-423
IV.09	345	104	28		477	477	75	33	78		186	-291	-291
V.09	245	131	39		415	415	78	20	86		184	-231	-231
VI.09	266	239	33		548	548	82	10	134		226	-322	-322
VII.09	196	235	42		463	463	91	7	127		225	-238	-238
VIII.09	130	216	27		373	373	123	5	130		258	-115	-115
IX.09	199	159	16		374	374	102	5	219		326	-48	-48
X.09	255	161	26		442	442	77	19	159		255	-187	-187
XI.09	348	73	15		436	436	60	61	180		301	-135	-135
XII.09	179	252	49		480	480	102	20	104		226	-254	-254
2009	3280	2195	361		5836	5836	974	294	1571		2839	-2997	-2997

These physical energy flows were measured on the cross-frontier transmission lines ( $>110$  kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

				I-XII
Thermal nuclear net generation	GWh	Σ	1999 2008 2009	n.a. 0 0
Fossil fuels net generation	GWh	Σ	1999 2008 2009	n.a. 8668 8037
Hydraulic net generation	GWh	Σ	1999 2008 2009	n.a. 4552 5954
Other renewable net generation <sup>1</sup>	GWh	Σ	2008 2009	0 0
- of which wind	GWh	Σ	2008 2009	0 0
Non-identifiable net generation <sup>1</sup>	GWh	Σ	2008 2009	0 0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	Σ	1999 2008 2009	n.a. 13220 13991
Physical import	GWh	Σ	1999 2008 2009	n.a. 3354 2839
Physical export	GWh	Σ	1999 2008 2009	n.a. 5004 5836
Total physical import/export balance	GWh	Σ	1999 2008 2009	n.a. -1645 -2990
Consumption of pumps	GWh	Σ	1999 2008 2009	n.a. 0 0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	1999 2008 2009	n.a. 11575 11001
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	n.a. 1158 1133
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	n.a. 1627 1753
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	n.a. 1894 1890
Time of highest load on the 3rd Wednesday		CET	1999 2008 2009	n.a. 18:00 18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	n.a.

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Bosnia-Herzegovina

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
706	749	701	486	638	751	853	810	737	751	800	686	686
693	596	668	470	681	769	818	691	662	759	611	619	619
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
479	369	436	546	362	313	225	215	222	347	343	695	695
699	796	718	637	380	366	281	303	233	367	485	689	689
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1185	1118	1137	1032	1000	1064	1078	1025	959	1098	1143	1381	1381
1392	1392	1386	1107	1061	1135	1099	994	895	1126	1096	1308	1308
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
335	319	302	258	247	200	280	306	247	322	301	237	237
258	190	204	186	184	226	225	258	326	255	301	226	226
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
426	439	427	379	339	380	430	391	370	445	449	529	529
551	650	627	477	415	548	463	373	374	442	436	480	480
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
-92	-120	-125	-121	-92	-176	-150	-86	-124	-115	-150	-294	-294
-292	-457	-423	-291	-230	-322	-236	-115	-49	-187	-135	-253	-253
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1093	998	1012	911	908	888	928	939	835	983	993	1087	1087
1100	935	963	816	831	813	863	879	846	939	961	1055	1055
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1133	<b>1158</b>	1100	954	955	973	998	993	985	1033	1088	1091	1091
1045	1110	997	898	891	920	909	901	930	1033	985	<b>1133</b>	<b>1133</b>
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1624	<b>1627</b>	1588	1447	1409	1417	1465	1458	1504	1510	1601	1622	1622
1605	<b>1753</b>	1518	1327	1300	1354	1431	1361	1349	1549	1426	1686	1686
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1793	1855	1793	1617	1510	1502	1517	1597	1682	1753	<b>1894</b>	1865	1865
1726	1864	1702	1573	1491	1446	1499	1478	1581	1745	1727	<b>1890</b>	<b>1890</b>
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
19:00	19:00	20:00	21:00	22:00	22:00	22:00	21:00	20:00	20:00	<b>18:00</b>	18:00	18:00
18:00	19:00	20:00	21:00	22:00	22:00	22:00	21:00	20:00	20:00	18:00	<b>18:00</b>	<b>18:00</b>
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

# Belgium

## Monthly values / Operation

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	46660
			2008	43359
			2009	44960
Fossil fuels net generation	GWh	$\Sigma$	1999	32626
			2008	31480
			2009	35179
Hydraulic net generation	GWh	$\Sigma$	1999	1482
			2008	1743
			2009	1749
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	2008	4801
			2009	6393
- of which wind	GWh	$\Sigma$	2008	630
			2009	980
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	2008	0
			2009	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999 <sup>2</sup>	80768
			2008 <sup>2</sup>	81383
			2009 <sup>2</sup>	88281
Physical import	GWh	$\Sigma$	1999	8918
			2008	17036
			2009	9366
Physical export	GWh	$\Sigma$	1999	8204
			2008	6561
			2009	11314
Total physical import/export balance	GWh	$\Sigma$	1999	849
			2008	10596
			2009	-1838
Consumption of pumps	GWh	$\Sigma$	1999	1517
			2008	1774
			2009	1888
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	80100
			2008	90205
			2009	84555
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	9709
			2008	10191
			2009	10173
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	11953
			2008	12578
			2009	12727
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	12514
			2008	13390
			2009	13501
Time of highest load on the 3rd Wednesday	CET		1999	18:00
			2008	19:00
			2009	19:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	12090

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Belgium

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
4294	3857	4246	3614	3976	3716	3593	3597	3334	4063	4090	4280
3870	3562	3442	2975	3319	3551	3626	3611	3227	3871	3946	4359
4366	3921	3935	3358	3747	3630	3554	3912	3857	3589	3235	3856
2975	3032	3008	2836	2190	2282	2152	2157	2652	2759	3272	3311
2960	2785	2418	2634	2472	2430	2672	2441	2825	2837	2437	2569
2852	2487	2693	2683	2592	2679	3069	3116	3221	3402	3076	3309
138	131	130	133	125	122	118	117	99	115	119	135
158	144	153	150	146	135	130	130	120	150	157	170
153	148	163	150	150	142	140	135	131	134	137	166
480	405	463	375	395	359	382	389	360	397	403	393
446	410	538	445	474	443	541	462	506	585	847	696
101	59	82	38	31	28	36	47	45	55	62	46
66	45	80	46	65	48	78	52	74	93	199	134
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
7407	7020	7384	6583	6291	6120	5863	5871	6085	6937	7481	7726
7468	6896	6476	6134	6332	6475	6810	6571	6532	7255	6943	7491
7817	6966	7329	6636	6963	6894	7304	7625	7715	7710	7295	8027
570	493	589	652	703	779	857	1152	1065	824	618	616
1577	1560	2120	1875	1594	1460	1025	1487	1239	1174	1070	855
1058	879	745	703	644	690	613	527	515	943	1020	1029
700	662	749	645	660	583	717	816	673	608	742	649
448	344	371	289	449	720	746	1035	437	643	438	641
658	520	648	682	895	947	1343	1451	1209	1101	859	1001
-117	-157	-148	27	54	206	148	345	400	227	-112	-24
1140	1225	1760	1596	1154	749	289	461	812	542	642	226
411	370	109	30	-241	-248	-724	-914	-685	-150	169	35
119	108	108	116	133	140	138	145	119	129	132	130
142	130	141	132	154	148	149	152	140	160	160	166
162	135	153	150	152	165	171	166	165	164	148	157
7171	6755	7128	6494	6212	6186	5873	6071	6366	7035	7237	7572
8466	7991	8095	7598	7332	7076	6950	6880	7204	7637	7425	7551
8066	7201	7285	6516	6570	6481	6409	6545	6865	7396	7316	7905
8688	9355	8164	8143	7602	7508	6516	7415	7645	8640	9537	9709
10179	10191	9945	9790	8353	8629	8577	8383	8636	8502	8703	9663
9545	9692	8300	7266	7694	7544	7477	7852	7913	8302	8788	10173
10931	11242	10592	10305	10245	10268	7070	10241	10487	11343	11388	11953
12578	12379	12427	12074	11331	11438	11298	11290	11562	11935	11344	12200
12250	12190	11083	10352	10830	10896	10501	11103	11737	11882	11782	12727
11372	11522	10770	10595	10482	10478	7433	10605	10734	11527	12269	12514
13390	12744	12688	12202	11699	11610	11422	11570	11812	12048	12179	12743
12796	12484	11244	10586	10964	11142	10725	11410	11976	12048	12721	13501
19:00	12:00	12:00	12:00	12:00	12:00	23:00	12:00	12:00	12:00	19:00	18:00
19:00	20:00	20:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	18:00	18:00
19:00	20:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	20:00	19:00	19:00
10494	11443	10879	10546	10241	9849	6969	9939	9862	11292	11953	12090

<sup>2</sup>including deliveries from industry

Physical exchanges in interconnected operation <sup>1</sup>

MM_YY	RG CE_EXP								RG CE_IMP								BE_RG CE	BE_Total
	Export (-)				Import (+)				RG CE_EXP				RG CE_IMP					
	BE→FR	BE→LU	BE→NL	Total_EXP	FR→BE	LU→BE	NL→BE	Total_IMP	FR→BE	LU→BE	NL→BE	Total_EXP	FR→BE	LU→BE	NL→BE	Total_IMP		
I.99	336	167	197	700	163	0	407	700	570	163	0	407	570	570	130	570		
II.99	233	166	263	662	203	0	290	662	493	203	0	290	493	493	-169	493		
III.99	190	178	381	749	271	0	318	749	589	271	0	318	589	589	-160	589		
IV.99	23	163	459	645	359	0	293	645	652	359	0	293	652	652	7	652		
V.99	31	154	475	660	431	0	272	660	703	431	0	272	703	703	43	703		
VI.99	24	164	395	583	505	0	274	583	779	505	0	274	779	779	196	779		
VII.99	7	178	532	717	694	0	163	717	857	694	0	163	857	857	140	857		
VIII.99	0	109	707	816	1018	0	134	816	1152	1018	0	134	1152	1152	336	1152		
IX.99	0	162	511	673	916	0	149	673	1065	916	0	149	1065	1065	392	1065		
X.99	10	179	419	608	589	0	235	608	824	589	0	235	824	824	216	824		
XI.99	84	181	477	742	344	0	274	742	618	344	0	274	618	618	-124	618		
XII.99	72	145	432	649	337	0	279	649	616	337	0	279	616	616	-33	616		
1999	1010	1946	5248	8204	5830	0	3088	8204	8918	5830	0	3088	8918	8918	714	8918		
I.08	241	154	53	448	369	198	1010	448	1577	369	198	1010	1577	1577	1129	1577		
II.08	125	148	71	344	589	178	793	344	1560	589	178	793	1560	1560	1216	1560		
III.08	207	159	5	371	385	190	1545	371	2120	385	190	1545	2120	2120	1749	1749		
IV.08	72	155	62	289	554	111	1210	289	1875	554	111	1210	1875	1875	1586	1875		
V.08	26	188	235	449	1030	0	564	449	1594	1030	0	564	1594	1594	1145	1594		
VI.08	6	174	540	720	1187	0	273	720	1460	1187	0	273	1460	1460	740	1460		
VII.08	84	177	485	746	711	28	286	746	1025	711	28	286	1025	1025	279	1025		
VIII.08	32	105	898	1035	1158	190	139	1035	1487	1158	190	139	1487	1487	452	1487		
IX.08	91	99	247	437	659	184	396	437	1239	659	184	396	1239	1239	802	1239		
X.08	467	80	96	643	162	193	819	643	1174	162	193	819	1174	1174	531	1174		
XI.08	287	52	99	438	278	181	611	438	1070	278	181	611	1070	1070	632	1070		
XII.08	398	26	217	641	204	176	475	641	855	204	176	475	855	855	214	855		
2008	2036	1517	3008	6561	7286	1629	8121	6561	17036	7286	1629	8121	17036	17036	10475	17036		
I.09	492	79	87	658	238	188	632	658	1058	238	188	632	1058	1058	400	1058		
II.09	318	74	128	520	274	150	455	520	879	274	150	455	879	879	359	879		
III.09	400	49	199	648	249	162	334	648	745	249	162	334	745	745	97	745		
IV.09	457	77	148	682	130	153	420	682	703	130	153	420	703	703	21	703		
V.09	288	76	531	895	276	140	228	895	644	276	140	228	644	644	-251	644		
VI.09	509	75	363	947	162	101	427	947	690	162	101	427	690	690	-257	690		
VII.09	891	86	366	1343	36	158	419	1343	613	36	158	419	613	613	-730	613		
VIII.09	538	56	857	1451	55	181	291	1451	527	55	181	291	527	527	-924	527		
IX.09	645	90	474	1209	83	166	266	1209	515	83	166	266	515	515	-694	515		
X.09	772	91	238	1101	55	181	707	1101	943	55	181	707	943	943	-158	943		
XI.09	619	90	150	859	64	155	801	859	1020	64	155	801	1020	1020	161	1020		
XII.09	701	68	232	1001	87	133	809	1001	1029	87	133	809	1029	1029	28	1029		
2009	6630	911	3773	11314	1709	1868	5789	11314	9366	1709	1868	5789	9366	9366	-1948	9366		

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

MM_YY	Export (-)							Import (+)							Total_IMP	RG CE_IMP	BG_GR CE	BG_Total
	BG→GR	BG→MK	BG→RO	BG→RS	BG→YUGO	BG→TR	RG CE_EXP	Total_EXP	GR→BG	MK→BG	RO→BG	RS→BG	YUGO→BG	TR→BG				
I.99	8		n.a.		150	n.a.	158	n.a.	49		n.a.		0	n.a.	49	n.a.	-109	n.a.
II.99	23		n.a.		95	n.a.	118	n.a.	34		n.a.		0	n.a.	34	n.a.	-84	n.a.
III.99	32		n.a.		21	n.a.	53	n.a.	10		n.a.		31	n.a.	41	n.a.	-12	n.a.
IV.99	69		n.a.		10	n.a.	79	n.a.	6		n.a.		83	n.a.	89	n.a.	10	n.a.
V.99	152		n.a.		19	n.a.	171	n.a.	1		n.a.		78	n.a.	79	n.a.	-92	n.a.
VI.99	174		n.a.		27	n.a.	201	n.a.	1		n.a.		6	n.a.	7	n.a.	-194	n.a.
VII.99	196		n.a.		12	n.a.	208	n.a.	0		n.a.		129	n.a.	129	n.a.	-79	n.a.
VIII.99	210		n.a.		17	n.a.	227	n.a.	1		n.a.		138	n.a.	139	n.a.	-88	n.a.
IX.99	165		n.a.		26	n.a.	191	n.a.	1		n.a.		114	n.a.	115	n.a.	-76	n.a.
X.99	55		n.a.		19	n.a.	74	n.a.	15		n.a.		57	n.a.	72	n.a.	-2	n.a.
XI.99	16		n.a.		59	n.a.	75	n.a.	66		n.a.		12	n.a.	78	n.a.	3	n.a.
XII.99	28		n.a.		87	n.a.	115	n.a.	60		n.a.		16	n.a.	76	n.a.	-39	n.a.
1999	1128		n.a.		542	n.a.	1670	n.a.	244		n.a.		664	n.a.	908	n.a.	-762	n.a.
I.08	322	63	0	189	0	0	574	574	0	0	467	0	0	0	467	467	-107	-107
II.08	340	62	0	138	0	0	540	540	0	0	544	0	0	0	544	544	4	4
III.08	428	78	0	240	0	0	746	746	0	0	318	0	0	0	318	318	-428	-428
IV.08	395	80	11	240	0	0	726	726	0	0	141	0	0	0	141	141	-585	-585
V.08	351	85	31	238	0	0	705	705	0	0	118	0	0	0	118	118	-587	-587
VI.08	415	82	103	126	0	0	726	726	0	0	212	0	0	0	212	212	-514	-514
VII.08	467	78	53	183	0	0	781	781	0	0	226	1	0	0	227	227	-554	-554
VIII.08	486	75	25	213	0	0	799	799	0	0	284	0	0	0	284	284	-515	-515
IX.08	381	72	40	148	0	0	641	641	0	0	191	0	0	0	191	191	-450	-450
X.08	374	67	1	217	0	0	659	659	0	0	175	0	0	0	175	175	-484	-484
XI.08	398	99	24	269	0	0	790	790	0	0	127	0	0	0	127	127	-663	-663
XII.08	271	301	0	181	0	0	753	753	0	0	292	0	0	0	292	292	-461	-461
2008	4628	1142	288	2382	0	0	8440	8440	0	0	3095	1	3096	0	3096	3096	-5344	-5344
I.09	271	292	0	139	0	0	702	702	0	0	333	0	0	0	333	333	-369	-369
II.09	285	252	0	135	0	0	672	672	0	0	285	0	0	0	285	285	-387	-387
III.09	328	271	0	90	0	0	689	689	0	0	356	0	0	0	356	356	-333	-333
IV.09	213	65	0	51	0	0	329	329	0	0	217	1	0	0	218	218	-111	-111
V.09	212	186	34	17	0	0	449	449	0	0	180	15	0	0	195	195	-254	-254
VI.09	352	282	2	19	0	0	655	655	0	0	208	13	0	0	221	221	-434	-434
VII.09	438	352	2	29	0	0	821	821	0	0	217	14	0	0	231	231	-590	-590
VIII.09	300	245	1	95	0	0	641	641	0	0	197	3	0	0	200	200	-441	-441
IX.09	242	217	62	124	0	0	645	645	0	0	121	0	0	0	121	121	-524	-524
X.09	244	139	100	161	0	0	644	644	0	0	175	0	0	0	175	175	-469	-469
XI.09	272	264	28	235	0	0	799	799	0	0	64	0	0	0	64	64	-735	-735
XII.09	261	237	1	89	0	0	588	588	0	0	265	0	0	0	265	265	-323	-323
2009	3418	2802	230	1184	0	0	7634	7634	0	0	2618	46	2664	0	2664	2664	-4970	-4970

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

# Bulgaria

## Monthly values / Operation

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	n.a.
			2008	14759
			2009	14256
Fossil fuels net generation	GWh	$\Sigma$	1999	n.a.
			2008	22594
			2009	20407
Hydraulic net generation	GWh	$\Sigma$	1999	n.a.
			2008	3202
			2009	3880
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	2008	0
			2009	0
- of which wind	GWh	$\Sigma$	2008	0
			2009	0
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	2008	0
			2009	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999	n.a.
			2008	40555
			2009	38543
Physical import	GWh	$\Sigma$	1999	n.a.
			2008	3096
			2009	2664
Physical export	GWh	$\Sigma$	1999	n.a.
			2008	8440
			2009	7634
Total physical import/export balance	GWh	$\Sigma$	1999	n.a.
			2008	-5397
			2009	-5121
Consumption of pumps	GWh	$\Sigma$	1999	n.a.
			2008	705
			2009	846
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	n.a.
			2008	34453
			2009	32576
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	n.a.
			2008 <sup>2</sup>	4972
			2009 <sup>2</sup>	4543
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	n.a.
			2008 <sup>2</sup>	6358
			2009 <sup>2</sup>	5801
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	n.a.
			2008 <sup>2</sup>	6771
			2009 <sup>2</sup>	6426
Time of highest load on the 3rd Wednesday	CET		1999	n.a.
			2008	20:00
			2009	20:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	n.a.

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).



## Monthly values / Operation

## Bulgaria

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1524	1336	1432	1364	1334	814	979	1135	677	1332	1392	1440
1430	1297	1432	972	819	1165	1312	1377	918	715	1383	1436
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2200	1781	1766	1561	1410	1808	1943	1788	2136	1786	2176	2239
2421	1973	1774	1455	1342	1199	1439	1225	1713	2156	1910	1800
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
361	245	255	351	399	385	269	245	195	162	160	175
227	275	323	378	437	413	362	312	238	259	286	370
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4085	3362	3453	3276	3143	3007	3191	3168	3008	3280	3728	3854
4078	3545	3529	2805	2598	2777	3113	2914	2869	3130	3579	3606
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
467	544	318	141	118	212	227	284	191	175	127	292
333	285	356	218	195	221	231	200	121	175	64	265
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.	n.a.	n.a.
574	540	746	726	705	726	781	799	641	659	790	753
702	672	689	329	449	655	821	641	645	644	799	588
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
-112	0	-434	-585	-587	-520	-561	-524	-454	-488	-668	-464
-375	-392	-337	-214	-256	-441	-596	-445	-527	-471	-739	-328
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
56	67	65	54	34	28	52	60	55	70	78	86
94	77	0	58	49	62	81	100	72	81	74	98
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3917	3295	2954	2637	2522	2459	2578	2584	2499	2722	2982	3304
3609	3076	3192	2533	2293	2274	2436	2369	2270	2578	2766	3180
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>4972</b>	4811	3725	3491	3282	3311	3393	3331	3163	3444	4060	4209
4414	<b>4543</b>	4081	3477	2983	3000	2989	2975	2969	3488	3564	4103
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>6358</b>	5950	5096	4646	4051	4191	4229	4302	4118	4378	5368	5347
<b>5801</b>	5691	5303	4563	3707	3876	3918	3897	3897	4623	4678	5757
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>6771</b>	6408	5829	5009	4467	4560	4459	4708	4691	5105	6014	<b>5971</b>
6303	<b>6426</b>	6125	4939	4184	4166	4383	4318	4555	5436	5440	6207
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>20:00</b>	20:00	20:00	21:00	22:00	22:00	23:00	22:00	21:00	20:00	19:00	19:00
19:00	<b>20:00</b>	20:00	21:00	22:00	23:00	23:00	22:00	21:00	20:00	19:00	20:00
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

<sup>2</sup> Gross values

				I-XII
Thermal nuclear net generation	GWh	Σ	1999 2008 2009	23523 26132 26119
Fossil fuels net generation	GWh	Σ	1999 2008 2009	2554 2121 2029
Hydraulic net generation	GWh	Σ	1999 2008 2009	40616 37559 37136
Other renewable net generation <sup>1</sup>	GWh	Σ	2008 2009	1155 1210
- of which wind	GWh	Σ	2008 2009	24 24
Non-identifiable net generation <sup>1</sup>	GWh	Σ	2008 2009	0 0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	Σ	1999 2008 <sup>2</sup> 2009 <sup>2</sup>	66693 66967 66494
Physical import	GWh	Σ	1999 2008 2009	20856 30494 30616
Physical export	GWh	Σ	1999 2008 2009	30123 30525 31782
Total physical import/export balance	GWh	Σ	1999 2008 2009	-10229 152 -959
Consumption of pumps	GWh	Σ	1999 2008 2009	1408 2685 2523
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	1999 <sup>3</sup> 2008 <sup>3</sup> 2009 <sup>3</sup>	55056 64434 63012
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	7093 7468 7931
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	8958 9610 10108
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	8982 9858 10261
Time of highest load on the 3rd Wednesday		CET	1999 2008 2009	17:00 10:00 18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	12372

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Switzerland

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
2279	2107	2180	2035	2215	1860	1168	1062	1816	2170	2276	2355	
2409	2252	2401	2320	2332	1460	2295	1253	2256	2392	2338	2424	
2426	2184	2414	2324	2365	1725	2267	1213	2056	2403	2320	2422	
248	230	225	210	191	168	157	177	235	233	238	242	
181	176	181	176	165	174	179	178	173	178	177	183	
178	164	171	165	163	161	167	162	170	170	178	180	
2300	2499	2570	2535	3842	4263	4446	4412	3946	3681	3276	2846	
2379	2243	2273	2301	3554	4500	4356	3976	4288	2574	2660	2455	
2675	2226	2389	2899	3890	4354	4703	4451	2916	2356	1976	2301	
98	96	99	96	90	95	97	97	94	97	96	100	
106	98	102	99	97	96	99	96	101	102	107	107	
2	2	2	2	2	2	2	2	2	2	2	2	
2	2	2	2	2	2	2	2	2	2	2	2	
0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	
4827	4836	4975	4780	6248	6291	5771	5651	5997	6084	5790	5443	
5067	4767	4954	4893	6141	6229	6927	5504	6811	5241	5271	5162	
5385	4672	5076	5487	6515	6336	7236	5922	5243	5031	4581	5010	
2737	2367	2461	2253	1036	915	1162	942	1377	1469	1827	2310	
3683	3361	3360	2852	1925	1412	1280	1878	1459	2811	2934	3539	
3512	3344	3254	2008	1406	1647	1335	1740	2546	2919	3261	3644	
2249	2154	2295	2416	2865	2844	2669	2241	2871	2777	2436	2306	
2545	2413	2459	2186	2786	2440	3027	2277	3001	2446	2414	2531	
2502	2285	2451	2532	2885	3083	3544	2642	2738	2484	2200	2436	
406	181	97	-238	-1907	-2040	-1629	-1419	-1584	-1391	-651	-54	
1157	969	920	683	-848	-1015	-1742	-385	-1529	381	537	1024	
1029	1076	818	-514	-1467	-1416	-2190	-889	-176	460	1082	1228	
44	21	34	95	194	252	222	215	131	82	35	83	
163	125	142	203	314	307	330	312	205	230	166	188	
117	137	184	176	283	245	319	289	221	200	151	201	
5189	4996	5038	4447	4147	3999	3920	4017	4282	4611	5104	5306	
6061	5611	5732	5373	4979	4907	4855	4807	5077	5392	5642	5998	
6297	5611	5710	4797	4765	4675	4727	4744	4846	5291	5512	6037	
6834	<b>7093</b>	6005	5619	4822	4809	4490	4729	4981	5941	6571	7011	
7173	<b>7468</b>	7312	6869	5737	5618	5273	5488	5901	5661	6854	7404	
7567	7706	6587	5221	5279	5214	5265	5288	5498	6536	6052	<b>7931</b>	
8522	8867	8223	8195	7565	7726	7086	7772	7958	8316	8627	<b>8958</b>	
<b>9610</b>	9348	8655	9071	8623	8416	7943	8669	8714	8458	9268	9483	
9714	9681	8576	7796	8125	8337	8311	8439	8798	8715	8960	<b>10108</b>	
8635	8942	8223	8195	7565	7726	7086	7772	7958	8316	8820	<b>8982</b>	
9610	9408	8948	9071	8623	8416	7943	8669	8714	8458	9274	<b>9858</b>	
9752	9695	8646	7796	8125	8337	8311	8439	8798	8715	9042	<b>10261</b>	
08:00	10:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	10:00	<b>17:00</b>	
11:00	08:00	12:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	17:00	<b>10:00</b>	
10:00	09:00	08:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	18:00	<b>18:00</b>	
10291	10993	9291	9269	10867	11470	10372	10387	12115	12137	11779	<b>12372</b>	

<sup>2</sup> including deliveries from industry<sup>3</sup> Calculations based on the ENTSO-E database differ from the official values of the Swiss Federal Office of Energy.

Physical exchanges in interconnected operation <sup>1</sup>

## Switzerland GWh

MM_YY	Export (-)						Import (+)						Balance	
	CH→AT	CH→DE	CH→FR	CH→IT	RG CE_EXP	Total_EXP	AT→CH	DE→CH	FR→CH	IT→CH	RG CE_IMP	Total_IMP	CH_RG CE	CH_Total
I.99	1	343	121	1784	2249	2249	400	1250	1087	0	2737	2737	488	488
II.99	6	413	170	1565	2154	2154	278	1010	1079	0	2367	2367	213	213
III.99	2	446	105	1742	2295	2295	324	1031	1106	0	2461	2461	166	166
IV.99	8	346	85	1977	2416	2416	370	1007	876	0	2253	2253	-163	-163
V.99	28	714	105	2018	2865	2865	200	322	507	7	1036	1036	-1829	-1829
VI.99	16	686	226	1916	2844	2844	185	296	433	1	915	915	-1929	-1929
VII.99	17	321	169	2162	2669	2669	200	569	392	1	1162	1162	-1507	-1507
VIII.99	66	509	276	1390	2241	2241	145	385	411	1	942	942	-1299	-1299
IX.99	99	509	411	1852	2871	2871	203	531	607	36	1377	1377	-1494	-1494
X.99	69	688	202	1818	2777	2777	217	528	722	2	1469	1469	-1308	-1308
XI.99	38	507	174	1717	2436	2436	288	756	783	0	1827	1827	-609	-609
XII.99	25	381	165	1735	2306	2306	335	1000	975	0	2310	2310	4	4
<b>1999</b>	<b>375</b>	<b>5863</b>	<b>2209</b>	<b>21676</b>	<b>30123</b>	<b>30123</b>	<b>3145</b>	<b>8685</b>	<b>8978</b>	<b>48</b>	<b>20856</b>	<b>20856</b>	<b>-9267</b>	<b>-9267</b>
I.08	0	59	301	2185	2545	2545	779	1915	983	6	3683	3683	1138	1138
II.08	0	55	182	2176	2413	2413	738	1603	1013	7	3361	3361	948	948
III.08	0	73	240	2146	2459	2459	838	1642	858	22	3360	3360	901	901
IV.08	0	88	165	1933	2186	2186	817	1228	794	13	2852	2852	666	666
V.08	3	334	116	2333	2786	2786	627	562	727	9	1925	1925	-861	-861
VI.08	18	520	266	1636	2440	2440	339	471	540	62	1412	1412	-1028	-1028
VII.08	10	509	391	2117	3027	3027	452	353	446	29	1280	1280	-1747	-1747
VIII.08	0	323	346	1608	2277	2277	553	726	562	37	1878	1878	-399	-399
IX.08	68	449	552	1932	3001	3001	334	645	419	61	1459	1459	-1542	-1542
X.08	2	128	463	1853	2446	2446	540	1520	665	86	2811	2811	365	365
XI.08	5	109	164	2136	2414	2414	618	1450	840	26	2934	2934	520	520
XII.08	0	62	362	2107	2531	2531	814	1743	940	42	3539	3539	1008	1008
<b>2008</b>	<b>106</b>	<b>2709</b>	<b>3548</b>	<b>24162</b>	<b>30525</b>	<b>30525</b>	<b>7449</b>	<b>13858</b>	<b>8787</b>	<b>400</b>	<b>30494</b>	<b>30494</b>	<b>-31</b>	<b>-31</b>
I.09	3	112	275	2112	2502	2502	680	1738	1044	50	3512	3512	1010	1010
II.09	0	75	139	2071	2285	2285	677	1631	1014	22	3344	3344	1059	1059
III.09	0	113	37	2301	2451	2451	723	1247	1266	18	3254	3254	803	803
IV.09	0	246	293	1993	2532	2532	770	647	563	28	2008	2008	-524	-524
V.09	1	582	252	2050	2885	2885	569	347	444	46	1406	1406	-1479	-1479
VI.09	2	485	477	2119	3083	3083	768	480	322	77	1647	1647	-1436	-1436
VII.09	8	408	497	2631	3544	3544	535	417	335	48	1335	1335	-2209	-2209
VIII.09	3	210	493	1936	2642	2642	611	664	442	23	1740	1740	-902	-902
IX.09	6	136	389	2207	2738	2738	770	1119	624	33	2546	2546	-192	-192
X.09	1	131	568	1784	2484	2484	783	1406	653	77	2919	2919	435	435
XI.09	0	51	248	1901	2200	2200	846	1606	750	59	3261	3261	1061	1061
XII.09	0	87	496	1853	2436	2436	921	1840	854	29	3644	3644	1208	1208
<b>2009</b>	<b>24</b>	<b>2636</b>	<b>4164</b>	<b>24958</b>	<b>31782</b>	<b>31782</b>	<b>8653</b>	<b>13142</b>	<b>8311</b>	<b>510</b>	<b>30616</b>	<b>30616</b>	<b>-1166</b>	<b>-1166</b>

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

MM_YY	RG CE_EXP					RG CE_IMP					Total_IMP	CZ_UCTE	CZ_Total
	CZ→AT	CZ→DE	CZ→PL	CZ→SK	Total_EXP	AT→CZ	DE→CZ	PL→CZ	SK→CZ	Import (+)			
I.99	339	455	3	195	992	1	126	795	97	1019	1019	27	27
II.99	296	469	6	167	938	3	98	678	108	887	887	-51	-51
III.99	281	480	9	165	935	7	110	596	126	839	839	-96	-96
IV.99	240	327	9	204	780	11	94	496	124	725	725	-55	-55
V.99	216	350	7	134	707	17	38	314	121	490	490	-217	-217
VI.99	167	462	7	175	811	18	34	361	152	565	565	-246	-246
VII.99	274	434	5	281	994	5	48	456	197	706	706	-288	-288
VIII.99	165	326	8	284	783	4	5	470	138	617	617	-166	-166
IX.99	357	388	13	204	962	2	41	494	144	681	681	-281	-281
X.99	436	644	7	280	1367	0	5	666	110	781	781	-586	-586
XI.99	409	786	2	285	1482	0	0	710	93	803	803	-679	-679
XII.99	456	572	3	479	1510	0	13	742	117	872	872	-638	-638
1999	3636	5693	79	2853	12261	68	612	6778	1527	8985	8985	-3276	-3276
I.08	682	948	1	901	2532	0	195	865	4	1064	1064	-1468	-1468
II.08	608	787	0	754	2149	0	84	776	6	866	866	-1283	-1283
III.08	501	829	2	563	1895	4	37	651	16	708	708	-1187	-1187
IV.08	516	712	4	634	1866	0	28	527	14	569	569	-1297	-1297
V.08	440	458	9	372	1279	4	25	459	20	508	508	-771	-771
VI.08	369	590	4	433	1396	10	8	518	9	545	545	-851	-851
VII.08	422	747	1	567	1737	5	14	713	18	750	750	-987	-987
VIII.08	345	603	4	507	1459	12	10	546	24	592	592	-867	-867
IX.08	114	306	0	607	1027	3	154	311	16	484	484	-543	-543
X.08	159	524	0	667	1350	3	367	384	19	773	773	-577	-577
XI.08	563	604	0	299	1466	5	339	487	64	895	895	-571	-571
XII.08	616	832	1	381	1830	10	65	672	23	770	770	-1060	-1060
2008	5335	7940	26	6885	19986	56	1326	6909	233	8524	8524	-11462	-11462
I.09	732	678	0	663	2073	3	177	859	3	1042	1042	-1031	-1031
II.09	584	892	0	525	2001	6	20	691	2	719	719	-1282	-1282
III.09	573	1032	1	575	2181	9	26	610	3	648	648	-1533	-1533
IV.09	346	1186	34	217	1783	51	0	298	44	393	393	-1390	-1390
V.09	243	652	31	347	1273	84	19	341	19	463	463	-810	-810
VI.09	467	679	24	364	1534	34	9	418	17	478	478	-1056	-1056
VII.09	539	573	10	686	1808	19	47	509	3	578	578	-1230	-1230
VIII.09	564	320	12	570	1466	19	63	476	3	561	561	-905	-905
IX.09	557	359	11	784	1711	11	127	646	0	784	784	-927	-927
X.09	593	847	2	685	2127	17	152	642	0	811	811	-1316	-1316
XI.09	879	766	1	507	2153	3	228	740	45	1016	1016	-1137	-1137
XII.09	782	703	3	634	2122	6	97	636	2	741	741	-1381	-1381
2009	6859	8687	129	6557	22232	262	965	6866	141	8234	8234	-13998	-13998

These physical energy flows were measured on the cross-frontier transmission lines ( $>110$  kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

# Czech Republic

## Monthly values / Operation

				I-XII
Thermal nuclear net generation	GWh	Σ	1999	12525
			2008	25016
			2009	25665
Fossil fuels net generation	GWh	Σ	1999	44655
			2008	49447
			2009	46983
Hydraulic net generation	GWh	Σ	1999	2251
			2008	2367
			2009	2969
Other renewable net generation <sup>1</sup>	GWh	Σ	2008	257
			2009	373
- of which wind	GWh	Σ	2008	242
			2009	289
Non-identifiable net generation <sup>1</sup>	GWh	Σ	2008	0
			2009	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	Σ	1999 <sup>2</sup>	59431
			2008 <sup>2</sup>	77087
			2009 <sup>2</sup>	75990
Physical import	GWh	Σ	1999	8985
			2008	8524
			2009 <sup>3</sup>	8586
Physical export	GWh	Σ	1999	12261
			2008	19986
			2009	22232
Total physical import/export balance	GWh	Σ	1999	-3276
			2008	-11468
			2009	-13644
Consumption of pumps	GWh	Σ	1999	716
			2008	478
			2009	748
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	1999	55439
			2008	65141
			2009	61598
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	7710
			2008	7952
			2009	7764
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	8682
			2008	9615
			2009	9465
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	8879
			2008	9804
			2009	9836
Time of highest load on the 3rd Wednesday	CET		1999	17:00
			2008	12:00
			2009	17:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	10367

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Czech Republic

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1245	1127	1187	899	980	960	910	882	894	1081	1201	1159
2660	2275	2142	2000	1987	1942	2472	1977	1936	1729	1627	2269
2469	2179	2395	1993	1949	1945	2327	1991	1827	1959	2191	2440
4157	4005	3852	3426	3258	3068	2919	3010	3277	4121	4669	4893
4947	4646	4700	4545	3678	3548	3219	3537	3584	4247	4455	4341
4700	4475	4474	3716	3206	3354	3007	3186	3585	4511	4197	4572
203	223	311	195	161	158	170	162	164	169	171	164
234	250	376	278	220	160	128	122	109	160	162	168
160	191	354	301	220	247	387	244	180	216	237	232
25	24	31	17	13	12	19	20	16	20	29	31
16	30	39	28	30	32	32	30	31	41	37	27
24	23	30	16	12	11	17	19	13	19	28	30
15	29	36	18	21	24	20	17	19	34	32	24
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
5605	5355	5350	4520	4399	4186	3999	4054	4335	5371	6041	6216
7866	7195	7249	6840	5898	5662	5838	5656	5645	6156	6273	6809
7345	6875	7262	6038	5405	5578	5753	5451	5623	6727	6662	7271
1019	887	839	725	490	565	706	617	681	781	803	872
1064	866	708	569	508	545	750	592	484	773	895	770
1073	749	682	425	492	491	600	590	817	845	1049	773
992	938	935	780	707	811	994	783	962	1367	1482	1510
2532	2149	1895	1866	1279	1396	1737	1459	1027	1350	1466	1830
2073	2001	2181	1783	1273	1534	1808	1466	1711	2127	2153	2122
27	-51	-96	-55	-217	-246	-288	-166	-281	-586	-679	-638
-1468	-1284	-1187	-1299	-772	-851	-987	-867	-544	-575	-571	-1063
-999	-1252	-1499	-1360	-781	-1043	-1209	-874	-893	-1282	-1103	-1349
34	25	29	36	54	73	83	87	84	77	75	59
56	37	48	42	16	27	32	28	20	48	66	58
63	61	45	49	25	36	61	67	82	88	80	91
5598	5279	5225	4429	4128	3867	3628	3801	3970	4708	5287	5519
6342	5874	6014	5499	5110	4784	4819	4761	5081	5533	5636	5688
6283	5562	5718	4629	4599	4499	4483	4510	4648	5357	5479	5831
7206	<b>7710</b>	6930	6176	5477	5035	4564	4804	5131	6580	7116	7136
7702	<b>7952</b>	7550	6998	6467	6045	5870	5767	6337	6206	7048	6646
7453	<b>7764</b>	6714	5515	5495	5441	5439	5429	5576	6760	6064	7389
<b>8682</b>	8658	8230	7080	6395	6339	5821	6201	6351	7681	8355	8396
<b>9615</b>	9399	9210	8944	8531	7777	7687	7682	8275	8148	9006	8696
9440	9413	8363	7188	7268	7323	7436	7185	7395	8577	8130	<b>9465</b>
8862	8708	8310	7191	6605	6633	5948	6318	6985	8120	<b>8879</b>	8849
<b>9804</b>	9524	9493	8969	8674	7939	7884	7820	8526	8540	9472	9005
9666	9597	8703	7347	7423	7387	7568	7539	7645	8823	8891	<b>9836</b>
13:00	13:00	13:00	16:00	09:00	09:00	12:00	12:00	19:00	07:00	<b>17:00</b>	17:00
<b>12:00</b>	09:00	19:00	12:00	12:00	13:00	12:00	13:00	20:00	19:00	17:00	16:00
17:00	15:00	19:00	12:00	12:00	12:00	12:00	12:00	20:00	19:00	17:00	<b>17:00</b>
9421	9944	9400	8241	7951	8010	7183	7845	8054	9649	<b>10367</b>	9978

<sup>2</sup> including deliveries from industry<sup>3</sup> Official values of the Czech Regulatory Office

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	159595
			2008	141074
			2009	127953
Fossil fuels net generation	GWh	$\Sigma$	1999	303877
			2008	356366
			2009	330218
Hydraulic net generation	GWh	$\Sigma$	1999	21118
			2008	23473
			2009	21453
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	2008	66370
			2009	68747
- of which wind	GWh	$\Sigma$	2008	40429
			2009	37812
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	2008	0
			2009	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999 <sup>2</sup>	521047
			2008 <sup>2</sup>	587283
			2009 <sup>2</sup>	548371
Physical import	GWh	$\Sigma$	1999	38766
			2008	40245
			2009	40564
Physical export	GWh	$\Sigma$	1999	39068
			2008	62695
			2009	54906
Total physical import/export balance	GWh	$\Sigma$	1999	966
			2008	-22450
			2009	-14334
Consumption of pumps	GWh	$\Sigma$	1999	5015
			2008	7671
			2009	7172
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	516998
			2008	557162
			2009	526865
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	58252
			2008	59061
			2009	57523
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	79628
			2008	79864
			2009	74923
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	81612
			2008	82231
			2009	80102
Time of highest load on the 3rd Wednesday	CET		1999	12:00
			2008	18:00
			2009	18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	79300

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).



## Monthly values / Operation

## Germany

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
14224	12346	13358	12975	12066	12643	12358	12684	14026	13485	14201	15229
12303	12433	13178	11637	11320	10172	10341	12100	11432	11394	11971	12793
12605	11152	11096	10494	10092	9496	8941	10406	9830	10089	11410	12342
29357	28235	28511	24121	22644	21195	22170	21569	22396	25979	28071	29629
34159	33498	30841	31656	26658	27021	28749	25496	27544	31415	30001	29328
34472	30777	29427	23882	21995	25663	26653	23589	25378	29816	28565	30001
1523	1453	1943	2063	2029	2041	1986	1709	1477	1611	1521	1762
2017	1772	2144	2134	2261	2217	2251	2081	1635	1669	1560	1732
1456	1316	1789	2092	2229	2074	2243	1848	1577	1469	1528	1832
8453	6202	7718	4160	4004	4323	4493	5184	4341	5766	6411	5315
5510	5245	6248	4818	5756	5567	5386	4852	5383	6253	7915	5814
6563	4304	5532	2026	1648	2032	2256	2881	2131	3544	4385	3127
3352	3203	3762	2180	2962	2800	2576	1986	2675	3588	5418	3310
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
48497	45197	47108	42105	39503	38578	39261	38667	40750	44166	47087	50128
56932	53905	53881	49587	44243	43733	45834	44861	44952	50244	49943	49168
54043	48490	48560	41286	40072	42800	43223	40695	42168	47627	49418	49989
2855	3005	3244	3024	3346	3351	3223	3478	3240	3719	3593	2688
3375	3040	2860	3126	3372	4119	4355	3777	3242	2765	2938	3276
3622	3651	3833	3502	4176	3335	3279	3397	3125	3251	2542	2851
4020	3339	3532	3702	2812	2694	2819	2593	2997	3164	3321	4075
7488	6407	7080	5538	4055	3099	3173	3739	4223	5837	5834	6222
6180	5418	4641	4040	3091	4054	3173	3253	4006	4822	5904	6324
-1150	-298	-264	-545	583	714	463	957	294	580	328	-696
-4113	-3367	-4220	-2412	-683	1020	1182	38	-981	-3072	-2896	-2946
-2558	-1767	-808	-572	1084	-719	133	139	-856	-1571	-3366	-3473
345	302	356	396	463	492	416	407	420	426	492	500
723	670	714	536	536	622	666	674	624	647	619	640
676	461	477	479	566	594	685	662	659	645	598	670
47002	44597	46488	41164	39623	38800	39308	39217	40624	44320	46923	48932
52096	49868	48947	46639	43024	44131	46350	44225	43347	46525	46428	45582
50809	46262	47275	40235	40590	41487	42671	40172	40653	45411	45454	45846
53763	57782	54423	48745	43425	43824	43071	40876	43982	50536	<b>58252</b>	57063
58504	<b>59061</b>	57753	54360	48980	49407	49336	48684	50887	51179	55893	51252
53549	<b>57523</b>	50496	39570	42349	42746	42517	42930	45239	50228	50371	53824
74852	75968	74092	74653	69969	71570	66654	66920	69956	74018	78542	<b>79628</b>
<b>79864</b>	76884	75190	74627	72076	71523	71227	72350	73189	75276	76789	74967
73820	73930	68192	63607	64091	65376	68150	65614	69683	73972	<b>74923</b>	74843
76632	78083	76642	75162	71037	72639	68226	67115	70757	74168	79663	<b>81612</b>
81004	80471	76982	75656	73502	72958	72800	74231	74224	76648	<b>82231</b>	77472
75874	77443	72043	64623	65410	66532	69382	66774	70586	74631	<b>80102</b>	79110
18:00	19:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	18:00	<b>12:00</b>
19:00	19:00	20:00	12:00	12:00	12:00	12:00	12:00	12:00	20:00	<b>18:00</b>	18:00
19:00	19:00	20:00	12:00	12:00	12:00	12:00	12:00	12:00	20:00	<b>18:00</b>	18:00
74700	74700	72600	71300	68100	67400	65700	64600	69100	72200	76000	<b>79300</b>

<sup>2</sup>including deliveries from industry

# Germany GWh

## Physical exchanges in interconnected operation <sup>1</sup>

MM_YY	Export (-)												Import (+)												RG_CE_IMP	Total_IMP	DE_RG_CE	DE_Total
	DE→AT	DE→CH	DE→CZ	DE→FR	DE→LU	DE→NL	DE→PL	DE→DK_W	DE→DK_E <sup>2</sup>	DE→SE	RG_CE_EXP	Total_EXP	AT→DE	CH→DE	CZ→DE	FR→DE	LU→DE	NL→DE	PL→DE	DK_W→DE	DK_E <sup>2</sup> →DE	SE→DE						
I.99	631	1250	126	12	361	1456	148	n.a.	18	18	3984	4020	289	343	455	993	49	28	50	n.a.	536	112	2207	2855	-1777	-1165		
II.99	551	1010	98	0	326	1171	142	n.a.	21	20	3298	3339	299	413	469	1050	45	18	30	n.a.	550	131	2324	3005	-974	-334		
III.99	669	1031	110	0	342	1304	75	n.a.	0	1	3531	3532	343	446	480	1221	41	17	20	n.a.	550	126	2568	3244	-963	-288		
IV.99	662	1007	94	0	343	1400	193	n.a.	2	1	3699	3702	265	346	327	1422	42	18	23	n.a.	441	140	2443	3024	-1256	-678		
V.99	300	322	38	8	328	1648	156	n.a.	12	0	2800	2812	580	714	350	1030	49	80	20	n.a.	371	152	2823	3346	23	534		
VI.99	286	296	34	28	334	1577	115	n.a.	24	0	2670	2694	672	686	462	914	54	103	24	n.a.	300	136	2915	3351	245	657		
VII.99	211	569	48	5	330	1423	188	n.a.	45	0	2774	2819	676	321	434	1222	43	101	17	n.a.	278	131	2814	3223	40	404		
VIII.99	178	385	5	1	321	1276	209	n.a.	203	15	2375	2593	549	509	326	1571	53	151	24	n.a.	252	43	3183	3478	808	885		
IX.99	273	531	41	3	357	1451	186	n.a.	145	10	2842	2997	519	509	388	1375	60	57	30	n.a.	237	65	2938	3240	96	243		
X.99	299	528	5	38	390	1598	201	n.a.	73	32	3059	3164	489	688	644	1199	71	24	36	n.a.	474	94	3151	3719	92	555		
XI.99	586	756	0	42	400	1409	113	n.a.	13	2	3306	3321	380	507	786	909	78	34	81	n.a.	676	142	2775	3593	-531	272		
XII.99	864	1000	13	85	397	1445	228	n.a.	42	1	4032	4075	282	381	572	865	72	34	13	n.a.	454	15	2219	2688	-1813	-1387		
1999	5510	8685	612	222	4229	17158	1954	n.a.	598	100	38370	39068	5343	5863	5693	13771	657	665	368	n.a.	5119	1287	32360	38766	-6010	-302		
I.08	1778	1915	195	27	460	2222	799	23	32	37	7419	7488	332	59	948	832	71	1	0	667	285	180	2910	3375	-4509	-4113		
II.08	1692	1603	84	74	434	1811	687	5	7	10	6390	6407	271	55	787	560	64	30	0	746	227	300	2513	3040	-3877	-3367		
III.08	1707	1642	37	167	446	2452	608	8	0	13	7067	7080	476	73	829	338	68	0	1	731	0	344	2516	2860	-4551	-4220		
IV.08	1344	1228	28	103	442	2020	359	3	3	8	5527	5538	440	88	712	571	69	1	3	831	60	351	2715	3126	-2812	-2412		
V.08	991	562	25	41	446	1642	249	22	56	21	3978	4055	473	334	458	1081	72	29	35	450	200	240	2932	3372	-1046	-683		
VI.08	583	471	8	11	436	1244	260	25	31	30	3038	3099	660	520	590	1312	69	74	32	522	151	189	3779	4119	741	1020		
VII.08	533	353	14	36	457	1235	409	33	49	54	3070	3173	811	509	747	1156	73	44	2	524	227	262	3866	4355	796	1182		
VIII.08	697	726	10	44	421	1094	290	134	244	79	3416	3739	642	323	603	1602	70	152	12	239	39	95	3643	3777	227	38		
IX.08	1056	645	154	86	429	1316	323	75	82	57	4084	4223	360	449	306	1015	63	131	10	535	214	159	2869	3242	-1215	-981		
X.08	1475	1520	367	230	453	1074	569	42	56	51	5730	5837	338	128	524	377	67	232	0	692	228	179	2358	2765	-3372	-3072		
XI.08	1455	1450	339	40	435	1289	559	93	98	76	5660	5834	339	109	604	805	70	92	0	599	197	123	2618	2938	-3042	-2896		
XII.08	1686	1743	65	9	443	1460	466	123	120	107	5995	6222	465	62	832	920	79	43	1	644	145	85	3046	3276	-2949	-2946		
2008	14997	13858	1326	868	5302	18859	5578	586	778	543	61374	62695	5607	2709	7940	10569	835	829	96	7180	1973	2507	35765	40245	-25609	-22450		
I.09	1722	1738	177	66	471	1190	660	59	65	32	6083	6180	364	112	678	1086	78	96	0	737	261	210	3151	3622	-2932	-2558		
II.09	1566	1631	20	1	419	1165	508	34	49	25	5344	5418	404	75	892	1152	68	73	0	658	244	85	3322	3651	-2022	-1767		
III.09	1382	1247	26	39	438	811	402	158	125	13	4503	4641	530	113	1032	1172	68	169	4	539	189	17	3627	3833	-876	-808		
IV.09	985	647	0	98	388	1251	162	235	125	149	3766	4040	789	246	1186	529	47	75	38	405	67	120	3315	3502	-451	-538		
V.09	698	347	19	31	391	822	262	254	147	120	2824	3091	842	582	652	1372	46	130	25	362	53	112	4011	4176	1187	1085		
VI.09	916	480	9	280	383	1086	305	272	182	141	3731	4054	936	485	679	625	40	163	25	223	76	83	3176	3335	-555	-719		
VII.09	766	417	47	272	412	464	477	67	132	119	2922	3173	774	408	573	633	44	490	9	115	122	111	3046	3279	124	106		
VIII.09	969	664	63	40	406	184	411	184	208	124	2921	3253	627	210	320	1288	62	636	8	138	50	58	3289	3397	368	144		
IX.09	1261	1119	127	52	428	194	526	62	165	72	3769	4006	461	136	359	806	58	738	8	416	76	67	2982	3125	-787	-881		
X.09	1310	1406	152	248	461	406	577	86	120	56	4646	4822	643	131	847	464	65	448	11	519	72	51	3128	3251	-1518	-1571		
XI.09	1627	1606	228	156	432	691	668	189	194	113	5597	5904	342	51	766	682	58	196	2	358	51	36	2455	2542	-3142	-3362		
XII.09	1754	1840	97	153	486	606	660	214	289	225	5810	6324	349	87	703	798	94	296	5	476	25	18	2808	2851	-3002	-3473		
2009	14956	13142	965	1436	5115	8870	5618	1814	1801	1189	51916	54906	7061	2636	8687	10607	728	3510	135	4946	1286	968	38310	40564	-13606	-14342		

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

<sup>2</sup> Physical exchanges of the year 1998 with the whole Denmark.

Physical exchanges in interconnected operation <sup>1</sup>

MM_YY	Export (-)						Import (+)					DK_W_RG CE	DK_W_Total
	DK_W→DE	DK_W→NO	DK_W→SE	RG CE_EXP	Total_EXP	Total_IMP							
						DE→DK_W	NO→DK_W	SE→DK_W	RG CE_IMP	Total_IMP			
I.99	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
II.99	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
III.99	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
IV.99	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
V.99	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
VI.99	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
VII.99	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
VIII.99	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
IX.99	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
X.99	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
XI.99	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
XII.99	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
1999	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
I.08	667	95	65	667	827	23	192	178	23	393	-644	-434	
II.08	746	20	40	746	806	5	264	257	5	526	-741	-280	
III.08	731	14	44	731	789	8	316	254	8	578	-723	-211	
IV.08	831	3	0	831	834	3	353	440	3	796	-828	-38	
V.08	450	0	5	450	455	22	286	418	22	726	-428	271	
VI.08	522	1	25	522	548	25	352	238	25	615	-497	67	
VII.08	524	3	37	524	564	33	606	240	33	879	-491	315	
VIII.08	239	26	61	239	326	134	568	47	134	749	-105	423	
IX.08	535	10	77	535	622	75	531	188	75	794	-460	172	
X.08	692	33	234	692	959	42	558	60	42	660	-650	-299	
XI.08	599	114	328	599	1041	93	386	22	93	501	-506	-540	
XII.08	644	105	279	644	1028	123	402	22	123	547	-521	-481	
2008	7180	424	1195	7180	8799	586	4814	2364	586	7764	-6594	-1035	
I.09	737	149	181	737	1067	59	308	119	59	486	-678	-581	
II.09	658	156	100	658	914	34	263	99	34	396	-624	-518	
III.09	539	166	219	539	924	158	271	66	158	495	-381	-429	
IV.09	405	150	131	405	686	235	312	83	235	630	-170	-56	
V.09	362	143	105	362	610	254	295	99	254	648	-108	38	
VI.09	223	141	150	223	514	272	140	42	272	454	49	-60	
VII.09	115	32	136	115	283	67	216	63	67	346	-48	63	
VIII.09	138	13	297	138	448	184	495	13	184	692	46	244	
IX.09	416	3	219	416	638	62	570	28	62	660	-354	22	
X.09	519	84	110	519	713	86	398	31	86	515	-433	-198	
XI.09	358	185	163	358	706	189	288	16	189	473	-169	-233	
XII.09	476	227	174	476	877	214	292	8	214	514	-262	-363	
2009	4946	1449	1985	4946	8380	1814	3828	667	1814	6309	-3132	-2071	

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

				I-XII
Thermal nuclear net generation	GWh	Σ	1999 2008 2009	n.a. 0 0
Fossil fuels net generation	GWh	Σ	1999 2008 2009	n.a. 15910 16153
Hydraulic net generation	GWh	Σ	1999 2008 2009	n.a. 27 18
Other renewable net generation <sup>1</sup>	GWh	Σ	2008 2009	6804 6637
- of which wind	GWh	Σ	2008 2009	5209 5128
Non-identifiable net generation <sup>1</sup>	GWh	Σ	2008 2009	0 0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	Σ	1999 2008 <sup>2</sup> 2009 <sup>2</sup>	n.a. 22741 22808
Physical import	GWh	Σ	1999 2008 2009	n.a. 7764 6309
Physical export	GWh	Σ	1999 2008 2009	n.a. 8799 8380
Total physical import/export balance	GWh	Σ	1999 2008 2009	n.a. -1029 -2191
Consumption of pumps	GWh	Σ	1999 2008 2009	n.a. 0 0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	1999 2008 2009	n.a. 21712 20617
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	n.a. 2083 2079
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	n.a. 3508 3430
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	n.a. 3664 3545
Time of highest load on the 3rd Wednesday		CET	1999 2008 2009	n.a. 18:00 18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	n.a.

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Denmark West

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1506	1345	1355	1445	1168	1088	888	826	1157	1499	1723	1910
1923	1837	1678	1286	1011	1214	1037	927	1050	1284	1240	1666
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	3	4	3	2	1	1	1	2	2	2	2
2	2	2	1	1	1	1	1	1	1	2	3
969	814	749	338	282	535	399	461	396	652	707	502
647	466	598	352	532	445	405	482	603	675	815	617
817	670	603	215	178	431	274	349	275	510	556	331
483	316	447	237	430	361	307	375	492	539	674	467
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2479	2162	2108	1786	1452	1624	1288	1288	1555	2153	2432	2414
2572	2305	2278	1639	1544	1660	1443	1410	1654	1960	2057	2286
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
393	526	578	796	726	615	879	749	794	660	501	547
486	396	495	630	648	454	346	692	660	515	473	514
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.	n.a.	n.a.
827	806	789	834	455	548	564	326	622	959	1041	1028
1067	914	924	686	610	514	283	448	638	713	706	877
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
-431	-278	-211	-36	272	67	314	423	172	-299	-540	-482
-577	-527	-444	-56	37	-60	63	203	-18	-198	-251	-363
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2048	1884	1897	1750	1724	1691	1602	1711	1727	1854	1892	1932
1995	1778	1834	1583	1581	1600	1506	1613	1636	1762	1806	1923
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>2083</b>	2015	2021	1958	1894	1844	1580	1825	1819	1775	1967	1957
1978	<b>2079</b>	1888	1678	1669	1766	1508	1653	1695	1765	1833	1972
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>3508</b>	3319	3204	3205	3089	3048	2627	3157	3105	3254	3408	<b>3508</b>
3407	<b>3430</b>	3070	2972	2936	2958	2494	2915	2973	3149	3315	3403
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>3664</b>	3351	3204	3205	3089	3049	2627	3157	3105	3254	3580	3571
3537	3430	3070	2972	2936	2958	2494	2915	2973	3149	3439	<b>3545</b>
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>18:00</b>	19:00	11:00	11:00	11:00	12:00	11:00	11:00	11:00	11:00	18:00	18:00
18:00	09:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	18:00	<b>18:00</b>
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

<sup>2</sup>including deliveries from industry

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	56379
			2008	56482
			2009	50422
Fossil fuels net generation	GWh	$\Sigma$	1999	98298
			2008	158005
			2009	143006
Hydraulic net generation	GWh	$\Sigma$	1999	27645
			2008	25380
			2009	28719
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	2008	38599
			2009	41554
- of which wind	GWh	$\Sigma$	2008	31267
			2009	35956
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	2008	297
			2009	421
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999	193941
			2008	285681
			2009	270732
Physical import	GWh	$\Sigma$	1999	11858
			2008	5894
			2009	6784
Physical export	GWh	$\Sigma$	1999	5905
			2008	16485
			2009	14388
Total physical import/export balance	GWh	$\Sigma$	1999	5720
			2008	-11039
			2009	-8101
Consumption of pumps	GWh	$\Sigma$	1999	3668
			2008	3729
			2009	3750
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	195993
			2008	270913
			2009	258881
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	20621
			2008	27775
			2009	25684
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	28705
			2008	40680
			2009	43154
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	32037
			2008	42588
			2009	44058
Time of highest load on the 3rd Wednesday	CET		1999	19:00
			2008	19:00
			2009	18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	27169

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Spain

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
5175	3935	4011	3517	4881	4517	4678	5216	4712	5076	5279	5382	
5338	5134	5360	4033	4687	4586	4559	4999	4483	4317	4044	4942	
5430	4316	3893	4045	3684	3527	4003	5271	4377	3950	3973	3953	
9453	9391	8948	7662	6244	7484	9140	7531	8614	7828	7596	8407	
15094	15130	12506	12113	11433	11744	14595	13252	13317	13551	13180	12090	
13294	10933	10855	9954	10572	12827	14715	12618	13006	12652	10559	11021	
1765	1620	2217	2358	3106	2664	2142	1657	1796	2095	3069	3156	
1679	1246	1345	2853	3496	3339	2348	1657	1468	1298	1858	2793	
2625	3736	2983	2369	2749	2296	1922	1623	1200	1472	2266	3478	
3076	2460	4569	3828	2167	2611	2642	2590	2761	3087	4028	4780	
3604	3380	3492	3241	3129	2687	3033	2794	2964	3416	4949	4865	
2637	2005	4068	3309	1712	2043	2072	1921	2088	2427	3383	3602	
3358	3105	2763	2910	2617	2175	2353	2048	2360	2942	4662	4663	
25	31	25	25	24	23	24	22	24	26	26	22	
34	44	34	33	33	33	35	31	35	37	36	36	
17438	15899	16144	14400	15138	15600	16977	15321	16085	15955	16959	18025	
25841	24598	24432	23428	22275	22804	24758	23066	22610	22861	23756	25252	
25588	22925	21777	20120	20659	21908	24323	22874	22140	22098	22370	23950	
868	883	997	1080	1003	983	1155	867	899	958	1112	1053	
777	614	364	258	564	336	506	502	417	285	591	680	
472	526	726	654	825	622	598	477	407	359	412	706	
587	476	494	355	382	410	628	362	683	495	459	574	
1186	1227	1521	1507	1303	1360	1396	1267	1327	1350	1491	1550	
1308	953	876	1154	1244	1375	1524	1239	1073	1274	1264	1104	
244	367	463	713	628	571	516	505	211	439	625	438	
-457	-656	-1199	-1292	-761	-1052	-908	-796	-936	-1102	-948	-932	
-898	-475	-196	-549	-437	-769	-945	-824	-714	-941	-898	-455	
469	343	234	216	220	178	215	261	341	490	316	385	
419	411	391	216	200	274	246	186	221	294	411	460	
484	385	291	252	244	222	229	239	252	283	390	479	
17213	15923	16373	14897	15546	15993	17278	15565	15955	15904	17268	18078	
24965	23531	22842	21920	21314	21478	23604	22084	21453	21465	22397	23860	
24206	22065	21290	19319	19978	20917	23149	21811	21174	20874	21082	23016	
20019	20238	18360	18298	17786	19272	20098	17541	17571	17663	20443	<b>20621</b>	
<b>27775</b>	26842	24202	25353	23786	24462	25304	23962	24243	23116	24110	25756	
<b>25684</b>	25003	22110	21942	22250	23481	24653	24157	23002	22704	23115	15710	
28065	28148	24812	24475	25003	27457	27843	23662	25104	25434	28238	<b>28705</b>	
40591	38543	31944	35484	34962	35412	37088	33392	35793	34214	36505	<b>40680</b>	
40154	37128	32626	33803	31523	36843	38339	35495	34229	33972	34902	<b>43154</b>	
30051	29219	26577	24880	25241	28536	29496	24470	25795	27676	31177	<b>32037</b>	
42118	39519	34000	36942	35136	35903	37618	34186	36328	36487	39568	<b>42588</b>	
42865	38307	34143	34311	32770	37800	39282	37171	34504	35724	36707	<b>44058</b>	
20:00	21:00	21:00	12:00	13:00	13:00	13:00	13:00	13:00	21:00	20:00	<b>19:00</b>	
19:00	20:00	20:00	21:00	12:00	12:00	12:00	13:00	21:00	20:00	19:00	<b>19:00</b>	
19:00	21:00	20:00	21:00	10:00	13:00	13:00	13:00	12:00	20:00	19:00	<b>18:00</b>	
26495	26495	22714	22159	22448	25321	26434	22097	24188	23223	25744	<b>27169</b>	

Physical exchanges in interconnected operation <sup>1</sup>

MM_YY	Export (-)						Import (+)						Balance	
	ES→FR	ES→PT	ES→MA	RG CE_EXP	Total_EXP	FR→ES	PT→ES	MA→ES	RG CE_IMP	Total_IMP	ES_RG CE	ES_Total		
I.99	66	454	67	520	587	531	337	0	868	868	348	281		
II.99	55	361	60	416	476	560	323	0	883	883	467	407		
III.99	50	380	64	430	494	600	397	0	997	997	567	503		
IV.99	65	226	64	291	355	601	479	0	1080	1080	789	725		
V.99	38	141	203	179	382	521	482	0	1003	1003	824	621		
VI.99	35	200	175	235	410	503	480	0	983	983	748	573		
VII.99	56	386	186	442	628	706	449	0	1155	1155	713	527		
VIII.99	25	139	198	164	362	673	194	0	867	867	703	505		
IX.99	47	425	211	472	683	648	251	0	899	899	427	216		
X.99	40	270	185	310	495	655	303	0	958	958	648	463		
XI.99	47	220	192	267	459	729	383	0	1112	1112	845	653		
XII.99	65	311	198	376	574	678	375	0	1053	1053	677	479		
<b>1999</b>	<b>589</b>	<b>3513</b>	<b>1803</b>	<b>4102</b>	<b>5905</b>	<b>7405</b>	<b>4453</b>	<b>0</b>	<b>11858</b>	<b>11858</b>	<b>7756</b>	<b>5953</b>		
I.08	71	878	237	949	1186	594	181	2	775	777	-174	-409		
II.08	35	845	347	880	1227	532	82	0	614	614	-266	-613		
III.08	161	1066	294	1227	1521	324	38	2	362	364	-865	-1157		
IV.08	174	948	385	1122	1507	197	61	0	258	258	-864	-1249		
V.08	115	850	338	965	1303	483	80	1	563	564	-402	-739		
VI.08	142	863	355	1005	1360	248	87	1	335	336	-670	-1024		
VII.08	129	795	472	924	1396	425	81	0	506	506	-418	-890		
VIII.08	79	697	491	776	1267	398	104	0	502	502	-274	-765		
IX.08	130	746	451	876	1327	299	118	0	417	417	-459	-910		
X.08	191	822	337	1013	1350	217	64	4	281	285	-732	-1065		
XI.08	222	1032	237	1254	1491	420	168	3	588	591	-666	-900		
XII.08	212	1055	283	1267	1550	427	251	2	678	680	-589	-870		
<b>2008</b>	<b>1661</b>	<b>10597</b>	<b>4227</b>	<b>12258</b>	<b>16485</b>	<b>4564</b>	<b>1315</b>	<b>15</b>	<b>5879</b>	<b>5894</b>	<b>-6379</b>	<b>-10591</b>		
I.09	322	820	166	1142	1308	226	243	3	469	472	-673	-836		
II.09	276	471	206	747	953	175	349	2	524	526	-223	-427		
III.09	148	545	183	693	876	429	294	3	723	726	30	-150		
IV.09	92	732	330	824	1154	505	149	0	654	654	-170	-500		
V.09	79	698	467	777	1244	652	173	0	825	825	48	-419		
VI.09	188	743	444	931	1375	465	157	0	622	622	-309	-753		
VII.09	250	739	535	989	1524	443	155	0	598	598	-391	-926		
VIII.09	130	558	551	688	1239	284	193	0	477	477	-211	-762		
IX.09	129	485	459	614	1073	212	195	0	407	407	-207	-666		
X.09	163	583	528	746	1274	195	164	0	359	359	-387	-915		
XI.09	224	654	386	878	1264	198	214	0	412	412	-466	-852		
XII.09	350	411	343	761	1104	173	533	0	706	706	-55	-398		
<b>2009</b>	<b>2351</b>	<b>7439</b>	<b>4598</b>	<b>9790</b>	<b>14388</b>	<b>3957</b>	<b>2819</b>	<b>8</b>	<b>6776</b>	<b>6784</b>	<b>-3014</b>	<b>-7604</b>		

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".



MM_YY	Export (-)										Import (+)		RG CE_IMP	Total_IMP	FR_RG CE	FR_Total
	FR→BE	FR→CH	FR→DE	FR→ES	FR→IT	FR→GB	RG CE_EXP	Total_EXP	BE→FR	CH→FR	DE→FR	ES→FR	IT→FR	GB→FR		
I.99	163	1087	993	531	1407	1338	4181	5610	336	121	12	66	38	0	573	-3608
II.99	203	1079	1050	560	1386	1168	4278	5546	233	170	0	55	35	0	493	-3785
III.99	271	1106	1221	600	1528	1361	4726	6185	190	105	0	50	35	0	380	-4346
IV.99	359	876	1422	601	1281	1275	4539	5923	23	85	0	65	26	0	199	-4340
V.99	431	507	1030	521	1350	1351	3839	5269	31	105	8	38	16	0	198	-5025
VI.99	505	433	914	503	1232	1192	3587	4878	24	226	28	35	36	0	349	-3238
VII.99	694	392	1222	706	1190	1114	4204	5442	7	169	5	56	70	0	307	-3897
VIII.99	1018	411	1571	673	781	1318	4454	5922	0	276	1	25	87	0	389	-4065
IX.99	916	607	1375	648	1237	1076	4783	5979	0	411	3	47	33	0	494	-4289
X.99	589	722	1199	655	1422	1341	4587	6064	10	202	38	40	10	0	300	-4287
XI.99	344	783	909	729	1461	1158	4226	5547	84	174	42	47	20	0	367	-3859
XII.99	337	975	865	678	1495	1222	4350	5743	72	165	85	65	35	0	422	-3928
<b>1999</b>	<b>5830</b>	<b>8978</b>	<b>13771</b>	<b>7405</b>	<b>15770</b>	<b>14914</b>	<b>51754</b>	<b>68108</b>	<b>1010</b>	<b>2209</b>	<b>222</b>	<b>589</b>	<b>441</b>	<b>0</b>	<b>4471</b>	<b>-47283</b>
I.08	369	983	832	594	1189	1034	3967	5001	241	301	27	71	157	74	797	-3170
II.08	589	1013	560	532	1179	863	3873	4736	125	182	74	35	116	62	532	-3341
III.08	385	858	338	324	1148	806	3053	3859	207	240	167	161	159	53	934	-2872
IV.08	554	794	571	197	1131	1039	3247	4286	72	165	103	174	70	54	584	-2663
V.08	1030	727	1081	483	1240	1472	4561	6033	26	116	41	115	42	0	340	-4221
VI.08	1187	540	1312	248	944	1299	4231	5530	6	266	11	142	61	0	486	-3745
VII.08	711	446	1156	425	1143	1413	3881	5294	84	391	36	129	50	0	690	-3191
VIII.08	1158	562	1602	398	906	1315	4626	5941	32	346	44	79	58	0	559	-4067
IX.08	659	419	1015	299	891	1164	3283	4447	91	552	86	130	61	3	920	-2363
X.08	162	665	377	217	791	758	2212	2970	467	463	230	191	91	183	1442	-1625
XI.08	278	840	805	420	1172	738	3515	4253	287	164	40	222	82	194	795	-2720
XII.08	204	940	920	427	1107	547	3598	4145	398	362	9	212	193	300	1174	-2424
<b>2008</b>	<b>7286</b>	<b>8787</b>	<b>10569</b>	<b>4564</b>	<b>12841</b>	<b>12448</b>	<b>44047</b>	<b>56495</b>	<b>2036</b>	<b>3548</b>	<b>868</b>	<b>1661</b>	<b>1140</b>	<b>923</b>	<b>9253</b>	<b>-34794</b>
I.09	238	1044	1086	226	1116	467	3710	4177	492	275	66	322	130	367	1285	-2425
II.09	274	1014	1152	175	1168	432	3783	4215	318	139	1	276	112	203	846	-2937
III.09	249	1266	1172	429	1525	544	4641	5185	400	37	39	148	71	193	695	-3946
IV.09	130	563	529	505	1050	959	2777	3736	457	293	98	92	95	45	1035	-1742
V.09	276	444	1372	652	1083	1312	3827	5139	288	252	31	79	64	10	714	-3113
VI.09	162	322	625	465	1001	790	2575	3365	509	477	280	188	74	29	1528	-1047
VII.09	36	335	633	443	979	848	2426	3274	891	497	272	250	96	68	2006	-420
VIII.09	55	442	1288	284	674	620	2743	3363	538	493	40	130	50	167	1251	-1492
IX.09	83	624	806	212	836	203	2561	2764	645	389	52	129	70	361	1285	-1276
X.09	55	653	464	195	657	50	2024	2074	772	568	248	163	188	707	1939	-85
XI.09	64	750	682	198	920	316	2614	2930	619	248	156	224	130	597	1377	-1237
XII.09	87	854	798	173	799	348	2711	3059	701	496	153	350	135	611	1835	-876
<b>2009</b>	<b>1709</b>	<b>8311</b>	<b>10607</b>	<b>3957</b>	<b>11808</b>	<b>6889</b>	<b>36392</b>	<b>43281</b>	<b>6630</b>	<b>4164</b>	<b>1436</b>	<b>2351</b>	<b>1215</b>	<b>3358</b>	<b>15796</b>	<b>-20596</b>
<b>2009</b>																<b>-24127</b>

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	374914
			2008	418298
			2009	389999
Fossil fuels net generation	GWh	$\Sigma$	1999	48698
			2008	53262
			2009	54818
Hydraulic net generation	GWh	$\Sigma$	1999	76694
			2008	67960
			2009	61753
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	2008	9595
			2009	12232
- of which wind	GWh	$\Sigma$	2008	5557
			2009	7779
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	2008	0
			2009	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999	500306
			2008	549115
			2009	518802
Physical import	GWh	$\Sigma$	1999	4965
			2008	10176
			2009	19154
Physical export	GWh	$\Sigma$	1999	68108
			2008	56495
			2009	43281
Total physical import/export balance	GWh	$\Sigma$	1999	-63143
			2008	-48004
			2009	-25702
Consumption of pumps	GWh	$\Sigma$	1999	6298
			2008	6612
			2009	6707
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	430865
			2008	494499
			2009	486393
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	56208
			2008	65817
			2009	72868
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	64103
			2008	81049
			2009	85207
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	66858
			2008	84239
			2009	89719
Time of highest load on the 3rd Wednesday		CET	1999	19:00
			2008	19:00
			2009	19:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	71165

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## France

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
36266	32072	32785	31826	26807	27098	29901	28715	29687	32075	32920	34762	
40922	38900	37204	34294	31973	28517	31838	32030	31239	33950	36123	41308	
43093	37051	35932	30862	29883	27129	28900	28223	28680	30932	31461	37853	
5953	6197	4792	3035	1965	2324	2594	1950	3051	3606	6015	7216	
7011	6151	6405	3900	1952	2875	2526	1733	3096	4397	6062	7154	
7934	6842	6152	2568	1787	2064	2368	2539	3583	4754	6589	7638	
5242	6281	6894	6589	8470	7103	5762	4966	4985	6307	6719	7376	
6037	4421	5531	6988	7167	8311	5983	4247	4832	3751	5103	5589	
6069	5777	6194	6581	7049	6309	4869	3842	2973	3055	3808	5227	
987	788	1096	734	616	575	672	730	737	741	969	950	
1028	859	1138	773	938	765	961	754	908	998	1730	1380	
604	431	701	420	285	278	340	392	436	451	606	613	
646	505	756	478	552	418	561	361	565	649	1319	969	
0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	
47461	44550	44471	41450	37242	36525	38257	35631	37723	41988	45654	49354	
54957	50260	50236	45916	41708	40278	41019	38740	39904	42839	48257	55001	
58124	50529	49416	40784	39657	36267	37098	35358	36144	39739	43588	52098	
609	518	421	248	244	392	360	442	539	353	410	429	
871	594	987	638	340	486	690	559	923	1625	989	1474	
1652	1049	888	1080	724	1557	2074	1418	1646	2646	1974	2446	
5610	5546	6185	5923	5269	4878	5442	5922	5979	6064	5547	5743	
5001	4736	3859	4286	6033	5530	5294	5941	4447	2970	4253	4145	
4177	4215	5185	3736	5139	3365	3274	3363	2764	2074	2930	3059	
-5001	-5028	-5764	-5675	-5025	-4486	-5082	-5480	-5440	-5711	-5137	-5314	
-4300	-4302	-3020	-3764	-5798	-5160	-4747	-5510	-3683	-1444	-3427	-2849	
-2685	-3360	-4428	-2732	-4534	-1930	-1317	-2028	-1250	449	-1112	-775	
599	413	394	450	663	507	552	504	486	643	486	601	
799	691	750	531	454	289	273	279	498	706	618	724	
724	652	605	615	619	440	515	405	364	571	577	620	
41861	39109	38313	35325	31554	31532	32623	29647	31797	35634	40031	43439	
49858	45267	46466	41621	35456	34829	35999	32951	35723	40689	44212	51428	
54715	46517	44383	37437	34504	33897	35266	32925	34530	39617	41899	50703	
51268	<b>56208</b>	44134	46444	38880	38865	40576	35211	38214	45675	53386	53832	
59631	60831	59647	56130	43005	42227	43032	38357	42985	43709	53708	<b>65817</b>	
65232	63120	50748	44227	41330	40249	38423	39128	40887	49460	49127	<b>72868</b>	
62295	<b>64103</b>	54402	57922	51970	52069	53265	46615	52610	59885	59757	60941	
74468	71400	71181	67199	56931	56501	57469	51227	57455	59506	68408	<b>81049</b>	
79303	75130	61619	58232	54752	55803	56505	52232	57467	65897	63998	<b>85207</b>	
64133	66105	55723	58072	52401	52418	53689	47263	52612	60159	64509	<b>66858</b>	
77932	72810	74083	68374	57506	57592	58645	52650	58173	60549	72967	<b>84239</b>	
82807	78154	63564	58776	55634	56934	57725	54652	58291	66931	68605	<b>89719</b>	
19:00	19:00	20:00	12:00	12:00	12:00	12:00	12:00	12:00	10:00	19:00	<b>19:00</b>	
19:00	19:00	20:00	09:00	13:00	13:00	13:00	13:00	12:00	20:00	19:00	<b>19:00</b>	
19:00	19:00	09:00	12:00	13:00	13:00	13:00	13:00	12:00	20:00	19:00	<b>19:00</b>	
67914	<b>71165</b>	62105	66114	58676	59155	60722	54864	59752	65363	64617	65640	

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	0
			2008	0
			2009	0
Fossil fuels net generation	GWh	$\Sigma$	1999	37004
			2008	46717
			2009	41617
Hydraulic net generation	GWh	$\Sigma$	1999	4787
			2008	3298
			2009	5613
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	2008	1878
			2009	2280
- of which wind	GWh	$\Sigma$	2008	1662
			2009	1909
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	2008	0
			2009	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999	43977
			2008 <sup>2</sup>	51893
			2009 <sup>2</sup>	49510
Physical import	GWh	$\Sigma$	1999	1813
			2008	7575
			2009	7604
Physical export	GWh	$\Sigma$	1999	1652
			2008	1964
			2009	3224
Total physical import/export balance	GWh	$\Sigma$	1999	162
			2008	5615
			2009	4368
Consumption of pumps	GWh	$\Sigma$	1999	335
			2008	1198
			2009	386
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	43804
			2008	56310
			2009	53492
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	4864
			2008	6323
			2009	5549
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	7116
			2008	8777
			2009	8625
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	7504
			2008	9007
			2009	8936
Time of highest load on the 3rd Wednesday		CET	1999	13:00
			2008	13:00
			2009	13:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	7233

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Greece

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
3330	2951	2763	2733	2720	3141	3571	3302	2829	3092	3168	3404
4307	3741	3253	3427	3693	4049	4754	4325	3919	3784	3624	3841
3896	3270	3218	2926	3327	3520	4074	3825	3490	3508	3130	3433
389	430	559	549	371	339	325	322	220	331	466	486
308	289	253	179	264	379	450	302	230	181	199	264
341	507	562	518	352	351	505	419	305	396	691	666
144	135	193	163	96	131	146	194	123	178	145	230
215	204	195	154	138	143	170	227	192	198	185	259
123	115	173	143	78	115	131	178	107	160	127	212
196	182	160	132	111	112	140	190	160	158	147	221
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
3914	3558	3496	3453	3253	3662	4100	3813	3208	3602	3824	4094
4759	4165	3699	3769	4053	4559	5350	4821	4272	4143	3968	4335
4452	3981	3975	3598	3817	4014	4749	4471	3987	4102	4006	4358
22	46	138	131	219	265	313	304	239	71	29	36
485	660	853	597	567	655	675	741	580	469	640	653
580	592	754	550	566	860	933	659	543	454	550	563
220	219	134	74	74	62	44	46	68	175	283	253
226	190	182	161	112	108	101	127	156	222	193	186
297	282	277	225	143	157	182	291	312	350	345	363
-198	-173	4	57	145	203	269	258	171	-104	-253	-217
260	471	672	436	456	547	574	614	424	248	447	466
284	309	475	324	420	702	751	367	229	105	203	199
21	13	5	4	48	52	58	46	26	23	30	9
103	96	101	100	101	91	94	95	98	105	104	110
83	20	51	29	31	67	21	16	23	21	17	7
3695	3372	3495	3506	3350	3813	4311	4025	3353	3475	3541	3868
4916	4540	4270	4105	4408	5015	5830	5340	4598	4286	4311	4691
4653	4270	4399	3893	4206	4649	5479	4822	4193	4186	4192	4550
4238	4171	3896	3314	3520	4322	4827	<b>4864</b>	3523	3513	3910	4226
4963	5314	4285	4259	4509	5265	<b>6323</b>	5867	4826	4218	4530	4688
4574	4972	4551	3990	4194	5191	<b>5549</b>	5092	4240	4066	4282	4723
6044	6009	6152	5276	5620	6789	<b>7116</b>	6882	5510	5575	5694	5964
7671	7889	5986	6580	7269	8731	<b>8777</b>	8537	7529	6821	7299	7201
7266	7708	7028	6437	6907	8500	<b>8625</b>	7703	6817	6413	6474	7035
6420	6214	6231	5740	5867	7091	<b>7504</b>	7204	5908	5963	6208	6629
8013	8226	6382	7143	7368	<b>9007</b>	8933	8860	7659	7391	7738	7899
7365	7857	7543	6874	7154	8869	<b>8936</b>	7915	7114	6956	7180	7864
20:00	20:00	20:00	22:00	13:00	13:00	<b>13:00</b>	13:00	21:00	21:00	19:00	19:00
19:00	19:00	19:00	21:00	12:00	<b>13:00</b>	13:00	13:00	20:00	20:00	18:00	18:00
19:00	19:00	20:00	21:00	21:00	13:00	<b>13:00</b>	13:00	20:00	20:00	19:00	18:00
6004	5904	5933	5314	5688	6843	<b>7233</b>	6952	5605	5575	5743	5974

<sup>2</sup>including deliveries from industry

MM_YY	Export (-)								Import (+)								Balance	
	GR→BG	GR→IT	GR→MK	GR→YUGO	GR→AL	GR→TR	RG CE_EXP	Total_EXP	BG→GR	IT→GR	MK→GR	YUGO→GR	AL→GR	TR→GR	RG CE_IMP	Total_IMP	GR_RG CE	GR_Total
I.99	49			50	121		50	220	8			14	0		14	22	-36	-198
II.99	34			58	127		58	219	23			23	0		23	46	-35	-173
III.99	10			5	119		5	134	32			103	3		103	138	98	4
IV.99	6			17	51		17	74	69			58	4		58	131	41	57
V.99	1			62	11		62	74	152			14	53		14	219	-48	145
VI.99	1			36	25		36	62	174			47	44		47	265	11	203
VII.99	0			1	43		1	44	196			107	10		107	313	106	269
VIII.99	1			2	43		2	46	210			87	7		87	304	85	258
IX.99	1			1	66		1	68	165			71	3		71	239	70	171
X.99	15			59	101		59	175	55			16	0		16	71	-43	-104
XI.99	66			60	157		60	283	16			13	0		13	29	-47	-254
XII.99	60			97	96		97	253	28			6	2		6	36	-91	-217
1999	244			448	960		448	1652	1128			559	126		559	1813	111	161
I.08	0	8	18		191	9	26	226	322	108	55		0	0	485	485	459	259
II.08	0	6	7		156	21	13	190	340	236	84		0	0	660	660	647	470
III.08	0	5	7		170	0	12	182	428	282	143		0	0	853	853	841	671
IV.08	0	55	3		103	0	58	161	395	99	103		0	0	597	597	539	436
V.08	0	11	5		96	0	16	112	351	138	78		0	0	567	567	551	455
VI.08	0	13	2		93	0	15	108	415	138	102		0	0	655	655	640	547
VII.08	0	0	3		98	0	3	101	467	91	117		0	0	675	675	672	574
VIII.08	0	11	2		114	0	13	127	486	150	105		0	0	741	741	728	614
IX.08	0	6	16		134	0	22	156	381	144	55		0	0	580	580	558	424
X.08	0	35	30		157	0	65	222	374	58	37		0	0	469	469	404	247
XI.08	0	13	2		178	0	15	193	398	121	121		0	0	640	640	625	447
XII.08	0	18	0		168	0	18	186	271	193	189		0	0	653	653	635	467
2008	0	181	95		1658	30	276	1964	4628	1758	1189		0	0	7575	7575	7299	5611
I.09	0	162	0		162	0	162	324	271	14	295		0	0	580	580	418	256
II.09	0	239	0		43	0	239	282	285	5	295		7	0	585	592	346	310
III.09	0	190	0		87	0	190	277	328	25	401		0	0	754	754	564	477
IV.09	0	222	0		3	0	222	225	213	53	247		37	0	513	550	291	325
V.09	0	126	0		17	0	126	143	212	23	316		15	0	551	566	425	423
VI.09	0	125	0		32	0	125	157	352	50	456		2	0	858	860	733	703
VII.09	0	138	0		44	0	138	182	438	4	491		0	0	933	933	795	751
VIII.09	0	161	0		130	0	161	291	300	4	355		0	0	659	659	498	368
IX.09	0	169	0		143	0	169	312	242	58	243		0	0	543	543	374	231
X.09	0	177	6		167	0	183	350	244	32	178		0	0	454	454	271	104
XI.09	0	207	0		138	0	207	345	272	30	248		0	0	550	550	343	205
XII.09	0	268	0		95	0	268	363	261	16	286		0	0	563	563	295	200
2009	0	2184	6		1061	0	2190	3251	3418	314	3811		61	0	7543	7604	5353	4353

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

Physical exchanges in interconnected operation <sup>1</sup>

## Croatia GWh

MM_YY	Export (-)							Import (+)							Total_IMP	HR_RG CE	HR_Total
	HR→BA	HR→YUGO	HR→HU	HR→RS	HR→SI	RG CE_EXP	Total_EXP	BA→HR	YUGO→HR	HU→HR	RS→HR	SI→HR	RG CE_IMP				
I.99	23	0	0	0	0	23	23	0	0	55		121	176	153	153		
II.99	3	0	0	0	0	3	3	1	3	51		136	191	188	188		
III.99	49	0	0	0	0	49	49	0	0	52		164	216	167	167		
IV.99	0	0	0	0	26	26	26	67	0	22		0	89	63	63		
V.99	0	0	0	0	0	0	0	6	0	17		14	37	37	37		
VI.99	0	0	0	0	0	0	0	53	0	22		87	162	162	162		
VII.99	0	0	0	0	0	0	0	41	0	24		147	212	212	212		
VIII.99	0	0	0	0	0	0	0	30	0	39		207	276	276	276		
IX.99	0	0	0	0	0	0	0	40	0	27		190	257	257	257		
X.99	0	0	0	0	0	0	0	9	0	19		251	279	279	279		
XI.99	59	0	0	0	0	59	59	0	0	70		283	353	294	294		
XII.99	41	0	0	0	43	84	84	0	0	340		0	340	256	256		
1999	175	0	0	0	69	244	244	247	3	738		1600	2588	2344	2344		
I.08	64	0	0	0	513	577	577	191		733	206	68	1198	621	621		
II.08	74	0	0	0	403	477	477	184		606	166	101	1057	580	580		
III.08	50	0	0	0	551	601	601	282		610	216	69	1177	576	576		
IV.08	33	0	0	0	474	507	507	261		373	183	152	969	462	462		
V.08	56	1	0	0	306	363	363	163		293	160	271	887	524	524		
VI.08	55	2	0	0	265	322	322	162		185	138	272	757	435	435		
VII.08	55	0	0	0	367	422	422	259		336	181	252	1028	606	606		
VIII.08	111	0	0	0	233	344	344	127		298	134	383	942	598	598		
IX.08	62	1	0	0	270	333	333	176		268	144	296	884	551	551		
X.08	47	0	0	0	426	473	473	280		533	149	134	1096	623	623		
XI.08	61	0	0	0	448	509	509	263		507	202	122	1094	585	585		
XII.08	69	0	0	0	672	741	741	316		559	182	101	1158	417	417		
2008	737	4	0	0	4928	5669	5669	2664		5301	2061	2221	12247	6578	6578		
I.09	73	0	0	0	604	677	677	322		451	193	126	1092	415	415		
II.09	43	0	0	0	686	729	729	450		406	181	72	1109	380	380		
III.09	68	0	0	0	594	662	662	345		440	173	157	1115	453	453		
IV.09	75	0	0	0	533	608	608	345		309	138	24	816	208	208		
V.09	78	4	0	0	312	394	394	245		126	118	385	874	480	480		
VI.09	82	1	0	0	374	457	457	266		221	140	375	1002	545	545		
VII.09	91	0	0	0	320	411	411	196		169	130	538	1033	622	622		
VIII.09	123	0	0	0	121	244	244	130		101	106	506	843	599	599		
IX.09	102	0	0	0	244	346	346	199		128	84	452	863	517	517		
X.09	77	0	0	0	445	522	522	255		195	147	398	995	473	473		
XI.09	60	3	0	0	509	572	572	348		376	186	204	1114	542	542		
XII.09	102	0	0	0	454	556	556	179		388	111	337	1015	459	459		
2009	974	8	0	0	5196	6178	6178	3280		3310	1707	3574	11871	5693	5693		

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	0
			2008	0
			2009	0
Fossil fuels net generation	GWh	$\Sigma$	1999	4807
			2008	6090
			2009	5190
Hydraulic net generation	GWh	$\Sigma$	1999	6526
			2008	5284
			2009	6775
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	2008	44
			2009	52
- of which wind	GWh	$\Sigma$	2008	41
			2009	43
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	2008	0
			2009	7
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999 <sup>2</sup>	11333
			2008 <sup>2</sup>	11418
			2009 <sup>2</sup>	12024
Physical import	GWh	$\Sigma$	1999	2588
			2008	12247
			2009	11871
Physical export	GWh	$\Sigma$	1999	244
			2008	5669
			2009	6178
Total physical import/export balance	GWh	$\Sigma$	1999	2344
			2008	6597
			2009	5686
Consumption of pumps	GWh	$\Sigma$	1999	4
			2008	154
			2009	203
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	13673
			2008	17861
			2009	17507
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	1401
			2008	1675
			2009	1703
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	2347
			2008	2556
			2009	2794
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	2375
			2008	2839
			2009	3035
Time of highest load on the 3rd Wednesday	CET		1999	12:00
			2008	20:00
			2009	20:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	1886

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).



## Monthly values / Operation

## Croatia

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
651	522	426	312	266	316	393	375	361	351	465	369
564	599	559	379	347	493	583	560	596	594	456	360
488	350	363	303	246	325	459	487	526	624	515	504
571	572	653	693	672	474	420	371	375	450	484	791
505	372	437	566	488	468	346	323	267	228	427	857
807	799	741	814	612	443	416	390	305	333	425	690
4	4	4	5	3	2	3	2	4	3	4	6
5	5	5	3	3	4	2	3	4	5	5	8
4	3	4	4	3	2	3	2	4	3	4	5
4	5	5	2	2	3	2	2	3	4	4	7
0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	1	1	0	0	0	0	0	1	1
1222	1094	1079	1005	938	790	813	746	736	801	949	1160
1073	975	1000	950	838	963	932	885	867	825	887	1223
1300	1154	1112	1121	862	772	877	880	835	962	946	1203
176	191	216	89	37	162	212	276	257	279	353	340
1198	1057	1177	969	887	757	1028	942	884	1096	1094	1158
1092	1109	1115	816	874	1002	1033	843	863	995	1114	1015
23	3	49	26	0	0	0	0	0	0	59	84
577	477	601	507	363	322	422	344	333	473	509	741
677	729	662	608	394	457	411	244	346	522	572	556
153	188	167	63	37	162	212	276	257	279	294	256
622	581	576	461	525	436	606	600	552	623	597	418
414	378	453	208	479	545	620	600	517	474	538	460
1	0	1	1	0	1	0	0	0	0	0	0
14	12	6	14	10	17	25	19	10	18	9	0
90	4	11	5	8	10	16	8	14	14	10	13
1374	1282	1245	1067	975	951	1025	1022	993	1080	1243	1416
1681	1544	1570	1397	1353	1382	1513	1466	1409	1430	1475	1641
1624	1528	1554	1324	1333	1307	1481	1472	1338	1422	1474	1650
1311	<b>1401</b>	1215	1092	917	972	1037	1044	983	1125	1226	1311
1571	<b>1675</b>	1567	1467	1352	1367	1486	1469	1362	1362	1464	1544
1572	<b>1703</b>	1459	1307	1345	1418	1494	1539	1339	1464	1393	1660
2238	<b>2347</b>	2107	1916	1553	1597	1667	1685	1635	1961	2133	2225
2495	<b>2556</b>	2427	2256	2184	2190	2284	2310	2187	2141	2349	2540
2568	<b>2794</b>	2261	2030	2129	2198	2389	2424	2113	2308	2199	2669
2309	<b>2375</b>	2223	1968	1637	1656	1707	1707	1795	2087	2257	2336
2740	<b>2839</b>	2738	2515	2269	2267	2434	2553	2463	2512	2737	2741
2746	<b>3035</b>	2655	2326	2284	2319	2550	2644	2388	2627	2574	2948
18:00	<b>12:00</b>	20:00	12:00	22:00	13:00	13:00	13:00	21:00	20:00	18:00	18:00
18:00	<b>20:00</b>	20:00	21:00	21:00	22:00	22:00	21:00	21:00	20:00	18:00	18:00
19:00	<b>20:00</b>	20:00	21:00	22:00	13:00	22:00	21:00	20:00	20:00	18:00	18:00
<b>1886</b>	1762	1786	1800	1473	1433	1219	1177	1149	1529	1633	1713

<sup>2</sup>including deliveries from industry

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	13268
			2008	13967
			2009	14570
Fossil fuels net generation	GWh	$\Sigma$	1999	26064
			2008	19375
			2009	15817
Hydraulic net generation	GWh	$\Sigma$	1999	176
			2008	208
			2009	222
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	2008	1460
			2009	1904
- of which wind	GWh	$\Sigma$	2008	181
			2009	300
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	2008	2372
			2009	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999 <sup>2</sup>	34220
			2008 <sup>2</sup>	37382
			2009 <sup>2</sup>	32513
Physical import	GWh	$\Sigma$	1999	4282
			2008	12772
			2009	10971
Physical export	GWh	$\Sigma$	1999	3285
			2008	8867
			2009	5463
Total physical import/export balance	GWh	$\Sigma$	1999	1062
			2008	3902
			2009	5513
Consumption of pumps	GWh	$\Sigma$	1999	0
			2008	0
			2009	0
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	35282
			2008	41284
			2009	38026
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	4360
			2008	4702
			2009	4494
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	5521
			2008	6104
			2009	5836
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	5682
			2008	6286
			2009	6252
Time of highest load on the 3rd Wednesday	CET		1999	13:00
			2008	18:00
			2009	18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	5532

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Hungary

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1243	1161	1082	1023	1006	957	911	947	1069	1296	1262	1311
1384	1296	1323	976	997	1017	1014	1009	998	1290	1255	1408
1417	1289	1279	1027	1013	1287	1060	1267	1026	1079	1379	1447
2172	2172	2172	2172	2172	2172	2172	2172	2172	2172	2172	2172
1754	1445	1583	1591	1462	1544	1615	1638	1693	1710	1703	1637
1579	1425	1300	1389	1194	981	1147	1068	1113	1437	1547	1637
12	16	4	4	8	22	23	19	17	17	16	18
18	19	6	10	18	24	21	19	19	21	17	16
17	16	14	17	20	24	24	16	14	20	20	20
117	111	120	84	104	99	117	106	158	151	139	154
154	141	159	122	184	182	162	146	129	172	168	185
12	12	17	2	13	8	20	15	18	15	20	29
24	36	44	20	25	24	20	18	14	27	22	26
207	237	256	234	163	182	165	141	110	217	227	233
0	0	0	0	0	0	0	0	0	0	0	0
3460	3152	3084	2662	2525	2406	2466	2493	2619	2963	3175	3215
3480	3108	3288	2895	2744	2866	2932	2913	2978	3389	3341	3448
3167	2871	2752	2555	2411	2474	2393	2497	2282	2708	3114	3289
257	264	309	307	262	370	427	440	330	303	344	669
1455	1353	1224	1032	1034	854	1037	954	966	1050	925	888
1015	850	1192	770	778	827	1112	802	1055	943	762	865
390	365	270	202	113	153	177	266	222	238	306	583
1164	970	947	565	472	399	543	560	588	943	817	899
667	581	608	429	216	359	296	251	264	400	598	794
-67	-101	39	105	148	217	250	174	108	65	38	86
291	382	277	467	560	456	494	394	379	107	107	-12
347	270	584	340	562	468	816	552	792	543	166	73
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
3393	3051	3123	2767	2673	2623	2716	2667	2727	3028	3213	3301
3771	3490	3565	3362	3304	3322	3426	3307	3357	3496	3448	3436
3514	3141	3336	2895	2973	2942	3209	3049	3074	3251	3280	3362
4295	<b>4360</b>	4095	3771	3502	3402	3277	3323	3362	3920	4061	4052
4665	<b>4702</b>	4530	4235	4123	4239	4117	3780	4120	4394	4237	4087
4390	<b>4494</b>	4167	3648	3815	3956	3844	3871	3981	4140	4102	4398
<b>5521</b>	5268	5140	4653	4381	4580	4567	4488	4553	5117	5280	5247
<b>6104</b>	5848	5754	5547	5375	5559	5519	4232	5588	5518	5764	5440
<b>5836</b>	5694	5399	4935	5108	5225	5735	5054	5277	5507	5377	5803
<b>5682</b>	5508	5324	4869	4518	4592	4658	4614	4795	5412	5614	5560
6286	6186	6135	5692	5467	5688	5651	4424	5770	6045	6184	<b>5830</b>
6156	6108	5846	5174	5252	5356	5824	5211	5610	5861	5992	<b>6252</b>
<b>13:00</b>	19:00	19:00	07:00	07:00	13:00	16:00	15:00	20:00	19:00	17:00	17:00
20:00	19:00	20:00	21:00	13:00	12:00	14:00	22:00	21:00	20:00	18:00	<b>18:00</b>
18:00	19:00	20:00	21:00	13:00	14:00	13:00	14:00	21:00	20:00	18:00	<b>18:00</b>
<b>5532</b>	5285	4967	4393	3978	4208	4167	4188	4338	5041	5014	4977

<sup>2</sup>including deliveries from industry

# Hungary GWh

## Physical exchanges in interconnected operation <sup>1</sup>

MM_YY	Export (-)										Import (+)				RG CE_IMP	Total_IMP	HU_RG CE	HU_Total
	HU→AT	HU→HR	HU→RO	HU→RS	HU→SK	HU→YUGO	HU→UA_W	RG CE_EXP	Total_EXP	AT→HU	YUGO→HU	HR→HU	RO→HU	RS→HU	SK→HU	UA_W→HU		
I.99	224	55	0	0	0	111	0	390	390	0	0	0	0	0	257	0	-133	-133
II.99	211	51	0	0	0	100	3	365	365	0	0	0	0	0	223	41	-139	-101
III.99	169	52	0	1	1	2	46	224	270	9	0	0	0	0	296	4	81	39
IV.99	168	22	0	1	1	0	11	191	202	7	0	0	0	0	287	13	103	105
V.99	52	17	0	5	5	33	6	107	113	13	0	0	0	0	240	9	146	149
VI.99	77	22	0	0	0	49	5	148	153	20	0	0	0	0	305	45	177	217
VII.99	150	24	0	0	0	3	0	177	177	7	0	0	0	0	341	79	171	250
VIII.99	223	39	0	0	0	2	2	264	266	5	0	0	0	0	382	53	123	174
IX.99	192	27	0	0	0	1	2	220	222	2	0	0	0	0	263	65	45	108
X.99	218	19	0	0	0	1	0	238	238	0	0	0	0	0	248	55	10	65
XI.99	202	70	0	4	4	30	0	306	306	0	0	0	0	0	217	127	-89	38
XII.99	132	340	0	0	0	111	0	583	583	2	0	0	0	0	460	207	-121	86
<b>1999</b>	<b>2018</b>	<b>738</b>	<b>0</b>	<b>11</b>	<b>443</b>	<b>75</b>	<b>0</b>	<b>3285</b>	<b>3285</b>	<b>65</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3519</b>	<b>698</b>	<b>374</b>	<b>997</b>
I.08	19	733	12	395	0	5	5	1159	1164	113	0	0	29	0	940	373	-77	291
II.08	10	606	17	337	0	0	0	970	970	121	0	0	18	0	850	364	19	383
III.08	42	610	4	273	0	18	18	929	947	88	0	0	47	0	782	307	-12	277
IV.08	45	373	0	146	0	1	1	564	565	53	0	0	136	0	591	252	216	467
V.08	25	293	0	151	0	3	3	469	472	61	1	1	126	0	666	180	385	562
VI.08	71	185	1	133	0	9	9	390	399	40	0	2	92	0	408	312	152	455
VII.08	36	336	0	171	0	0	0	543	543	72	0	0	101	0	456	408	86	494
VIII.08	16	298	16	207	0	23	23	537	560	122	0	0	27	0	491	314	103	394
IX.08	103	268	27	184	0	6	6	582	588	48	1	1	23	0	583	311	73	378
X.08	203	533	5	198	0	4	4	939	943	27	0	0	44	0	699	280	-169	107
XI.08	99	507	8	196	0	7	7	810	817	44	0	0	46	0	492	343	-228	108
XII.08	52	559	14	259	0	15	15	884	899	50	0	0	31	0	496	311	-307	-11
<b>2008</b>	<b>721</b>	<b>5301</b>	<b>104</b>	<b>2650</b>	<b>0</b>	<b>91</b>	<b>0</b>	<b>8776</b>	<b>8867</b>	<b>839</b>	<b>4</b>	<b>4</b>	<b>720</b>	<b>0</b>	<b>7454</b>	<b>3755</b>	<b>241</b>	<b>3905</b>
I.09	40	451	14	160	0	2	2	665	667	68	0	0	50	0	546	351	-1	348
II.09	46	406	3	122	0	4	4	577	581	52	0	0	81	0	422	295	-22	269
III.09	2	440	9	142	0	15	15	593	608	174	0	0	53	0	610	355	244	584
IV.09	27	309	8	65	0	20	20	409	429	97	0	0	75	3	403	192	169	341
V.09	3	126	21	36	0	30	30	186	216	207	4	4	80	19	421	47	545	562
VI.09	12	221	51	43	0	32	32	327	359	96	1	1	32	36	459	203	297	468
VII.09	7	169	22	86	0	12	12	284	296	143	0	0	42	6	654	267	297	468
VIII.09	5	101	26	98	0	21	21	230	251	186	0	0	45	0	374	197	561	816
IX.09	28	128	21	81	0	6	6	258	264	138	0	0	46	2	563	306	375	551
X.09	38	195	35	117	0	15	15	385	400	141	0	0	31	9	514	248	491	791
XI.09	27	376	21	149	0	25	25	573	598	33	3	3	49	0	451	226	310	543
XII.09	5	388	76	266	0	59	59	735	794	58	0	0	3	0	583	221	-37	164
<b>2009</b>	<b>240</b>	<b>3310</b>	<b>307</b>	<b>1365</b>	<b>0</b>	<b>241</b>	<b>0</b>	<b>5222</b>	<b>5463</b>	<b>1393</b>	<b>8</b>	<b>8</b>	<b>587</b>	<b>75</b>	<b>6000</b>	<b>2908</b>	<b>2841</b>	<b>5508</b>

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

Physical exchanges in interconnected operation <sup>1</sup>

Italy GWh

MM_YY	RG CE_EXP						RG CE_IMP						IT_RG CE	IT_Total
	IT→AT	IT→CH	IT→FR	IT→GR	IT→SI	Total_EXP	AT→IT	CH→IT	FR→IT	GR→IT	SI→IT	Total_IMP		
	Export (-)						Import (+)						Balance	
I.99	0	0	38		8	46	133	1784	1407		262	3586	3540	3540
II.99	0	0	35		14	49	117	1565	1386		208	3276	3227	3227
III.99	0	0	35		8	43	132	1742	1528		232	3634	3591	3591
IV.99	0	0	26		2	28	135	1977	1281		270	3663	3635	3635
V.99	0	7	16		0	23	141	2018	1350		341	3850	3827	3827
VI.99	0	1	36		2	39	163	1916	1232		306	3617	3578	3578
VII.99	0	1	70		0	71	160	2162	1190		358	3870	3799	3799
VIII.99	0	1	87		1	89	78	1390	1237		226	2475	2386	2386
IX.99	0	36	33		0	69	167	1852	1237		295	3551	3482	3482
X.99	0	2	10		0	12	158	1818	1422		344	3742	3730	3730
XI.99	0	0	20		2	22	155	1717	1461		211	3544	3522	3522
XII.99	0	0	35		1	36	148	1735	1495		353	3731	3695	3695
<b>1999</b>	<b>0</b>	<b>48</b>	<b>441</b>		<b>38</b>	<b>527</b>	<b>1687</b>	<b>21676</b>	<b>15770</b>		<b>3406</b>	<b>42539</b>	<b>42012</b>	<b>42012</b>
I.08	0	6	157	108	2	273	114	2185	1189	8	415	3911	3638	3638
II.08	0	7	116	236	2	361	107	2176	1179	6	305	3773	3412	3412
III.08	0	22	159	282	1	464	124	2146	1148	5	447	3870	3406	3406
IV.08	0	13	70	99	0	182	115	1933	1131	55	509	3743	3561	3561
V.08	0	9	42	138	3	192	121	2333	1240	11	380	4085	3893	3893
VI.08	0	62	61	138	8	269	114	1636	944	13	341	3048	2779	2779
VII.08	0	29	50	91	1	171	110	2117	1143	0	491	3861	3690	3690
VIII.08	0	37	58	150	4	249	120	1608	906	11	204	2849	2600	2600
IX.08	1	61	61	144	69	336	90	1932	891	6	164	3083	2747	2747
X.08	0	86	91	58	4	239	112	1853	791	35	322	3113	2874	2874
XI.08	0	26	82	121	1	230	120	2136	1172	13	411	3852	3622	3622
XII.08	0	42	193	193	0	428	120	2107	1107	18	744	4096	3668	3668
<b>2008</b>	<b>1</b>	<b>400</b>	<b>1140</b>	<b>1758</b>	<b>95</b>	<b>3394</b>	<b>1367</b>	<b>24162</b>	<b>12841</b>	<b>181</b>	<b>4733</b>	<b>43284</b>	<b>39890</b>	<b>39890</b>
I.09	0	50	130	14	0	194	116	2112	1116	162	541	4047	3853	3853
II.09	0	22	112	5	1	140	106	2071	1168	239	678	4262	4122	4122
III.09	0	18	71	25	0	114	119	2301	1525	190	647	4782	4668	4668
IV.09	0	28	95	53	0	176	126	1993	1050	222	727	4118	3942	3942
V.09	0	46	64	23	4	137	101	2050	1083	126	573	3933	3796	3796
VI.09	0	77	74	50	4	205	17	2119	1001	125	638	3900	3695	3695
VII.09	0	48	96	4	2	150	76	2631	979	138	599	4423	4273	4273
VIII.09	0	23	50	4	12	89	70	1936	674	161	99	2940	2851	2851
IX.09	0	33	70	58	24	185	106	2207	836	169	404	3722	3537	3537
X.09	0	77	188	32	4	301	124	1784	657	177	599	3341	3040	3040
XI.09	0	59	130	30	2	221	126	1901	920	207	672	3826	3605	3605
XII.09	0	29	135	16	7	187	111	1853	799	268	622	3653	3466	3466
<b>2009</b>	<b>0</b>	<b>510</b>	<b>1215</b>	<b>314</b>	<b>60</b>	<b>2099</b>	<b>1198</b>	<b>24958</b>	<b>11808</b>	<b>2184</b>	<b>6799</b>	<b>46947</b>	<b>44848</b>	<b>44848</b>

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	0
			2008	0
			2009	0
Fossil fuels net generation	GWh	$\Sigma$	1999	201174
			2008	250266
			2009	216196
Hydraulic net generation	GWh	$\Sigma$	1999	51561
			2008	46695
			2009	52843
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	2008	10248
			2009	12179
- of which wind	GWh	$\Sigma$	2008	4852
			2009	6485
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	2008	0
			2009	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999	252735
			2008	307209
			2009	281218
Physical import	GWh	$\Sigma$	1999	42539
			2008	43284
			2009	46947
Physical export	GWh	$\Sigma$	1999	527
			2008	3394
			2009	2099
Total physical import/export balance	GWh	$\Sigma$	1999	42012
			2008	39890
			2009	44848
Consumption of pumps	GWh	$\Sigma$	1999	8903
			2008	7618
			2009	5798
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	285844
			2008	339481
			2009	320268
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	26571
			2008	32482
			2009	31917
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	43789
			2008	51936
			2009	50472
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	46262
			2008	52632
			2009	50963
Time of highest load on the 3rd Wednesday		CET	1999	17:00
			2008	17:00
			2009	18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	40669

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Italy

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
18132	17505	18197	15406	14537	15764	17572	14836	17030	16684	17415	18096
23109	22296	21899	20055	18797	19815	22259	19076	21976	22536	19397	19051
19216	17206	17499	14557	15248	15855	19200	17736	19597	20601	20102	19379
2906	2823	3414	4107	5858	5358	4849	4098	4617	5090	4442	3999
2784	2465	2690	3076	4836	6018	5632	4260	4056	2916	4119	3843
3998	3843	3995	5459	6672	6355	5915	4398	3478	2933	2553	3244
916	817	1099	1096	829	706	790	714	716	741	854	970
973	1029	1233	949	820	909	876	789	941	1068	1061	1531
453	376	621	634	372	264	323	243	286	306	435	539
535	621	751	472	304	444	363	277	462	586	608	1062
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
21038	20328	21611	19513	20395	21122	22421	18934	21647	21774	21857	22095
26809	25578	25688	24227	24462	26539	28681	24050	26748	26193	24370	23864
24187	22078	22727	20965	22740	23119	25991	22923	24016	24602	23716	24154
3586	3276	3634	3663	3850	3617	3870	2475	3551	3742	3544	3731
3911	3773	3870	3743	4085	3048	3861	2849	3083	3113	3852	4096
4047	4262	4782	4118	3933	3900	4423	2940	3722	3341	3826	3653
46	49	43	28	23	39	71	89	69	12	22	36
273	361	464	182	192	269	171	249	336	239	230	428
194	140	114	176	137	205	150	89	185	301	221	187
3540	3227	3591	3635	3827	3578	3799	2386	3482	3730	3522	3695
3638	3412	3406	3561	3893	2779	3690	2600	2747	2874	3622	3668
3853	4122	4668	3942	3796	3695	4273	2851	3537	3040	3605	3466
746	690	681	723	801	701	748	632	786	785	780	830
639	571	599	593	663	687	618	610	649	681	725	583
553	475	486	570	546	367	418	404	400	472	542	565
23832	22865	24521	22425	23421	23999	25472	20688	24343	24719	24599	24960
29808	28419	28495	27195	27692	28631	31753	26040	28846	28386	27267	26949
27487	25725	26909	24337	25990	26447	29846	25370	27153	27170	26779	27055
23852	24674	23935	23690	24399	24944	<b>26571</b>	19807	25581	24145	24020	25227
30125	30796	29941	29498	29078	29892	<b>32482</b>	26339	29505	29727	28347	27516
28298	28137	26231	23868	27322	30575	<b>31917</b>	26493	28236	27816	26898	28082
40667	42812	40020	40720	40360	40677	43216	28680	41188	40872	40783	<b>43789</b>
51936	51845	48322	46695	46836	48492	<b>51498</b>	37761	46305	46462	46192	47100
48664	47931	42584	40560	43903	48613	<b>50472</b>	36908	46238	45970	44975	47668
42207	43183	40331	41068	40360	40677	43216	29300	41188	40878	42608	<b>46262</b>
<b>52632</b>	52227	48952	46924	46836	48492	51498	38917	46305	46995	49802	49642
49307	49170	43896	40831	43903	48613	50737	39465	46238	46200	47340	<b>50963</b>
18:00	10:00	09:00	10:00	11:00	11:00	11:00	21:00	11:00	10:00	17:00	<b>17:00</b>
<b>17:00</b>	19:00	19:00	10:00	11:00	11:00	11:00	21:00	11:00	19:00	18:00	18:00
18:00	19:00	19:00	10:00	11:00	11:00	12:00	21:00	11:00	10:00	18:00	<b>18:00</b>
36811	37579	34309	34899	34250	34847	37043	25487	35330	34823	36844	<b>40669</b>

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	0
			2008	0
			2009	0
Fossil fuels net generation	GWh	$\Sigma$	1999	230
			2008	2379
			2009	2809
Hydraulic net generation	GWh	$\Sigma$	1999	774
			2008	947
			2009	824
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	2008	153
			2009	163
- of which wind	GWh	$\Sigma$	2008	61
			2009	64
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	2008	0
			2009	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999	1028
			2008	3479
			2009	3796
Physical import	GWh	$\Sigma$	1999	6175
			2008	6819
			2009	6026
Physical export	GWh	$\Sigma$	1999	657
			2008	2464
			2009	2596
Total physical import/export balance	GWh	$\Sigma$	1999	5561
			2008	4355
			2009	3430
Consumption of pumps	GWh	$\Sigma$	1999	916
			2008	1160
			2009	1031
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	5673
			2008	6674
			2009	6195
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	722
			2008	832
			2009	763
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	782
			2008	1026
			2009	928
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	853
			2008	1052
			2009	998
Time of highest load on the 3rd Wednesday	CET		1999	19:00
			2008	12:00
			2009	18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	823

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).



## Monthly values / Operation

## Luxembourg

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	23	21	23	23	17	14	16	14	16	18	21	24
	275	249	267	181	24	23	57	255	261	283	260	244
	286	229	242	230	221	155	238	235	248	272	242	211
	66	58	55	56	59	60	47	57	64	80	87	85
	84	76	84	82	77	76	76	73	66	76	82	95
	89	81	82	58	54	45	48	64	60	67	67	109
	16	14	16	10	9	11	13	13	13	13	13	12
	13	12	16	13	13	13	14	12	12	14	16	15
	9	6	8	3	3	3	4	4	5	5	6	5
	5	5	8	4	4	4	5	3	4	5	10	7
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	91	81	80	81	78	76	65	73	82	100	110	111
	375	339	367	273	110	110	146	341	340	372	355	351
	388	322	340	301	288	213	300	311	320	353	325	335
	528	492	520	506	482	498	508	430	519	569	581	542
	614	582	605	597	634	610	634	526	528	533	487	469
	550	493	487	465	467	458	498	462	518	552	522	554
	49	45	41	42	49	54	43	53	60	71	78	72
	269	242	258	180	72	69	101	260	247	260	251	255
	266	218	230	200	186	141	202	243	224	246	213	227
	478	447	479	470	439	450	471	384	464	505	504	470
	345	340	347	417	562	541	533	266	281	273	236	214
	284	275	257	265	281	317	296	219	294	306	309	327
	73	60	56	56	70	74	61	75	86	100	106	99
	98	89	94	95	99	96	101	100	88	95	97	108
	107	95	93	66	66	58	67	88	80	92	85	134
	496	468	503	495	447	452	475	382	460	505	508	482
	622	590	620	595	573	555	578	507	533	550	494	457
	565	502	504	500	503	472	529	442	534	567	549	528
	<b>722</b>	715	683	672	671	584	641	529	494	679	712	661
	759	829	656	<b>832</b>	700	745	714	731	643	623	548	507
	617	756	<b>763</b>	643	643	676	716	539	655	661	736	637
	745	762	775	781	769	753	724	658	674	747	<b>782</b>	729
	1014	918	<b>1026</b>	842	963	958	909	866	943	848	756	724
	921	847	<b>928</b>	811	802	821	882	710	915	899	839	828
	803	792	831	781	783	776	752	680	727	811	<b>853</b>	794
	1041	1024	<b>1052</b>	917	999	986	911	920	947	906	775	743
	972	952	956	872	810	904	924	824	931	975	<b>998</b>	855
	20:00	20:00	12:00	11:00	20:00	12:00	12:00	13:00	14:00	21:00	<b>19:00</b>	19:00
	19:00	20:00	<b>12:00</b>	12:00	12:00	16:00	15:00	12:00	12:00	21:00	19:00	18:00
	19:00	19:00	09:00	12:00	12:00	13:00	12:00	12:00	14:00	12:00	<b>18:00</b>	12:00
	764	774	790	789	780	758	<b>823</b>	664	680	762	796	742

Physical exchanges in interconnected operation <sup>1</sup>

MM_YY	Export (-)				Import (+)				Total_IMP	LU_RG CE	LU_Total
	LU→BE	LU→DE	RG CE_EXP	Total_EXP	BE→LU	DE→LU	RG CE_IMP				
I.99	0	49	49	49	167	361	528	528	479	479	
II.99	0	45	45	45	166	326	492	492	447	447	
III.99	0	41	41	41	178	342	520	520	479	479	
IV.99	0	42	42	42	163	343	506	506	464	464	
V.99	0	49	49	49	154	328	482	482	433	433	
VI.99	0	54	54	54	164	334	498	498	444	444	
VII.99	0	43	43	43	178	330	508	508	465	465	
VIII.99	0	53	53	53	109	321	430	430	377	377	
IX.99	0	60	60	60	162	357	519	519	459	459	
X.99	0	71	71	71	179	390	569	569	498	498	
XI.99	0	78	78	78	181	400	581	581	503	503	
XII.99	0	72	72	72	145	397	542	542	470	470	
1999	0	657	657	657	1946	4229	6175	6175	5518	5518	
I.08	198	71	269	269	154	460	614	614	345	345	
II.08	178	64	242	242	148	434	582	582	340	340	
III.08	190	68	258	258	159	446	605	605	347	347	
IV.08	111	69	180	180	155	442	597	597	417	417	
V.08	0	72	72	72	188	446	634	634	562	562	
VI.08	0	69	69	69	174	436	610	610	541	541	
VII.08	28	73	101	101	177	457	634	634	533	533	
VIII.08	190	70	260	260	105	421	526	526	266	266	
IX.08	184	63	247	247	99	429	528	528	281	281	
X.08	193	67	260	260	80	453	533	533	273	273	
XI.08	181	70	251	251	52	435	487	487	236	236	
XII.08	176	79	255	255	26	443	469	469	214	214	
2008	1629	835	2464	2464	1517	5302	6819	6819	4355	4355	
I.09	188	78	266	266	79	471	550	550	284	284	
II.09	150	68	218	218	74	419	493	493	275	275	
III.09	162	68	230	230	49	438	487	487	257	257	
IV.09	153	47	200	200	77	388	465	465	265	265	
V.09	140	46	186	186	76	391	467	467	281	281	
VI.09	101	40	141	141	75	383	458	458	317	317	
VII.09	158	44	202	202	86	412	498	498	296	296	
VIII.09	181	62	243	243	56	406	462	462	219	219	
IX.09	166	58	224	224	90	428	518	518	294	294	
X.09	181	65	246	246	91	461	552	552	306	306	
XI.09	155	58	213	213	90	432	522	522	309	309	
XII.09	133	94	227	227	68	486	554	554	327	327	
2009	1868	728	2596	2596	911	5115	6026	6026	3430	3430	

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

MM_YY	Export (-)					Import (+)					Balance	
	ME→BA	ME→RS	ME→AL	RG CE_EXP	Total_EXP	BA→ME	RS→ME	AL→ME	RG CE_IMP	Total_IMP		
I.99	26	51	81	77	158	213	96	0	309	309	232	151
II.99	25	62	91	87	178	229	82	0	311	311	224	133
III.99	29	25	88	54	142	123	137	0	260	260	206	118
IV.99	28	19	59	47	106	109	132	0	241	241	194	135
V.99	11	13	47	24	71	151	142	1	293	294	269	223
VI.99	7	36	78	43	121	197	61	0	258	258	215	137
VII.99	10	23	29	33	62	153	140	1	293	294	260	232
VIII.99	2	21	76	23	99	234	106	0	340	340	317	241
IX.08	41	66	63	107	170	189	85	0	274	274	167	104
X.08	16	33	35	49	84	148	164	3	312	315	263	231
XI.08	21	35	76	56	132	165	72	0	237	237	181	105
XII.08	23	55	83	78	161	171	72	2	243	245	165	84
2008	239	439	806	678	1484	2082	1289	7	3371	3378	2693	1894
I.09	43	137	110	180	290	202	26	0	228	228	48	-62
II.09	55	177	0	232	232	177	4	0	181	181	-51	-51
III.09	16	122	107	138	245	246	31	0	277	277	139	32
IV.09	33	121	3	154	157	104	19	30	123	153	-31	-4
V.09	20	58	20	78	98	131	53	17	184	201	106	103
VI.09	10	29	88	39	127	239	59	0	298	298	259	171
VII.09	7	19	82	26	108	235	99	0	334	334	308	226
VIII.09	5	14	71	19	90	216	128	0	344	344	325	254
IX.09	5	4	58	9	67	159	171	0	330	330	321	263
X.09	19	43	75	62	137	161	100	0	261	261	199	124
XI.09	61	32	0	93	93	73	118	0	191	191	98	98
XII.09	20	137	0	157	157	252	44	0	296	296	139	139
2009	294	893	614	1187	1801	2195	852	47	3047	3094	1860	1293

These physical energy flows were measured on the cross-frontier transmission lines ( $>110$  kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	
			2008	0
			2009	0
Fossil fuels net generation	GWh	$\Sigma$	1999	
			2008	1155
			2009	621
Hydraulic net generation	GWh	$\Sigma$	1999	
			2008	1536
			2009	2053
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	1999	
			2008	0
			2009	0
- of which wind	GWh	$\Sigma$	1999	
			2008	0
			2009	0
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	1999	
			2008	0
			2009	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999	
			2008	2691
			2009	2674
Physical import	GWh	$\Sigma$	1999	
			2008	3378
			2009	3094
Physical export	GWh	$\Sigma$	1999	
			2008	1484
			2009	1801
Total physical import/export balance	GWh	$\Sigma$	1999	
			2008	1892
			2009	-1430
Consumption of pumps	GWh	$\Sigma$	1999	
			2008	0
			2009	0
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	
			2008	4583
			2009	1244
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	
			2008	542
			2009	455
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	
			2008	628
			2009	571
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	
			2008	715
			2009	633
Time of highest load on the 3rd Wednesday	CET		1999	
			2008	20:00
			2009	18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Montenegro

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
135	120	119	35	7	130	107	131	132	65	114	60
138	120	138	125	67	1	1	1	1	1	1	27
175	172	171	175	96	64	38	17	131	66	159	272
320	356	297	146	102	96	73	50	14	163	143	293
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
310	292	290	210	103	194	145	148	263	131	273	332
458	476	435	271	169	97	74	51	15	164	144	320
309	311	260	241	294	258	294	340	274	315	237	245
228	181	277	153	201	298	334	344	330	261	191	296
158	178	142	106	71	121	62	99	170	84	132	161
290	232	245	157	98	127	108	90	67	137	93	157
152	133	118	138	223	137	230	241	102	230	102	86
-68	-113	-29	2	-100	-169	-226	-254	-251	-123	-69	-30
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
462	425	408	348	326	331	375	389	365	361	375	418
390	363	406	273	69	-72	-152	-203	-236	41	75	290
519	<b>542</b>	455	389	361	366	402	424	391	409	433	438
394	<b>455</b>	n.a.	283	276	289	291	317	284	n.a.	n.a.	n.a.
<b>628</b>	623	591	462	462	469	520	535	509	484	528	542
526	<b>571</b>	n.a.	381	358	407	425	420	384	n.a.	n.a.	n.a.
670	<b>715</b>	651	561	501	524	563	617	565	556	620	606
557	<b>633</b>	n.a.	436	419	445	493	493	439	n.a.	n.a.	n.a.
18:00	<b>20:00</b>	20:00	22:00	21:00	22:00	22:00	21:00	21:00	21:00	19:00	20:00
20:00	<b>18:00</b>	n.a.	21:00	22:00	22:00	22:00	21:00	21:00	n.a.	n.a.	n.a.

				I-XII
Thermal nuclear net generation	GWh	Σ	1999 2008 2009	n.a. 0 0
Fossil fuels net generation	GWh	Σ	1999 2008 2009	n.a. 4982 5009
Hydraulic net generation	GWh	Σ	1999 2008 2009	n.a. 881 1243
Other renewable net generation <sup>1</sup>	GWh	Σ	2008 2009	0 0
- of which wind	GWh	Σ	2008 2009	0 0
Non-identifiable net generation <sup>1</sup>	GWh	Σ	2008 2009	0 0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	Σ	1999 2008 2009	n.a. 5863 6252
Physical import	GWh	Σ	1999 2008 2009	n.a. 3920 5138
Physical export	GWh	Σ	1999 2008 2009	n.a. 1203 3814
Total physical import/export balance	GWh	Σ	1999 2008 2009	n.a. 2780 1544
Consumption of pumps	GWh	Σ	1999 2008 2009	n.a. 0 0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	1999 2008 2009	n.a. 8643 7796
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	n.a. 1006 947
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	n.a. 1285 1217
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	n.a. 1431 1374
Time of highest load on the 3rd Wednesday		CET	1999 2008 2009	n.a. 18:00 19:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	n.a.

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## FYROM

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	566	483	499	417	285	298	341	346	349	442	476	480
	560	483	533	343	278	272	271	407	440	484	460	478
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	115	93	85	84	95	41	51	48	77	57	60	75
	101	71	94	135	165	130	116	74	39	74	116	128
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	681	576	584	501	380	339	392	394	426	499	536	555
	661	554	627	478	443	402	387	481	479	558	576	606
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	307	303	320	289	334	374	385	369	291	212	295	441
	496	488	532	235	396	544	647	406	296	255	366	477
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	55	84	143	103	79	102	117	105	55	37	121	202
	295	295	401	247	316	456	491	355	246	178	248	286
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	261	215	177	192	253	282	281	272	235	185	169	258
	201	188	136	94	90	99	157	132	51	76	126	194
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	942	791	761	693	633	621	673	666	661	684	705	813
	862	742	763	572	533	501	544	613	530	634	702	800
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	<b>1006</b>	954	862	768	666	690	750	691	694	723	783	810
	866	<b>947</b>	823	612	511	499	558	562	624	760	745	876
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	<b>1285</b>	1198	1273	996	882	909	956	958	853	919	1043	1088
	1178	<b>1217</b>	1082	867	742	759	786	803	760	1011	941	1136
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	<b>1431</b>	1371	1369	1162	994	1021	1012	1091	1067	1143	1278	1241
	1264	<b>1374</b>	1263	1054	860	861	923	902	949	1177	1127	1312
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	<b>18:00</b>	19:00	20:00	21:00	21:00	22:00	22:00	21:00	21:00	20:00	18:00	<b>18:00</b>
	18:00	<b>19:00</b>	20:00	21:00	22:00	15:00	15:00	21:00	20:00	20:00	18:00	15:00
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.





MM_YY	RG CE_EXP				RG CE_IMP				Total_IMP	NL_RG CE	NL_Total
	NL→BE	NL→DE	NL→NO	Export (-)	BE→NL	DE→NL	NO→NL	Import (+)			
I.99	407	28		435	197	1456		1653	1653	1218	1218
II.99	290	18		308	263	1171		1434	1434	1126	1126
III.99	318	17		335	381	1304		1685	1685	1350	1350
IV.99	293	18		311	459	1400		1859	1859	1548	1548
V.99	272	80		352	475	1648		2123	2123	1771	1771
VI.99	274	103		377	395	1577		1972	1972	1595	1595
VII.99	163	101		264	532	1423		1955	1955	1691	1691
VIII.99	134	151		285	707	1276		1983	1983	1698	1698
IX.99	149	57		206	511	1451		1962	1962	1756	1756
X.99	235	24		259	419	1598		2017	2017	1758	1758
XI.99	274	34		308	477	1409		1886	1886	1578	1578
XII.99	279	34		313	432	1445		1877	1877	1564	1564
1999	3088	665		3753	5248	17158		22406	22406	18653	18653
I.08	1010	1	0	1011	53	2222	0	2275	2275	1264	1264
II.08	793	30	0	823	71	1811	0	1882	1882	1059	1059
III.08	1545	0	0	1545	5	2452	0	2457	2457	912	912
IV.08	1210	1	0	1211	62	2020	0	2082	2082	871	871
V.08	564	29	0	593	235	1642	501	1877	2378	1284	1785
VI.08	273	74	3	347	540	1244	482	1784	2266	1437	1916
VII.08	286	44	12	330	485	1235	411	1720	2131	1390	1789
VIII.08	139	152	48	291	898	1094	341	1992	2333	1701	1994
IX.08	396	131	62	527	247	1316	318	1563	1881	1036	1292
X.08	819	232	43	1051	96	1074	394	1170	1564	119	470
XI.08	611	92	86	703	99	1289	351	1388	1739	685	950
XII.08	475	43	78	518	217	1460	358	1677	2035	1159	1439
2008	8121	829	332	8950	3008	18859	3156	21867	25023	12917	15741
I.09	632	96	61	728	87	1190	353	1277	1630	549	841
II.09	455	73	20	528	128	1165	106	1293	1399	765	851
III.09	334	169	138	503	199	811	281	1010	1291	507	650
IV.09	420	75	42	495	148	1251	61	1399	1460	904	923
V.09	228	130	99	358	531	822	94	1353	1447	995	990
VI.09	427	163	171	590	363	1086	193	1449	1642	859	881
VII.09	419	490	144	909	366	464	217	830	1047	-79	-6
VIII.09	291	636	82	927	857	184	297	1041	1338	114	329
IX.09	266	738	28	1004	474	194	412	668	1080	-336	48
X.09	707	448	85	1155	238	406	351	644	995	-511	-245
XI.09	801	196	174	997	150	691	234	841	1075	-156	-96
XII.09	809	296	213	1105	232	606	215	838	1053	-267	-265
2009	5789	3510	1257	9299	3773	8870	2814	12643	15457	3344	4901

These physical energy flows were measured on the cross-frontier transmission lines ( $>110$  kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	3539
			2008	3933
			2009	4018
Fossil fuels net generation	GWh	$\Sigma$	1999	48623
			2008	91451
			2009	95569
Hydraulic net generation	GWh	$\Sigma$	1999	0
			2008	102
			2009	0
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	2008	8866
			2009	8333
- of which wind	GWh	$\Sigma$	2008	4250
			2009	4589
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	2008	0
			2009	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999 <sup>2</sup>	83150
			2008 <sup>2</sup>	104352
			2009 <sup>2</sup>	107920
Physical import	GWh	$\Sigma$	1999	22406
			2008	25023
			2009	15457
Physical export	GWh	$\Sigma$	1999	3753
			2008	9282
			2009	10556
Total physical import/export balance	GWh	$\Sigma$	1999	18657
			2008	15842
			2009	4987
Consumption of pumps	GWh	$\Sigma$	1999	0
			2008	0
			2009	0
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	101807
			2008	120194
			2009	112907
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	8360
			2008	11300
			2009	10551
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	15377
			2008	17191
			2009	16768
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	15909
			2008	17712
			2009	17840
Time of highest load on the 3rd Wednesday	CET		1999	17:00
			2008	18:00
			2009	18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	8748

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## The Netherlands

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
338	295	335	327	337	323	282	243	69	325	327	338
362	338	361	125	275	345	354	353	345	361	351	363
365	330	364	147	359	343	351	349	341	358	349	362
4651	4271	4532	3680	3587	3672	3911	3697	4262	3923	4114	4323
8424	7759	8511	7820	6939	6658	6589	6326	7204	8504	8288	8429
8817	7869	8195	7181	6933	7202	7757	7431	7739	8620	8601	9224
0	0	0	0	0	0	0	0	0	0	0	0
9	10	4	7	9	10	8	6	5	8	12	14
0	0	0	0	0	0	0	0	0	0	0	0
1072	790	938	586	524	500	609	733	705	916	922	571
746	632	751	541	716	561	650	552	678	725	998	783
622	363	510	261	232	220	258	336	267	389	455	337
434	320	439	229	404	249	338	240	366	413	686	471
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
7795	7023	7487	6462	6227	6340	6654	6353	6561	7079	7401	7768
9867	8897	9814	8538	7747	7513	7560	7418	8259	9789	9573	9377
9928	8831	9310	7869	8008	8106	8758	8332	8758	9703	9948	10369
1653	1434	1685	1859	2123	1972	1955	1983	1962	2017	1886	1877
2275	1882	2457	2082	2378	2266	2131	2333	1881	1564	1739	2035
1630	1399	1291	1460	1447	1642	1047	1338	1080	995	1075	1053
435	308	335	311	352	377	264	285	206	259	308	313
1011	823	1545	1211	593	350	342	339	589	1094	789	596
789	548	641	537	457	761	1053	1009	1032	1240	1171	1318
1219	1126	1350	1548	1771	1595	1692	1699	1757	1757	1578	1565
1263	1058	909	881	1784	1916	1790	1993	1292	569	950	1437
840	850	649	923	989	880	17	399	48	-245	-98	-265
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
9014	8149	8837	8010	7998	7935	8346	8052	8318	8836	8979	9333
11130	9955	10723	9419	9531	9429	9350	9411	9551	10358	10523	10814
10768	9681	9959	8792	8997	8986	8775	8731	8806	9458	9850	10104
7393	7621	7662	7020	7904	7757	8272	7513	<b>8360</b>	7053	7400	7560
<b>11300</b>	10748	10919	10765	10299	10076	9834	10446	9902	9810	10207	10547
9883	10131	9645	8333	9515	8860	9212	9310	9103	9631	<b>10551</b>	10178
14812	14861	14786	14004	14648	14770	14130	13392	<b>15377</b>	14137	14820	15309
<b>17191</b>	15945	16230	15483	15102	14624	14817	15422	14613	15045	15956	16294
15641	15741	14398	13925	13501	13371	13414	14461	13827	15010	16727	<b>16768</b>
15110	14872	14806	14070	14705	14845	14222	13882	15480	14256	15596	<b>15909</b>
17314	16070	16324	15612	15236	15479	15104	15798	14650	15337	<b>17712</b>	16915
15960	15741	14409	14965	13658	13700	13855	14869	14251	15085	<b>17840</b>	17714
18:00	12:00	12:00	12:00	12:00	14:00	12:00	14:00	12:00	10:00	18:00	<b>17:00</b>
18:00	10:00	12:00	14:00	15:00	14:00	14:00	14:00	12:00	20:00	<b>18:00</b>	18:00
18:00	11:00	12:00	15:00	14:00	14:00	14:00	15:00	14:00	14:00	<b>18:00</b>	18:00
8717	8733	8455	7531	7775	8516	7487	7109	8542	7496	8320	<b>8748</b>

<sup>2</sup>including deliveries from industry

				I-XII
Thermal nuclear net generation	GWh	Σ	1999	0
			2008	0
			2009	0
Fossil fuels net generation	GWh	Σ	1999	137790
			2008 <sup>3</sup>	140812
			2009	135759
Hydraulic net generation	GWh	Σ	1999	4142
			2008	2668
			2009	2897
Other renewable net generation <sup>1</sup>	GWh	Σ	2008 <sup>4</sup>	948
			2009	1259
- of which wind	GWh	Σ	2008	796
			2009	1051
Non-identifiable net generation <sup>1</sup>	GWh	Σ	2008	0
			2009	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	Σ	1999 <sup>2</sup>	141932
			2008 <sup>2</sup>	144428
			2009 <sup>2</sup>	139915
Physical import	GWh	Σ	1999	2767
			2008	9021
			2009	7404
Physical export	GWh	Σ	1999	8424
			2008	9704
			2009	9593
Total physical import/export balance	GWh	Σ	1999	-4936
			2008	-685
			2009	-2205
Consumption of pumps	GWh	Σ	1999	2867
			2008	891
			2009	894
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	1999	134129
			2008	142852
			2009	136816
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	15908
			2008	15059
			2009	14845
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	20128
			2008	20160
			2009	20889
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	21753
			2008	21901
			2009	22425
Time of highest load on the 3rd Wednesday	CET		1999	17:00
			2008	17:00
			2009	18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	21811

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Poland

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
13454	12383	12451	10677	10202	9578	9702	9813	10208	12292	13228	13802
13390	12099	12161	11501	10720	10927	11051	11023	11373	12129	11899	12539
13082	11540	12302	10389	9657	10015	10456	10491	10847	12237	11908	12835
370	348	440	411	367	356	351	298	267	303	289	342
241	236	294	269	247	166	202	195	175	228	188	227
188	224	320	317	203	245	262	198	165	228	290	257
112	100	94	47	39	55	46	62	48	113	138	94
100	90	100	75	92	97	82	97	108	128	174	116
102	89	81	35	27	43	34	48	34	99	124	80
88	74	83	60	77	79	65	79	89	109	154	94
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
13824	12731	12891	11088	10569	9934	10053	10111	10475	12595	13517	14144
13743	12435	12549	11817	11006	11148	11299	11280	11596	12470	12225	12860
13370	11854	12722	10781	9952	10357	10800	10786	11120	12593	12372	13208
245	219	179	261	201	166	238	266	242	271	179	300
1007	962	951	699	642	513	774	560	636	868	787	622
891	654	458	242	484	476	691	579	723	715	804	687
931	807	715	592	462	468	578	520	571	865	985	930
1195	1093	884	691	588	634	781	612	597	861	865	903
1193	942	926	490	444	523	688	581	859	947	1046	954
-629	-537	-478	-274	-189	-239	-273	-190	-272	-538	-747	-570
-189	-131	66	8	56	-121	-10	-52	40	6	-78	-280
-304	-288	-477	-249	39	-46	2	-3	-138	-231	-244	-266
271	231	237	226	231	225	208	172	255	271	261	279
102	65	69	47	61	74	58	79	90	97	76	73
57	40	46	48	68	68	75	94	89	102	95	112
12924	11963	12176	10588	10149	9470	9572	9749	9948	11786	12509	13295
13452	12239	12546	11778	11001	10953	11231	11149	11546	12379	12071	12507
13009	11526	12199	10484	9923	10243	10727	10689	10893	12260	12033	12830
15563	<b>15908</b>	15337	14311	12727	11964	11620	11640	12083	14895	15655	15677
14870	15020	15059	13901	13047	13147	12655	13092	13588	13639	<b>14195</b>	13936
14549	14594	<b>13717</b>	12036	12188	12217	12246	12160	12444	14134	13684	14845
19387	19417	18866	17779	15866	15722	15050	15133	15583	19196	<b>20128</b>	19815
20100	20160	20019	19058	17886	17828	17300	17898	18836	18657	19518	<b>19605</b>
19849	<b>19745</b>	18740	16891	16911	16990	17335	17167	17411	19587	18962	20889
20837	20875	20301	18167	15961	15874	15082	15992	17405	20536	<b>21753</b>	21585
21901	21347	21664	19903	18143	18261	17763	18326	19891	20307	21383	<b>21190</b>
<b>20946</b>	20948	20208	17898	17219	17279	17774	17493	18697	20709	20616	22425
17:00	20:00	19:00	21:00	09:00	10:00	12:00	21:00	20:00	19:00	<b>17:00</b>	17:00
18:00	19:00	20:00	21:00	13:00	13:00	13:00	13:00	20:00	20:00	18:00	<b>17:00</b>
<b>18:00</b>	19:00	20:00	21:00	13:00	12:00	13:00	12:00	21:00	20:00	18:00	17:00
21271	20849	20257	18808	16428	16716	15991	16140	16359	20866	<b>21811</b>	21446

<sup>2</sup> including deliveries from industry<sup>3</sup> Energy from co-firing (biomass combustion in lignite/hard coal power stations) is classified as energy from fossil fuels installation.<sup>4</sup> Only energy from 100% renewable installation (e.g. wind farms, biogas) is classified as energy from renewable (co-firing is not included).

MM_YY	Export (-)							Import (+)							Balance		PL_RG CE	PL_Total
	PL→CZ	PL→DE	PL→SK	PL→BY	PL→SE	PL→UA	RG CE_EXP	Total_EXP	CZ→PL	DE→PL	SK→PL	BY→PL	SE→PL	UA→PL	RG CE_IMP	Total_IMP		
I.99	795	50	86				931	931	3	148	0			94	151	245	-780	-686
II.99	678	30	99		0	0	807	807	6	142	2	0	207	69	150	219	-657	-588
III.99	596	20	99		0	0	715	715	9	75	1	0	275	94	85	179	-630	-536
IV.99	496	23	73		6	0	592	592	9	193	1	0	283	58	203	261	-389	-331
V.99	314	20	128		2	0	462	462	7	156	0	0	226	38	163	201	-299	-261
VI.99	361	24	83		0	0	468	468	7	115	0	0	79	44	122	166	-346	-302
VII.99	456	17	105		0	0	578	578	5	188	0	0	182	45	193	238	-385	-340
VIII.99	470	24	26		0	0	520	520	8	209	0	0	106	49	217	266	-303	-254
IX.99	494	30	47		0	0	571	571	13	186	2	0	106	41	201	242	-370	-329
X.99	666	36	163		0	0	865	865	7	201	0	0	83	63	208	271	-657	-594
XI.99	710	81	194		0	0	985	985	2	113	0	0	67	64	115	179	-870	-806
XII.99	742	13	175		0	0	930	930	3	228	0	0	92	69	231	300	-699	-630
1999	6778	368	1278				8424	8424	79	1954	6	554	2066	766	2039	2767	-6385	-5657
I.08	865	0	330	0	0	0	1195	1195	1	799	0	0	207	0	800	1007	-395	-188
II.08	776	0	317	0	0	0	1093	1093	0	687	0	0	275	0	687	962	-406	-131
III.08	651	1	232	0	0	0	884	884	2	608	0	0	341	0	610	951	-274	67
IV.08	527	3	155	0	6	0	685	691	4	359	0	0	283	53	363	699	-322	8
V.08	459	35	92	0	2	0	586	588	9	249	3	61	226	94	261	642	-325	54
VI.08	518	32	71	0	13	0	621	634	4	260	8	67	79	95	272	513	-349	-121
VII.08	713	2	57	0	9	0	772	781	1	409	2	73	182	107	412	774	-360	-7
VIII.08	546	12	42	0	12	0	600	612	4	290	18	31	89	128	312	560	-288	-52
IX.08	311	10	258	0	18	0	579	597	0	323	0	57	132	124	323	636	-256	39
X.08	384	0	460	0	17	0	844	861	0	569	0	88	106	105	569	868	-275	7
XI.08	487	0	357	0	21	0	844	865	0	559	0	85	83	60	559	787	-285	-78
XII.08	672	1	181	0	49	0	854	903	1	466	0	92	63	0	467	622	-387	-281
2008	6909	96	2552	0	0	0	9557	9704	26	5578	31	554	2066	766	5635	9021	-3922	-683
I.09	859	0	310	0	24	0	1169	1193	0	660	0	0	231	0	660	891	-509	-302
II.09	691	0	224	0	27	0	915	942	0	508	0	0	146	0	508	654	-407	-288
III.09	610	4	264	0	48	0	878	926	1	402	0	0	55	0	403	458	-475	-468
IV.09	298	38	99	0	55	0	435	490	34	162	11	0	35	0	207	242	-228	-248
V.09	341	25	71	0	7	0	437	444	31	262	30	0	161	0	323	484	-114	40
VI.09	418	25	72	0	8	0	515	523	24	305	19	0	118	10	348	476	-167	-47
VII.09	509	9	155	0	15	0	673	688	10	477	1	0	203	0	488	691	-185	3
VIII.09	476	8	96	0	1	0	580	581	12	411	2	0	154	0	425	579	-155	-2
IX.09	646	8	205	0	0	0	859	859	11	526	1	0	122	63	538	723	-321	-136
X.09	642	11	294	0	0	0	947	947	2	577	0	0	69	67	579	715	-368	-232
XI.09	740	2	283	0	21	0	1025	1046	1	668	0	0	76	59	669	804	-356	-242
XII.09	636	5	265	0	48	0	906	954	3	660	0	0	24	0	663	687	-243	-267
2009	6866	135	2338	0	254	0	9339	9593	129	5618	64	0	1394	199	5811	7404	-3528	-2189

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

Physical exchanges in interconnected operation <sup>1</sup>

MM_YY	PT→ES		RG CE_EXP		Total_EXP		ES→PT		RG CE_IMP		Total_IMP		PT_RG CE		PT_Total	
	Export (-)		Import (+)		Balance											
I.99	337	337	337	337	337	337	454	454	454	454	454	454	117	117	117	117
II.99	323	323	323	323	323	323	361	361	361	361	361	361	38	38	38	38
III.99	397	397	397	397	397	397	380	380	380	380	380	380	-17	-17	-17	-17
IV.99	479	479	479	479	479	479	226	226	226	226	226	226	-253	-253	-253	-253
V.99	482	482	482	482	482	482	141	141	141	141	141	141	-341	-341	-341	-341
VI.99	480	480	480	480	480	480	200	200	200	200	200	200	-280	-280	-280	-280
VII.99	449	449	449	449	449	449	386	386	386	386	386	386	-63	-63	-63	-63
VIII.99	194	194	194	194	194	194	139	139	139	139	139	139	-55	-55	-55	-55
IX.99	251	251	251	251	251	251	425	425	425	425	425	425	174	174	174	174
X.99	303	303	303	303	303	303	270	270	270	270	270	270	-33	-33	-33	-33
XI.99	383	383	383	383	383	383	220	220	220	220	220	220	-163	-163	-163	-163
XII.99	375	375	375	375	375	375	311	311	311	311	311	311	-64	-64	-64	-64
<b>1999</b>	<b>4453</b>	<b>4453</b>	<b>4453</b>	<b>4453</b>	<b>4453</b>	<b>4453</b>	<b>3513</b>	<b>3513</b>	<b>3513</b>	<b>3513</b>	<b>3513</b>	<b>3513</b>	<b>-940</b>	<b>-940</b>	<b>-940</b>	<b>-940</b>
I.08	181	181	181	181	181	181	878	878	878	878	878	878	697	697	697	697
II.08	82	82	82	82	82	82	845	845	845	845	845	845	763	763	763	763
III.08	38	38	38	38	38	38	1066	1066	1066	1066	1066	1066	1028	1028	1028	1028
IV.08	61	61	61	61	61	61	948	948	948	948	948	948	887	887	887	887
V.08	80	80	80	80	80	80	850	850	850	850	850	850	770	770	770	770
VI.08	87	87	87	87	87	87	863	863	863	863	863	863	776	776	776	776
VII.08	81	81	81	81	81	81	795	795	795	795	795	795	714	714	714	714
VIII.08	104	104	104	104	104	104	697	697	697	697	697	697	593	593	593	593
IX.08	118	118	118	118	118	118	746	746	746	746	746	746	628	628	628	628
X.08	64	64	64	64	64	64	822	822	822	822	822	822	758	758	758	758
XI.08	168	168	168	168	168	168	1032	1032	1032	1032	1032	1032	864	864	864	864
XII.08	251	251	251	251	251	251	1055	1055	1055	1055	1055	1055	804	804	804	804
<b>2008</b>	<b>1315</b>	<b>1315</b>	<b>1315</b>	<b>1315</b>	<b>1315</b>	<b>1315</b>	<b>10597</b>	<b>10597</b>	<b>10597</b>	<b>10597</b>	<b>10597</b>	<b>10597</b>	<b>9282</b>	<b>9282</b>	<b>9282</b>	<b>9282</b>
I.09	243	243	243	243	243	243	820	820	820	820	820	820	577	577	577	577
II.09	349	349	349	349	349	349	471	471	471	471	471	471	122	122	122	122
III.09	294	294	294	294	294	294	545	545	545	545	545	545	251	251	251	251
IV.09	149	149	149	149	149	149	732	732	732	732	732	732	583	583	583	583
V.09	173	173	173	173	173	173	698	698	698	698	698	698	525	525	525	525
VI.09	157	157	157	157	157	157	743	743	743	743	743	743	586	586	586	586
VII.09	155	155	155	155	155	155	739	739	739	739	739	739	584	584	584	584
VIII.09	193	193	193	193	193	193	558	558	558	558	558	558	365	365	365	365
IX.09	195	195	195	195	195	195	485	485	485	485	485	485	290	290	290	290
X.09	164	164	164	164	164	164	583	583	583	583	583	583	419	419	419	419
XI.09	214	214	214	214	214	214	654	654	654	654	654	654	440	440	440	440
XII.09	533	533	533	533	533	533	411	411	411	411	411	411	-122	-122	-122	-122
<b>2009</b>	<b>2819</b>	<b>2819</b>	<b>2819</b>	<b>2819</b>	<b>2819</b>	<b>2819</b>	<b>7439</b>	<b>7439</b>	<b>7439</b>	<b>7439</b>	<b>7439</b>	<b>7439</b>	<b>4620</b>	<b>4620</b>	<b>4620</b>	<b>4620</b>

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

# Portugal

## Monthly values / Operation

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	0
			2008	0
			2009	0
Fossil fuels net generation	GWh	$\Sigma$	1999	29653
			2008	27344
			2009	27839
Hydraulic net generation	GWh	$\Sigma$	1999	7492
			2008	7100
			2009	8720
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	2008	7358
			2009	9468
- of which wind	GWh	$\Sigma$	2008	5696
			2009	7491
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	2008	0
			2009	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999 <sup>2</sup>	40363
			2008 <sup>2</sup>	43387
			2009 <sup>2</sup>	47555
Physical import	GWh	$\Sigma$	1999	3513
			2008	10597
			2009	7439
Physical export	GWh	$\Sigma$	1999	4453
			2008	1315
			2009	2819
Total physical import/export balance	GWh	$\Sigma$	1999	-852
			2008	9430
			2009	4777
Consumption of pumps	GWh	$\Sigma$	1999	491
			2008	640
			2009	928
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	39020
			2008	52177
			2009	51404
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	3463
			2008	5691
			2009	5828
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	6213
			2008	7954
			2009	8324
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	6627
			2008	8857
			2009	9241
Time of highest load on the 3rd Wednesday	CET		1999	19:00
			2008	21:00
			2009	20:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	5405

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).



## Monthly values / Operation

## Portugal

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
2634	2484	2592	2497	2540	2570	2711	2576	2375	2165	2228	2281
2891	2464	2184	1536	1796	1906	2561	2336	2515	2358	2462	2335
2498	1844	2253	2099	2266	2409	2553	2601	2798	2507	1901	2110
561	422	530	528	653	528	474	269	412	860	1094	1161
663	424	342	950	982	865	577	403	461	415	305	713
1006	1589	844	546	513	418	384	399	439	467	701	1414
557	601	770	709	486	475	518	593	409	619	717	904
830	581	752	676	682	558	749	669	609	824	1198	1340
418	481	622	561	336	334	368	448	282	506	584	756
685	455	598	536	512	386	570	478	435	642	1028	1166
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
3472	3158	3393	3287	3469	3366	3461	3092	3028	3287	3610	3740
4263	3619	3435	3329	3379	3368	3791	3455	3517	3516	3614	4101
4493	4132	3968	3431	3580	3512	3820	3806	3963	3930	3921	4999
454	361	380	226	141	200	386	139	425	270	220	311
878	845	1066	948	850	863	795	697	746	822	1032	1055
820	471	545	732	698	743	739	558	485	583	654	411
337	323	397	479	482	480	449	194	251	303	383	375
181	82	38	61	80	87	81	104	118	64	168	251
243	349	294	149	173	157	155	193	195	164	214	533
131	45	-4	-253	-348	-275	-50	-46	183	-24	-157	-54
714	776	1041	898	774	784	729	606	641	770	877	820
592	137	263	594	538	598	597	381	303	429	452	-107
41	64	53	25	3	6	30	50	55	56	59	49
106	93	56	38	36	50	44	32	26	48	50	61
61	44	42	80	94	78	100	81	86	100	71	91
3562	3139	3336	3009	3118	3085	3381	2996	3156	3207	3394	3637
4871	4302	4420	4189	4117	4102	4476	4029	4132	4238	4441	4860
5024	4225	4189	3945	4024	4032	4317	4106	4180	4259	4302	4801
3426	3023	3075	2977	2880	3304	<b>3463</b>	2753	3214	2911	3204	3263
5516	5141	4986	4743	4724	4875	5095	4431	4747	4583	5095	<b>5691</b>
5527	5171	4561	4614	4629	4863	4917	4588	4852	4603	4806	<b>5828</b>
<b>6213</b>	5967	5278	5368	5241	5517	5830	4426	5396	5415	5717	6085
7644	7420	7278	6772	6884	6901	7204	5755	6814	6602	7225	<b>7954</b>
8125	7278	6492	6817	6438	6860	6821	5946	6650	6801	6990	<b>8324</b>
6607	6160	5528	5368	5293	5652	5928	4538	5487	5474	6255	<b>6627</b>
8381	7920	7798	7319	7097	7189	7657	6386	6970	7271	7967	<b>8857</b>
9101	8047	6983	7249	6654	7282	7064	6558	6944	7275	7673	<b>9241</b>
19:00	19:00	20:00	11:00	12:00	15:00	15:00	12:00	12:00	20:00	19:00	<b>19:00</b>
20:00	21:00	21:00	22:00	13:00	13:00	13:00	22:00	13:00	21:00	20:00	<b>21:00</b>
21:00	21:00	21:00	22:00	13:00	16:00	13:00	22:00	22:00	21:00	20:00	<b>20:00</b>
4773	4894	4646	<b>5405</b>	5378	5371	5115	4019	4276	4876	5294	5371

<sup>2</sup>including deliveries from industry

# Romania

## Monthly values / Operation

				I-XII
Thermal nuclear net generation	GWh	Σ	1999 2008 2009	n.a. 10329 10810
Fossil fuels net generation	GWh	Σ	1999 2008 2009	n.a. 32636 26901
Hydraulic net generation	GWh	Σ	1999 2008 2009	n.a. 16794 15548
Other renewable net generation <sup>1</sup>	GWh	Σ	2008 2009	11 13
- of which wind	GWh	Σ	2008 2009	11 13
Non-identifiable net generation <sup>1</sup>	GWh	Σ	2008 2009	0 0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	Σ	1999 2008 2009	n.a. 59770 53272
Physical import	GWh	Σ	1999 2008 2009	n.a. 2609 2383
Physical export	GWh	Σ	1999 2008 2009	n.a. 7042 4856
Total physical import/export balance	GWh	Σ	1999 2008 2009	n.a. -4434 -2471
Consumption of pumps	GWh	Σ	1999 2008 2009	n.a. 119 150
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	1999 2008 2009	n.a. 55217 50651
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	n.a. 6268 5735
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	n.a. 7862 7413
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	n.a. 8439 8035
Time of highest load on the 3rd Wednesday		CET	1999 2008 2009	n.a. 18:00 18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	n.a.

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Romania

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
962	865	968	852	618	445	885	942	926	973	920	973
973	879	974	912	570	890	944	945	895	967	942	919
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3290	3168	2771	2215	2193	2332	2547	2504	2755	2892	3113	2856
2973	2558	2343	1474	1895	1753	1865	2006	2192	2627	2434	2781
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1427	1352	1558	1734	1905	1777	1471	1350	923	1100	935	1262
1186	1217	1518	1687	1626	1388	1477	1194	924	849	1250	1232
0	1	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1	2	1
0	1	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1	2	1
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5679	5386	5298	4802	4717	4555	4904	4797	4605	4966	4969	5092
5133	4655	4836	4074	4092	4032	4287	4146	4012	4444	4628	4933
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
316	295	186	129	178	247	214	253	219	174	167	231
242	168	197	104	178	193	161	170	187	278	203	302
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.	n.a.	n.a.
820	875	682	513	470	495	582	551	431	500	506	617
626	544	559	352	339	311	320	336	302	398	340	429
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
-505	-580	-496	-383	-292	-249	-367	-299	-212	-326	-340	-385
-383	-377	-361	-248	-163	-117	-160	-166	-114	-119	-137	-126
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	4	6	21	23	12	9	5	4	7	4	19
12	10	0	22	10	8	11	13	10	15	25	14
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5169	4802	4796	4398	4402	4294	4528	4493	4389	4633	4625	4688
4738	4268	4475	3804	3919	3907	4116	3967	3888	4310	4466	4793
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>6268</b>	6169	5694	5542	5280	5319	5456	5238	5176	5374	5561	5408
5500	5485	5211	5001	4626	4674	4543	4635	4664	5083	5210	<b>5735</b>
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>7862</b>	7722	7055	7068	6461	6770	6804	6632	6679	6563	7246	7066
7151	7155	6837	6165	6083	6208	6168	6235	6056	6671	6784	<b>7413</b>
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>8439</b>	8235	7826	7367	6690	6842	6982	7030	7364	7392	7872	7810
7652	7678	7475	6656	6361	6246	6359	6470	6734	7326	7614	<b>8035</b>
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>18:00</b>	19:00	20:00	21:00	21:00	13:00	14:00	21:00	20:00	20:00	18:00	18:00
18:00	19:00	19:00	21:00	21:00	13:00	13:00	21:00	20:00	20:00	18:00	<b>18:00</b>
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

MM_YY	Export (-)							Import (+)							Total_IMP	RG CE_IMP	RO_RG CE	RO_Total
	RO→BG	RO→HU	RO→RS	RO→YUGO	RO→UA_W	RO→MD	RG CE_EXP	Total_EXP	BG→RO	HU→RO	RS→RO	YUGO→RO	UA_W→RO	MD→RO				
I.99	n.a.	0		167		n.a.	167	n.a.	n.a.	0		1		n.a.	1	-166	n.a.	
II.99	n.a.	0		111		n.a.	111	n.a.	n.a.	0		2		n.a.	2	-109	n.a.	
III.99	n.a.	0		3		n.a.	3	n.a.	n.a.	0		43		n.a.	43	40	n.a.	
IV.99	n.a.	0		0		n.a.	0	n.a.	n.a.	0		119		n.a.	119	119	n.a.	
V.99	n.a.	0		14		n.a.	14	n.a.	n.a.	0		204		n.a.	204	190	n.a.	
VI.99	n.a.	0		21		n.a.	21	n.a.	n.a.	0		274		n.a.	274	253	n.a.	
VII.99	n.a.	0		2		n.a.	2	n.a.	n.a.	0		102		n.a.	102	100	n.a.	
VIII.99	n.a.	0		9		n.a.	9	n.a.	n.a.	0		50		n.a.	50	41	n.a.	
IX.99	n.a.	0		27		n.a.	27	n.a.	n.a.	0		61		n.a.	61	34	n.a.	
X.99	n.a.	0		26		n.a.	26	n.a.	n.a.	0		41		n.a.	41	15	n.a.	
XI.99	n.a.	0		56		n.a.	56	n.a.	n.a.	0		30		n.a.	30	-26	n.a.	
XII.99	n.a.	0		40		n.a.	40	n.a.	n.a.	0		43		n.a.	43	3	n.a.	
1999	n.a.	0		476		n.a.	476	n.a.	n.a.	0		970		n.a.	970	494	n.a.	
I.08	467	29	324		0	0	820	820	0	12	0		246	58	12	-808	-504	
II.08	544	18	313		0	0	875	875	0	17	0		226	52	17	-858	-580	
III.08	318	47	317		0	0	682	682	0	4	0		132	50	4	-678	-496	
IV.08	141	136	235		1	0	512	513	11	0	0		73	45	11	-501	-384	
V.08	118	126	226		0	0	470	470	31	0	0		107	40	31	-439	-292	
VI.08	212	92	189		2	0	493	495	103	1	0		69	74	104	-389	-248	
VII.08	226	101	254		1	0	581	582	53	0	0		73	88	53	-528	-368	
VIII.08	284	27	240		0	0	551	551	25	16	9		121	82	50	-501	-298	
IX.08	191	23	216		1	0	430	431	40	27	0		70	82	67	-363	-212	
X.08	175	44	279		2	0	498	500	1	5	0		111	57	6	-492	-326	
XI.08	127	46	328		5	0	501	506	24	8	1		94	40	33	-468	-339	
XII.08	292	31	294		0	0	617	617	0	14	0		112	105	14	-603	-386	
2008	3095	720	3215		12	0	7030	7042	288	104	10		1434	773	402	-6628	-4433	
I.09	333	50	243		0	0	626	626	0	14	0		105	123	14	-612	-384	
II.09	285	81	178		0	0	544	544	0	3	0		81	84	3	-541	-376	
III.09	356	53	150		0	0	559	559	0	9	0		103	85	9	-550	-362	
IV.09	217	75	60		0	0	352	352	0	8	2		70	24	10	-342	-248	
V.09	180	80	79		0	0	339	339	34	21	7		102	14	62	-277	-161	
VI.09	208	32	71		0	0	311	311	2	51	11		115	14	64	-247	-118	
VII.09	217	42	61		0	0	320	320	2	22	6		117	14	30	-290	-159	
VIII.09	197	45	94		0	0	336	336	1	26	28		103	12	55	-281	-166	
IX.09	121	46	135		0	0	302	302	62	21	0		92	12	83	-219	-115	
X.09	175	31	189		3	0	395	398	100	35	0		143	0	135	-260	-120	
XI.09	64	49	227		0	0	340	340	28	21	0		137	17	49	-291	-137	
XII.09	265	3	161		0	0	429	429	1	76	1		212	12	78	-351	-127	
2009	2618	587	1648		3	0	4853	4856	230	307	55		1380	411	592	-4261	-2473	

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

Physical exchanges in interconnected operation <sup>1</sup>

Serbia

GWh

MM_YY	Export (-)										Import (+)										Balance	
	RS <sup>2</sup> →BA	RS <sup>2</sup> →BG	RS <sup>2</sup> →HR	RS <sup>2</sup> →HU	RS→ME	RS→MK	RS <sup>2</sup> →RO	RS <sup>2</sup> →AL	RG CE_EXP	Total_EXP	BA→RS <sup>2</sup>	BG→RS <sup>2</sup>	HR→RS <sup>2</sup>	HU→RS <sup>2</sup>	ME→RS	MK→RS	RO→RS <sup>2</sup>	AL→RS <sup>2</sup>	RG CE_IMP	Total_IMP	RS_RG CE	RS_Total
I.99	0	0	0	0	0	0	1	16			0	150	0	111			167	97				
II.99	0	0	3	0	0	0	2	23			0	95	0	100			111	41				
III.99	0	31	0	0	0	0	43	28			0	21	0	2			3	57				
IV.99	0	83	0	0	0	0	119	13			0	10	0	0			0	47				
V.99	80	78	0	0	0	0	204	17			171	19	0	33			14	28				
VI.99	35	6	0	0	0	0	274	17			140	27	0	49			21	33				
VII.99	52	129	0	0	0	0	102	7			119	12	0	3			2	60				
VIII.99	62	138	0	0	0	0	50	8			143	17	0	2			9	69				
IX.99	51	114	0	0	0	0	61	6			176	26	0	1			27	91				
X.99	68	57	0	0	0	0	41	12			205	19	0	1			26	60				
XI.99	93	12	0	0	0	0	30	3			210	59	0	30			56	12				
XII.99	69	16	0	0	0	0	43	8			288	87	0	111			40	36				
<b>1999</b>	<b>510</b>	<b>664</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>970</b>	<b>158</b>			<b>1452</b>	<b>542</b>	<b>0</b>	<b>443</b>			<b>476</b>	<b>631</b>				
I.08	245	0	206	0	96	226	0	6	773	779	22	189	0	395	51	0	324	21	981	1002	208	223
II.08	220	0	166	0	82	234	0	11	702	713	26	138	0	337	62	0	313	12	876	888	174	175
III.08	223	0	216	0	137	235	0	27	811	838	22	240	0	273	25	0	317	0	877	877	66	39
IV.08	197	0	183	0	132	206	0	13	718	731	9	240	0	146	19	0	235	14	649	663	-69	-68
V.08	180	0	160	0	142	244	0	14	726	740	25	238	0	151	13	1	226	18	654	672	-72	-68
VI.08	138	0	138	0	61	290	0	22	627	649	21	126	0	133	36	0	189	2	505	507	-122	-142
VII.08	215	1	181	0	140	304	0	13	841	854	18	183	0	171	23	0	254	15	649	664	-192	-190
VIII.08	193	0	134	0	106	292	9	14	734	748	30	213	0	207	21	0	240	9	711	720	-23	-28
IX.08	144	0	144	0	85	203	0	16	576	592	5	148	0	184	66	0	216	8	619	627	43	35
X.08	259	0	149	0	164	115	0	10	687	697	17	217	0	198	33	0	279	13	744	757	57	60
XI.08	219	0	202	0	72	194	1	3	688	691	21	269	0	196	35	0	328	33	849	882	161	191
XII.08	145	0	182	0	72	140	0	3	539	542	42	181	0	259	55	13	294	33	844	877	305	335
<b>2008</b>	<b>2378</b>	<b>1</b>	<b>2061</b>	<b>0</b>	<b>1289</b>	<b>2683</b>	<b>10</b>	<b>152</b>	<b>8422</b>	<b>8574</b>	<b>258</b>	<b>2382</b>	<b>0</b>	<b>2650</b>	<b>439</b>	<b>14</b>	<b>3215</b>	<b>178</b>	<b>8958</b>	<b>9136</b>	<b>536</b>	<b>562</b>
I.09	142	0	193	0	26	204	0	2	565	567	27	139	0	160	137	0	243	40	706	746	141	179
II.09	92	0	181	0	4	236	0	0	513	513	23	135	0	122	177	0	178	74	635	709	122	196
III.09	120	0	173	0	31	261	0	3	585	588	36	90	0	142	122	0	150	36	540	576	-45	-12
IV.09	78	1	138	3	19	170	2	0	411	411	28	51	0	65	121	0	60	95	325	420	-86	9
V.09	86	15	118	19	53	210	7	5	508	513	39	17	0	36	58	0	79	47	229	276	-279	-237
VI.09	134	13	140	36	59	262	11	14	655	669	43	19	0	43	29	0	71	15	205	220	-450	-449
VII.09	127	14	130	6	99	295	6	15	677	692	32	29	0	86	19	0	61	6	227	233	-450	-459
VIII.09	130	3	106	0	128	161	28	22	556	578	27	95	0	98	14	0	94	4	328	332	-228	-246
IX.09	219	0	84	2	171	79	0	23	555	578	16	124	0	81	4	3	135	9	363	372	-192	-206
X.09	159	0	147	9	100	110	0	9	525	534	26	161	0	117	43	0	189	23	536	559	11	25
XI.09	180	0	186	0	118	102	0	4	586	590	15	235	0	149	32	0	227	39	658	697	72	107
XII.09	104	0	111	0	44	240	1	6	500	506	49	89	0	266	137	0	161	37	702	739	202	233
<b>2009</b>	<b>1571</b>	<b>46</b>	<b>1707</b>	<b>75</b>	<b>852</b>	<b>2330</b>	<b>55</b>	<b>103</b>	<b>6636</b>	<b>6739</b>	<b>361</b>	<b>1184</b>	<b>0</b>	<b>1365</b>	<b>893</b>	<b>3</b>	<b>1648</b>	<b>425</b>	<b>5454</b>	<b>5879</b>	<b>-1182</b>	<b>-860</b>

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".<sup>2</sup> Physical exchanges of the year 1999 with YUGO

				I-XII
Thermal nuclear net generation	GWh	Σ	1999 2008 2009	0 0 0
Fossil fuels net generation	GWh	Σ	1999 2008 2009	29383 30027
Hydraulic net generation	GWh	Σ	1999 2008 2009	10020 11093
Other renewable net generation <sup>1</sup>	GWh	Σ	2008 2009	0 0
- of which wind	GWh	Σ	2008 2009	0 0
Non-identifiable net generation <sup>1</sup>	GWh	Σ	2008 2009	0 0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	Σ	1999 2008 2009	39403 41120
Physical import	GWh	Σ	1999 2008 2009	9136 5879
Physical export	GWh	Σ	1999 2008 2009	8574 6739
Total physical import/export balance	GWh	Σ	1999 2008 2009	435 649
Consumption of pumps	GWh	Σ	1999 2008 2009	856 915
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	1999 2008 2009	38982 40854
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	4813 4887
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	6146 6424
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	6520 6923
Time of highest load on the 3rd Wednesday		CET	1999 2008 2009	19:00 18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Serbia

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
3146	2802	2559	2061	2012	1698	2331	2153	2265	2756	2865	2735
3180	2541	2778	1674	2028	2332	2272	2332	2423	2799	2702	2966
875	778	1117	1149	927	818	707	709	697	509	611	1123
1017	1080	1137	1234	974	833	1011	681	554	637	926	1009
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
4021	3580	3676	3210	2939	2516	3038	2862	2962	3265	3476	3858
4197	3621	3915	2908	3002	3165	3283	3013	2977	3436	3628	3975
1002	888	877	663	672	507	664	720	627	757	882	877
746	709	576	420	276	220	233	332	372	559	697	739
779	713	838	731	740	649	854	748	592	697	691	542
567	513	588	411	513	669	692	578	578	534	590	506
-152	-82	-11	91	-107	138	189	26	-25	42	111	215
-394	-195	12	-9	238	449	460	247	206	-24	-107	-234
52	40	93	67	52	20	117	101	29	100	106	79
59	48	62	116	83	115	97	30	81	94	66	64
3817	3458	3572	3234	2780	2634	3110	2787	2908	3207	3481	3994
3744	3378	3865	2783	3157	3499	3646	3230	3102	3318	3455	3677
4800	<b>4813</b>	4205	3496	2737	2795	2699	2807	2963	3150	4090	4376
4527	<b>4887</b>	4474	3135	2590	2720	2795	2822	2739	4156	3712	4869
<b>6146</b>	5901	5333	5219	4147	4148	3923	4070	4757	4496	5343	5703
5891	<b>6424</b>	5776	4473	3977	4067	4243	3966	4163	5553	4981	6350
<b>6520</b>	6407	6000	5490	4676	4558	4529	4611	5536	5423	6196	6476
6194	6749	6339	5234	4499	4484	4675	4514	4928	6199	5872	<b>6923</b>
<b>19:00</b>	21:00	20:00	21:00	22:00	22:00	22:00	21:00	20:00	21:00	19:00	19:00
19:00	19:00	20:00	21:00	22:00	22:00	22:00	21:00	21:00	20:00	18:00	<b>18:00</b>

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	4485
			2008	5970
			2009	5458
Fossil fuels net generation	GWh	$\Sigma$	1999	3915
			2008	4838
			2009	4696
Hydraulic net generation	GWh	$\Sigma$	1999	3412
			2008	3506
			2009	4272
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	2008	0
			2009	0
- of which wind	GWh	$\Sigma$	2008	0
			2009	0
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	2008	0
			2009	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999	12269
			2008	14314
			2009	14426
Physical import	GWh	$\Sigma$	1999	3662
			2008	6233
			2009	7783
Physical export	GWh	$\Sigma$	1999	5011
			2008	7827
			2009	10843
Total physical import/export balance	GWh	$\Sigma$	1999	-1349
			2008	-1628
			2009	-3089
Consumption of pumps	GWh	$\Sigma$	1999	0
			2008	0
			2009	0
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	10920
			2008	12686
			2009	11337
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	1071
			2008	1220
			2009	1095
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	1719
			2008	1814
			2009	1763
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	1747
			2008	1918
			2009	1895
Time of highest load on the 3rd Wednesday	CET		1999	17:00
			2008	20:00
			2009	18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	1760

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).



## Monthly values / Operation

## Slovenia

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
	465	419	415	0	103	369	453	449	438	463	448	463
	516	483	515	500	514	407	508	507	493	511	500	516
	518	467	516	0	448	497	510	501	493	512	500	496
	375	332	393	420	305	191	198	215	266	337	431	452
	473	464	434	443	333	418	406	332	402	434	348	351
	463	449	429	348	299	353	414	267	275	475	482	442
	161	132	217	281	401	357	340	358	326	352	256	231
	194	151	189	273	372	429	380	337	217	218	358	388
	259	251	290	511	519	464	448	322	379	248	238	343
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	1001	883	1025	737	851	964	1041	1074	1084	1211	1193	1205
	1183	1098	1138	1216	1219	1254	1294	1176	1112	1163	1206	1255
	1240	1167	1235	859	1266	1314	1372	1090	1147	1235	1220	1281
	319	293	275	379	382	305	358	216	313	348	290	184
	591	480	607	544	475	414	523	425	436	514	502	722
	656	701	636	725	566	588	703	417	648	754	680	709
	383	344	396	270	355	393	506	433	485	595	494	357
	624	503	629	724	660	636	759	601	509	569	645	968
	834	924	893	756	958	1014	1138	606	856	1002	894	968
	-64	-51	-121	109	27	-88	-148	-217	-172	-247	-204	-173
	-36	-27	-25	-183	-188	-225	-240	-178	-75	-58	-144	-249
	-182	-226	-259	-34	-394	-429	-438	-191	-211	-248	-216	-261
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	937	832	904	846	878	876	893	857	912	964	989	1032
	1147	1071	1113	1033	1031	1029	1054	998	1037	1105	1062	1006
	1058	941	976	825	872	885	934	899	936	987	1004	1020
	987	951	954	977	969	1011	968	925	1014	1032	<b>1071</b>	1055
	1174	1178	<b>1220</b>	1141	1158	1123	1093	1101	1171	1194	1160	999
	1059	1076	1005	863	910	964	989	1039	959	1025	994	<b>1095</b>
	1526	1527	1464	1474	1396	1498	1409	1395	1480	1574	<b>1719</b>	1650
	1805	<b>1814</b>	1719	1666	1702	1691	1639	1669	1699	1731	1738	1665
	1717	1652	1497	1407	1495	1520	1566	1567	1506	1614	1587	<b>1763</b>
	1602	1550	1551	1536	1463	1527	1470	1427	1581	1716	1725	<b>1747</b>
	1866	<b>1918</b>	1856	1741	1771	1731	1725	1757	1823	1863	1907	1698
	1744	1777	1634	1472	1553	1578	1642	1644	1578	1714	1751	<b>1895</b>
	18:00	14:00	20:00	15:00	13:00	12:00	13:00	12:00	21:00	20:00	17:00	<b>17:00</b>
	19:00	<b>20:00</b>	20:00	21:00	09:00	09:00	12:00	13:00	20:00	20:00	18:00	09:00
	12:00	19:00	20:00	09:00	13:00	13:00	13:00	13:00	20:00	20:00	19:00	<b>18:00</b>
	1520	1449	1651	1275	1204	933	1397	1572	1490	1643	1725	<b>1760</b>

Physical exchanges in interconnected operation <sup>1</sup>

MM_YY	Export (-)					Import (+)					Balance	
	SI→AT	SI→HR	SI→IT	RG CE_EXP		Total_EXP	AT→SI	HR→SI	IT→SI	RG CE_IMP		Total_IMP
I.99	0	121	262	383	383	383	311	0	8	319	-64	319
II.99	0	136	208	344	344	344	279	0	14	293	-51	293
III.99	0	164	232	396	396	396	267	0	8	275	-121	275
IV.99	0	0	270	270	270	270	351	26	2	379	109	379
V.99	0	14	341	355	355	355	382	0	0	382	27	382
VI.99	0	87	306	393	393	393	303	0	2	305	-88	305
VII.99	1	147	358	506	506	506	358	0	0	358	-148	358
VIII.99	0	207	226	433	433	433	215	0	1	216	-217	216
IX.99	0	190	295	485	485	485	313	0	0	313	-172	313
X.99	0	251	344	595	595	595	348	0	0	348	-247	348
XI.99	0	283	211	494	494	494	288	0	2	290	-204	290
XII.99	4	0	353	357	357	357	140	43	1	184	-173	184
<b>1999</b>	<b>5</b>	<b>1600</b>	<b>3406</b>	<b>5011</b>	<b>5011</b>	<b>5011</b>	<b>3555</b>	<b>69</b>	<b>38</b>	<b>3662</b>	<b>-1349</b>	<b>3662</b>
I.08	141	68	415	624	624	624	76	513	2	591	-33	591
II.08	97	101	305	503	503	503	75	403	2	480	-23	480
III.08	113	69	447	629	629	629	55	551	1	607	-22	607
IV.08	63	152	509	724	724	724	70	474	0	544	-180	544
V.08	9	271	380	660	660	660	166	306	3	475	-185	475
VI.08	23	272	341	636	636	636	141	265	8	414	-222	414
VII.08	16	252	491	759	759	759	155	367	1	523	-236	523
VIII.08	14	383	204	601	601	601	188	233	4	425	-176	425
IX.08	49	296	164	509	509	509	97	270	69	436	-73	436
X.08	113	134	322	569	569	569	84	426	4	514	-55	514
XI.08	112	122	411	645	645	645	53	448	1	502	-143	502
XII.08	123	101	744	968	968	968	50	672	0	722	-246	722
<b>2008</b>	<b>873</b>	<b>2221</b>	<b>4733</b>	<b>7827</b>	<b>7827</b>	<b>7827</b>	<b>1210</b>	<b>4928</b>	<b>95</b>	<b>6233</b>	<b>-1594</b>	<b>6233</b>
I.09	167	126	541	834	834	834	52	604	0	656	-178	656
II.09	174	72	678	924	924	924	14	686	1	701	-223	701
III.09	89	157	647	893	893	893	42	594	0	636	-257	636
IV.09	5	24	727	756	756	756	192	533	0	725	-31	725
V.09	0	385	573	958	958	958	250	312	4	566	-392	566
VI.09	1	375	638	1014	1014	1014	210	374	4	588	-426	588
VII.09	1	538	599	1138	1138	1138	381	320	2	703	-435	703
VIII.09	1	506	99	606	606	606	284	121	12	417	-189	417
IX.09	0	452	404	856	856	856	380	244	24	648	-208	648
X.09	5	398	599	1002	1002	1002	305	445	4	754	-248	754
XI.09	18	204	672	894	894	894	169	509	2	680	-214	680
XII.09	9	337	622	968	968	968	248	454	7	709	-259	709
<b>2009</b>	<b>470</b>	<b>3574</b>	<b>6799</b>	<b>10843</b>	<b>10843</b>	<b>10843</b>	<b>2527</b>	<b>5196</b>	<b>60</b>	<b>7783</b>	<b>-3060</b>	<b>7783</b>

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

MM_YY	Export (-)						Import (+)						RG CE_IMP	Total_IMP	SK_RG CE	SK_Total
	SK→CZ	SK→HU	SK→PL	SK→UA_W	RG CE_EXP	Total_EXP	CZ→SK	HU→SK	PL→SK	UA_W→SK						
I.99	97	257	0	0	354	354	195	0	86	99	281	380	-73	26		
II.99	108	223	2	0	333	333	167	0	99	85	266	351	-67	18		
III.99	126	296	1	0	423	423	165	1	99	158	265	423	-158	0		
IV.99	124	287	1	0	412	412	204	1	73	84	278	362	-134	-50		
V.99	121	240	0	0	361	361	134	5	128	27	267	294	-94	-67		
VI.99	152	305	0	0	457	457	175	0	83	86	258	344	-199	-113		
VII.99	197	341	0	3	538	541	281	0	105	58	386	444	-152	-97		
VIII.99	138	382	0	1	520	521	284	0	26	96	310	406	-210	-115		
IX.99	144	263	2	9	409	418	204	0	47	54	251	305	-158	-113		
X.99	110	248	0	3	358	361	280	0	163	20	443	463	85	102		
XI.99	93	217	0	5	310	315	285	4	194	65	483	548	173	233		
XII.99	117	460	0	19	577	596	479	0	175	73	654	727	77	131		
1999	1527	3519	6	40	5052	5092	2853	11	1278	905	4142	5047	-910	-45		
I.08	4	940	0	264	944	1208	901	0	330	6	1231	1237	287	29		
II.08	6	850	0	258	856	1114	754	0	317	5	1071	1076	215	-38		
III.08	16	782	0	70	798	868	563	0	232	6	795	801	-3	-67		
IV.08	14	591	0	43	605	648	634	0	155	15	789	804	184	156		
V.08	20	666	3	23	689	712	372	0	92	37	464	501	-225	-211		
VI.08	9	408	8	16	425	441	433	0	71	32	504	536	79	95		
VII.08	18	456	2	87	476	563	567	0	57	10	624	634	148	71		
VIII.08	24	491	18	35	533	568	507	0	42	13	549	562	16	-6		
IX.08	16	583	0	45	599	644	607	0	258	21	865	886	266	242		
X.08	19	699	0	159	718	877	667	0	460	15	1127	1142	409	265		
XI.08	64	492	0	96	556	652	299	0	357	8	656	664	100	12		
XII.08	23	496	0	75	519	594	381	0	181	9	562	571	43	-23		
2008	233	7454	31	1171	7718	8889	6685	0	2552	177	9237	9414	1519	525		
I.09	3	546	0	152	549	701	663	0	310	9	973	982	424	281		
II.09	2	422	0	74	424	498	525	0	224	9	749	758	325	260		
III.09	3	610	0	182	613	795	575	0	264	7	839	846	226	51		
IV.09	44	403	11	106	458	564	217	0	99	7	316	323	-142	-241		
V.09	19	421	30	37	470	507	347	0	71	19	418	437	-52	-70		
VI.09	17	459	19	67	495	562	364	0	72	10	436	446	-59	-116		
VII.09	3	654	1	136	658	794	686	0	155	5	841	846	183	52		
VIII.09	3	374	2	144	379	523	570	0	96	5	666	671	287	148		
IX.09	0	563	1	112	564	676	784	0	205	5	989	994	425	318		
X.09	0	514	0	172	514	686	685	0	294	8	979	987	465	301		
XI.09	45	451	0	117	496	613	507	0	283	10	790	800	294	187		
XII.09	2	583	0	178	585	763	634	0	265	7	899	906	314	143		
2009	141	6000	64	1477	6205	7682	6557	0	2338	101	8895	8996	2690	1314		

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (> 110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

# Slovak Republic

## Monthly values / Operation

				I-XII
Thermal nuclear net generation	GWh	$\Sigma$	1999	12108
			2008	15483
			2009	13097
Fossil fuels net generation	GWh	$\Sigma$	1999	9086
			2008	7288
			2009	6277
Hydraulic net generation	GWh	$\Sigma$	1999	4796
			2008	4306
			2009	4683
Other renewable net generation <sup>1</sup>	GWh	$\Sigma$	2008	311
			2009	389
- of which wind	GWh	$\Sigma$	2008	0
			2009	5
Non-identifiable net generation <sup>1</sup>	GWh	$\Sigma$	2008	0
			2009	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	$\Sigma$	1999 <sup>2</sup>	25990
			2008 <sup>2</sup>	27388
			2009 <sup>2</sup>	24446
Physical import	GWh	$\Sigma$	1999	5047
			2008	9414
			2009	8996
Physical export	GWh	$\Sigma$	1999	5092
			2008	8889
			2009	7682
Total physical import/export balance	GWh	$\Sigma$	1999	-42
			2008	521
			2009	1312
Consumption of pumps	GWh	$\Sigma$	1999	293
			2008	274
			2009	322
National electrical consumption, calculated to represent 100% of the national values	GWh	$\Sigma$	1999	25655
			2008	27635
			2009	25436
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	3523
			2008	3346
			2009	3158
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	3994
			2008	4120
			2009	3948
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	4058
			2008	4275
			2009	4056
Time of highest load on the 3rd Wednesday	CET		1999	20:00
			2008	18:00
			2009	18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	3922

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Slovak Republic

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1094	1028	1107	1069	931	1013	997	1034	1089	857	849	1040
1468	1387	1470	966	1437	1128	1163	1224	1135	1203	1468	1434
1251	1123	1219	1010	934	1125	978	1044	898	1058	1240	1217
1082	935	689	531	523	486	458	585	598	962	1114	1123
777	728	574	654	584	523	487	512	546	636	630	637
651	606	492	487	605	453	441	426	480	559	487	590
345	379	585	491	570	464	524	336	261	287	245	309
362	341	493	481	414	358	412	342	267	260	234	342
280	267	549	623	427	402	487	335	277	302	331	403
29	27	28	25	24	24	26	20	23	28	29	28
31	27	31	33	33	33	30	27	35	39	35	35
0	0	0	0	0	0	0	0	0	0	0	0
0	1	1	1	0	0	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
2521	2342	2381	2091	2024	1963	1979	1955	1948	2106	2208	2472
2636	2483	2565	2126	2459	2033	2088	2098	1971	2127	2361	2441
2213	2023	2291	2153	1999	2013	1936	1832	1690	1958	2093	2245
380	351	423	362	294	344	444	406	305	463	548	727
1237	1076	801	804	501	536	634	562	886	1142	664	571
982	758	846	323	437	446	846	671	994	987	800	906
354	333	423	412	361	457	541	521	418	361	315	596
1208	1114	868	648	712	441	563	568	644	877	652	594
701	498	795	564	507	562	794	523	676	686	613	763
26	18	0	-50	-66	-113	-97	-114	-113	102	233	132
29	-38	-68	156	-212	96	71	-7	241	265	11	-23
282	259	50	-241	-70	-116	52	149	318	301	186	142
27	18	24	17	16	22	26	24	33	31	31	24
28	26	19	20	27	26	18	13	21	22	24	30
27	20	24	24	24	25	27	30	27	29	32	33
2520	2342	2357	2024	1942	1828	1856	1817	1802	2177	2410	2580
2637	2419	2478	2262	2220	2103	2141	2078	2191	2370	2348	2388
2468	2262	2317	1888	1905	1872	1961	1951	1981	2230	2247	2354
3459	<b>3523</b>	3351	2981	2654	2463	2335	2278	2382	3077	3359	3287
<b>3346</b>	3318	3164	2940	2871	2740	2672	2603	2802	2869	3070	2897
3069	<b>3158</b>	2842	2289	2347	2358	2423	2444	2348	2786	2587	3031
<b>3994</b>	3934	3560	3314	3040	2965	2775	2870	2776	3510	3794	3787
<b>4120</b>	3991	3895	3636	3646	3460	3373	3368	3648	3625	3931	3763
3937	<b>3948</b>	3616	3012	3134	3145	3227	3204	3238	3637	3485	3891
4049	4052	3888	3459	3222	3048	2848	2917	2964	3690	3990	<b>4058</b>
<b>4275</b>	4101	4036	3762	3691	3496	3493	3428	3708	3782	4162	3920
4053	4051	3730	3187	3160	3183	3276	3281	3326	3764	3742	<b>4056</b>
20:00	19:00	19:00	20:00	08:00	12:00	13:00	10:00	20:00	19:00	17:00	<b>20:00</b>
<b>18:00</b>	19:00	20:00	21:00	13:00	14:00	13:00	13:00	20:00	20:00	18:00	18:00
18:00	19:00	20:00	21:00	13:00	13:00	13:00	13:00	20:00	20:00	18:00	<b>18:00</b>
<b>3922</b>	3860	3530	3398	3172	3222	2926	3034	3081	3143	3613	3463

<sup>2</sup>including deliveries from industry

				I-XII
Thermal nuclear net generation	GWh	Σ	1999 2008 2009	706996 774802 727327
Fossil fuels net generation	GWh	Σ	1999 2008 2009	1035892 1384122 1291843
Hydraulic net generation	GWh	Σ	1999 2008 2009	292481 306469 319044
Other renewable net generation <sup>1</sup>	GWh	Σ	2008 2009	158858 173186
- of which wind	GWh	Σ	2008 2009	100908 109918
Non-identifiable net generation <sup>1</sup>	GWh	Σ	2008 2009	11027 9923
Total net electrical energy generation calculated to represent 100% of the national values	GWh	Σ	1999 <sup>2</sup> 2008 <sup>2</sup> 2009 <sup>2</sup>	2128659 2643781 2529461
Physical import	GWh	Σ	1999 2008 2009	200684 310644 296071
Physical export	GWh	Σ	1999 2008 2009	210630 309196 299110
Total physical import/export balance	GWh	Σ	1999 2008 2009	-8472 -893 -6172
Consumption of pumps	GWh	Σ	1999 2008 2009	33916 39837 38152
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	1999 2008 2009	2086271 2603051 2485066
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	237047 277867 270855
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	319151 383134 386779
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999 2008 2009	332778 392452 405158
Time of highest load on the 3rd Wednesday		CET	1999 2008 2009	19:00 19:00 18:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	315380

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

# Monthly values / Operation

RG CE <sup>3</sup>

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
66623	58347	60706	57285	53302	53456	55251	54829	57134	60891	62853	66319	
73718	70261	69796	62042	60793	54384	60034	61140	59147	63323	65935	74229	
76343	66188	65449	57144	55863	52759	55147	56499	55198	57611	60383	68743	
100498	96297	94574	79844	73054	73919	79519	73585	80250	87223	95815	101314	
134328	127065	120253	112330	99678	103244	112594	102925	112462	122104	118820	118319	
128875	112903	111821	90904	88652	96504	105393	98285	106078	118811	113694	119923	
18968	19636	23684	24327	30992	28674	26230	22960	22362	24698	24730	25220	
23492	19606	23117	27768	32353	35003	30302	25006	23290	18877	21957	25698	
25837	26688	28448	31390	33841	31497	30349	25166	19686	18889	20652	26601	
17055	13389	17988	12274	9682	10514	10973	11909	10905	13523	15605	15041	
14425	13210	15398	12323	13638	12536	13193	11993	13205	15244	20242	17779	
12491	8940	13055	7670	4933	5815	6139	6886	5994	8492	10778	9715	
9894	8905	9936	7328	8089	7130	7401	6129	7721	9792	14968	12625	
906	834	967	960	949	894	900	876	765	854	965	1157	
650	728	835	870	953	910	926	844	817	802	782	806	
194534	181947	186942	168837	164498	163275	168501	158615	166930	180871	191912	201797	
250280	231882	232887	216084	204038	204662	215528	202525	207258	219387	224032	235218	
246890	220351	222590	193219	193558	194871	205757	193461	195659	212060	216461	234584	
17473	16144	17431	16843	15409	15430	16827	15065	16865	17459	17572	18166	
30747	28298	29214	25818	24393	22351	24658	23477	22424	25171	25883	28210	
29074	26244	26883	21850	21511	22825	24000	21333	23798	25493	25858	27202	
18460	16887	18075	17396	16299	16064	17348	16120	17721	18566	18331	19363	
30981	28078	28953	25489	24060	22185	24232	24138	22392	24683	25924	28081	
28140	25682	27052	22745	22935	24035	24841	22062	23166	24799	25928	27725	
-706	-566	-657	-439	-945	-718	-516	-1005	-671	-1039	-721	-489	
-874	-316	-17	379	194	341	678	-740	-248	385	-402	-273	
83	-183	-385	-986	-1219	-758	-431	-744	331	233	-700	-1413	
2838	2327	2308	2486	3122	2901	2956	2815	2935	3191	2870	3167	
3779	3323	3510	2904	3129	3014	3035	2939	3057	3725	3635	3787	
3719	2947	2830	3029	3199	2845	3215	3020	2942	3331	3354	3721	
190990	179054	183977	165912	160431	159656	165029	154795	163324	176641	188321	198141	
245627	228243	229360	213559	201103	201989	213171	198846	203953	216047	219995	231158	
243242	217196	219366	189189	189140	191279	202110	189697	193051	208964	212401	229431	
224830	<b>237047</b>	212769	202533	184682	186669	189442	172174	185692	206880	230533	232787	
276152	<b>277867</b>	266868	255449	228456	230290	234227	220786	232127	232007	253171	263072	
267328	<b>270855</b>	237406	205044	209460	214204	215535	210363	215029	236566	235274	267877	
311299	316733	294243	291078	275441	281732	276143	252851	278647	299495	310955	<b>319151</b>	
<b>383134</b>	371175	353845	346891	328685	330297	334354	311420	332686	334714	355367	372864	
373879	366209	325928	306088	303564	319137	327132	302619	320802	342291	341322	<b>386779</b>	
317237	320771	294990	291078	276119	282535	278657	255532	279208	299495	322080	<b>332778</b>	
<b>392452</b>	381367	365076	346989	331584	334470	338905	316998	335075	345195	377970	387230	
384829	374687	337131	307844	307206	323679	332173	310031	323763	348207	361057	<b>405158</b>	
19:00	19:00	12:00	11:00	12:00	12:00	12:00	12:00	12:00	11:00	19:00	<b>19:00</b>	
<b>19:00</b>	19:00	20:00	12:00	12:00	12:00	12:00	12:00	12:00	20:00	18:00	18:00	
19:00	19:00	20:00	12:00	12:00	12:00	12:00	13:00	12:00	20:00	19:00	<b>18:00</b>	
304467	310695	288626	283804	270959	277018	273660	252425	275298	293716	305670	<b>315380</b>	

<sup>2</sup> including deliveries from industry

<sup>3</sup> Ukraine West is not part of RG CE values

	Year	IMPORTING COUNTRIES													
		AT	BA	BE	BG	CH	CZ	DE	DK_W	ES	FR	GR	HR	HU	IT
EXPORTING COUNTRIES	1999					3145	68	5343						65	1687
	2008					7449	56	5607						839	1367
	2009					8653	262	7061						1393	1198
	1999												247		
	2008												2664		
	2009												3280		
	1999										1010				
	2008										2036				
	2009										6630				
	1999											1128			
	2008											4628			
	2009											3418			
	1999	375						5863			2209				21676
	2008	106						2709			3548				24162
	2009	24						2636			4164				24958
	1999	3636						5693							
	2008	5335						7940							
	2009	6859						8687							
	1999	5510				8685	612		n.a.		222				
	2008	14997				13858	1326		586		868				
	2009	14956				13142	965		1814		1436				
	1999							n.a.							
	2008							7180							
	2009							4946							
	1999										589				
	2008										1661				
	2009										2351				
	1999			5830		8978		13771		7405					15770
	2008			7286		8787		10569		4564					12841
	2009			1709		8311		10607		3957					11808
	1999				244										0
	2008				0										181
	2009				0										2184
	1999		175											0	
	2008		737											4	
	2009		974											8	
	1999	2018											738		
	2008	721											5301		
	2009	240											3310		
	1999	0				48					441	0			
	2008	1				400					1140	1758			
	2009	0				510					1215	314			
	1999			0				657							
	2008			1629				835							
	2009			1868				728							
	1999														
	2008		239												
	2009		294												
	1999				0							559			
	2008				0							1189			
	2009				0							3811			
	1999			3088				665							
	2008			8121				829							
	2009			5789				3510							
	1999						6778	368							
	2008						6909	96							
	2009						6866	135							
	1999									4453					
	2008									1315					
	2009									2819					
	1999				n.a.									0	
	2008				3095									720	
	2009				2618									587	
	1999		510		664								3	0	
	2008		2378		1								2061	0	
	2009		1571		46								1707	75	
	1999												1600		3406
	2008	5											2221		4733
	2009	873											3574		6799
	1999						1527							3519	
	2008						233							7454	
	2009						141							6000	
	1999													698	
	2008													3755	
	2009													2908	
	1999	11544	510	8918	908	20856	8985	32360	n.a.	11858	4471	559	2344	3584	42539
	2008	22033	3354	17036	3096	30494	8524	35765	586	5879	9253	7575	12247	9017	43284
	2009	22549	2839	9366	2664	30616	8234	38310	1814	6776	15796	7543	11871	8063	46947
	1999	0	0	0	n.a.	0	0	6406	n.a.	0	494	1254	244	698	0
	2008	0	0	0	0	0	0	4480	7178	15	923	0	0	3755	0
	2009	0	0	0	0	0	0	2254	4495	8	3358	61	0	2908	0
	1999	11544	510	8918	n.a.	20856	8985	38766	n.a.	11858	4965	1813	2588	4282	42539
	2008	22033	3354	17036	3096	30494	8524	40245	7764	5894	10176	7575	12247	12772	43284
	2009	22549	2839	9366	2664	30616	8234	40564	6309	6784	19154	7604	11871	10971	46947
	1999	-2319	-1189	714	n.a.	-9267	-3276	-6010	n.a.	7756	-47283	111	2100	374	42012
	2008	5505	-1650	10475	-5344	-31	-11462	-25609	-6594	-6379	-34794	7299	6578	241	39890
	2009	1455	-2997	-1948	-4970	-1166	-13998	-13606	-3132	-3014	-20596	5353	5693	2841	44848
	1999	-2319	n.a.	714	n.a.	-9267	-3276	-302	n.a.	5953	-63143	161	2344	997	42012
	2008	5505	-1650	10475	-5344	-31	-11462	-22450	-1035	-10591	-46319	5611	6578	3905	39890
	2009	1455	-2997	-1948	-4970	-1166	-13998	-14342	-2071	-7604	-24127	4353	5693	5508	44848



## Annual physical electricity exchange in interconnected operation (GWh)

RG CE

LU	ME	MK	NL	PL	PT	RO	RS	SI	SK	UA_W	RG CE	Third countries	Export
								3555 1210 2527			13863 16528 21094	0 0 0	13863 16528 21094
	2082 2195						258 893				1699 5004 5836	0 0 0	1699 5004 5836
1946 1517 911			5248 3008 3773								8204 6561 11314	0 0 0	8204 6561 11314
		0 1142 2802				n.a. 288 230	542 2382 1184				1670 8440 7634	n.a. 0 0	n.a. 8440 7634
											30123 30525 31782	0 0 0	30123 30525 31782
				79 26 129					2853 6685 6557		12261 19986 22232	0 0 0	12261 19986 22232
4229 5302 5115			17158 18859 8870	1954 5578 5618							38370 61374 51916	698 1321 2990	39068 62695 54906
											n.a. 7180 4946	n.a. 1619 3434	n.a. 8799 8380
					3513 10597 7439						4102 12258 9790	1803 4227 4598	5905 16485 14388
											51754 44047 36392	16354 12448 6889	68108 56495 43281
		448 95 6									448 276 2190	1204 1688 1061	1652 1964 3251
							0 0 0	69 4928 5196			244 5669 6178	0 0 0	244 5669 6178
						443 2650 1365	0 2650 1365		11 0 0	75 91 241	3210 8776 5222	75 91 241	3285 8867 5463
								38 95 60			527 3394 2099	0 0 0	527 3394 2099
											657 2464 2596	0 0 0	657 2464 2596
							439 893				678 1187	806 614	1484 1801
							14 3				559 1203 3814	n.a. 0 0	n.a. 1203 3814
											3753 8950 9299	0 332 1257	3753 9282 10556
									1278 9557 2338		8424 9557 9339	0 147 254	8424 9704 9593
											4453 1315 2819	0 0 0	4453 1315 2819
							476 3215 1648			0 12 3	476 7030 4853	n.a. 12 3	n.a. 7042 4856
	1289 852	2683 2330				970 10 55					8422 6636	152 103	8574 6739
											5011 7827 10843	0 0 0	5011 7827 10843
				6 31 64						40 1171 1477	5052 7718 6205	40 1171 1477	5092 8889 7682
						0 1434 1380			905 177 101		1603 5366 4389	n.a. 0 0	1603 5366 4389
6175 6819 6026	3371 3047	448 3920 5138	22406 21867 12643	2039 5635 5811	3513 10597 7439	970 402 592	8958 5454	3662 6233 7783	4142 9237 8895	115 1274 1721	163767 285182 276216	n.a. 24014 22894	210630 309196 299110
0 0 0	7 47	n.a. 0 0	0 3156 2814	728 3386 1593	0 0 0	n.a. 2207 1791	178 425	0 0 0	905 177 101	n.a. 0 0	n.a. 18099 14888		
6175 6819 6026	3378 3094	n.a. 3920 5138	22406 25023 15457	2767 9021 7404	3513 10597 7439	n.a. 2609 2383	9136 5879	3662 6233 7783	5047 9414 8996	115 1274 1721	200684 310644 296422		
5518 4355 3430	2693 3951	-111 2717 1324	18653 12917 3344	-6385 -3922 -3528	-940 9282 4620	252 -6628 -4261	536 -1182	-1349 -1594 -3060	-910 1519 2690	n.a. -4092 -2668			
5518 4355 3430	1894 1293	n.a. 2717 1324	18653 15741 4901	-5657 -683 -2189	-940 9282 4620	n.a. -4433 -2473	562 -860	-1349 -1594 -3060	-45 525 1314	115 -4092 -2668			

				I-XII	
				1999	n.a.
Thermal nuclear net generation	GWh	Σ	2008	0	0
			2009	0	0
Fossil fuels net generation	GWh	Σ	1999	n.a.	n.a.
			2008	8094	8094
			2009	6509	6509
Hydraulic net generation	GWh	Σ	1999	n.a.	n.a.
			2008	153	153
			2009	121	121
Other renewable net generation <sup>1</sup>	GWh	Σ	2008	0	0
			2009	0	0
- of which wind	GWh	Σ	2008	0	0
			2009	0	0
Non-identifiable net generation <sup>1</sup>	GWh	Σ	2008	0	0
			2009	0	0
Total net electrical energy generation calculated to represent 100% of the national values	GWh	Σ	1999	n.a.	n.a.
			2008	8247	8247
			2009	6630	6630
Physical import	GWh	Σ	1999	n.a.	n.a.
			2008	1274	1274
			2009	1721	1721
Physical export	GWh	Σ	1999	n.a.	n.a.
			2008	5366	5366
			2009	4389	4389
Total physical import/export balance	GWh	Σ	1999	n.a.	n.a.
			2008	-4092	-4092
			2009	-2666	-2666
Consumption of pumps	GWh	Σ	1999	n.a.	n.a.
			2008	0	0
			2009	0	0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	1999	n.a.	n.a.
			2008	4155	4155
			2009	3964	3964
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	n.a.	n.a.
			2008	637	637
			2009	601	601
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	n.a.	n.a.
			2008	850	850
			2009	833	833
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	1999	n.a.	n.a.
			2008	944	944
			2009	991	991
Time of highest load on the 3rd Wednesday		CET	1999	n.a.	n.a.
			2008	17:00	17:00
			2009	17:00	17:00
Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.	MW	max.	1999	n.a.	n.a.

<sup>1</sup> Before 2005, the information on renewable and not identifiable energy sources was collected in a different manner. Some countries added them to thermal conventional, some considered them as the part of not represented in the figures ( through the factor "representativity" ).

## Monthly values / Operation

## Ukraine West

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
804	732	726	617	585	640	665	655	638	574	709	749
741	647	646	411	363	481	519	391	559	543	586	622
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	11	20	19	18	10	18	13	7	9	7	13
11	9	9	17	8	12	10	5	3	11	15	11
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
812	743	746	636	603	650	683	668	645	583	716	762
752	656	655	428	371	493	529	396	562	554	601	633
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
269	258	88	45	26	27	88	58	52	165	108	90
154	78	197	126	67	99	148	165	118	190	142	237
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.	n.a.	n.a.
625	595	445	340	324	413	491	448	402	406	445	432
465	385	465	269	168	328	389	305	403	399	373	440
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
-356	-337	-357	-295	-297	-386	-404	-390	-350	-241	-337	-342
-311	-307	-268	-143	-101	-229	-241	-140	-285	-209	-230	-202
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
456	406	389	341	306	264	279	278	295	342	379	420
441	349	387	285	270	264	288	256	277	345	371	431
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
605	<b>637</b>	574	488	386	416	407	373	436	428	549	553
535	<b>601</b>	538	385	346	357	398	306	385	484	471	567
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
803	<b>850</b>	689	663	541	564	566	558	635	584	822	736
727	773	739	549	540	534	563	487	521	702	705	<b>833</b>
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>944</b>	913	822	766	621	599	621	628	754	753	934	865
894	901	859	666	614	588	587	539	670	846	821	<b>991</b>
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>17:00</b>	18:00	19:00	20:00	21:00	09:00	21:00	21:00	19:00	19:00	17:00	19:00
18:00	18:00	19:00	20:00	21:00	21:00	13:00	21:00	20:00	19:00	17:00	<b>17:00</b>
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Physical exchanges in interconnected operation <sup>1</sup>

MM_YY	Export (-)					Import (+)					Balance
	UA_W→HU	UA_W→RO	UA_W→SK	RG CE_EXP	Total_EXP	HU→UA_W	RO→UA_W	SK→UA_W	RG CE_IMP	Total_IMP	
I.99	0	0	99	99	99	0	0	0	0	0	-99
II.99	41	0	85	126	126	3	0	0	3	3	-123
III.99	4	0	158	162	162	46	0	0	46	46	-116
IV.99	13	0	84	97	97	11	0	0	11	11	-86
V.99	9	0	27	36	36	6	0	0	6	6	-30
VI.99	45	0	86	131	131	5	0	0	5	5	-126
VII.99	79	0	58	137	137	0	0	3	3	3	-134
VIII.99	53	0	96	149	149	2	0	1	3	3	-146
IX.99	65	0	54	119	119	2	0	9	11	11	-108
X.99	55	0	20	75	75	0	0	3	3	3	-72
XI.99	127	0	65	192	192	0	0	5	5	5	-187
XII.99	207	0	73	280	280	0	0	19	19	19	-261
1999	698	0	905	1603	1603	75	0	40	115	115	-1488
I.08	373	246	6	625	625	5	0	264	269	269	-356
II.08	364	226	5	595	595	0	0	258	258	258	-337
III.08	307	132	6	445	445	18	0	70	88	88	-357
IV.08	252	73	15	340	340	1	1	43	45	45	-295
V.08	180	107	37	324	324	3	0	23	26	26	-298
VI.08	312	69	32	413	413	9	2	16	27	27	-386
VII.08	408	73	10	491	491	0	1	87	88	88	-403
VIII.08	314	121	13	448	448	23	0	35	58	58	-390
IX.08	311	70	21	402	402	6	1	45	52	52	-350
X.08	280	111	15	406	406	4	2	159	165	165	-241
XI.08	343	94	8	445	445	7	5	96	108	108	-337
XII.08	311	112	9	432	432	15	0	75	90	90	-342
2008	3755	1434	177	5366	5366	91	12	1171	1274	1274	-4092
I.09	351	105	9	465	465	2	0	152	154	154	-311
II.09	295	81	9	385	385	4	0	74	78	78	-307
III.09	355	103	7	465	465	15	0	182	197	197	-268
IV.09	192	70	7	269	269	20	0	106	126	126	-143
V.09	47	102	19	168	168	30	0	37	67	67	-101
VI.09	203	115	10	328	328	32	0	67	99	99	-229
VII.09	267	117	5	389	389	12	0	136	148	148	-241
VIII.09	197	103	5	305	305	21	0	144	165	165	-140
IX.09	306	92	5	403	403	6	0	112	118	118	-285
X.09	248	143	8	399	399	15	3	172	190	190	-209
XI.09	226	137	10	373	373	25	0	117	142	142	-231
XII.09	221	212	7	440	440	59	0	178	237	237	-203
2009	2908	1380	101	4389	4389	241	3	1477	1721	1721	-2668

<sup>1</sup> These physical energy flows were measured on the cross-frontier transmission lines (≥110 kV). These values may differ from the official statistics and the total physical balance in the table "Monthly values: Operation".

## Load values on the 3rd Wednesday 2009<sup>1</sup>

<sup>1</sup> All values are calculated to represent 100% of the national values  
Statistical database as of 31 August 2010

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<sup>2</sup> The reported figures are best estimates based on actual measurements and extrapolations.

<sup>3</sup> Denmark West represents the Western part of Denmark synchronously interconnected with former UCTE (Jutland and Funen).

<sup>4</sup> FYROM = Former Yugoslav Republic of Macedonia

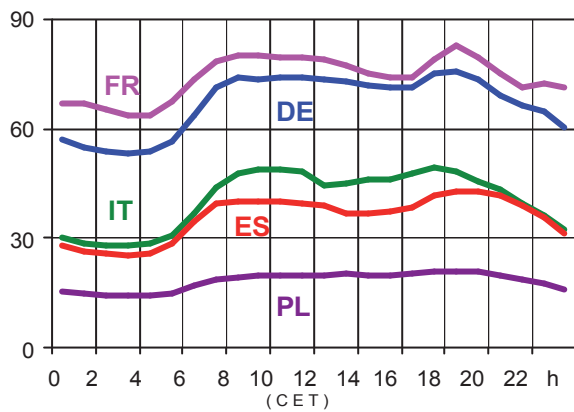
<sup>5</sup> Operational data

<sup>6</sup> Ukraine West represents the so-called Burshtyn Island synchronously interconnected with former UCTE.

## Load diagrams on the 3rd Wednesday in GW

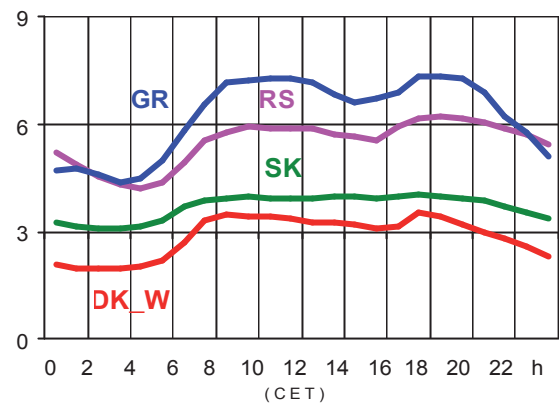
21.01.2009

( in GW )



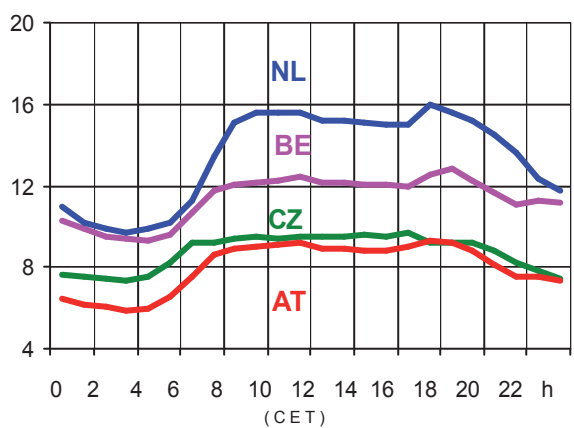
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( in GW )



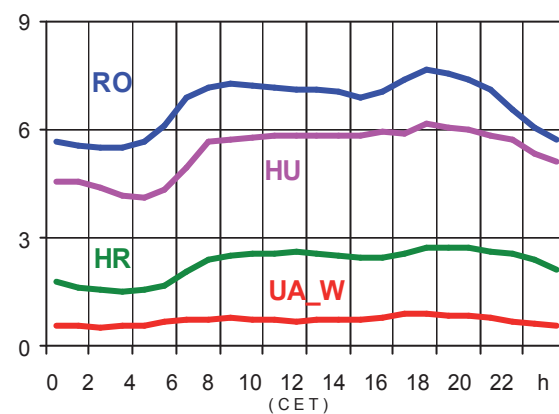
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( in GW )



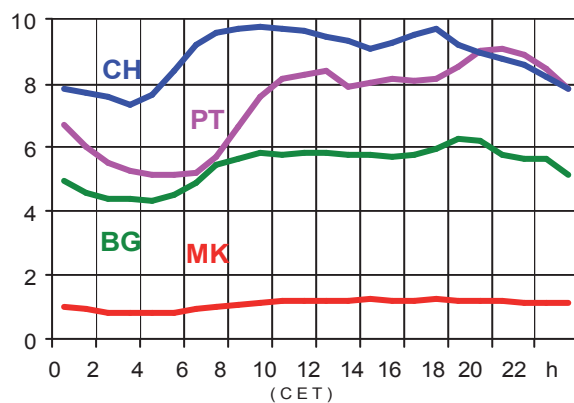
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( in GW )



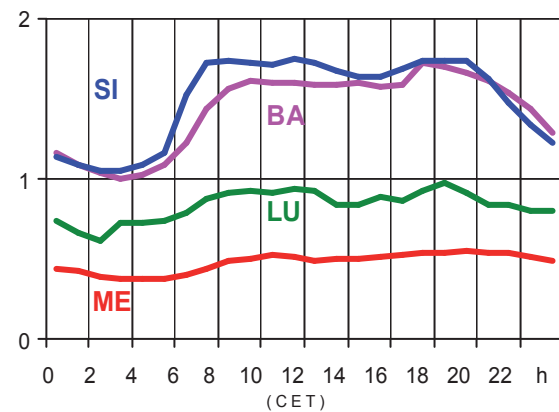
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( in GW )



21.01.2009

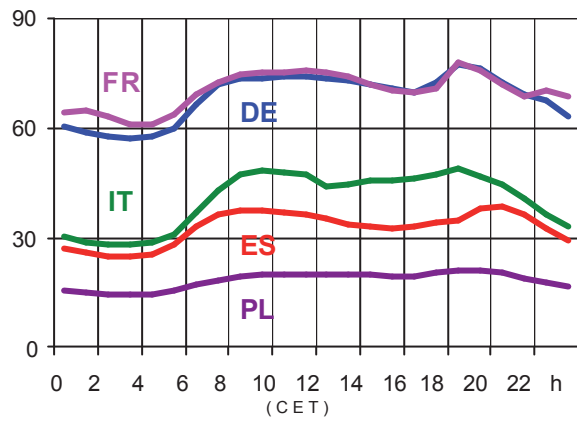
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## Load diagrams on the 3rd Wednesday in GW

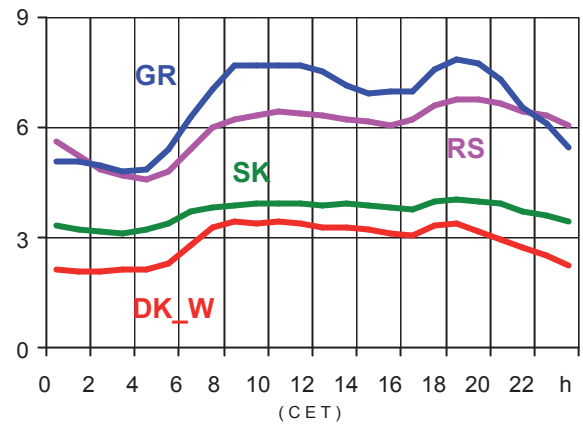
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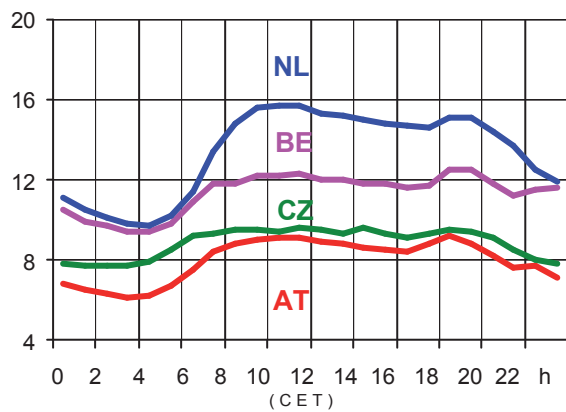
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( in GW )



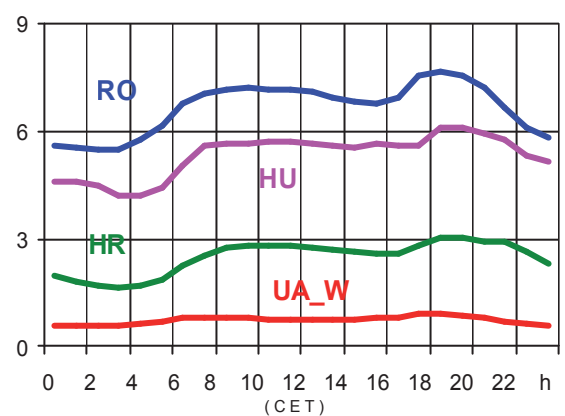
18.02.2009

( in GW )



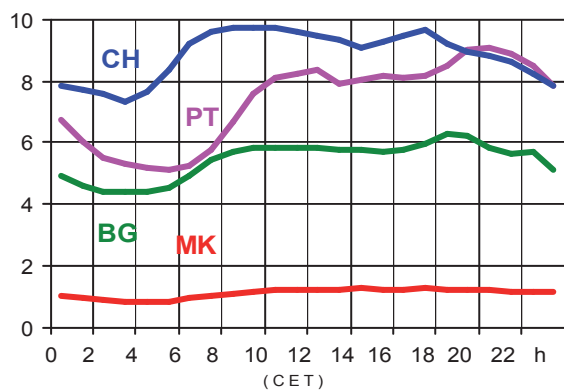
18.02.2009

( in GW )



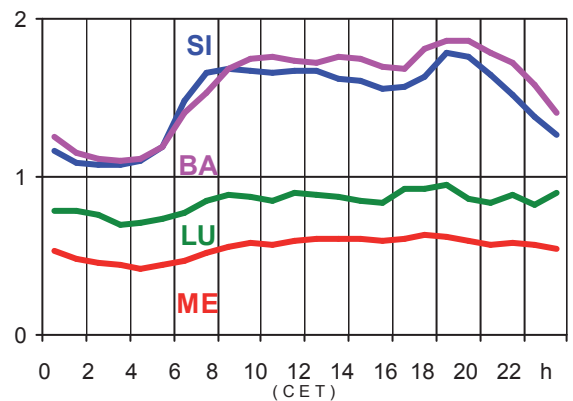
18.02.2009

( in GW )



18.02.2009

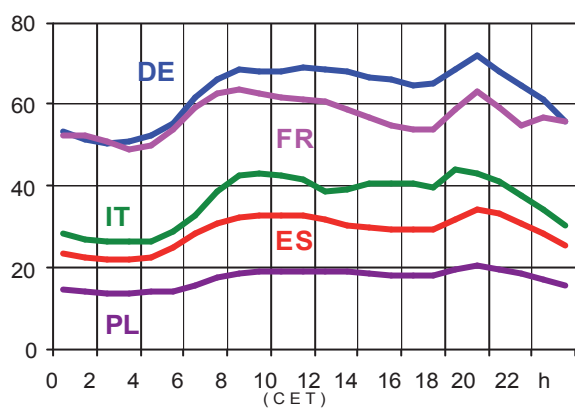
( in GW )



## Load diagrams on the 3rd Wednesday in GW

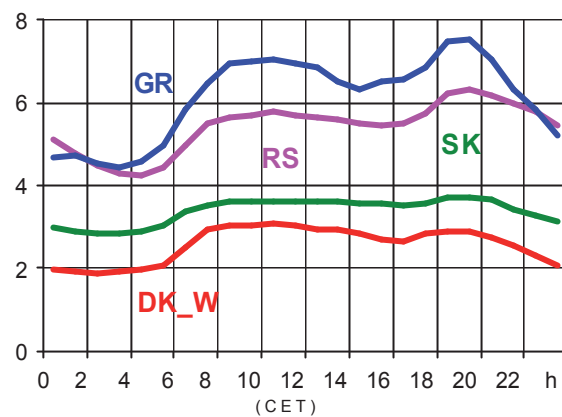
18.03.2009

( in GW )



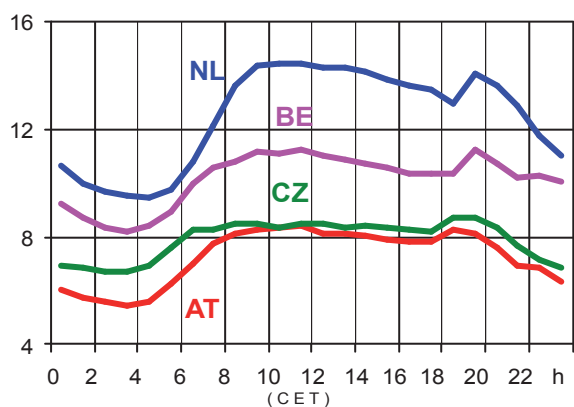
18.03.2009

( in GW )



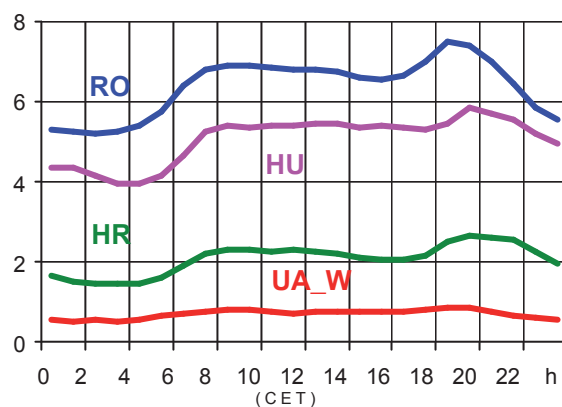
18.03.2009

( in GW )



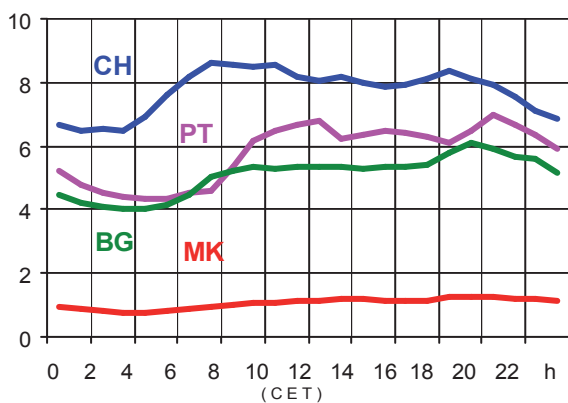
18.03.2009

( in GW )



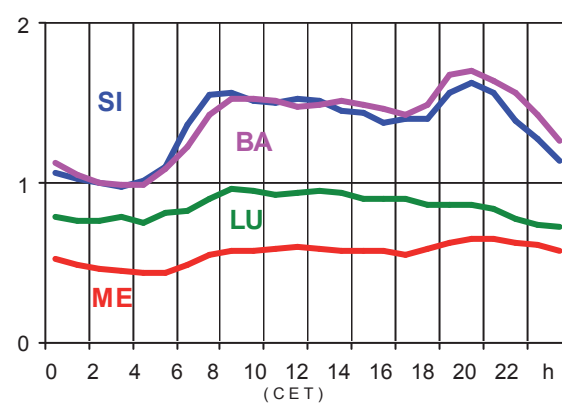
18.03.2009

( in GW )



18.03.2009

( in GW )

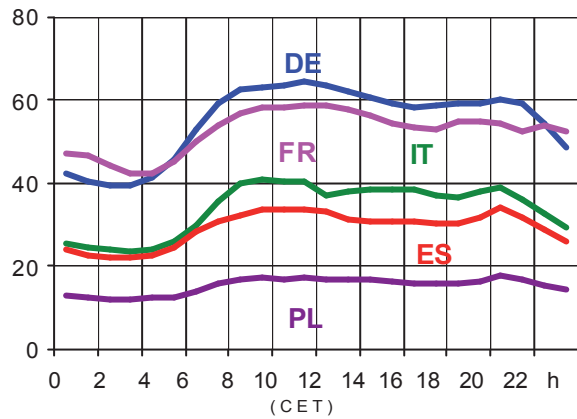




## Load diagrams on the 3rd Wednesday in GW

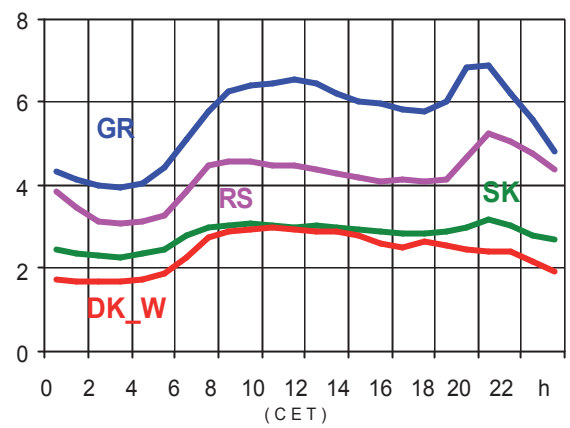
15.04.2009

( in GW )



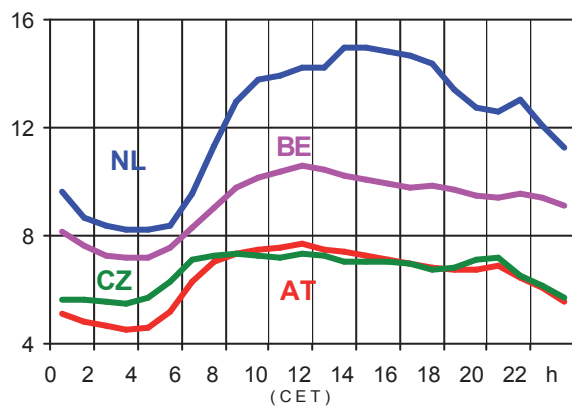
15.04.2009

( in GW )



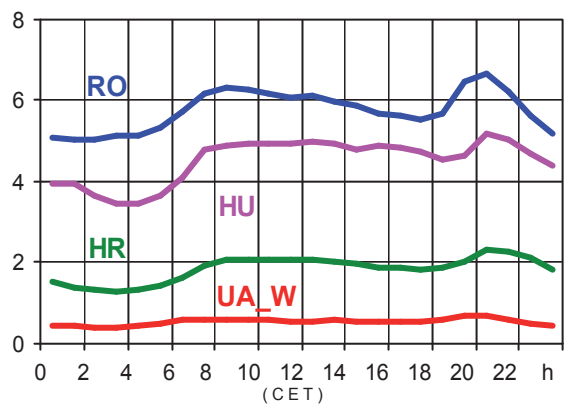
15.04.2009

( in GW )



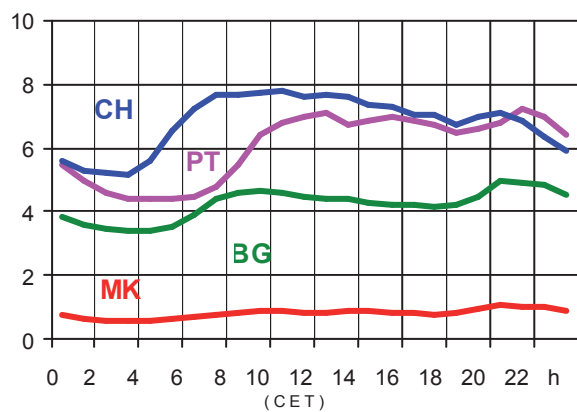
15.04.2009

( in GW )



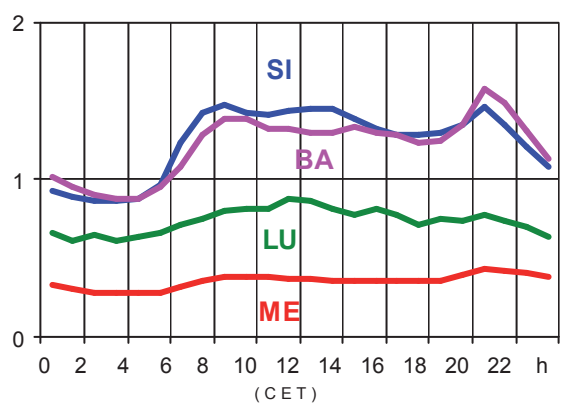
15.04.2009

( in GW )



15.04.2009

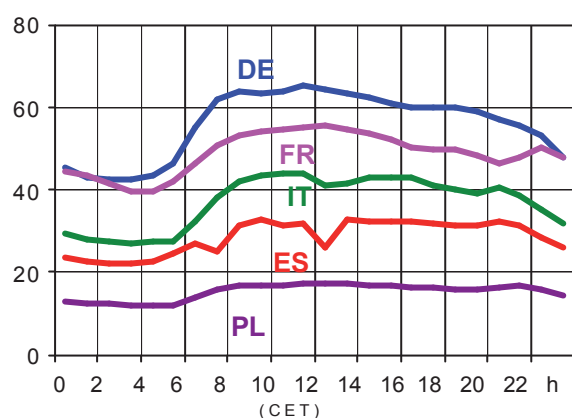
( in GW )



## Load diagrams on the 3rd Wednesday in GW

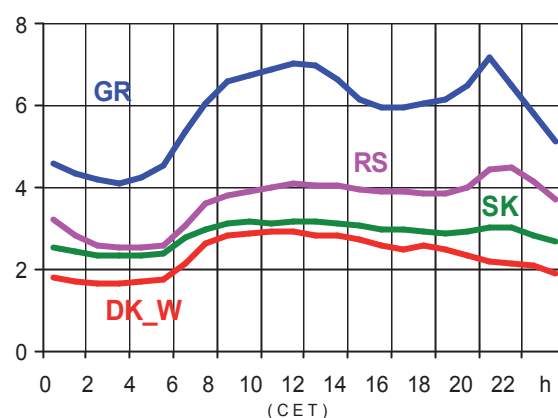
20.05.2009

( in GW )



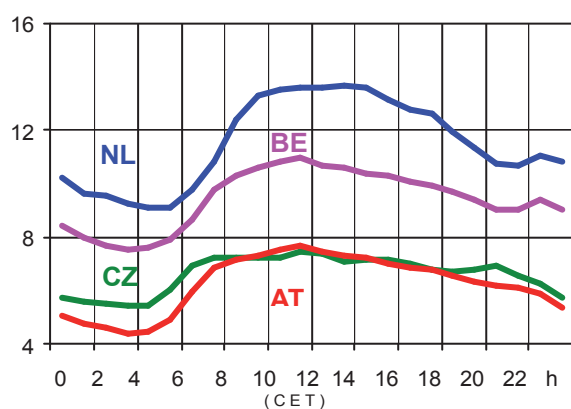
20.05.2009

( in GW )



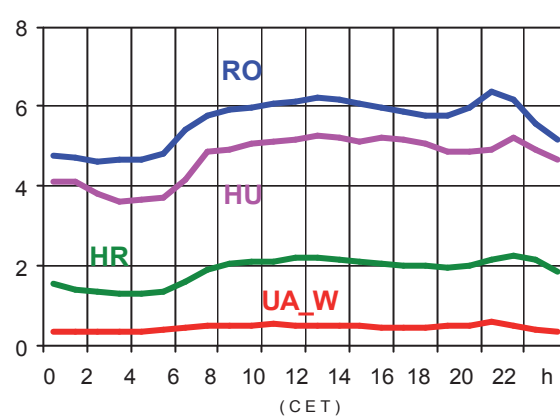
20.05.2009

( in GW )



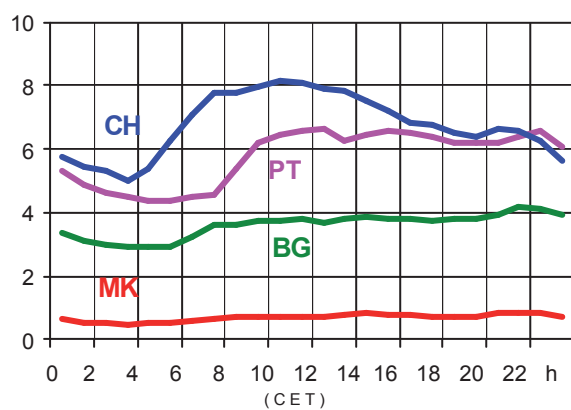
20.05.2009

( in GW )



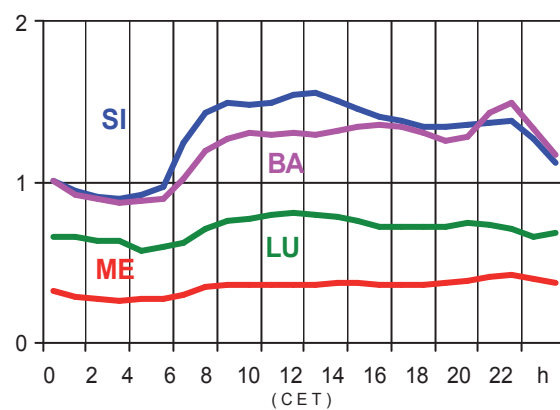
20.05.2009

( in GW )



20.05.2009

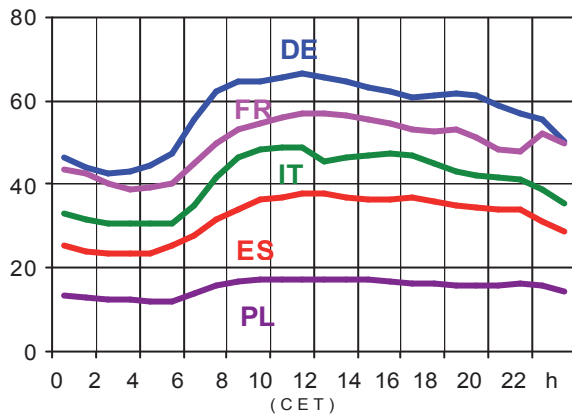
( in GW )



## Load diagrams on the 3rd Wednesday in GW

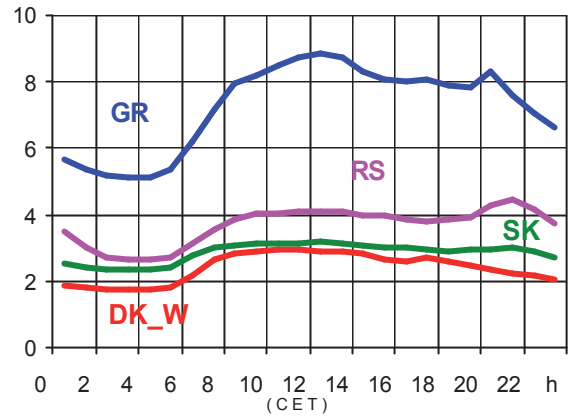
17.06.2009

( in GW )



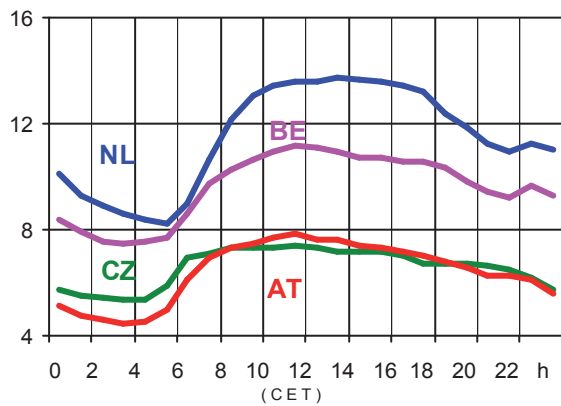
17.06.2009

( in GW )



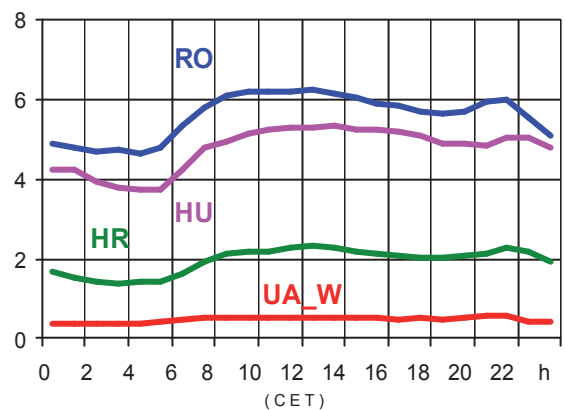
17.06.2009

( in GW )



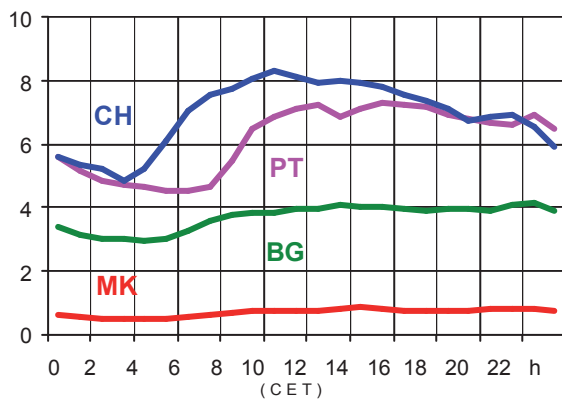
17.06.2009

( in GW )



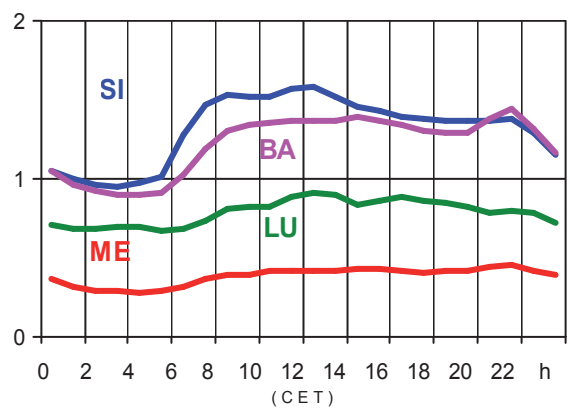
17.06.2009

( in GW )



17.06.2009

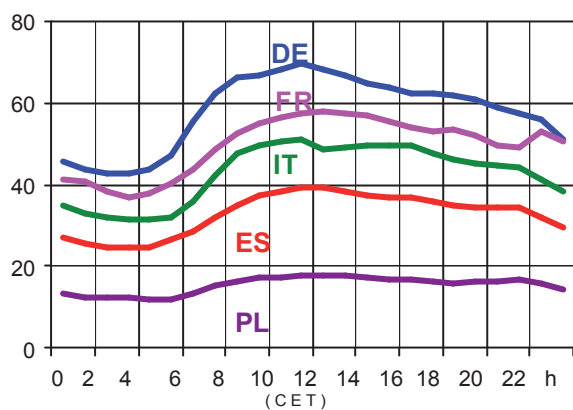
( in GW )



## Load diagrams on the 3rd Wednesday in GW

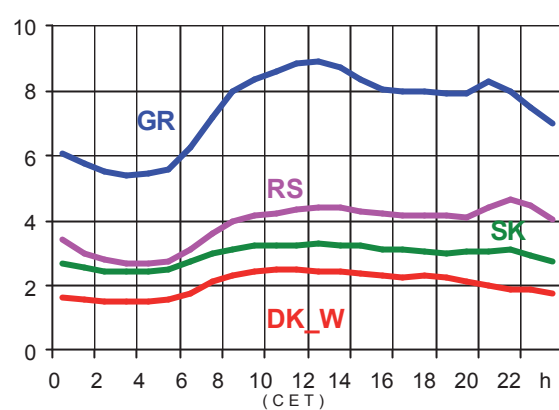
15.07.2009

( in GW )



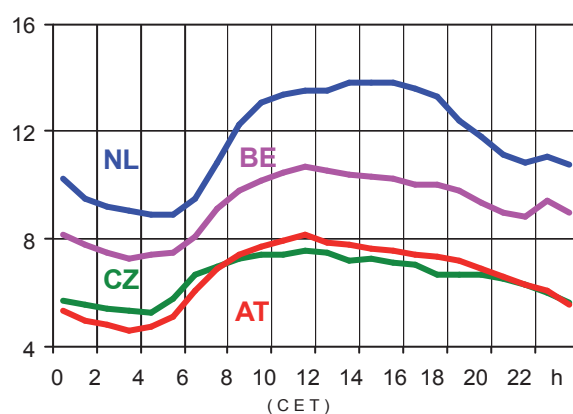
15.07.2009

( in GW )



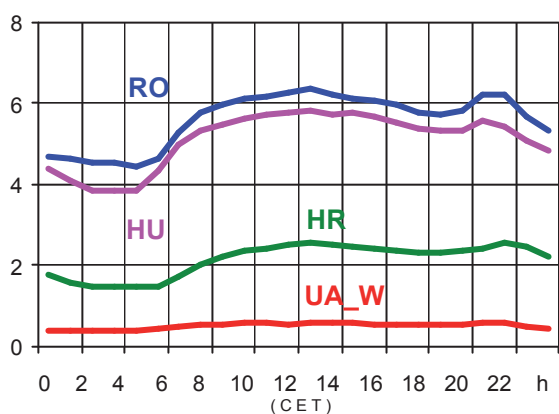
15.07.2009

( in GW )



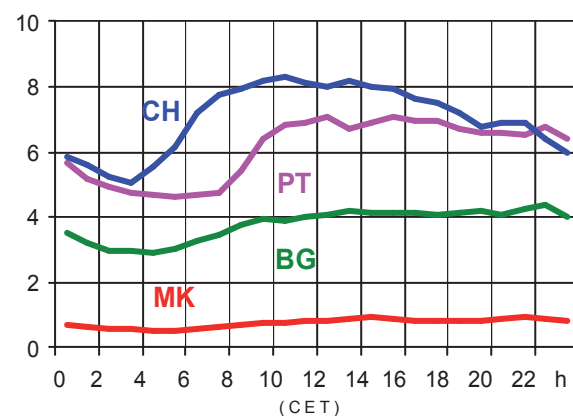
15.07.2009

( in GW )



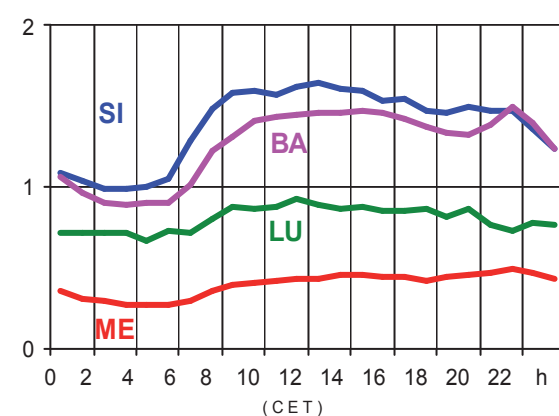
15.07.2009

( in GW )



15.07.2009

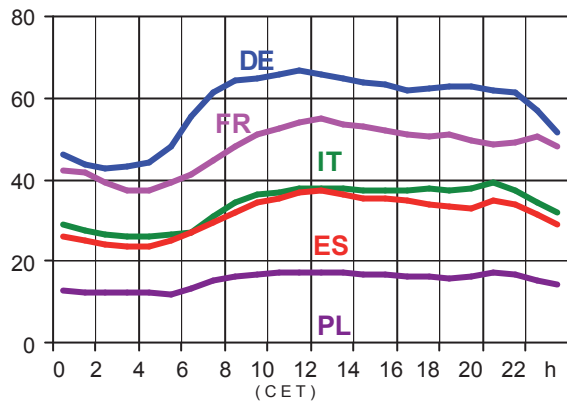
( in GW )



## Load diagrams on the 3rd Wednesday in GW

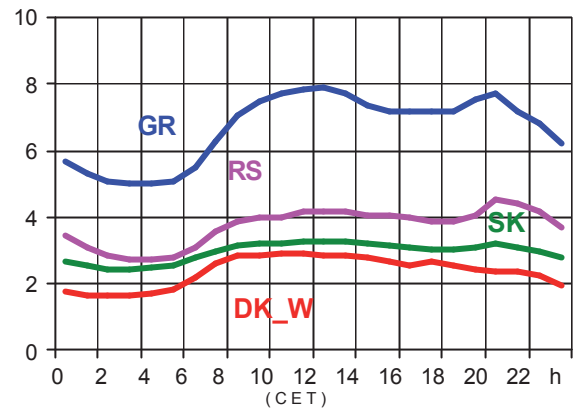
19.08.2009

( in GW )



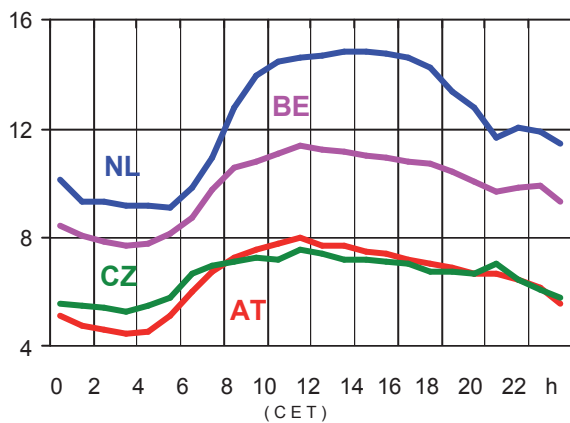
19.08.2009

( in GW )



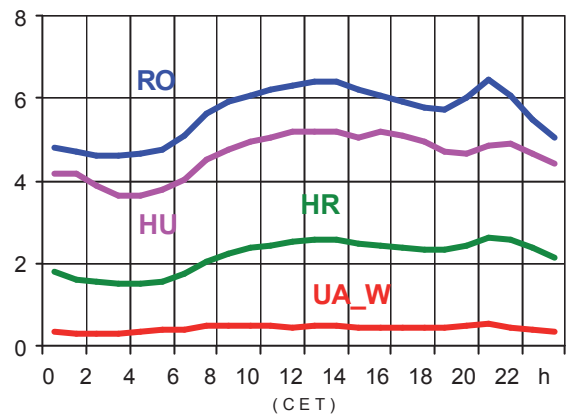
19.08.2009

( in GW )



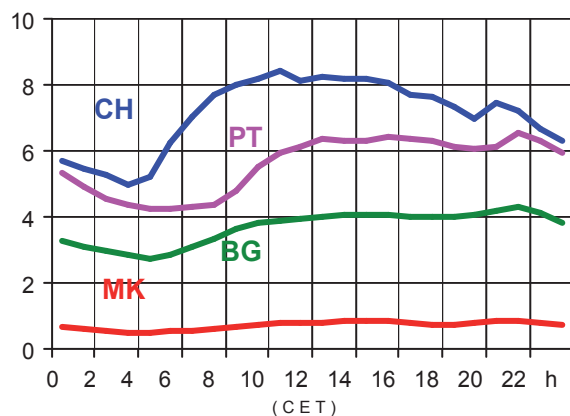
19.08.2009

( in GW )



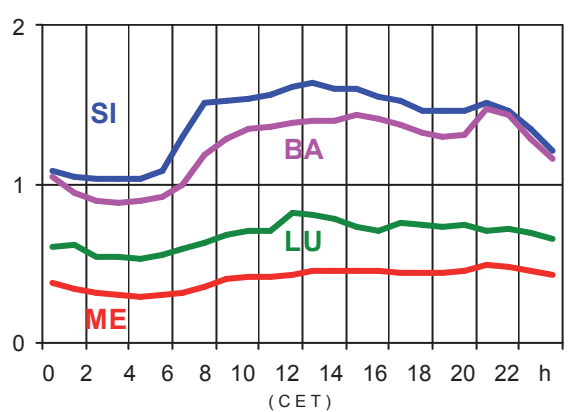
19.08.2009

( in GW )



19.08.2009

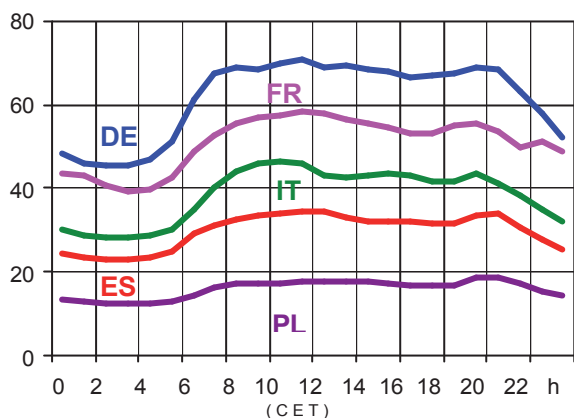
( in GW )



## Load diagrams on the 3rd Wednesday in GW

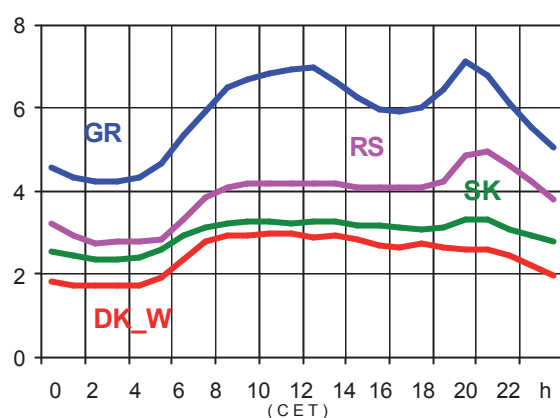
16.09.2009

( in GW )



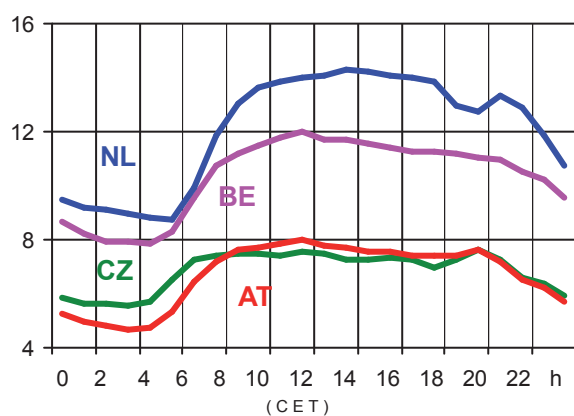
16.09.2009

( in GW )



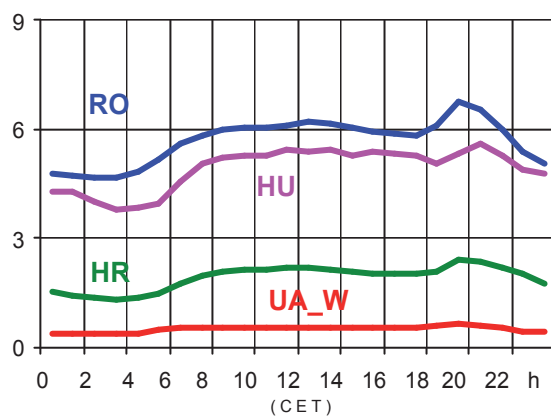
16.09.2009

( in GW )



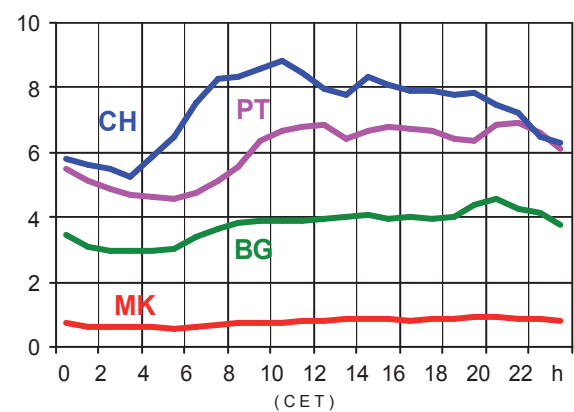
16.09.2009

( in GW )



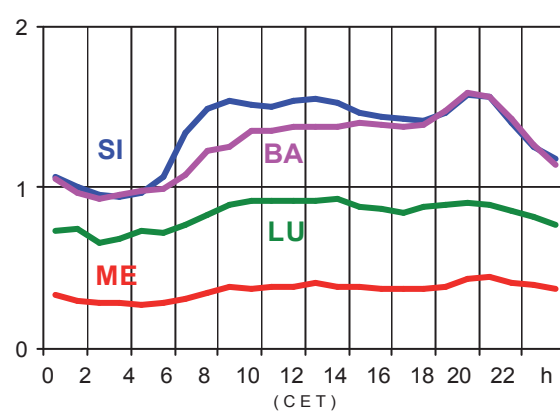
16.09.2009

( in GW )



16.09.2009

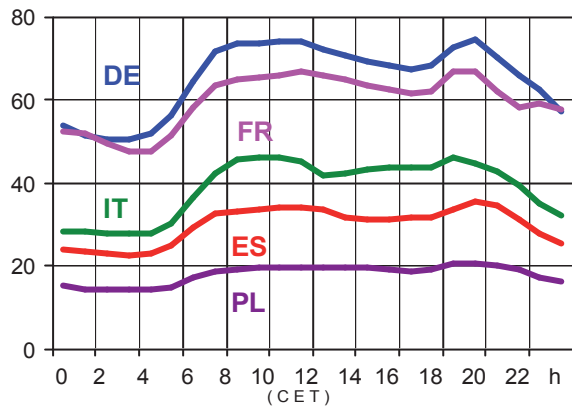
( in GW )



## Load diagrams on the 3rd Wednesday in GW

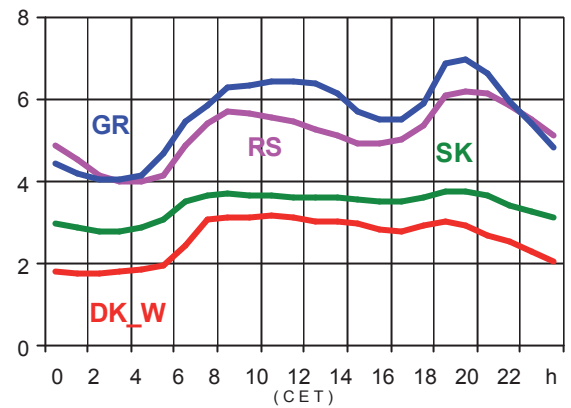
21.10.2009

( in GW )



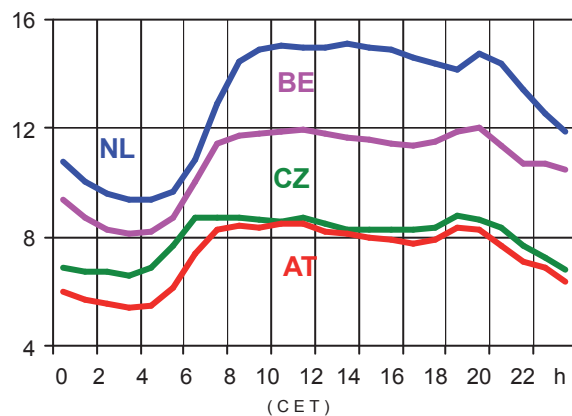
21.10.2009

( in GW )



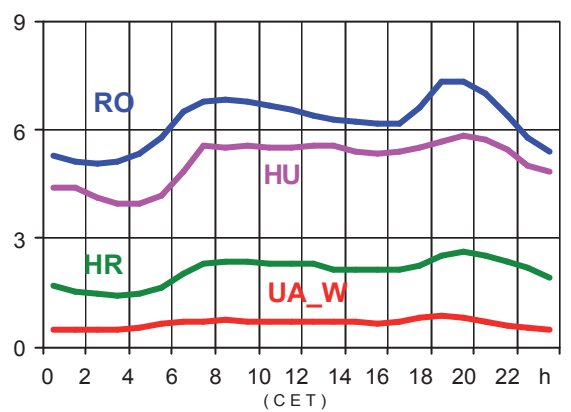
21.10.2009

( in GW )



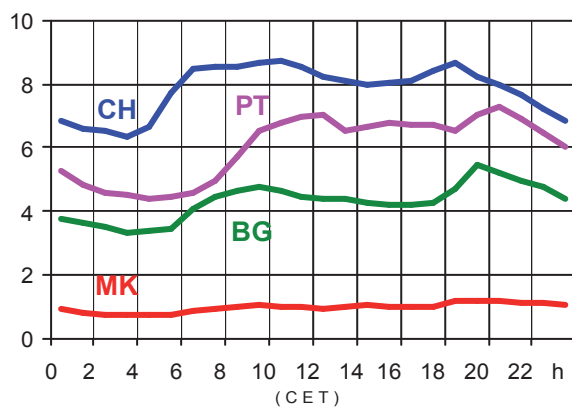
21.10.2009

( in GW )



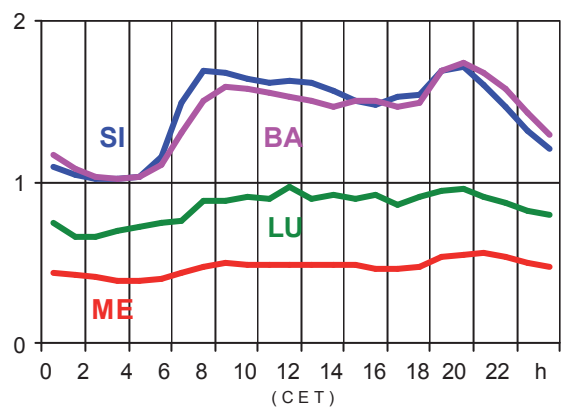
21.10.2009

( in GW )



21.10.2009

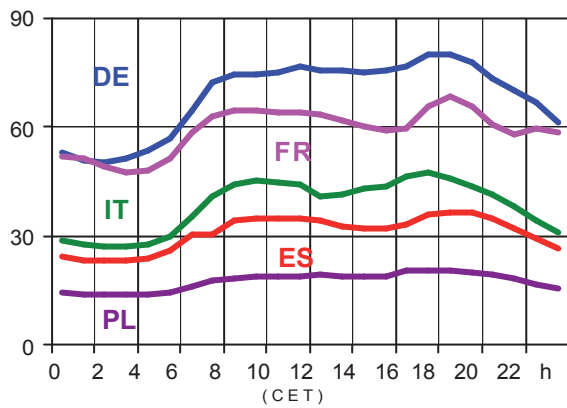
( in GW )



## Load diagrams on the 3rd Wednesday in GW

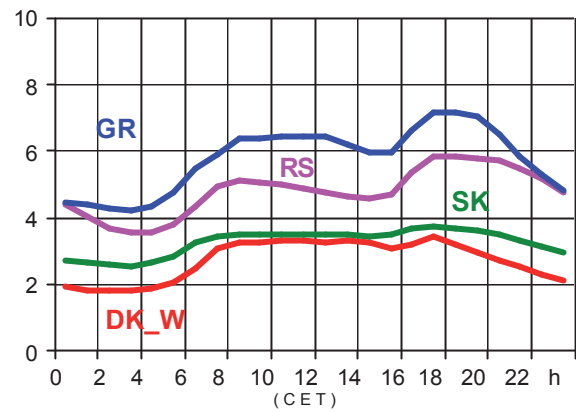
18.11.2009

( in GW )



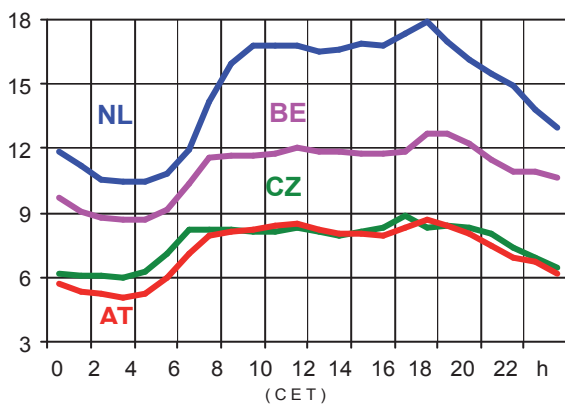
18.11.2009

( in GW )



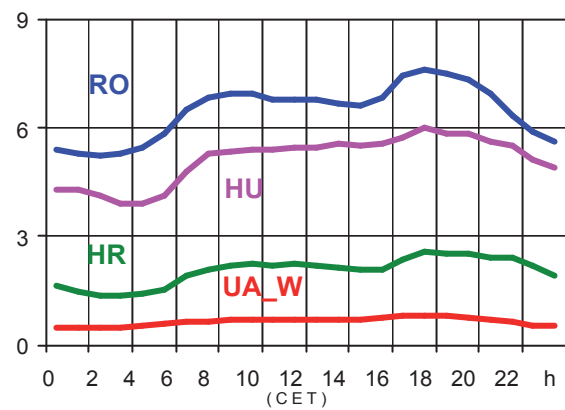
18.11.2009

( in GW )



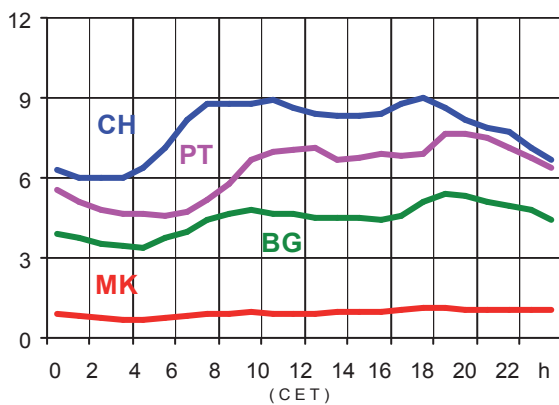
18.11.2009

( in GW )



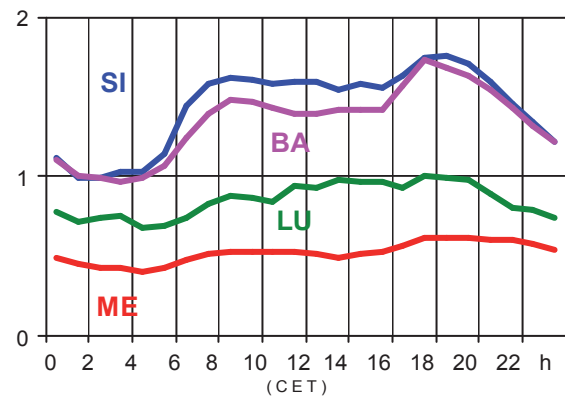
18.11.2009

( in GW )



18.11.2009

( in GW )

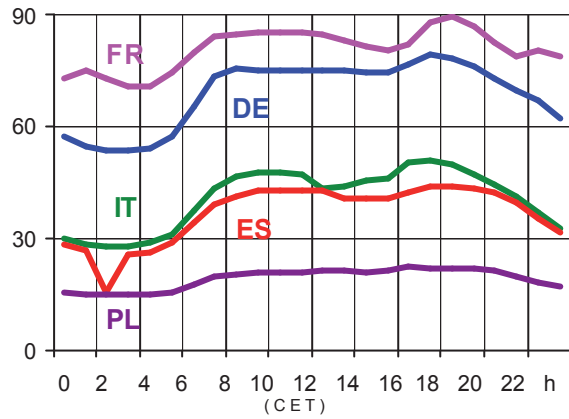




## Load diagrams on the 3rd Wednesday in GW

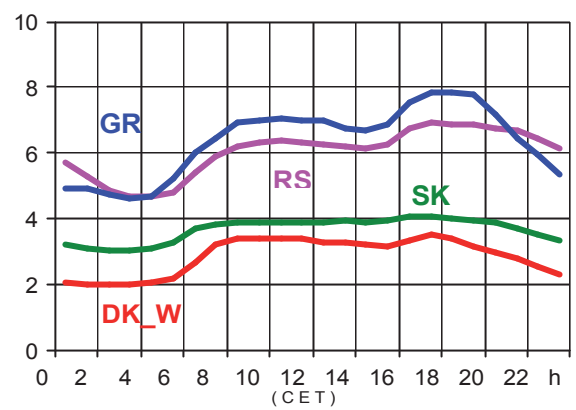
16.12.2009

( in GW )



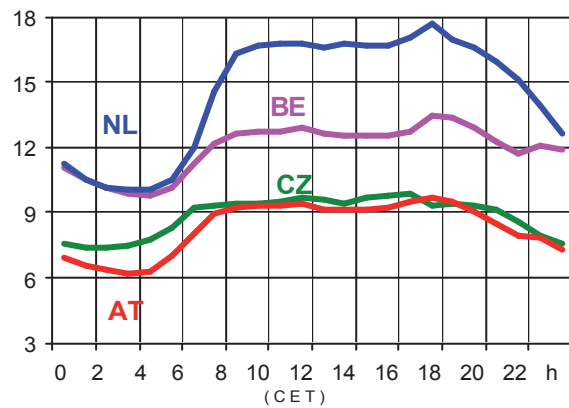
16.12.2009

( in GW )



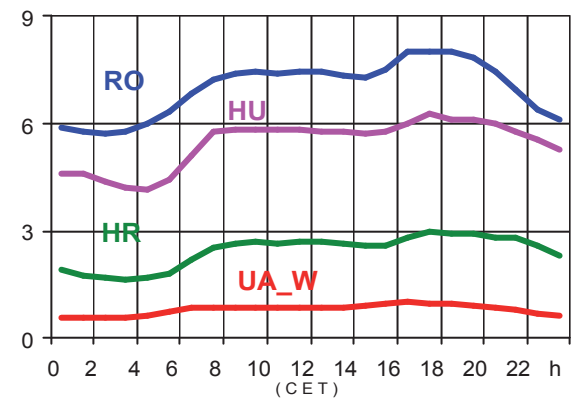
16.12.2009

( in GW )



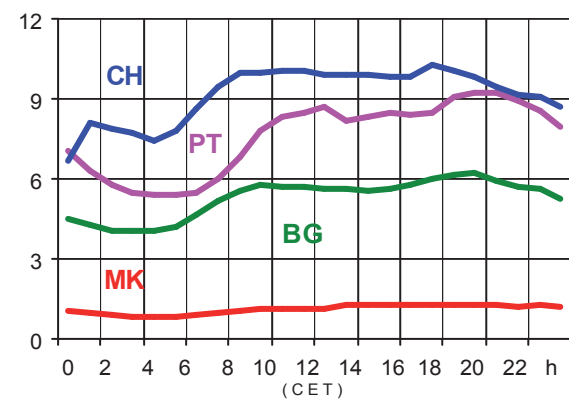
16.12.2009

( in GW )



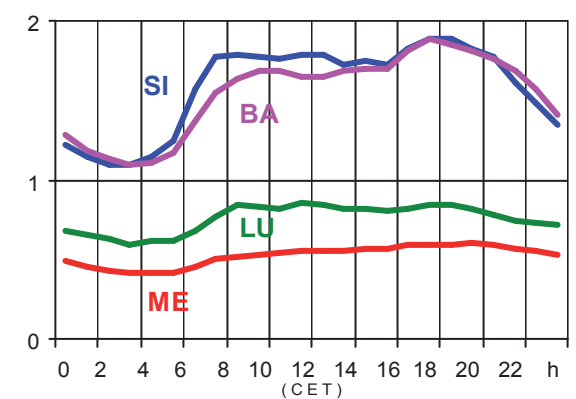
16.12.2009

( in GW )



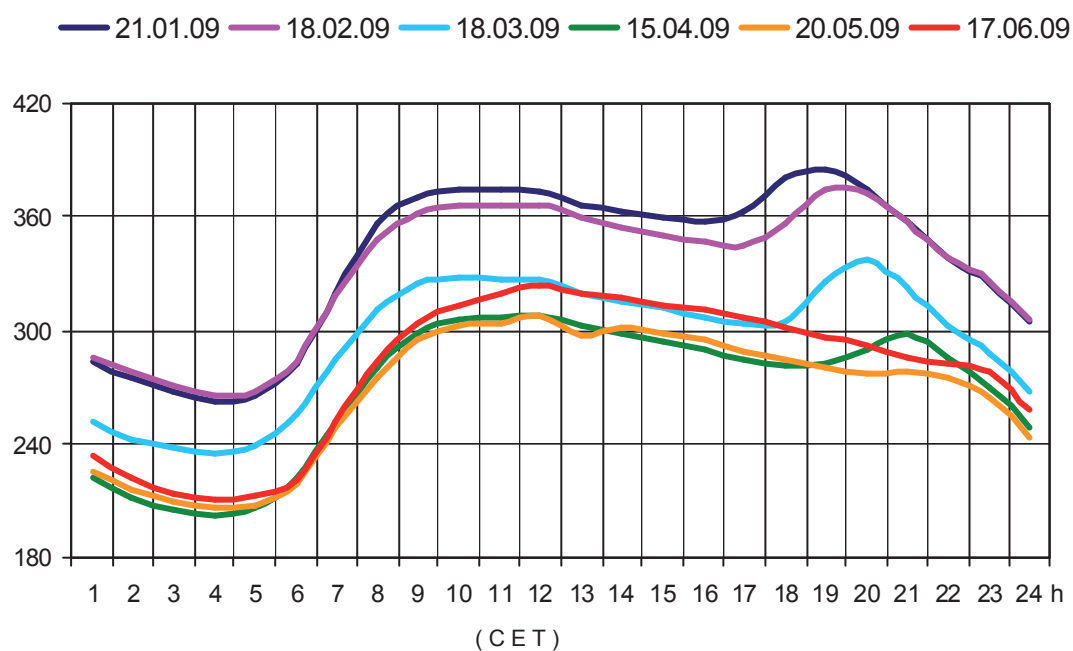
16.12.2009

( in GW )



## Load diagrams on the 3rd Wednesday in GW

### Regional Group Continental Europe (former UCTE) monthly load diagrams January - June 2009 in GW

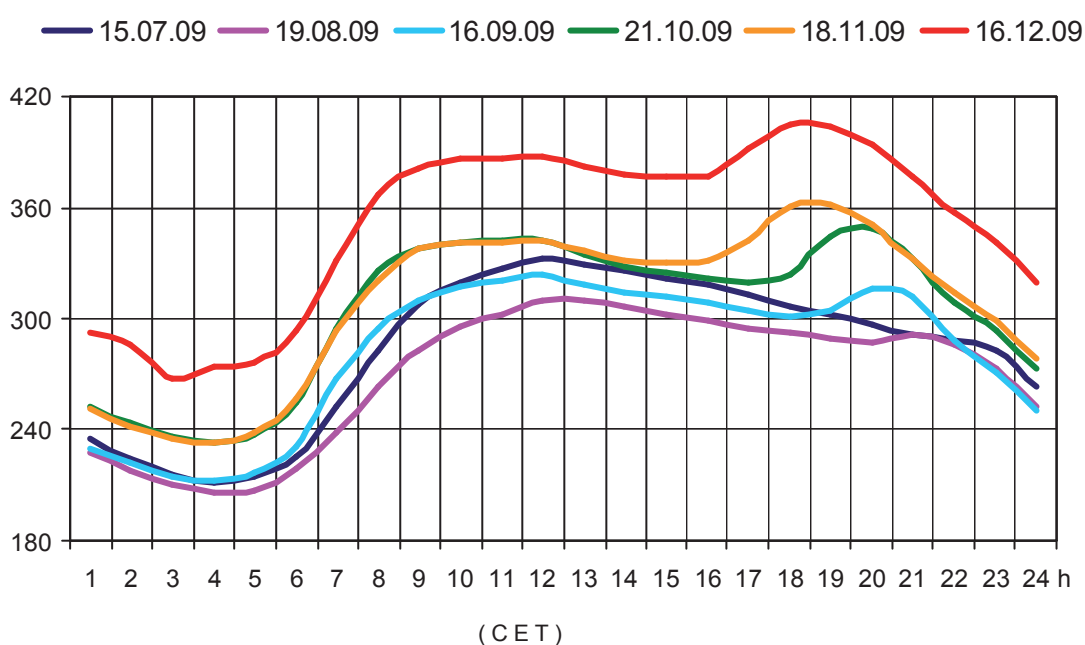


Percentage as referred to total values (%)

	AT	BA	BE	BG	CH	CZ	DE	DK	ES	FR	GR	HR	HU	IT	LU	ME	MK	NL	PL	PT	RO	RS	SI	SK	UA
								_W																	_W
21.01.09	100	100	100	99	100	100	91	100	98	100	100	100	100	100	100	100	100	100	100	97	100	100	100	100	100
18.02.09	100	100	100	99	100	100	91	100	98	100	100	100	100	100	100	100	100	100	100	97	100	100	100	100	100
18.03.09	100	100	100	99	100	100	91	100	98	100	100	100	100	100	100	100	100	100	100	97	100	100	100	100	100
15.04.09	100	100	100	99	100	100	91	100	98	100	100	100	100	100	100	100	100	100	100	97	100	100	100	100	100
20.05.09	100	100	100	99	100	100	91	100	98	100	100	100	100	100	100	100	100	100	100	97	100	100	100	100	100
17.06.09	100	100	100	99	100	100	91	100	98	100	100	100	100	100	100	100	100	100	100	97	100	100	100	100	100

## Load diagrams on the 3rd Wednesday in GW

### Regional Group Continental Europe (former UCTE) monthly load diagrams July - December 2009 in GW



Percentage as referred to total values (%)

	AT	BA	BE	BG	CH	CZ	DE	DK	ES	FR	GR	HR	HU	IT	LU	ME	MK	NL	PL	PT	RO	RS	SI	SK	UA
								_W																	_W
15.07.09	100	100	100	99	100	100	91	100	98	100	100	100	100	100	100	100	100	100	100	97	100	100	100	100	100
19.08.09	100	100	100	99	100	100	91	100	98	100	100	100	100	100	100	100	100	100	100	97	100	100	100	100	100
16.09.09	100	100	100	99	100	100	91	100	98	100	100	100	100	100	100	100	100	100	100	97	100	100	100	100	100
21.10.09	100	100	100	99	100	100	91	100	98	100	100	100	100	100	100	100	100	100	100	97	100	100	100	100	100
18.11.09	100	100	100	99	100	100	91	100	98	100	100	100	100	100	100	100	100	100	100	97	100	100	100	100	100
16.12.09	100	100	100	99	100	100	91	100	98	100	100	100	100	100	100	100	100	100	100	97	100	100	100	100	100

## Hourly load values on the 3rd Wednesday in MW

### Austria

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	6492	6178	6036	5852	5936	6501	7479	8589	8944	8999	9115
18 / 2 / 2009	6788	6524	6349	6150	6202	6714	7574	8428	8857	9029	9158
18 / 3 / 2009	6000	5729	5581	5433	5563	6251	7029	7762	8106	8235	8349
15 / 4 / 2009	5108	4772	4628	4470	4559	5213	6263	7007	7348	7442	7537
20 / 5 / 2009	5056	4737	4600	4386	4474	4940	5994	6842	7168	7320	7542
17 / 6 / 2009	5102	4714	4583	4451	4473	4940	6077	6941	7309	7469	7688
15 / 7 / 2009	5321	4987	4858	4630	4734	5123	6065	6923	7418	7710	7954
19 / 8 / 2009	5130	4761	4627	4483	4567	5100	6003	6760	7271	7560	7766
16 / 9 / 2009	5203	4904	4786	4604	4676	5310	6442	7184	7573	7684	7854
21 / 10 / 2009	6015	5701	5556	5419	5522	6170	7385	8265	8407	8374	8486
18 / 11 / 2009	5678	5358	5243	5092	5270	5967	7077	7922	8125	8199	8355
16 / 12 / 2009	6903	6582	6379	6186	6310	6982	8016	8940	9188	9310	9343

### Bosnia - Herzegovina

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	1160	1089	1045	1008	1034	1086	1232	1437	1568	1610	1605
18 / 2 / 2009	1247	1150	1110	1097	1111	1192	1401	1533	1687	1750	1753
18 / 3 / 2009	1127	1050	997	983	992	1094	1226	1433	1524	1531	1518
15 / 4 / 2009	1018	953	898	873	876	949	1085	1284	1382	1386	1327
20 / 5 / 2009	1009	917	891	868	885	903	1017	1197	1270	1313	1300
17 / 6 / 2009	1052	958	920	899	894	907	1025	1194	1299	1336	1354
15 / 7 / 2009	1065	960	909	894	900	902	1018	1226	1312	1411	1431
19 / 8 / 2009	1045	945	901	884	897	925	992	1182	1287	1355	1361
16 / 9 / 2009	1047	960	930	958	973	990	1083	1225	1256	1352	1349
21 / 10 / 2009	1168	1087	1033	1022	1029	1106	1301	1503	1585	1578	1549
18 / 11 / 2009	1106	1001	985	971	986	1064	1247	1388	1479	1471	1426
16 / 12 / 2009	1288	1192	1133	1097	1105	1173	1380	1551	1643	1684	1686

### Belgium

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	10316	9859	9545	9353	9344	9617	10660	11748	12063	12205	12250
18 / 2 / 2009	10492	9958	9692	9400	9395	9804	10893	11778	11851	12185	12190
18 / 3 / 2009	9230	8674	8300	8184	8383	8918	9955	10567	10794	11144	11083
15 / 4 / 2009	8149	7617	7266	7144	7191	7546	8315	9022	9794	10153	10352
20 / 5 / 2009	8421	7993	7694	7565	7620	7895	8662	9752	10325	10628	10830
17 / 6 / 2009	8338	7936	7544	7458	7562	7674	8544	9699	10259	10656	10896
15 / 7 / 2009	8186	7803	7477	7294	7401	7514	8084	9141	9832	10198	10501
19 / 8 / 2009	8454	8110	7852	7734	7758	8135	8748	9779	10535	10809	11103
16 / 9 / 2009	8643	8218	7913	7895	7845	8249	9517	10741	11156	11482	11737
21 / 10 / 2009	9369	8705	8302	8161	8239	8724	10062	11447	11720	11785	11882
18 / 11 / 2009	9726	9076	8788	8672	8719	9187	10358	11593	11610	11674	11782
16 / 12 / 2009	11095	10542	10173	9862	9808	10128	11212	12184	12639	12736	12727

## Hourly load values on the 3rd Wednesday in MW

												Austria
12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
9229	8925	8911	8812	8832	8987	9326	9242	8764	8130	7494	7518	7307
9172	8914	8828	8670	8533	8457	8810	9261	8870	8254	7627	7742	7175
8400	8120	8114	8007	7918	7788	7846	8229	8130	7551	6904	6848	6347
7694	7465	7373	7210	7120	6925	6819	6730	6733	6877	6403	6077	5506
7684	7436	7346	7199	7034	6892	6753	6567	6354	6205	6146	5892	5351
7854	7626	7576	7401	7289	7140	6999	6797	6514	6270	6279	6101	5535
8157	7910	7817	7668	7557	7414	7345	7199	6912	6586	6342	6096	5561
7983	7740	7681	7511	7373	7197	7076	6866	6661	6707	6430	6156	5580
7991	7739	7707	7545	7523	7398	7356	7419	7577	7147	6510	6221	5646
8530	8220	8123	7966	7887	7800	7916	8366	8273	7730	7112	6932	6371
8491	8209	8067	8009	7976	8268	8641	8408	8013	7483	6897	6772	6155
9357	9153	9175	9130	9186	9464	9675	9476	9047	8489	7880	7818	7290

												Bosnia - Herzegovina
12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
1606	1586	1587	1606	1572	1593	1726	1705	1658	1616	1537	1444	1295
1738	1714	1752	1744	1696	1679	1809	1864	1856	1781	1725	1582	1408
1477	1493	1512	1495	1458	1432	1493	1682	1702	1638	1564	1424	1259
1317	1298	1291	1329	1299	1277	1236	1249	1345	1573	1486	1310	1135
1306	1302	1316	1350	1351	1343	1307	1262	1281	1428	1491	1334	1170
1365	1371	1366	1390	1369	1346	1307	1286	1293	1379	1446	1310	1164
1445	1463	1458	1467	1460	1424	1376	1335	1319	1387	1499	1397	1237
1388	1400	1406	1441	1419	1379	1319	1302	1317	1478	1445	1291	1162
1373	1376	1374	1403	1395	1378	1393	1472	1581	1559	1426	1267	1142
1525	1499	1468	1501	1502	1470	1493	1695	1745	1682	1583	1431	1293
1395	1390	1422	1424	1422	1569	1727	1686	1624	1542	1430	1318	1222
1655	1657	1695	1702	1702	1816	1890	1853	1813	1762	1694	1580	1412

												Belgium
12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
12435	12128	12145	12051	12033	12008	12527	12796	12254	11647	11088	11258	11194
12373	11984	11989	11816	11846	11640	11735	12474	12484	11782	11276	11548	11583
11244	11017	10839	10682	10579	10314	10351	10364	11198	10715	10166	10242	10007
10586	10402	10222	10038	9908	9786	9825	9707	9463	9413	9514	9364	9061
10964	10711	10604	10390	10266	10073	9952	9681	9380	9054	9012	9422	9031
11142	11043	10930	10721	10682	10539	10505	10355	9789	9432	9197	9606	9230
10725	10531	10420	10303	10231	10063	10048	9802	9398	8984	8835	9441	8983
11410	11235	11147	11003	10958	10828	10696	10418	10041	9660	9874	9903	9337
11976	11680	11697	11549	11368	11264	11261	11147	10991	10944	10478	10181	9510
11990	11798	11658	11564	11437	11359	11498	11878	12048	11396	10737	10725	10458
12013	11816	11861	11715	11711	11852	12665	12721	12189	11477	10875	10917	10661
12879	12671	12578	12493	12507	12689	13501	13403	12942	12261	11715	12054	11928

## Hourly load values on the 3rd Wednesday in MW

### Bulgaria

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	4952	4594	4414	4384	4370	4523	4930	5462	5685	5859	5801
18 / 2 / 2009	4920	4700	4543	4456	4452	4654	5024	5461	5758	5825	5691
18 / 3 / 2009	4494	4212	4081	4025	4041	4178	4494	5015	5223	5372	5303
15 / 4 / 2009	3857	3612	3477	3392	3383	3515	3923	4386	4576	4658	4563
20 / 5 / 2009	3334	3079	2983	2943	2895	2949	3246	3584	3613	3724	3707
17 / 6 / 2009	3429	3165	3000	3015	2935	3000	3254	3591	3753	3852	3876
15 / 7 / 2009	3511	3196	2989	2988	2903	3029	3272	3478	3798	3957	3918
19 / 8 / 2009	3329	3097	2975	2870	2780	2879	3131	3337	3663	3854	3897
16 / 9 / 2009	3446	3120	2969	2954	2939	3055	3375	3678	3842	3916	3897
21 / 10 / 2009	3744	3604	3488	3351	3358	3463	4044	4460	4663	4746	4623
18 / 11 / 2009	3943	3765	3564	3479	3400	3768	3979	4418	4670	4795	4678
16 / 12 / 2009	4537	4280	4103	4028	4032	4197	4639	5179	5597	5767	5757

### Switzerland

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	7825	7734	7567	7341	7637	8393	9184	9619	9727	9752	9714
18 / 2 / 2009	7880	7781	7706	7495	7751	8505	8964	9558	9695	9640	9681
18 / 3 / 2009	6686	6502	6587	6482	6913	7634	8211	8646	8562	8524	8576
15 / 4 / 2009	5602	5311	5221	5176	5618	6560	7198	7640	7662	7729	7796
20 / 5 / 2009	5736	5473	5279	5005	5397	6252	7105	7770	7799	7929	8125
17 / 6 / 2009	5594	5360	5214	4876	5256	6109	7087	7560	7727	8040	8337
15 / 7 / 2009	5831	5592	5265	5086	5543	6169	7169	7724	7961	8181	8311
19 / 8 / 2009	5737	5472	5288	4971	5257	6241	7055	7702	8010	8223	8439
16 / 9 / 2009	5833	5607	5498	5222	5877	6497	7552	8243	8346	8559	8798
21 / 10 / 2009	6807	6581	6536	6341	6673	7707	8452	8564	8525	8682	8715
18 / 11 / 2009	6292	6025	6052	6001	6393	7160	8167	8772	8789	8803	8960
16 / 12 / 2009	n.a.	8158	7931	7727	7459	7817	8631	9462	10022	9998	10108

### Czech Republic

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	7587	7517	7453	7317	7544	8252	9218	9229	9413	9475	9440
18 / 2 / 2009	7807	7725	7764	7713	7974	8551	9254	9303	9509	9572	9413
18 / 3 / 2009	6916	6825	6714	6670	6935	7591	8253	8269	8460	8478	8363
15 / 4 / 2009	5645	5607	5515	5480	5675	6270	7110	7241	7330	7266	7188
20 / 5 / 2009	5764	5585	5495	5411	5440	6021	6961	7220	7258	7261	7268
17 / 6 / 2009	5693	5493	5441	5342	5304	5887	6894	7090	7289	7281	7323
15 / 7 / 2009	5732	5572	5439	5335	5285	5769	6674	6967	7283	7418	7436
19 / 8 / 2009	5602	5462	5429	5307	5472	5818	6699	6939	7147	7286	7185
16 / 9 / 2009	5793	5601	5576	5495	5692	6485	7267	7423	7450	7488	7395
21 / 10 / 2009	6904	6771	6760	6604	6894	7700	8702	8687	8710	8656	8577
18 / 11 / 2009	6162	6078	6064	6012	6268	7110	8205	8201	8190	8153	8130
16 / 12 / 2009	7528	7401	7389	7422	7716	8286	9265	9273	9392	9440	9465

## Hourly load values on the 3rd Wednesday in MW

												<b>Bulgaria</b>
<b>12:00</b>	<b>13:00</b>	<b>14:00</b>	<b>15:00</b>	<b>16:00</b>	<b>17:00</b>	<b>18:00</b>	<b>19:00</b>	<b>20:00</b>	<b>21:00</b>	<b>22:00</b>	<b>23:00</b>	<b>24:00</b>
5852	5817	5768	5747	5701	5756	5964	6303	6198	5806	5636	5679	5138
5778	5649	5688	5668	5656	5675	5860	6335	6426	6193	5958	5977	5431
5350	5373	5393	5309	5355	5335	5404	5782	6125	5916	5668	5646	5200
4480	4406	4390	4310	4233	4209	4136	4245	4479	4939	4921	4829	4554
3777	3642	3811	3844	3785	3770	3712	3775	3796	3920	4184	4095	3910
3991	3973	4109	4031	4015	3958	3907	3995	3982	3904	4074	4166	3888
4027	4079	4201	4138	4156	4147	4055	4156	4164	4059	4228	4383	4029
3983	4035	4062	4066	4069	4011	4013	4037	4079	4224	4318	4134	3816
3915	3937	4016	4064	3987	4016	3934	4049	4386	4555	4242	4142	3761
4474	4380	4395	4279	4206	4176	4247	4696	5436	5231	4955	4776	4364
4668	4560	4538	4516	4459	4632	5142	5440	5377	5088	4969	4823	4438
5719	5623	5628	5580	5626	5760	6014	6198	6207	5940	5712	5643	5258

												<b>Switzerland</b>
<b>12:00</b>	<b>13:00</b>	<b>14:00</b>	<b>15:00</b>	<b>16:00</b>	<b>17:00</b>	<b>18:00</b>	<b>19:00</b>	<b>20:00</b>	<b>21:00</b>	<b>22:00</b>	<b>23:00</b>	<b>24:00</b>
9630	9474	9330	9107	9284	9497	9691	9201	8936	8795	8619	8226	7867
9530	9539	9393	9166	9157	9147	9651	9539	9186	9021	8805	8558	8354
8216	8060	8193	8002	7907	7955	8158	8392	8158	7961	7592	7135	6847
7605	7653	7572	7330	7312	7023	7054	6715	6978	7074	6878	6361	5908
8101	7885	7835	7543	7190	6817	6746	6542	6384	6641	6581	6236	5599
8108	7955	7988	7930	7844	7530	7397	7112	6776	6845	6935	6558	5943
8124	8009	8188	7985	7921	7611	7481	7188	6749	6877	6899	6389	5979
8161	8248	8228	8179	8077	7736	7692	7366	6998	7504	7214	6694	6303
8439	7959	7747	8316	8063	7912	7891	7787	7826	7496	7195	6509	6309
8523	8248	8065	7961	8013	8121	8410	8669	8230	7940	7627	7237	6850
8671	8421	8350	8334	8390	8829	9042	8619	8205	7861	7714	7150	6663
10047	9952	9928	9902	9849	9847	10261	10112	9863	9482	9167	9080	8732

												<b>Czech Republic</b>
<b>12:00</b>	<b>13:00</b>	<b>14:00</b>	<b>15:00</b>	<b>16:00</b>	<b>17:00</b>	<b>18:00</b>	<b>19:00</b>	<b>20:00</b>	<b>21:00</b>	<b>22:00</b>	<b>23:00</b>	<b>24:00</b>
9510	9524	9459	9619	9469	9666	9236	9253	9207	8845	8211	7817	7469
9591	9536	9372	9597	9363	9148	9313	9504	9474	9147	8490	8059	7786
8459	8470	8307	8416	8332	8264	8169	8703	8677	8361	7664	7179	6833
7347	7278	7030	6993	7012	6932	6725	6793	7107	7207	6542	6127	5706
7423	7372	7118	7182	7159	7003	6771	6724	6786	6969	6592	6280	5777
7387	7318	7106	7130	7119	7021	6722	6671	6673	6640	6491	6189	5726
7568	7527	7219	7252	7163	7064	6669	6702	6642	6504	6348	6042	5619
7539	7387	7226	7232	7122	7061	6716	6738	6697	7012	6455	6126	5769
7550	7474	7218	7216	7291	7210	6957	7241	7645	7276	6588	6331	5903
8723	8529	8287	8313	8313	8268	8337	8823	8648	8375	7723	7251	6781
8312	8134	7970	8162	8280	8891	8303	8381	8308	8057	7391	6918	6462
9639	9549	9414	9657	9754	9836	9288	9380	9355	9178	8530	7953	7582

## Hourly load values on the 3rd Wednesday in MW

### Germany

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	57034	54650	53549	53282	53982	56729	63774	71452	73903	73526	73820
18 / 2 / 2009	60439	58638	57523	56982	57507	59650	66467	72160	73697	73502	73930
18 / 3 / 2009	53324	51165	50496	50919	52510	55431	61546	66273	68437	68095	68192
15 / 4 / 2009	42561	40362	39570	39681	41489	45923	52865	59304	62441	63006	63607
20 / 5 / 2009	45385	43289	42349	42435	43437	46567	55197	61724	63887	63436	64091
17 / 6 / 2009	46290	44025	42746	42973	44372	47280	55662	62184	64663	64568	65376
15 / 7 / 2009	45820	43518	42517	42617	43786	46886	55185	62468	65940	66641	68150
19 / 8 / 2009	45983	43845	42930	43009	44190	47863	55293	61363	64052	64543	65614
16 / 9 / 2009	48285	46173	45239	45570	47080	51247	61158	67327	68723	68589	69683
21 / 10 / 2009	53695	51349	50228	50517	52085	56100	64550	71484	73531	73503	73972
18 / 11 / 2009	53130	50841	50371	51348	53596	56871	64675	71983	74331	74515	74923
16 / 12 / 2009	57227	54808	53824	53754	54286	57350	65408	73474	75583	74919	74843

### Denmark West

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	2076	1986	1978	1981	2039	2211	2707	3331	3482	3407	3407
18 / 2 / 2009	2140	2072	2079	2108	2122	2277	2765	3310	3430	3411	3430
18 / 3 / 2009	1955	1900	1888	1902	1943	2085	2490	2942	3056	3031	3070
15 / 4 / 2009	1734	1676	1678	1691	1728	1875	2257	2725	2904	2918	2972
20 / 5 / 2009	1772	1698	1669	1663	1681	1754	2136	2638	2852	2869	2936
17 / 6 / 2009	1877	1789	1766	1746	1730	1827	2187	2638	2849	2884	2958
15 / 7 / 2009	1626	1538	1508	1500	1491	1535	1769	2099	2313	2421	2494
19 / 8 / 2009	1762	1668	1653	1651	1690	1832	2179	2621	2821	2846	2915
16 / 9 / 2009	1801	1724	1695	1704	1731	1921	2355	2766	2909	2915	2973
21 / 10 / 2009	1826	1758	1765	1810	1831	1954	2449	3043	3140	3111	3149
18 / 11 / 2009	1919	1848	1833	1845	1907	2062	2516	3081	3242	3247	3315
16 / 12 / 2009	2028	1973	1972	1970	2026	2183	2649	3230	3421	3371	3403

### Spain

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	27829	26320	25684	25591	26098	28743	34494	39409	39968	40265	40154
18 / 2 / 2009	27028	25666	25003	24879	25387	28037	32992	36582	37254	37551	37128
18 / 3 / 2009	23600	22427	22110	21991	22491	24937	28228	30871	31983	32607	32626
15 / 4 / 2009	23884	22478	21942	21871	22322	24594	28337	30963	32395	33512	33803
20 / 5 / 2009	23641	22573	22250	22192	22553	24411	26888	24913	31250	32770	31523
17 / 6 / 2009	25309	23945	23481	23312	23459	25106	27862	31270	33715	36100	36843
15 / 7 / 2009	26909	25475	24653	24509	24665	26454	28663	31777	34860	37431	38339
19 / 8 / 2009	26177	24890	24157	23764	23825	25097	26938	29378	32073	34242	35495
16 / 9 / 2009	24358	23385	23002	22979	23365	25101	29163	31151	32407	33515	34229
21 / 10 / 2009	23964	23185	22704	22586	22705	24977	29244	32796	33130	33731	33972
18 / 11 / 2009	24610	23543	23115	23177	23708	25960	30404	30428	34133	34653	34902
16 / 12 / 2009	28277	26675	15710	25705	26413	29207	34596	39179	41353	42738	43154



## Hourly load values on the 3rd Wednesday in MW

												Germany
12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
74161	73571	72713	71774	71304	71227	75404	75874	73631	68967	66507	64865	60378
74317	73545	72882	71707	70847	69972	72323	77443	76137	72565	69081	67396	62960
69101	68362	68114	66795	65824	64682	65183	68654	72043	67939	64390	61113	55904
64623	63360	61971	60557	59390	58218	58547	59185	59253	60430	59283	54359	48563
65410	64428	63389	62371	61193	59869	59921	59835	58865	56894	55825	52986	47820
66532	65434	64584	63326	62117	61031	61364	61946	61465	59042	57015	55586	50445
69382	67945	66654	64926	63867	62198	62073	61884	61034	58864	57394	56025	50779
66774	65698	64718	63582	63030	61886	62369	62721	62485	61513	61162	56838	51321
70586	69085	69243	68460	67796	66560	66834	67498	69004	68291	63214	57832	52085
74081	72375	70760	69332	68285	67145	68234	72763	74631	69970	65776	62762	57408
76470	75723	75449	74985	75382	76636	80102	80008	77858	73396	70067	66461	61110
75270	75028	75221	74560	74352	76738	79110	78095	76150	72640	69486	66813	62129

												Denmark West
12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
3354	3248	3254	3182	3069	3163	3537	3397	3171	2960	2787	2567	2294
3390	3289	3306	3251	3105	3080	3347	3381	3166	2947	2756	2515	2248
3039	2937	2944	2849	2686	2631	2815	2885	2907	2722	2530	2304	2039
2955	2869	2867	2776	2615	2514	2640	2569	2451	2406	2382	2159	1925
2923	2843	2838	2746	2578	2487	2558	2488	2342	2201	2119	2103	1877
2958	2881	2896	2817	2663	2580	2685	2603	2468	2346	2253	2195	2041
2489	2439	2439	2383	2294	2248	2322	2265	2114	1986	1894	1884	1767
2905	2851	2867	2798	2651	2561	2674	2571	2429	2340	2384	2216	1962
2963	2878	2902	2832	2687	2635	2747	2647	2565	2583	2428	2206	1944
3130	3029	3034	2951	2815	2766	2947	3023	2920	2696	2517	2278	2024
3319	3252	3308	3239	3101	3187	3439	3215	2972	2757	2558	2330	2096
3369	3268	3293	3241	3164	3353	3545	3379	3152	2960	2775	2542	2300

												Spain
12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
39423	38795	37075	36902	37131	38369	41450	42865	42613	41525	38957	35484	31474
36391	35460	33444	32890	32713	32904	34193	34570	38013	38307	36231	32831	29357
32656	31956	30282	29628	29376	29241	29350	31678	34143	33294	30922	28063	25463
33571	32977	31267	30724	30697	30637	30320	30351	31798	34311	31541	28827	26185
31881	26148	32753	32283	32429	32448	31658	31175	31321	32461	31219	28357	25921
37590	37800	36527	36153	36353	36621	35803	34867	34171	34048	34114	31235	28518
39125	39282	38087	37201	37058	36866	35963	35115	34328	34150	34223	31819	29529
36597	37171	36547	35408	35122	34723	34112	33427	33151	34745	33805	31455	29052
34504	34303	32874	32205	32006	31969	31727	31489	33536	34057	30739	27805	25530
34009	33402	31628	31109	31188	31500	31665	33759	35724	34417	30887	27922	25302
34712	34195	32428	32241	32302	33409	35987	36707	36423	34946	32275	29358	26760
42911	42732	41006	40693	40745	42102	44058	44029	43545	42378	39617	35519	31520

## Hourly load values on the 3rd Wednesday in MW

### France

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	67112	67036	65232	63442	63595	67411	73318	78451	79821	80005	79303
18 / 2 / 2009	64369	65082	63120	60717	60721	63673	69184	72477	74398	75275	75130
18 / 3 / 2009	52463	52408	50748	48982	49730	53620	59007	62460	63564	62794	61619
15 / 4 / 2009	47170	46580	44227	42320	42385	45392	50101	54010	57067	58137	58232
20 / 5 / 2009	44418	43534	41330	39638	39787	41822	46406	50966	53364	54352	54752
17 / 6 / 2009	43571	42572	40249	38614	39052	40344	44770	49713	52831	54775	55803
15 / 7 / 2009	41450	40561	38423	37008	37864	40363	43744	48485	52413	55126	56505
19 / 8 / 2009	42226	41453	39128	37489	37462	39352	41144	44403	48010	50790	52232
16 / 9 / 2009	43765	43017	40887	39399	39618	42413	48797	52447	55367	56694	57467
21 / 10 / 2009	52400	51727	49460	47697	47781	51273	58224	63517	64960	65553	65897
18 / 11 / 2009	51939	51210	49127	47324	47782	51494	58716	63004	64296	64428	63998
16 / 12 / 2009	72637	74937	72868	70600	70693	74383	79961	84363	84903	85474	85207

### Greece

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	4712	4748	4574	4396	4466	4977	5811	6550	7193	7226	7266
18 / 2 / 2009	5055	5091	4972	4800	4875	5403	6257	7021	7672	7705	7708
18 / 3 / 2009	4690	4726	4551	4417	4552	4976	5837	6448	6948	6995	7028
15 / 4 / 2009	4320	4135	3990	3944	4036	4442	5085	5753	6263	6385	6437
20 / 5 / 2009	4585	4324	4194	4106	4262	4545	5359	6077	6582	6751	6907
17 / 6 / 2009	5645	5386	5191	5101	5134	5371	6220	7183	7927	8200	8500
15 / 7 / 2009	6075	5740	5549	5404	5467	5578	6280	7160	7977	8353	8625
19 / 8 / 2009	5635	5292	5092	4995	4981	5051	5455	6293	7033	7449	7703
16 / 9 / 2009	4584	4339	4240	4205	4317	4673	5314	5912	6509	6667	6817
21 / 10 / 2009	4432	4195	4066	4029	4141	4652	5432	5860	6281	6343	6413
18 / 11 / 2009	4462	4397	4282	4223	4333	4792	5497	5920	6369	6400	6474
16 / 12 / 2009	4903	4910	4723	4597	4680	5222	5996	6432	6923	7025	7035

### Croatia

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	1807	1644	1572	1534	1560	1702	2083	2383	2505	2570	2568
18 / 2 / 2009	1981	1798	1703	1665	1697	1845	2240	2533	2745	2812	2794
18 / 3 / 2009	1679	1530	1459	1447	1481	1623	1902	2203	2304	2296	2261
15 / 4 / 2009	1519	1368	1307	1283	1300	1413	1633	1923	2052	2061	2030
20 / 5 / 2009	1559	1403	1345	1313	1326	1367	1621	1935	2086	2125	2129
17 / 6 / 2009	1681	1507	1418	1397	1406	1408	1646	1933	2111	2182	2198
15 / 7 / 2009	1779	1587	1494	1454	1463	1459	1714	2031	2234	2347	2389
19 / 8 / 2009	1796	1618	1539	1500	1504	1573	1740	2034	2262	2383	2424
16 / 9 / 2009	1537	1405	1339	1323	1335	1452	1734	1963	2075	2119	2113
21 / 10 / 2009	1712	1545	1464	1439	1477	1610	2020	2319	2360	2356	2308
18 / 11 / 2009	1612	1468	1393	1377	1409	1541	1902	2111	2216	2226	2199
16 / 12 / 2009	1924	1740	1660	1636	1662	1816	2217	2504	2639	2723	2669

## Hourly load values on the 3rd Wednesday in MW

### France

12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
79431	78664	77242	75368	74079	74039	78734	82807	79428	75117	71234	72513	71180
75598	75112	74017	72005	70378	69561	71090	78154	76000	72035	68450	70385	68808
61363	60675	58804	56951	54999	53590	53650	58910	62952	58964	54887	56770	55515
58776	58752	57656	56321	54546	53219	53051	55096	54858	54554	52293	53878	52311
55427	55634	54872	53739	52182	50532	49660	50036	48340	46508	47705	50130	48110
56890	56934	56429	55681	54502	53242	52507	52866	51104	48380	47970	52072	49762
57486	57725	57212	56758	55262	54021	53160	53459	52051	49387	49285	53013	50315
53736	54652	53485	53076	51812	50997	50512	51015	49597	48339	49014	50661	47857
58291	57849	56566	55672	54374	53256	53064	55187	55491	53751	49771	50986	48987
66731	66000	64773	63698	62339	61525	61990	66725	66931	62180	57950	59210	57687
64173	63289	61702	60065	58847	59289	65702	68605	65427	60912	57828	59861	58407
85580	84715	83192	81494	80688	82208	87735	89719	86806	82900	78688	80426	78735

### Greece

12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
7274	7158	6814	6604	6735	6916	7343	7365	7311	6918	6196	5756	5115
7688	7540	7140	6902	6982	6990	7556	7857	7746	7336	6575	6129	5435
6934	6851	6526	6339	6501	6579	6867	7506	7543	7064	6311	5815	5219
6511	6453	6214	6018	5942	5805	5789	6013	6834	6874	6212	5577	4829
7016	6997	6654	6172	5965	5972	6076	6154	6510	7154	6516	5817	5114
8748	8869	8706	8331	8085	8031	8047	7868	7850	8294	7583	7078	6607
8835	8936	8727	8354	8058	7983	7998	7935	7948	8313	7964	7511	7005
7857	7915	7699	7361	7148	7141	7190	7170	7555	7698	7188	6791	6220
6945	6970	6642	6237	5965	5927	6030	6426	7114	6797	6083	5549	5037
6437	6382	6112	5704	5505	5517	5879	6848	6956	6618	5947	5423	4830
6471	6429	6185	5943	5950	6619	7159	7180	7037	6538	5844	5294	4841
7022	6988	6775	6685	6852	7522	7864	7863	7786	7150	6461	5933	5317

### Croatia

12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
2620	2588	2525	2470	2454	2574	2741	2746	2714	2605	2552	2406	2120
2826	2766	2710	2645	2596	2616	2821	3032	3035	2927	2897	2621	2300
2298	2264	2185	2105	2040	2040	2154	2507	2655	2590	2546	2273	1961
2048	2066	2023	1949	1876	1840	1820	1840	2010	2326	2241	2111	1808
2213	2224	2185	2116	2051	2006	1991	1969	1994	2155	2284	2165	1866
2280	2319	2283	2204	2121	2072	2053	2044	2087	2131	2262	2203	1926
2493	2549	2530	2462	2392	2339	2327	2335	2379	2406	2550	2462	2200
2528	2594	2586	2503	2419	2364	2338	2349	2414	2644	2582	2410	2128
2177	2184	2138	2075	2006	1994	2009	2102	2388	2367	2177	2002	1743
2320	2295	2142	2162	2136	2154	2223	2544	2627	2534	2340	2199	1929
2230	2218	2156	2097	2114	2353	2574	2543	2521	2428	2387	2182	1896
2710	2689	2619	2571	2564	2784	2948	2923	2909	2828	2791	2602	2282

## Hourly load values on the 3rd Wednesday in MW

### Hungary

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	4577	4577	4390	4179	4132	4342	4955	5670	5737	5788	5836
18 / 2 / 2009	4609	4609	4494	4225	4184	4437	5063	5609	5681	5662	5694
18 / 3 / 2009	4338	4338	4167	3963	3935	4168	4665	5253	5394	5365	5399
15 / 4 / 2009	3931	3931	3648	3439	3424	3657	4101	4757	4846	4913	4935
20 / 5 / 2009	4106	4106	3815	3596	3658	3694	4179	4855	4941	5078	5108
17 / 6 / 2009	4254	4254	3956	3762	3733	3756	4235	4772	4958	5124	5225
15 / 7 / 2009	4410	4088	3844	3824	3859	4353	4995	5316	5484	5610	5735
19 / 8 / 2009	4161	4161	3871	3632	3659	3789	4048	4516	4741	4938	5054
16 / 9 / 2009	4285	4285	3981	3759	3817	3970	4562	5034	5204	5261	5277
21 / 10 / 2009	4386	4386	4140	3947	3978	4181	4862	5545	5518	5563	5507
18 / 11 / 2009	4266	4266	4102	3916	3891	4132	4780	5297	5365	5384	5377
16 / 12 / 2009	4590	4590	4398	4186	4171	4447	5079	5795	5805	5828	5803

### Italy

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	29962	28767	28298	28079	28569	30633	36871	44052	47666	48842	48664
18 / 2 / 2009	30419	28868	28137	27968	28566	30898	37060	42769	47154	48199	47931
18 / 3 / 2009	28148	26750	26231	26083	26499	28665	32534	38648	42414	42871	42584
15 / 4 / 2009	25296	24442	23868	23659	24112	26146	29680	35570	39793	40831	40560
20 / 5 / 2009	29302	28091	27322	26916	27433	27634	32141	38404	42077	43670	43903
17 / 6 / 2009	33079	31256	30575	30376	30602	30438	34989	41749	46353	48209	48613
15 / 7 / 2009	34670	32746	31917	31301	31585	31834	35883	42201	47506	49702	50472
19 / 8 / 2009	29142	27465	26493	26025	25868	26678	27254	30808	34271	36270	36908
16 / 9 / 2009	30240	28925	28236	28276	28613	30020	35060	40329	44248	45817	46238
21 / 10 / 2009	28292	28267	27816	27807	27908	30242	36498	42202	45397	46200	45970
18 / 11 / 2009	28647	27644	26898	27035	27463	29697	35557	40922	44406	45322	44975
16 / 12 / 2009	29985	28698	28082	27934	28822	31166	37283	43578	46846	47765	47668

### Luxembourg

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	747	667	617	729	724	738	794	873	914	932	921
18 / 2 / 2009	776	780	756	694	705	726	766	843	882	876	847
18 / 3 / 2009	791	759	763	789	751	812	819	899	956	952	928
15 / 4 / 2009	663	616	643	610	641	663	713	747	798	815	811
20 / 5 / 2009	664	654	643	633	572	602	625	705	758	778	802
17 / 6 / 2009	704	677	676	691	689	663	680	738	802	818	821
15 / 7 / 2009	720	718	716	711	669	723	722	809	875	861	882
19 / 8 / 2009	601	622	539	538	526	552	588	633	686	713	710
16 / 9 / 2009	734	746	655	674	728	716	773	835	887	922	915
21 / 10 / 2009	745	667	661	696	726	746	767	884	891	906	899
18 / 11 / 2009	779	711	736	753	679	690	747	828	873	867	839
16 / 12 / 2009	686	661	637	600	622	626	685	774	841	838	828

## Hourly load values on the 3rd Wednesday in MW

Hungary												
12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
5859	5840	5845	5841	5926	5894	6156	6078	6025	5830	5709	5357	5133
5693	5650	5612	5542	5652	5613	5620	6108	6090	5909	5769	5341	5152
5410	5450	5438	5361	5393	5372	5317	5443	5846	5702	5567	5218	4976
4914	4944	4921	4792	4872	4822	4720	4541	4600	5174	5034	4690	4372
5153	5252	5244	5129	5208	5155	5080	4897	4895	4926	5243	4937	4649
5283	5312	5356	5217	5255	5209	5080	4896	4877	4844	5058	5063	4788
5765	5824	5701	5760	5670	5536	5363	5342	5304	5561	5416	5099	4834
5175	5175	5211	5073	5172	5098	4970	4719	4682	4842	4919	4653	4447
5414	5370	5417	5298	5394	5342	5249	5056	5347	5610	5244	4914	4754
5502	5560	5537	5412	5334	5413	5491	5658	5861	5731	5461	5011	4860
5425	5462	5545	5495	5585	5713	5992	5851	5817	5639	5530	5132	4891
5830	5789	5796	5713	5787	6016	6252	6129	6089	5972	5795	5553	5268

												Italy
12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
48127	44484	45005	46145	46366	47596	49307	48065	45684	43354	39828	36054	32408
47371	43994	44629	45724	45909	46194	47272	49170	46793	44466	40658	36508	33163
41715	38630	39284	40364	40354	40401	39562	43896	43041	41127	37594	33995	30160
40206	37308	37954	38750	38703	38338	36854	36484	38075	39193	35983	32752	29405
43806	41082	41734	42890	43141	42987	41145	39928	39076	40362	38780	35312	32102
48515	45676	46257	46713	47102	47073	44913	42901	41900	41579	40937	38517	35336
50737	48427	48991	49624	49706	49724	47731	45914	45109	44638	43907	41428	38050
37809	37833	37866	37520	37461	37480	37572	37391	37858	39465	37062	34302	31709
45962	42992	42674	43320	43561	43257	41781	41718	43352	41351	38216	35158	32014
45203	41801	42124	43253	43667	43885	43507	45982	44567	42525	39129	35128	31916
44250	40987	41502	42960	43898	46336	47340	45986	43934	41573	38261	34444	31190
46931	43637	44120	45313	46035	50507	50963	49616	46989	44731	41110	37145	32949

Luxembourg												
12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
938	923	841	845	893	870	925	972	915	839	846	808	807
896	881	867	849	827	920	917	952	859	828	877	823	892
933	946	937	902	904	897	855	866	861	834	774	736	721
872	860	818	772	818	774	715	748	732	781	743	702	638
810	797	784	760	723	719	720	720	747	740	715	660	688
880	904	895	833	853	881	863	841	818	780	791	788	725
924	890	870	884	855	849	866	821	860	762	731	781	767
824	808	776	737	711	755	750	738	741	709	714	690	660
917	914	931	881	865	839	882	896	899	888	854	814	766
975	895	928	899	925	860	908	942	958	908	876	829	804
940	932	973	963	963	928	998	988	983	887	799	795	743
855	848	821	827	811	827	848	849	825	784	749	732	718

## Hourly load values on the 3rd Wednesday in MW

### Montenegro

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	447	433	394	381	376	377	401	445	488	505	526
18 / 2 / 2009	522	480	455	436	420	434	460	510	551	575	571
18 / 3 / 2009	515	479	455	442	438	437	488	545	575	577	591
15 / 4 / 2009	335	305	283	273	273	283	316	356	377	378	381
20 / 5 / 2009	322	294	276	267	271	279	300	344	364	357	358
17 / 6 / 2009	356	312	289	287	279	282	309	358	383	389	407
15 / 7 / 2009	359	313	291	276	270	272	303	352	396	413	425
19 / 8 / 2009	382	338	317	301	296	297	319	354	399	418	420
16 / 9 / 2009	334	301	284	280	273	281	310	349	378	365	384
15 / 10 / 2008	439	420	409	389	394	398	440	472	494	491	484
19 / 11 / 2008	485	449	433	421	405	430	479	516	521	524	528
17 / 12 / 2008	493	463	438	423	415	418	463	509	523	529	542

### FYROM

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	1031	935	866	821	809	843	951	1015	1105	1157	1178
18 / 2 / 2009	1140	1020	947	908	894	927	1027	1104	1178	1211	1217
18 / 3 / 2009	966	879	823	777	781	810	889	971	1012	1081	1082
15 / 4 / 2009	762	674	612	590	583	625	705	799	852	888	867
20 / 5 / 2009	625	548	511	485	497	493	569	638	698	741	742
17 / 6 / 2009	620	539	499	485	485	483	534	620	689	738	759
15 / 7 / 2009	685	610	558	546	543	535	586	660	732	769	786
19 / 8 / 2009	667	611	562	529	534	551	571	641	718	771	803
16 / 9 / 2009	719	648	624	628	611	585	608	665	728	746	760
21 / 10 / 2009	922	806	760	713	706	750	844	943	1014	1025	1011
18 / 11 / 2009	906	815	745	713	709	746	825	908	953	957	941
16 / 12 / 2009	1077	946	876	819	808	843	942	1029	1090	1135	1136

### The Netherlands

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	10995	10194	9883	9711	9913	10174	11270	13425	15097	15586	15641
18 / 2 / 2009	11119	10504	10131	9804	9747	10205	11458	13446	14815	15603	15741
18 / 3 / 2009	10615	9997	9645	9555	9488	9730	10800	12138	13634	14325	14398
15 / 4 / 2009	9632	8661	8333	8207	8186	8361	9527	11295	12961	13746	13925
20 / 5 / 2009	10216	9640	9515	9282	9131	9071	9748	10822	12354	13263	13501
17 / 6 / 2009	10089	9270	8860	8560	8348	8214	8974	10649	12138	13016	13371
15 / 7 / 2009	10255	9527	9212	9042	8931	8927	9497	10839	12236	13101	13414
19 / 8 / 2009	10155	9324	9310	9179	9173	9140	9803	10963	12805	13923	14461
16 / 9 / 2009	9484	9193	9103	8970	8834	8718	9928	11873	13059	13639	13827
21 / 10 / 2009	10801	10079	9631	9409	9424	9694	10896	12904	14422	14909	15010
18 / 11 / 2009	11821	11206	10551	10475	10448	10782	11928	14193	15905	16734	16727
16 / 12 / 2009	11212	10481	10178	10072	10068	10482	11987	14545	16296	16695	16768

## Hourly load values on the 3rd Wednesday in MW

Montenegro												
12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
511	495	500	499	510	532	538	545	557	539	536	521	492
598	602	604	602	592	601	633	616	587	572	578	562	537
597	586	578	566	565	549	585	622	651	642	623	614	572
370	372	362	361	356	352	353	361	397	436	421	409	380
366	366	379	370	368	360	368	376	381	413	419	398	371
413	412	415	425	424	409	399	409	411	434	445	415	390
434	439	452	451	441	440	424	440	454	470	493	472	436
432	448	452	458	451	445	437	442	459	493	474	453	423
388	404	390	376	371	369	373	387	436	439	411	399	366
487	490	482	483	463	464	473	539	551	556	532	503	480
526	511	494	520	527	561	616	620	617	602	604	581	539
559	555	554	567	565	593	594	594	606	592	570	562	539

FYROM												
12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
1178	1181	1236	1258	1228	1229	1264	1241	1231	1197	1177	1172	1125
1225	1232	1315	1352	1341	1303	1347	1374	1360	1317	1301	1289	1272
1098	1101	1206	1216	1163	1115	1156	1250	1263	1234	1207	1200	1151
857	853	896	902	864	816	800	834	975	1054	1022	997	899
732	737	808	821	800	755	719	708	735	850	860	815	712
781	781	843	861	835	781	746	735	729	803	844	823	733
821	840	903	923	898	852	820	810	812	874	915	875	799
821	834	892	891	870	818	776	773	820	902	876	830	752
779	790	886	881	874	835	842	882	949	928	896	840	784
985	954	1010	1025	1006	965	1002	1147	1177	1148	1101	1126	1041
930	905	966	988	991	1063	1127	1125	1102	1081	1030	1104	1039
1155	1173	1276	1312	1310	1291	1287	1287	1263	1267	1187	1264	1219

The Netherlands												
12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
15589	15218	15236	15094	15013	15035	15960	15622	15175	14517	13662	12346	11767
15677	15310	15235	15013	14861	14699	14586	15088	15141	14442	13723	12537	11910
14409	14288	14285	14131	13861	13601	13467	12915	14062	13605	12848	11716	11046
14192	14212	14964	14965	14815	14623	14346	13411	12701	12557	13011	12078	11217
13613	13596	13658	13611	13116	12788	12605	11913	11317	10718	10695	11083	10853
13576	13532	13700	13638	13559	13399	13187	12356	11796	11192	10938	11245	11005
13534	13514	13855	13847	13853	13597	13345	12401	11792	11164	10839	11107	10752
14598	14681	14817	14869	14774	14582	14221	13330	12792	11661	12044	11930	11422
14021	14038	14251	14208	14049	13990	13813	12987	12708	13360	12919	11829	10724
14992	14993	15085	14980	14883	14576	14342	14186	14731	14359	13404	12562	11874
16729	16503	16587	16829	16741	17360	17840	16918	16147	15436	14854	13746	12905
16798	16592	16770	16716	16656	17013	17714	16972	16633	15959	15120	13880	12638

## Hourly load values on the 3rd Wednesday in MW

### Poland

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	15257	14708	14549	14461	14616	15134	17203	18885	19518	19846	19849
18 / 2 / 2009	15447	14814	14594	14506	14692	15327	16981	18351	19370	19758	19745
18 / 3 / 2009	14450	13932	13717	13687	13899	14181	15560	17498	18404	18759	18740
15 / 4 / 2009	12732	12252	12036	12039	12188	12354	13897	15772	16804	17034	16891
20 / 5 / 2009	13049	12530	12188	12138	11726	11941	13775	15706	16672	16968	16911
17 / 6 / 2009	13118	12519	12217	12064	11595	11813	13654	15619	16563	16874	16990
15 / 7 / 2009	13237	12622	12246	12149	11813	11789	13416	15345	16534	17178	17335
19 / 8 / 2009	12993	12385	12160	12153	12233	12104	13414	15281	16387	17001	17167
16 / 9 / 2009	13204	12736	12444	12500	12589	13026	14508	16236	17136	17416	17411
21 / 10 / 2009	15013	14449	14134	14086	14282	14873	16981	18596	19257	19620	19587
18 / 11 / 2009	14484	13909	13684	13654	13889	14449	16398	17849	18627	18962	18962
16 / 12 / 2009	15686	15087	14845	14792	14938	15527	17760	19803	20380	20797	20889

### Portugal

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	6710	6008	5527	5293	5153	5119	5234	5745	6652	7584	8125
18 / 2 / 2009	6148	5540	5171	4927	4845	4860	4939	5491	6164	6997	7278
18 / 3 / 2009	5225	4798	4561	4406	4344	4377	4515	4580	5386	6206	6492
15 / 4 / 2009	5488	4951	4614	4436	4416	4410	4482	4813	5497	6439	6817
20 / 5 / 2009	5298	4881	4629	4482	4390	4400	4526	4568	5356	6190	6438
17 / 6 / 2009	5625	5187	4863	4700	4640	4553	4558	4680	5482	6458	6860
15 / 7 / 2009	5680	5189	4917	4724	4662	4601	4702	4745	5444	6404	6821
19 / 8 / 2009	5345	4922	4588	4401	4296	4253	4356	4359	4801	5522	5946
16 / 9 / 2009	5490	5117	4852	4703	4613	4578	4745	5114	5578	6361	6650
21 / 10 / 2009	5235	4841	4603	4488	4414	4440	4579	4975	5693	6500	6801
18 / 11 / 2009	5600	5144	4806	4691	4655	4601	4734	5234	5797	6706	6990
16 / 12 / 2009	7055	6310	5828	5521	5402	5403	5500	5990	6873	7786	8324

### Romania

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	5647	5551	5500	5485	5671	6112	6882	7165	7269	7207	7151
18 / 2 / 2009	5601	5533	5485	5503	5743	6126	6744	7071	7168	7241	7155
18 / 3 / 2009	5323	5233	5211	5244	5423	5737	6412	6798	6901	6901	6837
15 / 4 / 2009	5076	5018	5001	5102	5114	5305	5731	6133	6300	6246	6165
20 / 5 / 2009	4781	4714	4626	4652	4671	4820	5403	5776	5907	5995	6083
17 / 6 / 2009	4909	4780	4674	4716	4648	4790	5348	5814	6075	6196	6208
15 / 7 / 2009	4691	4627	4543	4523	4450	4615	5258	5770	5969	6138	6168
19 / 8 / 2009	4819	4704	4635	4631	4669	4768	5108	5615	5926	6066	6235
16 / 9 / 2009	4786	4726	4664	4661	4820	5152	5625	5835	6003	6038	6056
21 / 10 / 2009	5273	5138	5083	5135	5346	5781	6505	6767	6845	6804	6671
18 / 11 / 2009	5380	5270	5210	5267	5471	5844	6479	6837	6919	6916	6784
16 / 12 / 2009	5877	5765	5735	5776	5982	6344	6841	7218	7409	7441	7413



## Hourly load values on the 3rd Wednesday in MW

### Poland

12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
20008	20055	20198	19855	19665	20488	20946	20728	20693	19985	18834	17393	16129
19933	19997	20104	19698	19291	19233	20509	20948	20844	20205	19011	17637	16489
18975	18963	19092	18679	18207	17883	18166	19695	20208	19622	18351	16919	15619
16989	16937	16899	16562	16224	15916	15735	15681	16366	17898	16975	15474	14135
17122	17219	17151	16945	16656	16400	16129	15817	15976	16486	17009	15763	14348
17279	17270	17211	16925	16592	16283	16050	15795	15767	15810	16294	15761	14452
17734	17774	17686	17296	16956	16613	16394	16028	16156	16350	16572	15728	14352
17493	17457	17440	17022	16728	16422	16078	15874	16027	17163	16903	15384	14113
17702	17734	17772	17484	17188	16935	16678	16926	18650	18697	17148	15472	14286
19748	19707	19704	19328	18813	18642	19159	20489	20709	20023	18803	17300	15993
19156	19199	19110	18795	18914	20392	20616	20292	20191	19399	18198	16696	15511
21041	21139	21357	21098	21342	22425	22211	21883	21800	21140	19912	18300	17117

### Portugal

12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
8254	8373	7892	8041	8158	8109	8154	8531	9009	9101	8875	8470	7851
7403	7425	6893	7008	7079	6870	6758	6762	7862	8047	7844	7488	6997
6652	6791	6215	6386	6503	6428	6320	6093	6496	6983	6675	6356	5906
6972	7117	6695	6877	6957	6843	6750	6462	6578	6794	7249	6957	6392
6589	6654	6239	6422	6560	6497	6419	6201	6214	6217	6407	6562	6054
7096	7243	6870	7109	7282	7236	7158	6902	6790	6706	6591	6908	6463
6918	7064	6691	6885	7046	6988	6930	6728	6588	6557	6501	6763	6381
6153	6369	6306	6315	6437	6377	6305	6149	6078	6114	6558	6348	5964
6779	6877	6450	6655	6822	6745	6650	6432	6337	6865	6944	6615	6139
6942	7042	6520	6625	6764	6715	6692	6546	7032	7275	6890	6482	6007
7088	7170	6691	6750	6885	6812	6913	7630	7673	7522	7165	6785	6388
8502	8686	8189	8361	8473	8426	8489	9131	9241	9215	8944	8569	8005

### Romania

12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
7088	7104	7043	6913	7041	7390	7652	7564	7377	7124	6589	6056	5734
7159	7115	6959	6814	6777	6926	7539	7678	7549	7215	6674	6102	5808
6823	6807	6726	6597	6574	6665	7001	7475	7418	7000	6430	5853	5535
6061	6112	5941	5842	5661	5631	5531	5653	6452	6656	6224	5618	5187
6104	6226	6184	6056	5987	5870	5779	5797	5960	6361	6154	5583	5170
6204	6246	6136	6059	5911	5844	5676	5651	5693	5937	5999	5518	5090
6250	6359	6226	6108	6060	5974	5771	5720	5832	6199	6207	5684	5328
6291	6404	6389	6230	6091	5939	5802	5708	6039	6470	6072	5474	5067
6119	6234	6130	6049	5949	5899	5812	6073	6734	6521	5972	5393	5059
6540	6406	6286	6218	6151	6171	6641	7314	7326	6995	6385	5800	5403
6772	6757	6647	6622	6811	7441	7614	7467	7333	6955	6352	5877	5619
7442	7459	7354	7296	7531	8001	8035	7991	7828	7469	6958	6406	6124

## Hourly load values on the 3rd Wednesday in MW

### Serbia

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	5221	4858	4527	4304	4192	4353	4928	5563	5766	5967	5891
18 / 2 / 2009	5624	5244	4887	4705	4595	4800	5396	6020	6239	6344	6424
18 / 3 / 2009	5136	4766	4474	4271	4237	4446	4984	5498	5668	5708	5776
15 / 4 / 2009	3842	3461	3135	3064	3101	3276	3831	4446	4574	4574	4473
20 / 5 / 2009	3232	2834	2590	2523	2513	2594	3061	3624	3809	3921	3977
17 / 6 / 2009	3507	2985	2720	2661	2640	2683	3129	3533	3852	4018	4067
15 / 7 / 2009	3432	3003	2795	2701	2681	2728	3140	3615	3980	4136	4243
19 / 8 / 2009	3444	3067	2822	2746	2726	2796	3112	3553	3847	3971	3966
16 / 9 / 2009	3227	2935	2739	2756	2775	2835	3292	3828	4086	4166	4163
21 / 10 / 2009	4894	4515	4156	3997	3988	4160	4858	5403	5669	5660	5553
18 / 11 / 2009	4407	4033	3712	3567	3543	3796	4363	4958	5137	5085	4981
16 / 12 / 2009	5707	5282	4869	4678	4649	4815	5375	5918	6204	6336	6350

### Slovenia

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	1136	1087	1059	1057	1088	1169	1520	1724	1734	1725	1717
18 / 2 / 2009	1159	1088	1076	1070	1093	1187	1474	1651	1681	1672	1652
18 / 3 / 2009	1068	1025	1005	977	1018	1099	1369	1554	1561	1516	1497
15 / 4 / 2009	934	894	863	860	876	968	1236	1420	1472	1426	1407
20 / 5 / 2009	1005	945	910	902	926	979	1248	1435	1497	1485	1495
17 / 6 / 2009	1049	998	964	953	969	1016	1282	1463	1529	1513	1520
15 / 7 / 2009	1092	1035	989	995	1007	1050	1284	1488	1583	1593	1566
19 / 8 / 2009	1087	1054	1039	1039	1035	1084	1300	1509	1527	1542	1567
16 / 9 / 2009	1059	1003	959	945	968	1062	1339	1489	1536	1513	1506
21 / 10 / 2009	1099	1045	1025	1016	1035	1158	1496	1685	1675	1637	1614
18 / 11 / 2009	1113	997	994	1024	1028	1142	1445	1585	1616	1602	1587
16 / 12 / 2009	1221	1152	1095	1095	1145	1254	1575	1781	1794	1776	1763

### Slovak Republic

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	3233	3145	3069	3059	3123	3300	3686	3877	3925	3955	3937
18 / 2 / 2009	3324	3223	3158	3149	3223	3414	3741	3854	3905	3948	3948
18 / 3 / 2009	2994	2910	2842	2832	2896	3056	3379	3520	3611	3634	3616
15 / 4 / 2009	2455	2352	2289	2274	2333	2445	2766	2972	3043	3063	3012
20 / 5 / 2009	2546	2424	2347	2349	2357	2413	2768	2993	3092	3151	3134
17 / 6 / 2009	2545	2431	2358	2336	2329	2419	2784	3010	3092	3139	3145
15 / 7 / 2009	2659	2533	2423	2413	2425	2484	2767	2990	3123	3206	3227
19 / 8 / 2009	2649	2531	2444	2433	2490	2526	2791	2983	3125	3208	3204
16 / 9 / 2009	2547	2429	2348	2362	2413	2569	2936	3137	3203	3249	3238
21 / 10 / 2009	2980	2857	2786	2772	2878	3054	3492	3671	3700	3670	3637
18 / 11 / 2009	2755	2654	2587	2576	2650	2845	3264	3432	3520	3534	3485
16 / 12 / 2009	3232	3095	3031	3019	3116	3282	3675	3844	3909	3909	3891

## Hourly load values on the 3rd Wednesday in MW

### Serbia

12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
5905	5898	5721	5649	5548	5943	6190	6194	6144	6037	5861	5722	5416
6383	6332	6195	6141	6073	6210	6585	6749	6746	6676	6426	6330	6075
5712	5648	5576	5474	5430	5507	5733	6206	6339	6193	5983	5777	5443
4470	4391	4301	4195	4099	4112	4076	4124	4641	5234	5054	4742	4370
4099	4059	4032	3958	3890	3877	3827	3862	4001	4447	4499	4153	3702
4083	4132	4087	3979	3966	3851	3797	3850	3921	4272	4484	4187	3751
4333	4391	4388	4293	4234	4188	4138	4139	4109	4393	4675	4469	4024
4139	4171	4178	4068	4050	3978	3888	3887	4064	4514	4410	4170	3699
4202	4170	4169	4097	4075	4091	4075	4224	4854	4928	4616	4227	3802
5426	5256	5092	4915	4897	5016	5358	6097	6199	6118	5823	5513	5091
4863	4739	4637	4604	4703	5392	5872	5872	5811	5741	5501	5174	4778
6333	6265	6202	6170	6268	6737	6923	6859	6895	6772	6660	6429	6151

### Slovenia

12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
1744	1724	1674	1642	1633	1685	1742	1732	1742	1621	1477	1338	1222
1671	1673	1618	1609	1551	1566	1631	1777	1758	1648	1510	1378	1267
1527	1516	1456	1440	1378	1397	1401	1563	1634	1570	1394	1277	1136
1432	1445	1450	1389	1327	1289	1282	1294	1346	1464	1347	1213	1079
1540	1553	1510	1459	1407	1386	1349	1349	1352	1375	1387	1267	1120
1567	1578	1522	1459	1423	1392	1375	1361	1369	1365	1373	1294	1155
1615	1642	1608	1601	1534	1546	1475	1460	1497	1473	1466	1367	1243
1614	1644	1602	1597	1556	1528	1465	1464	1460	1508	1460	1348	1215
1539	1546	1523	1459	1432	1425	1415	1462	1578	1567	1404	1252	1181
1624	1612	1565	1505	1474	1526	1537	1685	1714	1609	1462	1316	1206
1598	1593	1546	1581	1552	1624	1739	1751	1705	1590	1452	1339	1222
1793	1785	1732	1754	1728	1823	1895	1894	1831	1782	1611	1490	1353

### Slovak Republic

12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
3934	3938	3973	3959	3936	3965	4053	4003	3945	3882	3680	3523	3375
3930	3908	3926	3875	3825	3793	3972	4051	4003	3922	3727	3602	3462
3610	3596	3620	3579	3545	3508	3561	3722	3730	3639	3439	3285	3133
2996	3021	3000	2937	2869	2849	2850	2872	2998	3187	3007	2802	2677
3147	3160	3117	3051	2984	2971	2913	2860	2923	3019	3015	2832	2663
3157	3183	3145	3091	3019	2981	2930	2892	2930	2954	2982	2880	2684
3252	3276	3252	3208	3141	3100	3042	2999	3035	3067	3084	2941	2767
3240	3281	3277	3215	3159	3097	3045	3008	3057	3232	3101	2935	2799
3231	3270	3237	3186	3163	3109	3088	3121	3326	3295	3081	2898	2777
3605	3594	3616	3562	3503	3508	3580	3751	3764	3660	3431	3246	3117
3508	3511	3497	3473	3486	3659	3742	3664	3624	3524	3325	3149	2971
3893	3868	3924	3908	3921	4051	4056	4006	3969	3868	3703	3534	3345

## Hourly load values on the 3rd Wednesday in MW

### Regional Group Continental Europe ( former UCTE )

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	283865	274285	267328	263040	265971	282439	319585	356099	370143	373993	373879
18 / 2 / 2009	286034	277888	270855	265357	267901	283646	318124	346863	361341	366343	366209
18 / 3 / 2009	251733	243014	237406	234461	239243	255856	284592	310791	324477	326997	325928
15 / 4 / 2009	221713	212028	205044	201878	205809	222185	251157	280338	298531	305006	306088
20 / 5 / 2009	225836	216274	209460	205758	207909	218353	248931	274494	294987	302081	303564
17 / 6 / 2009	233435	222058	214204	210775	212534	220963	251704	284001	303648	313835	319137
15 / 7 / 2009	235199	223543	215535	211927	214400	224695	252192	283611	307205	320307	327132
19 / 8 / 2009	228357	217831	210363	206276	207900	218439	238059	263024	283426	295723	302619
16 / 9 / 2009	230451	221569	215029	212884	216562	230968	267505	294850	309722	316539	320802
21 / 10 / 2009	252115	243678	236566	233431	236814	254913	294083	325992	337587	341403	342291
18 / 11 / 2009	251220	241707	235274	233612	238602	256129	293740	321378	337088	341156	341322
16 / 12 / 2009	292808	285729	267877	273499	276329	293352	331142	366561	381280	386027	386779

### Ukraine West

Date	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
21 / 1 / 2009	561	560	535	580	610	668	758	769	787	755	727
18 / 2 / 2009	609	604	601	603	621	721	786	820	835	808	773
18 / 3 / 2009	559	516	538	533	582	672	714	772	792	790	739
15 / 4 / 2009	416	399	385	381	441	497	557	559	566	567	549
20 / 5 / 2009	348	352	346	347	375	428	484	512	520	530	540
17 / 6 / 2009	381	360	357	353	358	410	471	520	531	546	534
15 / 7 / 2009	392	384	398	368	377	446	503	551	556	577	563
19 / 8 / 2009	325	324	306	323	328	375	420	493	487	472	487
16 / 9 / 2009	396	365	385	376	387	475	520	557	538	546	521
21 / 10 / 2009	501	502	484	497	543	624	698	730	749	719	702
18 / 11 / 2009	484	474	471	477	523	574	631	665	700	728	705
16 / 12 / 2009	590	579	567	573	631	722	828	859	869	871	833

## Hourly load values on the 3rd Wednesday in MW

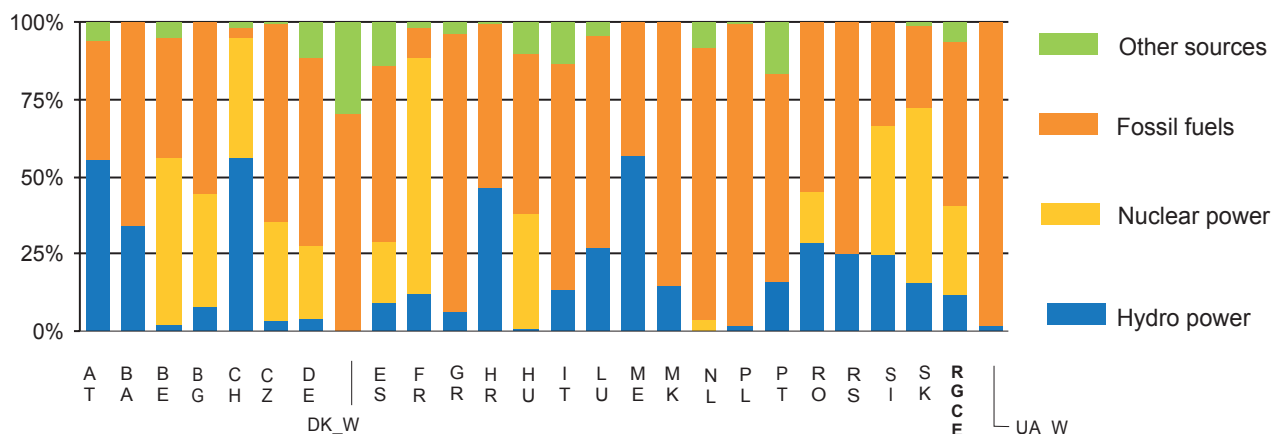
### Regional Group Continental Europe ( former UCTE )

12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
373660	366711	361987	358983	357580	362531	380566	384829	374382	356957	337892	324293	304290
366331	359167	354478	350288	346650	344797	355877	374687	371985	357542	337969	324940	305869
325998	319900	315626	311273	306852	303174	304564	325038	337782	322866	302029	287758	267992
307844	302551	298077	293899	289515	284750	281974	282958	289170	298412	285766	269413	248242
307208	297337	301575	298421	294028	288980	284161	280637	276931	277504	274855	264185	243982
323678	319790	316935	313422	310379	306448	301468	296997	291170	285384	282352	277696	257355
332179	328843	325580	321789	317818	312801	307124	302180	296602	291012	288270	283178	262737
309495	310075	306900	302199	298705	294447	292055	289501	287539	290975	286504	273228	252814
323833	317844	314044	311555	308291	304439	301945	304654	315352	311353	288627	270904	250308
342507	334469	328395	324745	321506	319542	323529	344125	348756	331670	308445	292957	273089
342713	335903	331631	330310	330989	342814	360891	361676	350890	332434	313306	298206	278507
387296	381822	378620	376744	377417	391830	405158	403650	393544	377519	356835	341827	319911

### Ukraine West

12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
718	740	763	775	796	889	894	862	839	796	670	627	578
763	772	762	771	782	829	901	891	873	792	719	659	609
732	755	767	760	758	758	831	859	838	762	676	618	578
543	535	556	515	513	509	537	566	666	658	566	469	446
502	504	503	496	477	478	479	520	490	614	526	436	379
535	536	525	524	510	492	511	488	512	588	568	452	413
559	587	572	580	545	523	528	523	532	583	572	489	419
457	478	477	463	453	435	451	436	521	539	435	394	359
534	521	542	539	508	525	524	616	670	613	513	433	406
699	684	709	682	665	710	809	846	791	699	617	539	490
709	683	688	687	761	821	793	801	754	684	637	544	511
824	845	859	888	932	991	979	955	919	836	773	677	646

## Net electricity generation<sup>1</sup> and its structure



	Thermal nuclear		Fossil fuels		Hydro power		Other renewable		of which wind	Non-identifiable		Total
Country	TWh	%	TWh	%	TWh	%	TWh	%	TWh	TWh	%	TWh
AT <sup>3</sup>	-	-	23,4	33,9	43,0	62,3	2,0	2,9	2,0	0,6	0,9	69,0
BA	-	-	8,0	57,4	6,0	42,6	-	-	-	-	-	14,0
BE <sup>4</sup>	45,0	50,9	35,2	40,0	1,8	2,0	6,4	7,2	1,0	-	-	88,3 <sup>2</sup>
BG	14,3	37,0	20,4	53,0	3,9	10,1	-	-	-	-	-	38,5
CH	26,1	39,3	2,0	3,0	37,1	55,9	1,2	1,8	0,02	-	-	66,5 <sup>2</sup>
CZ	25,7	33,8	47,0	61,8	3,0	3,9	0,4	0,5	0,3	-	-	76,0 <sup>2</sup>
DE <sup>5</sup>	128,0	23,3	330,2	60,2	21,4	3,9	68,8	12,5	37,8	-	-	548,4 <sup>2,6</sup>
DK_W	-	-	16,5	70,8	0,02	0,1	6,6	29,1	5,1	-	-	22,8 <sup>2</sup>
ES <sup>7</sup>	50,4	18,6	147,4	54,5	28,7	10,6	43,7	16,2	36,0	0,4	0,2	270,7
FR	390,0	75,2	54,8	10,6	61,8	11,9	12,2	2,4	7,8	-	-	518,8
GR	-	-	41,6	84,1	5,6	11,3	2,3	4,6	1,9	-	-	49,5 <sup>2</sup>
HR	-	-	5,2	43,2	6,8	56,4	0,1	0,4	0,04	0,01	0,1	12,0 <sup>2</sup>
HU	14,6	44,8	15,8	48,6	0,2	0,7	1,9	5,7	0,3	-	-	32,5
IT	-	-	216,2	76,9	52,8	18,8	12,2	4,3	6,5	-	-	281,2
LU	-	-	2,8	74,0	0,8	21,7	0,2	4,3	0,1	-	-	3,8
ME	-	-	0,6	23,2	2,1	76,8	-	-	-	-	-	2,7
MK	-	-	5,0	80,1	1,2	19,9	-	-	-	-	-	6,2
NL <sup>8</sup>	4,0	3,7	94,0	87,0	0,1	0,0	9,9	9,2	4,6	-	-	108,0 <sup>2</sup>
PL <sup>9</sup>	-	-	135,8	97,0	2,9	2,1	1,3	0,9	1,1	-	-	139,9 <sup>2</sup>
PT <sup>10</sup>	-	-	29,4	61,8	8,7	18,3	9,5	19,9	7,5	-	-	47,6 <sup>2</sup>
RO	10,8	20,3	26,9	50,5	15,6	29,2	0,01	0,0	0,01	-	-	53,3
RS	-	-	30,0	73,0	11,1	27,0	-	-	-	-	-	41,1
SI	5,5	37,8	4,7	32,6	4,3	29,6	-	-	-	-	-	14,4
SK	13,1	53,6	6,3	25,7	4,7	19,2	0,4	1,6	0,01	-	-	24,4 <sup>2</sup>
RG CE <sup>11</sup>	727,5	28,8	1299,2	51,3	323,6	12,8	180,0	7,1	112,1	1,0	0,04	2530,3 <sup>2</sup>
UA_W	-	-	6,5	98,2	0,1	1,8	-	-	-	-	-	6,6

<sup>1</sup> All net generation values are calculated to represent 100% of the national values.

<sup>2</sup> Including deliveries from industry.

<sup>3</sup> Official values from E-Control.

<sup>4</sup> The reported figures are best estimates based on actual measurements and extrapolations.

<sup>5</sup> 100% available as of 12 monthly values.

<sup>6</sup> Electricity generation and consumption also comprise shares of generation from industry's own power stations and feed-in from private generators (total of 12 monthly values).

The part of net electricity generation relevant to primary control power amounts to 521,6 TWh.

<sup>7</sup> The representativity of fossil fuels national values corresponds to 97% and of other renewable to 95%.

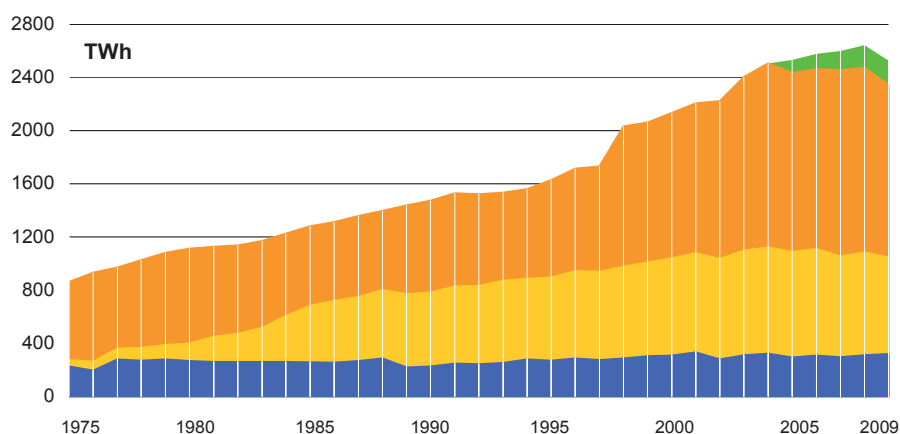
<sup>8</sup> Official values from the Statistical Bureau of The Netherlands (CBS).

<sup>9</sup> Operational data

<sup>10</sup> The representativity of fossil fuels national values corresponds to 95%.

<sup>11</sup> The country code RG CE (Regional Group Continental Europe) represents the former UCTE (Union for the Co-ordination of Transmission of Electricity).

## Development of net electricity generation <sup>1</sup>



Year	Hydro power	Thermal nuclear	Fossil fuels	Other sources <sup>2</sup>	Total
	TWh	TWh	TWh	TWh	TWh
1975	222,9	50,0	585,4		858,3
1976	191,2	69,5	669,1		929,8
1977	276,2	82,2	610,4		968,8
1978	266,1	97,4	659,9		1023,4
1979	275,4	110,6	691,3		1077,3
1980	263,4	133,9	712,1		1109,4
1981	256,4	191,0	678,4		1125,8
1982	258,0	211,2	665,5		1134,7
1983	255,9	258,8	653,3		1168,0
1984	257,0	348,5	617,3		1222,8
1985	255,2	426,3	597,3		1278,8
1986	253,3	464,4	593,6		1311,3
1987	264,9	483,0	607,7		1442,1
1988	282,9	514,6	597,0		1483,5
1989	216,2	551,6	669,2		1528,7
1990	222,8	558,5	690,6		1565,9
1991	246,2	579,6	701,7		1625,0
1992	240,2	591,2	689,5		1618,0
1993	251,2	616,9	664,9		1630,0
1994	278,8	606,1	674,7		1657,5
1995 <sup>3</sup>	265,8	627,7	732,8		1740,2
1996	284,6	657,2	770,1		1841,4
1997	272,0	665,2	792,1		1861,3
1998 <sup>4</sup>	284,4	689,5	1057,7		2172,3
1999	292,5	707,0	1035,9		2128,7
2000	305,1	733,8	1093,4		2246,4
2001	331,6	744,4	1129,8		2291,0
2002	276,1	757,6	1187,6		2303,8
2003 <sup>5</sup>	307,4	787,4	1305,7		2484,6
2004	319,8	798,6	1386,3		2525,2
2005	292,4	792,6	1349,1	98,2	2540,4
2006	305,4	801,9	1354,3	115,8	2584,9
2007 <sup>6</sup>	294,2	759,4	1402,3	143,3	2607,1
2008	306,5	774,8	1384,1	170,0	2643,8
2009	319,0	727,5	1292,9	176,2	2530,3

<sup>1</sup> Values of detailed generation are national values; total net generation data are calculated to represent 100% of the national values.

<sup>2</sup> Before 2005, the information on other renewable energy sources was collected in a different manner. Some countries added them to fossil fuels, some considered them as the part of not represented in the figures (through the factor "representativity").

<sup>3</sup> As of September 1995 total German values

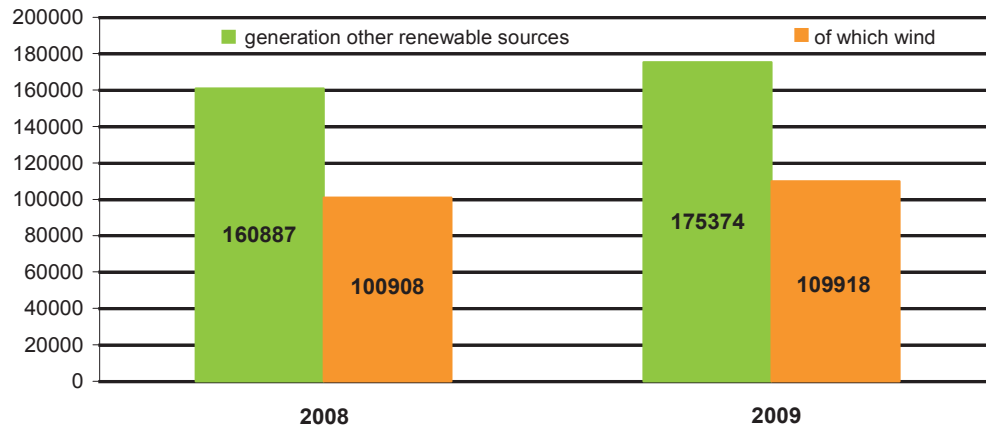
<sup>4</sup> Including values of CZ, HU, PL, SK as of 1998

<sup>5</sup> Including values of RO, BG as of 2003

<sup>6</sup> Including values of DK\_W as of June 2007

## Other renewable generation including wind power <sup>1</sup>

**Regional Group Continental Europe**  
**Generation renewable energy sources including wind power in the year 2008**  
**and 2009 in GWh <sup>1</sup>**

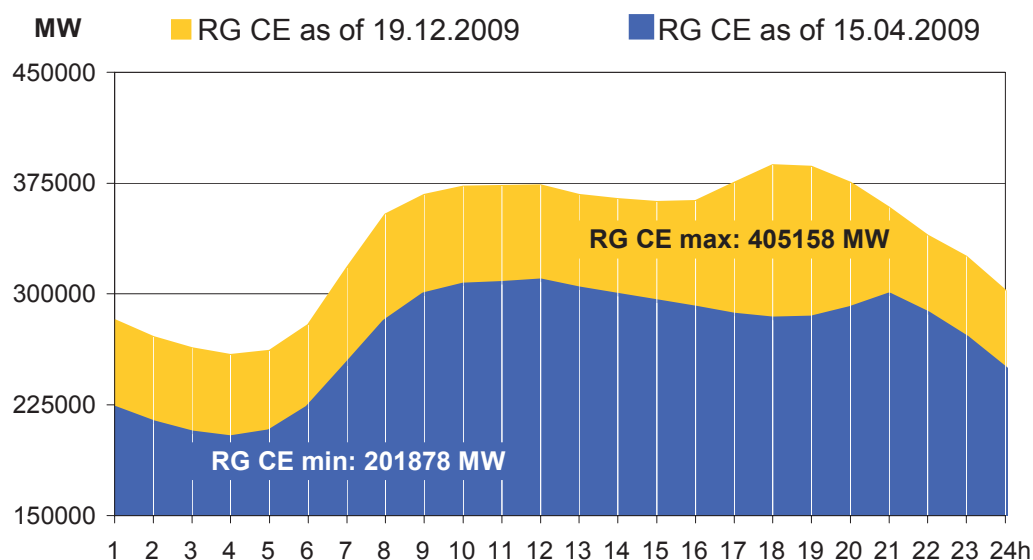


month	other renewable	of which wind		other renewable	of which wind
January	17217	12491		14615	9894
February	13518	8940		13388	8905
March	18228	13055		15582	9936
April	12475	7670		12494	7328
May	9796	4933		13803	8089
June	10651	5815		12677	7130
July	11112	6139		13353	7401
August	12045	6886		12140	6129
September	11050	5994		13361	7721
October	13685	8492		15424	9792
November	15817	10778		20502	14968
December	15293	9715		18035	12625
sum 2008	160887	100908	sum 2009	17537	4109918

<sup>1</sup> All values are calculated to represent 100% of the national values.  
Calculation based on the ENTSO-E statistical database.



## Highest and lowest load on 3rd Wednesday in 2009



### Highest load 3rd Wednesday of each country

### Lowest load 3rd Wednesday of each country

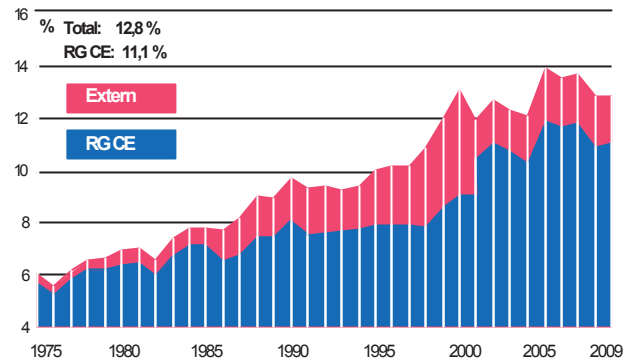
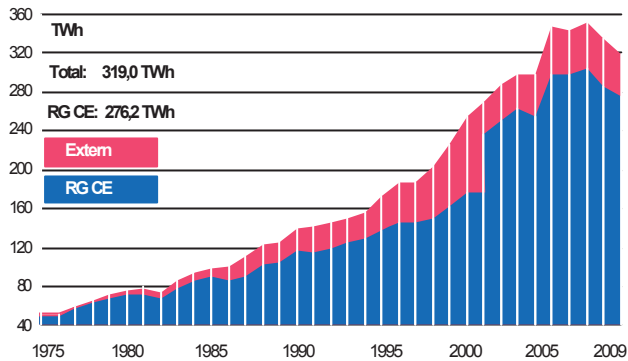
Country	MW	Date	Time	MW	Date	Time
AT	9675	16 December	06:00 p.m.	4386	20 May	04:00 a.m.
BA	1890	16 December	06:00 p.m.	868	21 May	04:00 a.m.
BE <sup>1</sup>	13501	16 December	06:00 p.m.	7144	15 April	04:00 a.m.
BG	6426	18 February	08:00 p.m.	2780	19 August	05:00 a.m.
CH	10261	16 December	06:00 p.m.	4876	17 June	04:00 a.m.
CZ	9836	16 December	05:00 p.m.	5285	15 July	05:00 a.m.
DE <sup>1</sup>	80102	18 November	06:00 p.m.	40362	15 April	02:00 a.m.
DK_W	3545	16 December	06:00 p.m.	1491	15 July	05:00 a.m.
ES	44058	16 December	06:00 p.m.	21942	15 April	03:00 a.m.
FR	89719	16 December	07:00 p.m.	37008	15 July	04:00 a.m.
GR <sup>2</sup>	8936	15 July	01:00 p.m.	3944	15 April	04:00 a.m.
HR	3035	18 February	08:00 p.m.	1283	15 April	04:00 a.m.
HU	6252	16 December	06:00 p.m.	3424	15 April	05:00 a.m.
IT	50963	16 December	06:00 p.m.	23659	15 April	04:00 a.m.
LU	998	18 November	06:00 p.m.	526	19 August	05:00 a.m.
ME	578	16 December	08:00 p.m.	267	20 May	04:00 a.m.
MK	1374	18 February	07:00 p.m.	483	17 June	06:00 a.m.
NL	17840	18 November	06:00 p.m.	8186	15 April	05:00 a.m.
PL	22425	16 December	05:00 p.m.	11595	17 June	05:00 a.m.
PT	9241	16 December	08:00 p.m.	4413	19 August	04:00 a.m.
RO	8035	16 December	06:00 p.m.	4450	15 July	05:00 a.m.
RS	6923	16 December	06:00 p.m.	2513	20 May	05:00 a.m.
SI	1895	16 December	06:00 p.m.	860	15 April	04:00 a.m.
SK	4056	16 December	06:00 p.m.	2274	15 April	04:00 a.m.
<b>RG CE<sup>3</sup></b>	<b>405158</b>	<b>16 December</b>	<b>06:00 p.m.</b>	<b>201878</b>	<b>15 April</b>	<b>04.00 a.m.</b>
UA_W	991	16 December	05:00 p.m.	306	19 August	04:00 a.m.

<sup>1</sup> The reported figures are best estimated based on actual measurements.

<sup>2</sup> The values for Greece refer to the interconnected system and not to the whole country.

<sup>3</sup> The country code RG CE (Regional Group Continental Europe) represents the former UCTE (Union for the Co-ordination of the Transmission of Electricity).

## Development of physical exchanges on tie lines



Year	Sum of electricity exchanges within the RG CE		Part of exchanges in the consumption of the RG CE	Sum of electricity exchanges with CENTREL		Part of exchanges with CENTREL in the consumption of the RG CE	Volume of exchanges with third countries		Part of exchanges with third countries in the consumption of the RG CE	Total exchanges		Part of total exchanges in the consumption of the RG CE
	TWh	%		TWh	%		TWh	%		TWh	%	
1975	48,4	5,7					3,2	0,4		51,6	6,0	
1976	48,6	5,3					2,9	0,3		51,5	5,6	
1977	56,4	5,9					2,6	0,3		59,0	6,1	
1978	62,9	6,2					3,3	0,3		66,2	6,5	
1979	66,4	6,2					4,3	0,4		70,8	6,6	
1980	70,5	6,4					5,9	0,5		76,4	6,9	
1981	72,2	6,5					6,0	0,5		78,3	7,0	
1982	67,9	6,0					6,2	0,6		74,2	6,6	
1983	77,5	6,7					8,3	0,7		85,7	7,4	
1984	87,0	7,2					7,1	0,6		94,1	7,8	
1985	90,5	7,2					7,4	0,6		97,9	7,8	
1986	85,0	6,6					14,7	1,1		99,7	7,7	
1987	90,7	6,8					18,9	1,4		109,5	8,2	
1988	102,6	7,5					20,9	1,5		123,5	9,0	
1989	103,8	7,5					21,9	1,4		125,7	8,9	
1990	115,8	8,0					23,9	1,7		139,7	9,7	
1991	117,7	7,8					26,9	1,9		144,6	9,7	
1992	117,6	7,8					27,8	1,9		145,4	9,7	
1993	124,4	8,3					26,2	1,7		150,6	10,0	
1994	129,5	8,1					26,2	1,6		155,7	10,1	
1995 <sup>1</sup>	137,4	8,4		11,9	0,7		23,1	1,5		172,3	10,8	
1996	145,0	8,7		14,1	0,8		26,8	1,6		185,9	11,1	
1997	144,7	8,5		13,9	0,8		27,1	1,7		185,7	11,0	
1998	148,9	8,4		14,0	0,8		25,4	1,5		204,5	10,7	
1999	161,6	7,6		16,5	0,8		29,7	1,7		225,4	11,5	
2000	177,5	8,5		22,1	1,1		29,6	1,6		229,2	12,4	
2001 <sup>2</sup>	235,5	10,5					33,7	1,8		269,2	12,4	
2002	250,9	11,1					36,9	1,6		287,8	12,7	
2003 <sup>3</sup>	263,8	10,8					35,5	1,5		299,3	12,3	
2004	255,2	10,3					44,1	1,8		299,3	12,1	
2005	298,9	12,0					48,8	2,0		347,7	13,9	
2006	296,8	11,7					46,0	1,8		342,8	13,5	
2007 <sup>4</sup>	304,1	11,9					46,7	1,8		350,8	13,7	
2008	285,2	11,0					49,5	1,9		334,7	12,9	
2009	276,2	11,1					42,7	1,7		319,0	12,8	

<sup>1</sup> As of September 1995 total German values

<sup>3</sup> From year 2003 on sum of exchanges including RO and BG

<sup>2</sup> From year 2001 on sum of exchanges including CZ, HU, PL SK

<sup>4</sup> From June 2007 on sum of exchanges including DK\_W

# Scheduled exchanges in MWh

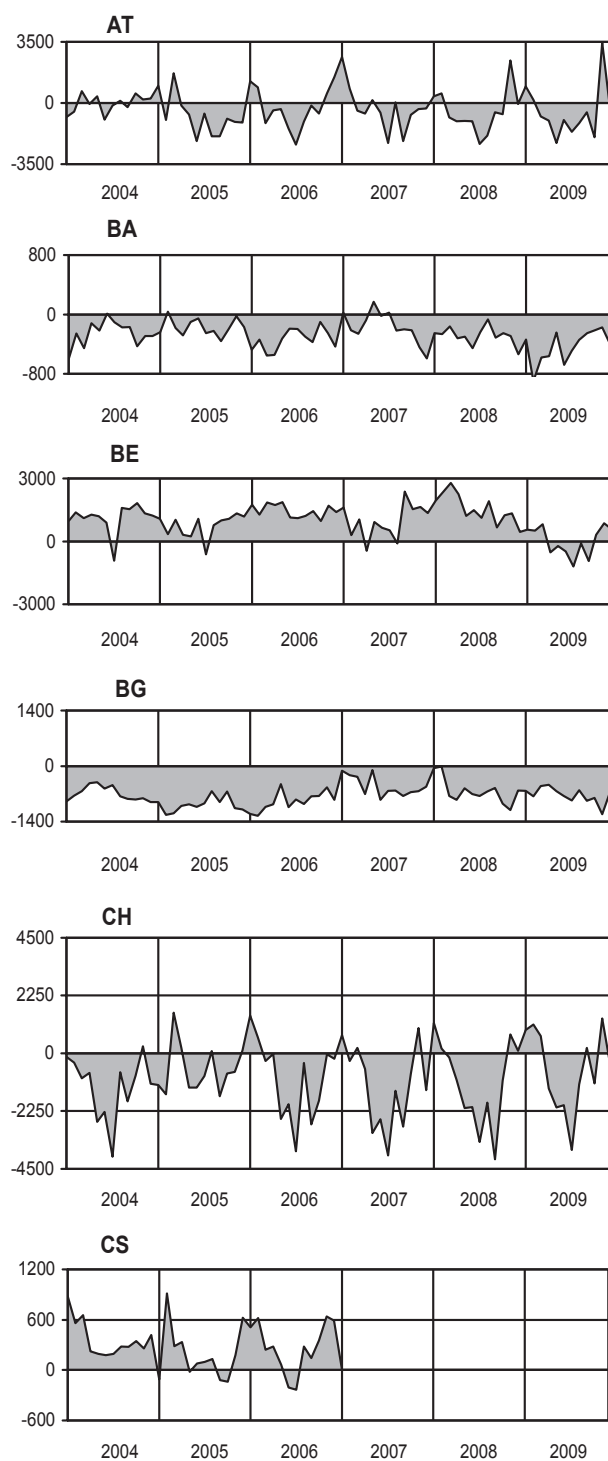
Control area	2009		January 2009				July 2009			
	Export Programs	Import Programs	Export Programs at 03:00	Import Programs at 03:00	Export Programs at 11:00	Import Programs at 11:00	Export Programs at 03:00	Import Programs at 03:00	Export Programs at 11:00	Import Programs at 11:00
AT	7738055	15143887	1550	418	424	845	966	601	1056	955
BA	6026784	2967658	157	100	181	100	157	100	235	100
BE	7694505	4883240	0	458	747	1198	1409	71	1252	0
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	24118271	23165198	1206	3781	3116	4026	3276	1702	4400	664
CZ	23588638	9291183	2774	983	2272	1378	2756	1147	2735	1728
DE	32729240	22449564	2592	2473	2158	1446	934	2363	2257	5843
DK_W	5387986	5766770	430	0	325	397	147	240	645	360
ES	13007850	7048504	1934	1095	1408	300	2161	1292	2050	300
FR	67989721	43376186	8927	3125	9294	3896	7817	3388	6015	6145
GR	2578745	6941289	305	725	0	590	260	1027	430	1166
HR	843214	6532446	313	580	0	602	117	906	0	887
HU	9788482	15971461	1111	1345	1211	2048	1415	1798	621	2229
IT	2102712	46950100	287	4399	193	6517	154	5845	155	6622
ME	385406	271987	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
MK	273900	1847100	140	268	140	450	0	281	50	324
NL	14240164	19192504	1293	2144	1637	2950	2307	2363	2547	1340
PL	4150261	2852152	682	20	800	509	4	0	1400	600
PT	721204	5721757	0	1453	0	761	0	1452	0	438
RO	3596567	1308688	616	142	839	252	275	58	282	79
RS	7726762	5910155	430	315	547	590	1101	647	1402	609
SI	9197662	6155814	1449	1013	1239	903	891	623	1106	687
SK	6436798	7091864	466	491	603	1054	650	746	970	1396
UA_W	2623997	25479	409	0	440	0	385	0	485	0

- Control areas can differ from national borders (i.e. German block which includes parts of AT, LU and DK\_W).
- Values are calculated on an hourly base in MWh.
- This values are not the provisional values entered in the VULCANUS system, but the definitive values after an eventual correction during the actual date.
- Export Programs: Sum of all positive values of every hour of every border as sum year 2009
- Import Programs: Sum of all negative values of every hour of every border as sum year 2009
- Export Programs at 03:00: Sum of all positive values the third Wednesday in January and July 2009 from 02:00 to 03:00 a.m.
- Import Programs at 03:00: Sum of all negative values the third Wednesday in January and July 2009 from 02:00 to 03:00 a.m.
- Export Programs at 11:00: Sum of all positive values the third Wednesday in January and July 2009 from 10:00 to 11:00 a.m.
- Import Programs at 11:00: Sum of all negative values the third Wednesday in January and July 2009 from 10:00 to 11:00 a.m.

## Balance of the simultaneous power flows across the frontiers of the Regional Group Continental Europe countries

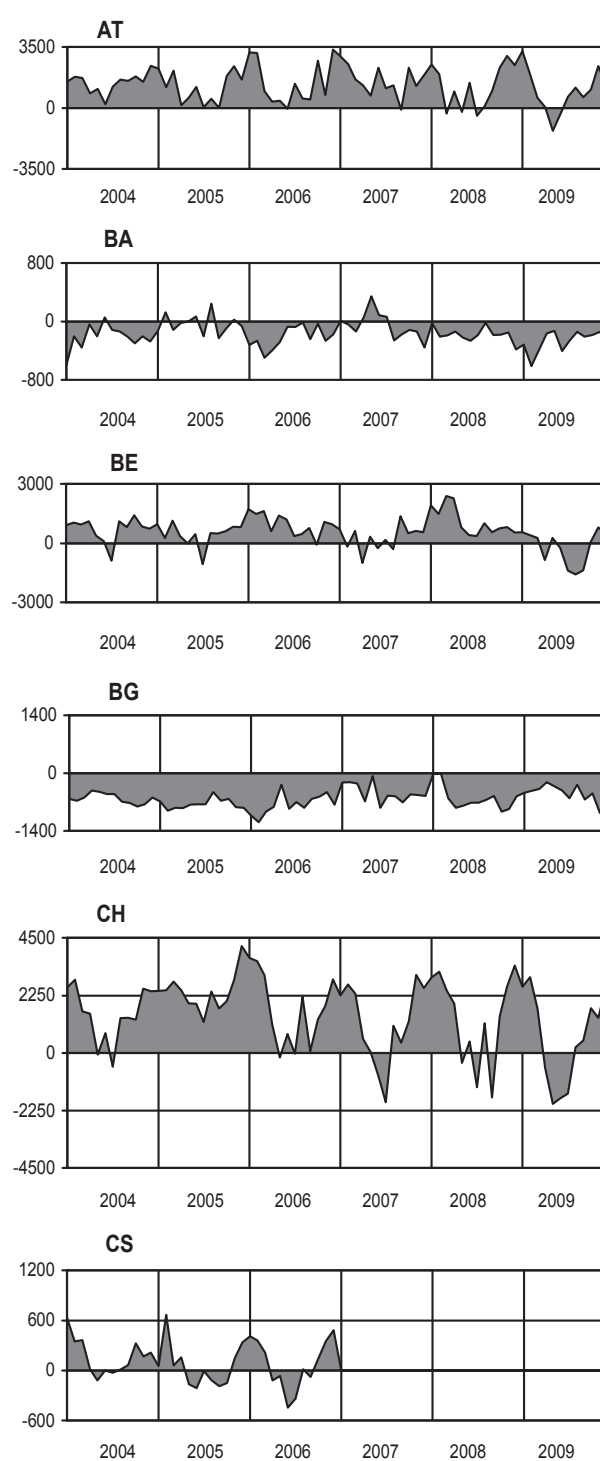
11:00

Day load in MW <sup>1</sup>



03:00

Night load in MW <sup>1</sup>

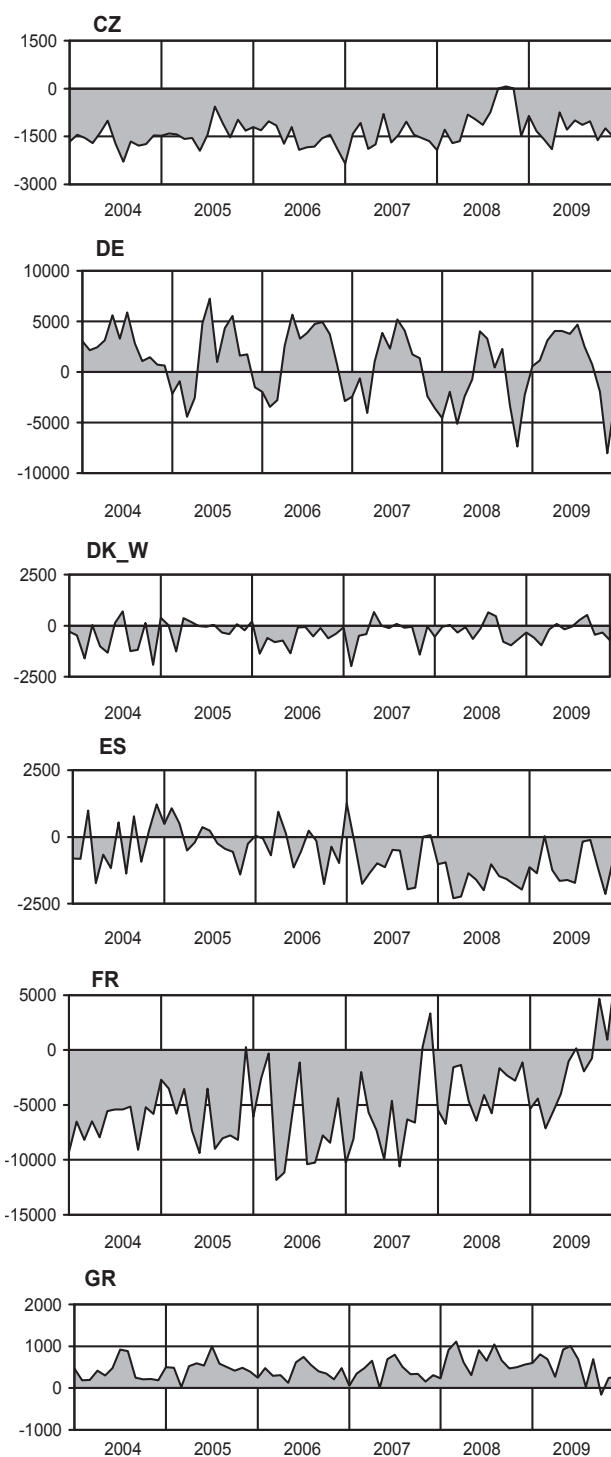


<sup>1</sup> Balance of import-export on the 3rd Wednesday of each month

## Balance of the simultaneous power flows across the frontiers of the Regional Group Continental Europe countries

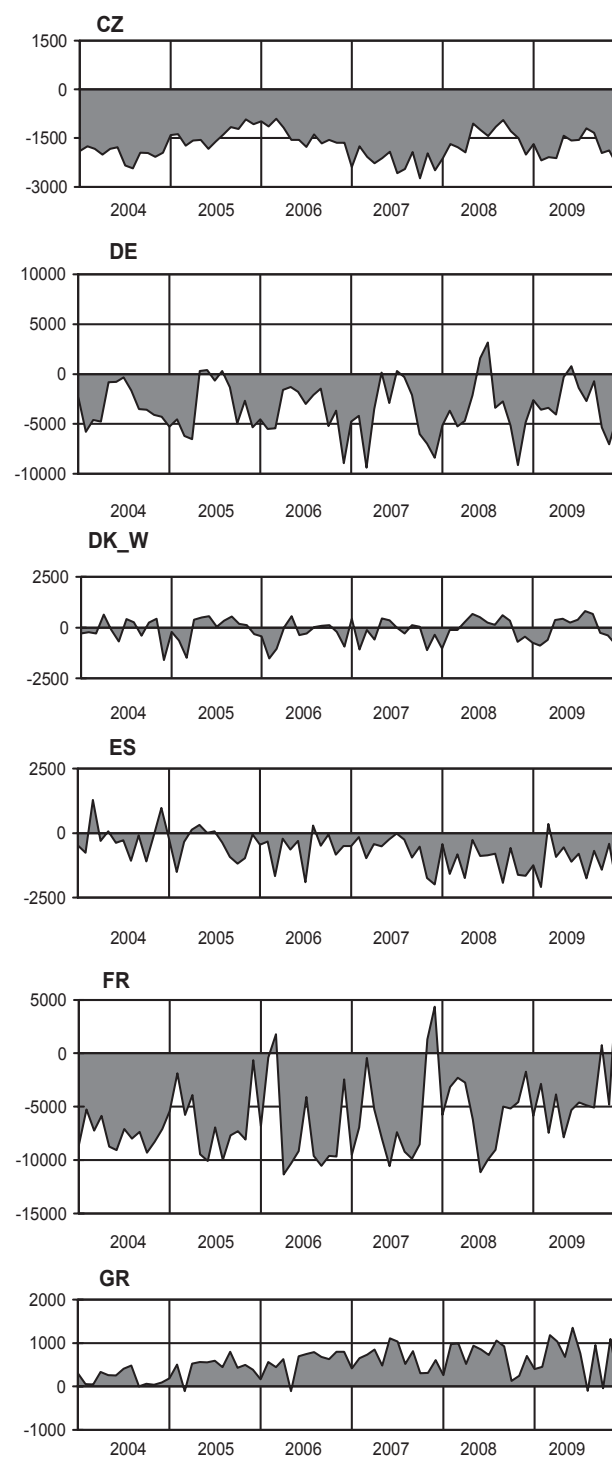
11:00

Day load in MW <sup>1</sup>



03:00

Night load in MW <sup>1</sup>

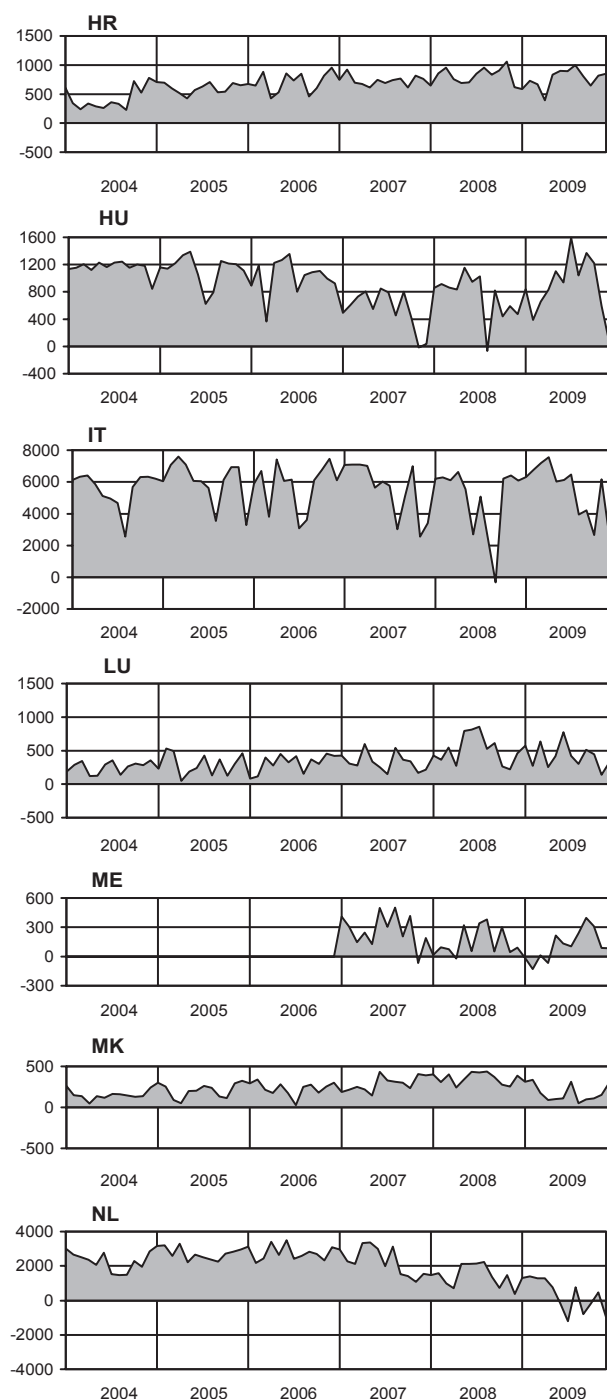


<sup>1</sup> Balance of import-export on the 3rd Wednesday of each month

## Balance of the simultaneous power flows across the frontiers of the Regional Group Continental Europe countries

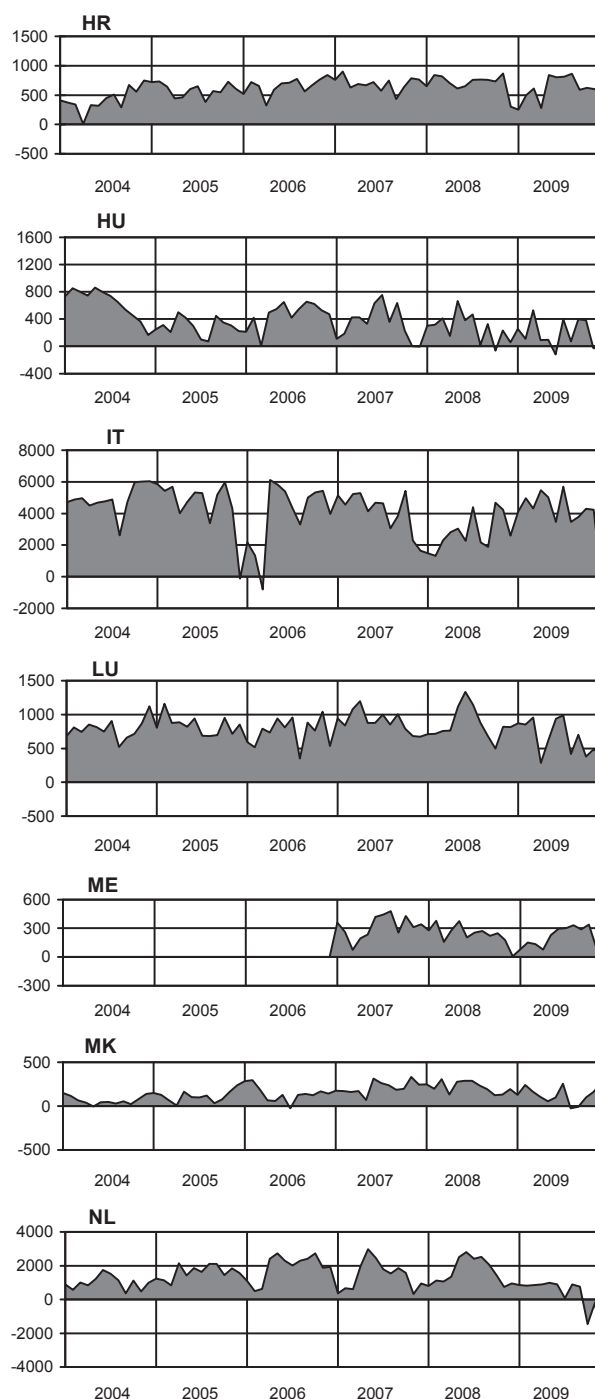
11:00

Day load in MW <sup>1</sup>



03:00

Night load in MW <sup>1</sup>

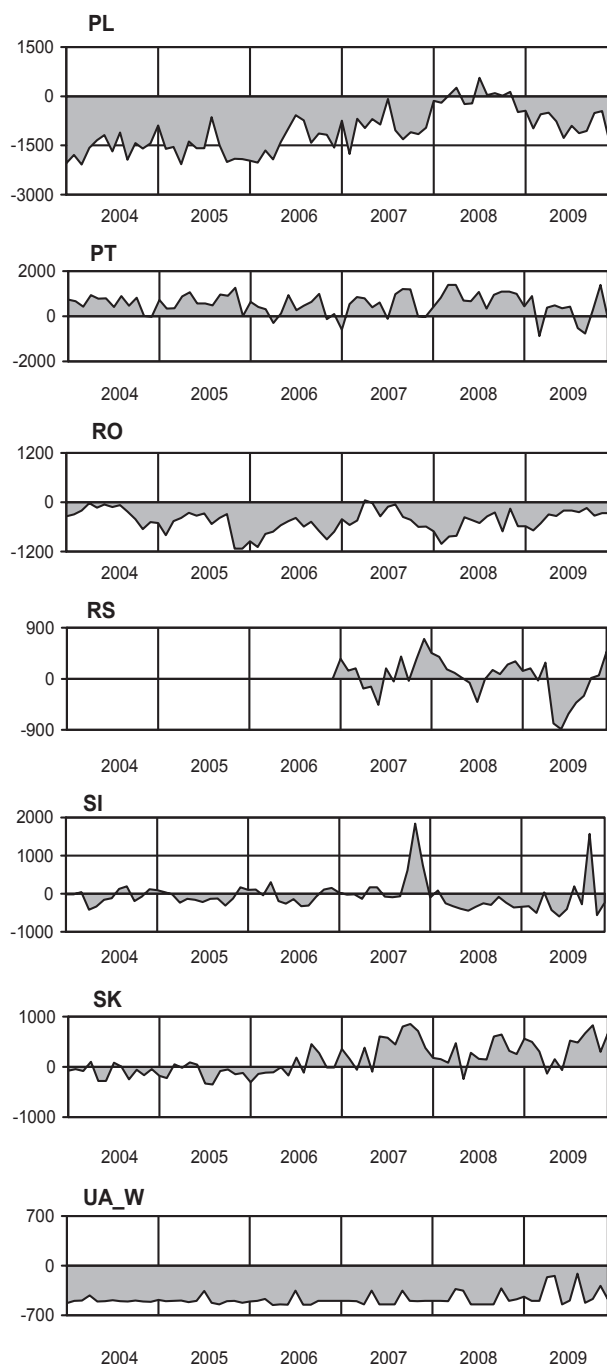


<sup>1</sup> Balance of import-export on the 3rd Wednesday of each month

## Balance of the simultaneous power flows across the frontiers of the Regional Group Continental Europe countries

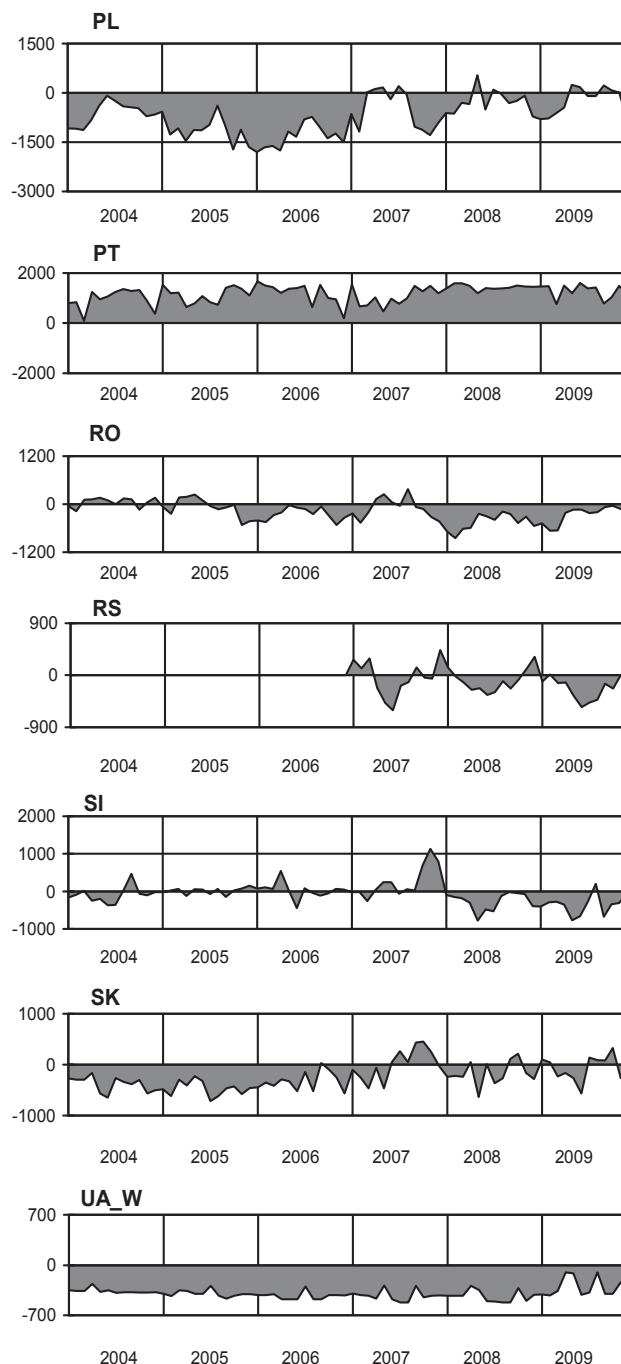
11:00

Day load in MW <sup>1</sup>



03:00

Night load in MW <sup>1</sup>



<sup>1</sup> Balance of import-export on the 3rd Wednesday of each month

**Development of the simultaneous power flows across the frontiers  
of the Regional Group Continental Europe <sup>1</sup>**

**Values in MW**

Date	Night	Day	Date	Night	Day
I.2004	29256	34182	I.2007	38361	44323
II.2004	29916	32890	II.2007	35103	39093
III.2004	28158	31485	III.2007	38724	39879
IV.2004	26784	29284	IV.2007	31042	35592
V.2004	25067	29647	V.2007	29604	31623
VI.2004	24757	26479	VI.2007	33100	34083
VII.2004	26091	29950	VII.2007	32701	34488
VIII.2004	23333	26840	VIII.2007	29640	32111
IX.2004	28708	30714	IX.2007	31496	32702
X.2004	30693	33706	X.2007	37051	38615
XI.2004	32489	33415	XI.2007	37014	35286
XII.2004	36858	32395	XII.2007	38428	33916
I.2005	37275	33964	I.2008	33754	40167
II.2005	37569	37991	II.2008	31571	38189
III.2005	34802	39231	III.2008	35574	38794
IV.2005	32930	37448	IV.2008	31563	34232
V.2005	29743	31564	V.2008	24244	26511
VI.2005	33353	36145	VI.2008	27519	28774
VII.2005	30301	34641	VII.2008	27013	31179
VIII.2005	29701	30909	VIII.2008	28899	27271
IX.2005	30425	32967	IX.2008	23429	22437
X.2005	33755	35394	X.2008	30208	34776
XI.2005	33728	36159	XI.2008	32133	38123
XII.2005	32850	33209	XII.2008	32428	36042
I.2006	33189	39380	I.2009	32203	36863
II.2006	35935	39220	II.2009	35587	37297
III.2006	34048	35330	III.2009	31178	34455
IV.2006	33833	37349	IV.2009	29017	30221
V.2006	30974	33176	V.2009	28059	30473
VI.2006	31574	34413	VI.2009	27055	29960
VII.2006	27811	30712	VII.2009	29575	32976
VIII.2006	29425	31511	VIII.2009	26445	27693
IX.2006	30387	32741	IX.2009	26329	29792
X.2006	35170	35269	X.2009	30121	34766
XI.2006	34951	38371	XI.2009	34017	39866
XII.2006	36861	37100	XII.2009	32755	31726

<sup>1</sup> Day load at 11.00 a.m. and night load at 3.00 a.m. on the 3rd Wednesday of each month. The power flows crossing common borders with neighbouring third countries are excluded.



# Net generating capacity on 31 December 2009, 2008 and 2004 in MW

Country	NGC Nuclear power MW				NGC Fossil fuels MW				NGC Hydro power MW				NGC Other sources <sup>1</sup> MW				NGC Total MW				Representativity <sup>2</sup> %			
	2009	2008	2004		2009	2008	2004		2009	2008	2004		2009	2008	2004		2009	2008	2004		2009	2008	2004	
AT	-	-	-		7389	7250	5900		12665	12469	11700		1031	1014	670		21085	20733	18270		100	100	100	
BA	-	-	-		1957	1957	1957		2064	2064	2064		-	-	-		4021	4021	4021		100	100	99	
BE	5902	5825	5802		8590	8335	7996		1413	1412	1410		1758	1147	395		17663	16719	15603		100	100	99	
BG	2000	2000	2880		6523	6523	6420		2993	2993	2930		361	113	0		11877	11629	12230		99	100	100	
CH	3220	3220	3220		355	355	320		13464	13475	13315		540	540	540		17579	17590	17395		100	100	100	
CS	-	-	-		6400	6400	6400		3497	3497	3497		-	-	-		9897	9897	9897		100	100	96	
CZ	3597	3537	3537		10647	10578	10591		2180	2175	2138		658	190	20		17082	16480	16286		100	100	100	
DE	20300	20300	20500		71300	72300	68100		10400	9700	9000		37500	32400	17300		139500	134700	114900		100	100	90	
DK_W	-	-	-		5063	5049	5098		9	9	11		3146	2774	2379		8218	7832	7488		100	100	100	
ES	7465	7465	7600		42918	44074	33051		19044	19024	18523		22675	19791	9393		92102	90354	68567		100	100	100	
FR	63130	63260	63363		26158	24718	26908		25341	25392	25394		5606	4283	1056		120235	117653	116721		100	100	100	
GR	-	-	-		8284	8375	7212		3200	3177	3103		1144	940	412		12628	12492	10727		100	100	100	
HR	-	-	-		1810	1700	1662		2086	2007	2079		107	55	5		4003	3762	3746		100	100	100	
HU	1822	1822	1755		6154	5360	5685		50	50	46		549	1309	790		8575	8541	8276		100	100	100	
IT	-	-	-		73360	72723	58990		21371	21275	20744		6716	4627	1777		101447	986625	81511		100	100	100	
LU	-	-	-		498	498	477		1128	1128	1128		80	80	60		1706	1706	1665		100	100	96	
ME <sup>3</sup>	-	-	-		210	210	210		660	660	660		0	0	0		870	870	870		100	100	100	
MK	-	-	-		907	907	907		503	503	418		-	-	-		1410	1410	1325		100	100	100	
NL	485	485	449		22902	21702	18770		37	37	37		3031	3036	1896		26455	25260	21152		100	100	100	
PL	-	-	-		29728	29709	29350		2327	2327	2193		719	473	145		32774	32509	31688		100	100	100	
PT	-	-	-		7743	6829	6194		4973	4963	4717		3932	3131	835		16648	14923	11746		97	97	94	
RO	1300	1300	655		8773	9431	10081		5904	5843	6007		22	7	-		15998	16582	16743		100	100	100	
RS	-	-	-		5115	5524	5524		2846	2831	862		-	-	-		7961	8355	8355		100	100	100	
SI	700	700	670		1315	1315	1262		879	879	862		-	-	-		2894	2894	2794		100	100	100	
SK	1820	2200	2640		2742	2714	2290		2478	2478	2429		61	61	699		7101	7453	8058		100	100	100	
RG CE <sup>4</sup>	111741	112114	113071		352481	348136	315621		137359	136871	133830		89426	75971	38372		691666	672793	600894		100	100	100	
UA_W	-	-	-		2225	2347	2347		27	27	27		-	-	-		2252	2374	2374		100	100	100	

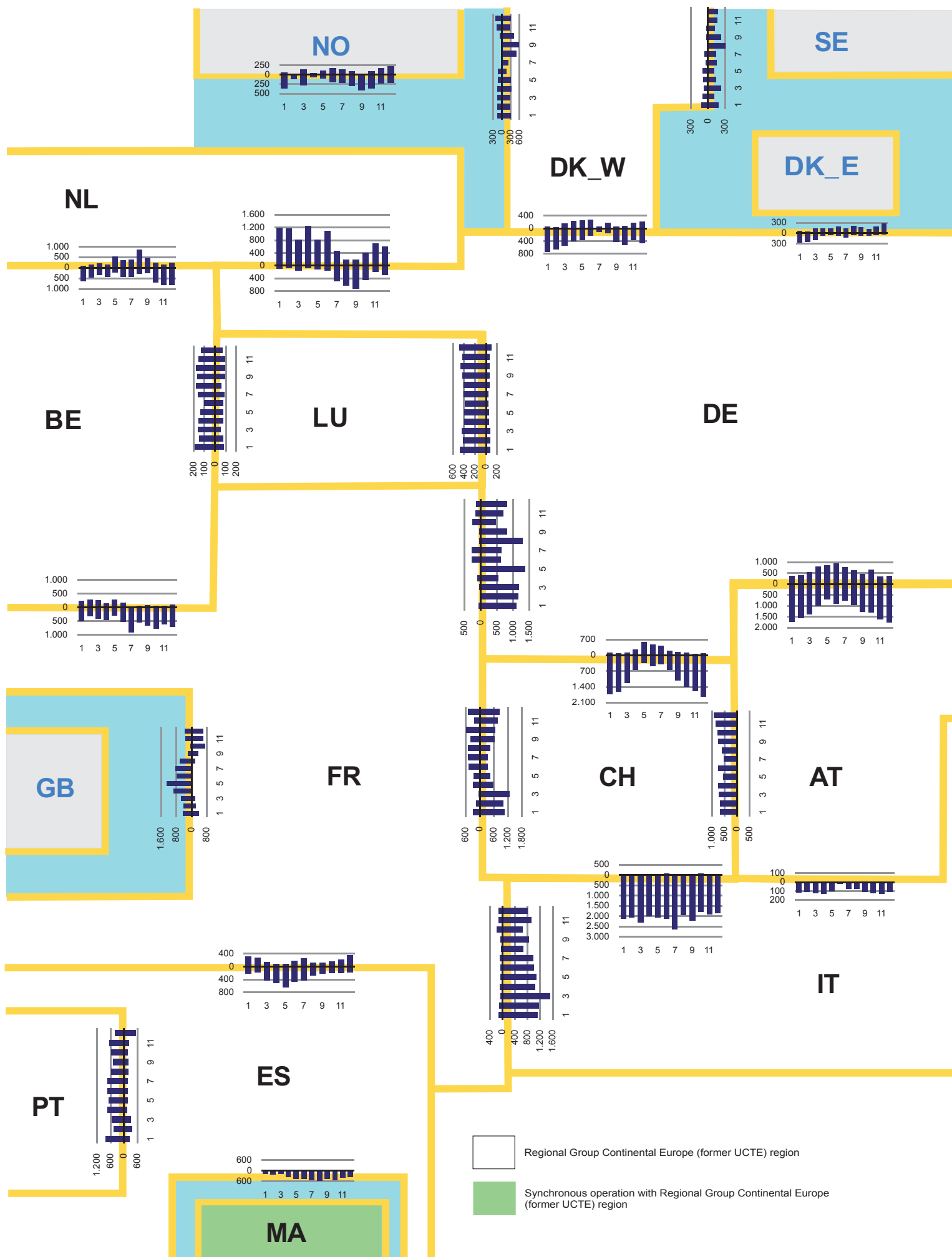
<sup>1</sup> Values of NGC Other sources are the sum of other renewable and other sources.

<sup>2</sup> Percentage as referred to the total values of a country

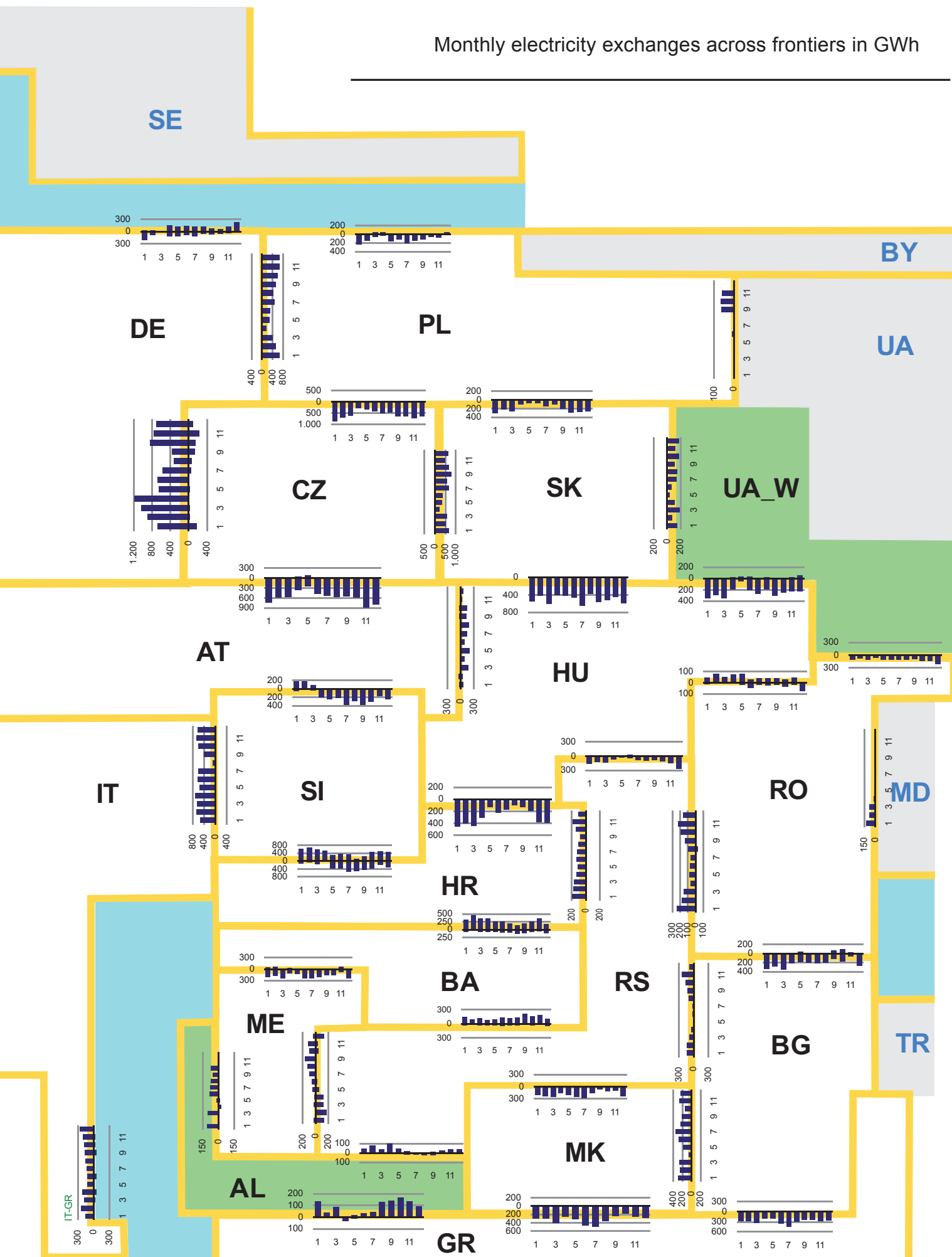
(The total values of a country are defined as the synchronously interconnected system plus the areas directly connected via AC or DC to the mainland system.).

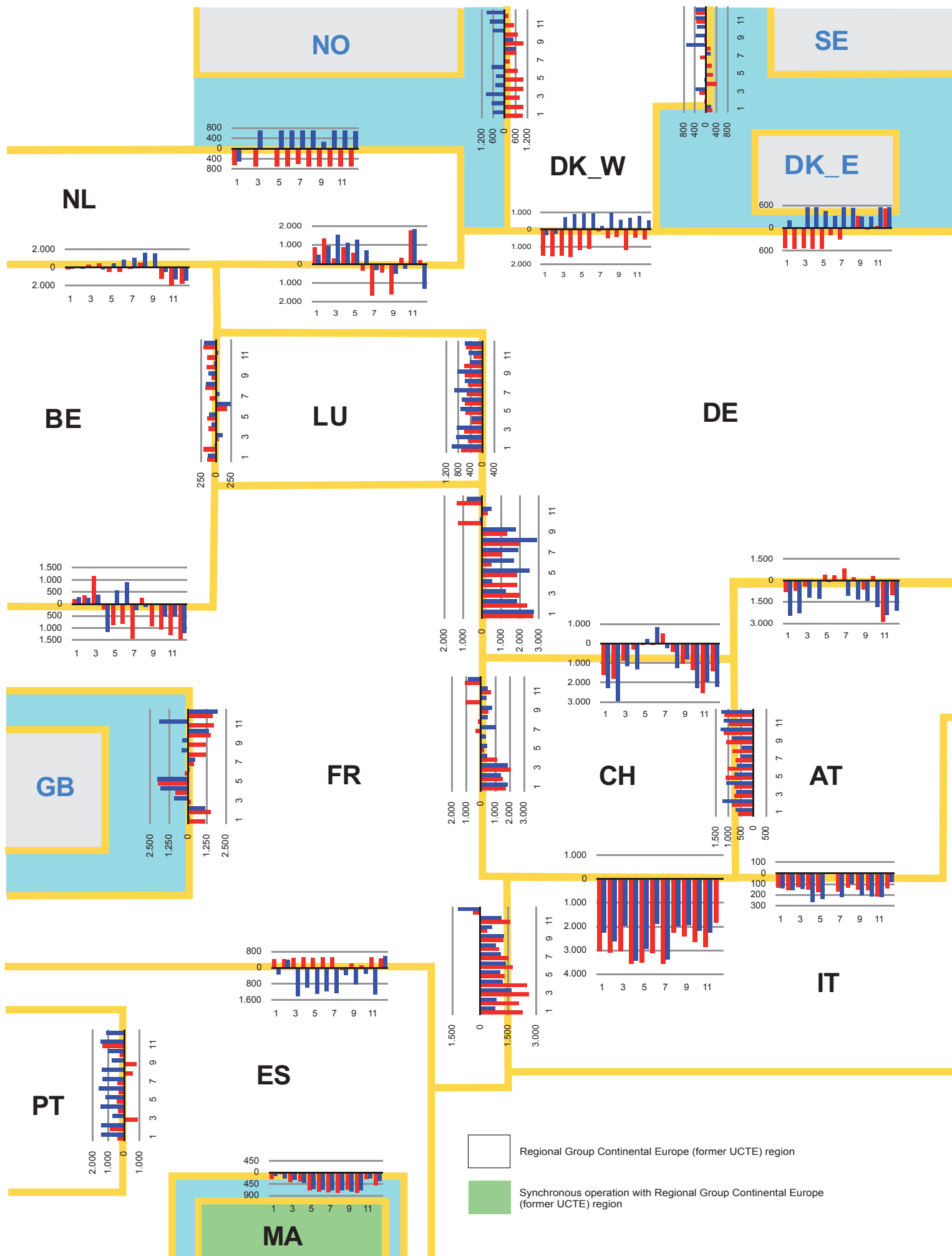
<sup>3</sup> Year 2009 NGC capacity as of December 2008

<sup>4</sup> The country code RG CE (Regional Group Continental Europe) represents the former UCTE (Union for the Co-ordination of Transmission of Electricity).

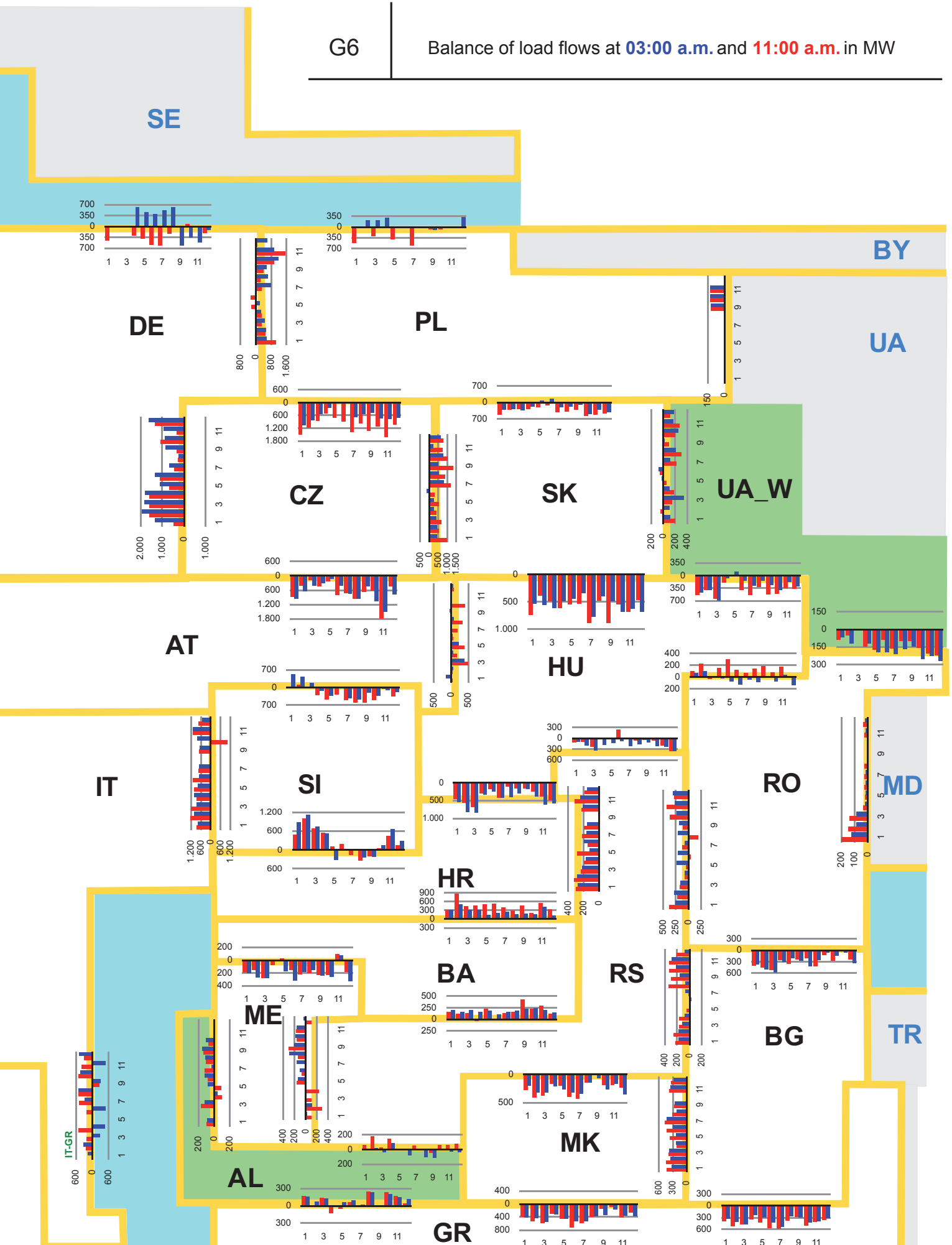


# Monthly electricity exchanges across frontiers in GWh





G6

Balance of load flows at **03:00 a.m.** and **11:00 a.m.** in MW



Unavailability of international tie lines - Regional Group Continental Europe overview 2009

Circuit ID	From substation	To substation	Voltage [kV]	Thermal conventional transmission capacity [ MVA ]	Major Reason	Time whole year [min]	January [min]	February [min]	March [min]	April [min]	May [min]	June [min]	July [min]	August [min]	September [min]	October [min]	November [min]	December [min]
11.1.1	DE - Diele ( transpower )	NL - Meeden ( TenneT TSO B.V. )	380	1382	R1,R10	2426					1275		603	548				
11.1.2	DE - Diele ( transpower )	NL - Meeden ( TenneT TSO B.V. )	380	1382	R1	295				295								
13.1.1	DE - Siersdorf ( Amprion )	NL - Maasbracht ( TenneT TSO B.V. )	380	1645	R1, R2	7171			655		6341					175		
13.1.2	DE - Rommerskirchen ( Amprion )	NL - Maasbracht ( TenneT TSO B.V. )	380	1698	R1, R7	742					671				71			
15.1.1	DE - Gronau ( Amprion )	NL - Hengelo ( TenneT TSO B.V. )	380	1790	R1	702		362				225					115	
15.1.2	DE - Gronau ( Amprion )	NL - Hengelo ( TenneT TSO B.V. )	380	1790	R1	159											159	
25.1.1	BE - Van Eyck ( Elia )	NL - Maasbracht ( TenneT TSO B.V. )	380	1207	R1,R6	6891	750			39			6102					
25.1.2	BE - Van Eyck ( Elia )	NL - Maasbracht ( TenneT TSO B.V. )	380	1270	R2	59	59											
26.1.1	BE - Zandvliet ( Elia )	NL - Geertruidenberg ( TenneT TSO B.V. )	380	1476	R1,R2	6146						59			6087			
26.2.1	BE - Zandvliet ( Elia )	NL - Borssele ( TenneT TSO B.V. )	380	1476	R1	101												101
27.1.1	NL - Eemshaven ( TenneT TSO B.V. )	NO - Fedra ( Statnett SF )	450	700	R2, R7, R10	82161		27291		28210	21600			5060				
41.2.1	BE - Aubange ( Elia )	LU - Belval ( SOTEL )	150	157	R1	1160					1159	1						
51.1.1	BE - Monceau ( Elia )	FR - Chooz ( RTE )	220	356	R1	26195						26195						
51.2.1	BE - Avelgem ( Elia )	FR - Mastaing ( RTE )	380	1207	R1	943					943							
51.2.2	BE - Avelgem ( Elia )	FR - Avelin ( RTE )	380	1367	R1,R2	6309				6309								
51.3.1	BE - Achene ( Elia )	FR - Lonny ( RTE )	380	1177	R1	3393				3380								13
52.1.1	BE - Aubange ( Elia )	FR - Moulaine ( RTE )	220	381	R1,R3, R4,R9	187840		120				6	6330	44371	43199	19785	37414	36615
71.1.1	DE - Uchtelfangen ( Amprion )	FR - Vigy ( RTE )	380	1790	R1	20678							20678					
71.1.2	DE - Uchtelfangen ( Amprion )	FR - Vigy ( RTE )	380	1790	R9	21853							19273	2580				
71.2.1	DE - Ensdorf ( Amprion )	FR - St-Avold ( RTE )	220	261	R9	39958										1780	38178	
72.1.1	DE - Eichstetten ( EnBW Transportnetze )	FR - Vogelgrün ( RTE )	220	338	R1,R9	36873	3							252		36618		
72.1.2	DE - Eichstetten ( EnBW Transportnetze )	FR - Muhlbach ( RTE )	380	1684	R1	718					4	710		4				
81.1.1	CH - Bassecourt ( swissgrid )	FR - Sierentz ( RTE )	380	1186	R1	6934	533										6401	
81.2.1	CH - Laufenburg ( swissgrid )	FR - Sierentz ( RTE )	380	1167	R1	2248	575	388					645		640			
81.3.1	CH - Bassecourt ( swissgrid )	FR - Mambelin ( RTE )	380	1046	R1,R2,R9	18032	2073			928		10451		524			3644	412
82.1.1	CH - Verbois ( swissgrid )	FR - Bois-Tollot ( RTE )	380	1211	R1,R9	16963	487						14		16462			
82.1.2	CH - Chamoson ( swissgrid )	FR - Bois-Tollot ( RTE )	380	1409	R1,R9	106935	5796		4281	43200	28751	6001	2303	4367	928		1563	9745
82.2.1	CH - Verbois ( swissgrid )	FR - Gèniissiat ( RTE )	220	315	R1	12372					9649	2723						
82.2.2	CH - Verbois ( swissgrid )	FR - Gèniissiat ( RTE )	220	315	R1	2088						2088						
82.4.1	CH - La Bâtiаз ( swissgrid )	FR - Vallorcine ( RTE )	220	266	R1	2205				2205								
82.5.1	CH - Riddes ( swissgrid )	FR - Cornier ( RTE )	220	275	R1,R9	24542					3095	2444	18287					716
82.6.1	CH - St-Triphon ( swissgrid )	FR - Cornier ( RTE )	220	275	R1	16298						12456	3842					
83.1.1	DE - Asphard ( swissgrid/EnBW Tr.Netze Strom )	FR - Sierentz ( RTE )	380	1167	R1	26213										26213		
91.1.1	FR - Albertville ( RTE )	IT - Rondissone ( Terna )	380	1244	R1	603						603						
91.1.2	FR - Albertville ( RTE )	IT - Rondissone ( Terna )	380	1244	R1	562					562							
92.1.1	FR - Trinite Victor ( RTE )	IT - Camporosso ( Terna )	220	320	R1	6379				6379								
93.1.1	FR - Villarodin ( RTE )	IT - Venaus ( Terna )	380	956	R1,R8	48714								41289	6497			928
102.1.1	CH - Laufenburg ( swissgrid )	DE - Gurtweil ( EnBW Transportnetze )	220	469	R1,R9	1101		124			509				468			
102.1.2	CH - Laufenburg ( swissgrid )	DE - Gurtweil ( EnBW Transportnetze )	220	469	R1,R9	1436		81			523		456			376		
102.2.1	CH - Laufenburg ( swissgrid )	DE - Kühmoos ( EnBW Transportnetze )	220	410	R1	3182		113			1156				1566	347		
102.3.1	CH - Laufenburg ( swissgrid )	DE - Kühmoos ( EnBW Transportnetze )	220	430	R1,R9	3165		336			1095				1734			
102.3.2	CH - Laufenburg ( swissgrid )	DE - Kühmoos ( EnBW Transportnetze )	380	1620	R1,R9	43771		201							1068	559	37007	4936
102.4.1	CH - Laufenburg ( swissgrid )	DE - Kühmoos ( EnBW Transportnetze )	380	1620	R1,R9	995		253	208						534			
102.4.2	CH - Laufenburg ( swissgrid )	DE - Kühmoos ( Amprion )	380	1620	R1,R2	8037		257							6706	507		
102.5.1	CH - Laufenburg ( swissgrid )	DE - Tiengen ( Amprion )	380	1131	R1	91834						567						
103.1.1	CH - Beznau ( swissgrid )	DE - Tiengen ( Amprion )	380	1158	R1,R2 ,R9	36876		34			93	22614	35103	34117		16737	11005	4894
103.1.2	CH - Beznau ( swissgrid )	DE - Tiengen ( Amprion )	220	335	R1	13372		173								13199		
104.1.1	CH - Asphard ( swissgrid )	DE - Kühmoos ( EnBW Transportnetze )	380	1340	R1	1866				721								1145
105.1.1	CH - Laufenburg ( swissgrid )	DE - Trossingen ( EnBW Transportnetze )	380	1580	R1,R9	5761		485	1932					182	458	1067		1637
107.1.1	CH - Laufenburg 220 kV ( swissgrid )	DE - Laufenburg 110 kV ( ED )	110	200	R1	199		199										
111.1.1	AT - Bürs ( VIW )	DE - Obermooweller ( EnBW Transportnetze )	380	1369	R1,R2,R9	12558				1032	1838	3812	296	705	4591	284		
111.1.2	AT - Bürs ( VIW )	DE - Obermooweller ( EnBW Transportnetze )	380	1369	R1,R9	4353				610					3648	95		
111.2.1	AT - Bürs ( VIW )	DE - Herbertingen ( Amprion )	220	389	R1,R2,R9	16136		6321	382	2221			5073	473	993		637	36
111.3.1	AT - Bürs ( VIW )	DE - Dellmensingen ( Amprion )	220	492	R1,R9	1439			65				710		456	140		68
115.5.1	AT - St. Peter ( Verbund-APG )	DE - Altheim ( transpower )	220	301	R1,R9	2219	972						1089				158	
115.6.1	AT - St. Peter ( Verbund-APG )	DE - Simbach ( transpower )	220	301	R1	5235			3202	1415			385			233		
115.9.1	AT - St. Peter ( Verbund-APG )	DE - Pirach ( transpower )	220	518	R1,R9	2937	571				1429	937						
115.10.1	AT - St. Peter ( Verbund-APG )	DE - Pleinting ( transpower )	220	449	R1,R9	4752	2448							1258			1046	
116.1.1	AT - Westtirol ( Verbund-APG )	DE - Leupolz ( Amprion )	380	1316	R1	7797					7797							
116.2.1	AT - Westtirol ( Verbund-APG )	DE - Memmingen ( Amprion )	220	762	R1,R2	10590					9169		1151				270	
117.1.1	AT - Silz ( TIWAG-Netz )	DE - Oberbrunn ( transpower )	220	793	R1,R2	14978						2420	6502	4274	1088	694		
117.1.2	AT - Silz ( TIWAG-Netz )	DE - Oberbrunn ( transpower )	220	793	R1,R2	16415		578	868			4006	5769	2845	1855	494		
121.2.1	CH - Gorduno ( swissgrid )	IT - Mese ( Terna )	220	278	R1,R9	7541			1876				608		5057			
121.3.1	CH - Soazza ( swissgrid )	IT - Bulciago ( Terna )	380	1224	R1	21066								20423				643

Reasons: R1 - Maintenance, R2 - Repair, R3 - New construction, R4 - Overload (also calculated), R5 - False operation, R6 - Failure in protection device or other element, R7 - Outside impacts (animals, trees, fire, avalance,...), R8 - Very exceptional conditions (weather, natural disaster,...), R9 - Other reasons, R10 - Unknown reasons





Unavailability of international tie lines - Regional Group Continental Europe overview 2009

Circuit ID	From substation	To substation	Voltage [kV]	Thermal conventional transmission capacity [ MVA ]	Major Reason	Time whole year [min]	January [min]	February [min]	March [min]	April [min]	May [min]	June [min]	July [min]	August [min]	September [min]	October [min]	November [min]	December [min]
121.4.1	CH - Lavorgo ( swissgrid )	IT - Musignano ( Terna )	380	1204	R1	17701								12519	5182			
122.1.1	CH - Campocologno ( RE )	IT - Poschiavino ( Terna )	150	103	R1,R9	52880			2451	3990						18360	28079	
123.1.1	CH - Riddes ( swissgrid )	IT - Avise ( Terna )	220	309	R1,R2,R9	31400						3379	2042		20671		2210	3098
123.2.1	CH - Riddes ( swissgrid )	IT - Valpelline ( Terna )	220	309	R9	10845									622	5603	1189	3431
123.3.1	CH - Serra ( swissgrid )	IT - Pallanzeno ( Terna )	220	278	R1,R7,R9	343893	44640	40320	44580	43200	44640	43200	21141	40950	20828			394
124.1.1	CH - Robbia ( swissgrid )	IT - Gorlago ( Terna )	380	1340	R2,R8	5379				4005					547			827
124.1.2	CH - Robbia ( swissgrid )	IT - San Fiorano ( Terna )	380	1340	R1,R9	2104				1367	737							
141.2.1	AT - Meiningen ( VKW-Netz )	CH - Winkeln ( swissgrid )	220	776	R1	43797			2580								31202	10015
142.1.1	AT - Westtirol ( Verbund-APG )	CH - Pradella ( swissgrid )	380	1340	R1,R9	2572							645			1927		
142.2.1	AT - Westtirol ( Verbund-APG )	CH - Pradella ( swissgrid )	380	1340	R1,R9	1452						863	589					
151.1.1	ES - Hernani ( REE )	FR - Argia ( RTE )	380	1136	R1	6474											6474	
151.3.1	ES - Arkale ( REE )	FR - Argia ( RTE )	220	340	R1	3549				3419						130		
151.4.1	ES - Biescas ( REE )	FR - Pragnères ( RTE )	220	237	R2,R10	48407							22		17065	31320		
152.1.1	ES - Benós ( REE )	FR - Lac d'Oo ( RTE )	110	63	R1,R2	266737			14340	43200	44640	43200		20992	43200	44700	12465	
153.1.1	ES - Vich ( REE )	FR - Baixas ( RTE )	380	1105	R1,R2,R7,R10	2699	31	4	2362			302						
161.1.1	DE - Flensburg ( transpower )	DK W - Ensted ( Energinet.dk )	220	332	R1,R9,R10	638		166	273				199					
161.2.1	DE - Flensburg ( transpower )	DK W - Kassø ( Energinet.dk )	220	332	R1,R9,R10	821		220	507				94					
161.3.1	DE - Audorf ( transpower )	DK W - Kassø ( Energinet.dk )	380	1078	R1,R10	1637							674	384	579			
161.3.2	DE - Audorf ( transpower )	DK W - Kassø ( Energinet.dk )	380	1078	R1	1353							650	211	492			
164.1.1	NO - Kristiansand ( Statnett SF )	DK W - Tjele ( Energinet.dk )		350	R6	3842		3842										
165.1.1	SE - Stenkullen ( Svenska Kraftnät )	DK W - Vester Hassing- Lindome ( Energinet.dk )		125	R2	355	355											
166.1.1	SE - Lindome ( Svenska Kraftnät )	DK W - Vester Hassing- Lindome ( Energinet.dk )		360	R6	2417		2417										
171.1.1	AT - Bisamberg ( Verbund-APG )	CZ - Sokolnice ( CEPS )	220	251	R1,R9	3483					171			999	2313			
171.2.1	AT - Bisamberg ( Verbund-APG )	CZ - Sokolnice ( CEPS )	220	251	R1,R9	5790					112		793		4885			
172.1.1	AT - Dürnrohr ( Verbund-APG )	CZ - Slavetice ( CEPS )	380	1481	R1	4903									4903			
172.1.2	AT - Dürnrohr ( Verbund-APG )	CZ - Slavetice ( CEPS )	380	1481	R1,R9	7567								4661	2906			
181.1.1	AT - Obersielach ( Verbund-APG )	SI - Podlog ( ELES )	220	351	R8	4							4					
182.2.1	AT - Kainachtal ( Verbund-APG )	SI - Maribor ( ELES )	380	1514	R8	4	4											
191.3.1	DE - Bauler ( Amprion )	LU - Flebour ( Creos )	220	490	R1,R2	28630			2078	15691	10706					155		
191.4.1	DE - Bauler ( Amprion )	LU - Roost ( Creos )	220	490	R1	29030			18215	10815								
192.1.1	DE - Trier ( Amprion )	LU - Heisdorf ( Creos )	220	490	R1	1606			601						1005			
192.2.1	DE - Quint ( Amprion )	LU - Heisdorf ( Creos )	220	490	R1	7765			561			6504		700				
201.1.1	IT - Redipuglia ( Terna )	SI - Divača ( ELES )	380	1619	R1	39420								39420				
201.2.1	IT - Padriciano ( Terna )	SI - Divača ( ELES )	220	305	R8	7							7					
205.1.1	IT - Galatina ( Terna )	GR - Arachthos ( HTSO )	380	500	R1,R2,R6,R8,R10	81331	81		7680		19661	9740	20501	23227		131	300	10
221.1.1	GB - Sellindge ( National Grid )	FR - Mandarins ( RTE )	270	1000	R1,R6	6779	27					40			6390		57	265
221.2.1	GB - Sellindge ( National Grid )	FR - Mandarins ( RTE )	270	1000	R1,R6,R9	10786	94					7590		390			2248	464
231.1.1	ES - Las Conchas ( REE )	PT - Lindoso ( REN )	132	90	R1	5760				5760								
232.2.1	ES - Aldeadávila ( REE )	PT - Lagoaça 2 ( REN )	220	374	R1,R3	8710					605				6378		1727	
232.3.1	ES - Saucelle ( REE )	PT - Pocinho ( REN )	220	346	R3	55156					38256	16900						
233.1.1	ES - Cedillo ( REE )	PT - Falaqueira ( REN )	380	1300	R1	5760				5760								
234.1.1	ES - Cartelle ( REE )	PT - Alto Lindoso ( REN )	380	1330	R1	6068								6068				
234.1.2	ES - Cartelle ( REE )	PT - Alto Lindoso ( REN )	380	1330	R1,R2	7689					1440			916	5333			
235.1.1	ES - Brovales ( REE )	PT - Alqueva ( REN )	400	1280	R2,R3	33144	13652							3426		8061	8005	
242.1.1	MK - Bitola ( MEPSO )	GR - Meliti ( HTSO )	400	1300	R1	2718				2718								
261.1.1	RS - Djerdap ( EMS )	RO - Portile de Fier ( Transelectrica )	400	1135	R1	2186						341			1439	406		
262.1.1	RS - Kikinda 1 ( EMS )	RO - Jimbolia ( Transelectrica )	110	65	R1,r2	498									215	283		
264.1.1	RS - Sip ( EMS )	RO - Gura Vaili ( Transelectrica )	110	87	R1	409						409						
271.1.1	BG - Sofija Zapad ( ESO )	RS - Niš ( EMS )	380	1309	R1	3576						349	476		2751			
272.1.1	BG - Breznik ( ESO )	RS - HE Vrla 1 ( EMS )	110	97	R1	238											238	
277.1.1	RO - Tântăreni ( Transelectrica )	BG - Kozlodui ( ESO )	400	1300	R1	2446							2446					
277.1.2	RO - Tântăreni ( Transelectrica )	BG - Kozlodui ( ESO )	400	1300	R1	39230					28385				10845			
278.1.1	RO - Isaccea ( Transelectrica )	BG - Dobrudja ( ESO )	400	1135	R1	51900				16917			13201				8778	13004
282.1.1	AL - Fierza ( KESH )	RS - Prizren ( EMS )	220	270	R9	363							363					
291.1.1	AL - Elbassan ( KESH )	GR - Kardja ( HTSO )	400	1300	R1,R8,R10	3123	25							622	2476			
301.1.1	BG - Blagoevgrad ( ESO )	GR - Thessaloniki ( HTSO )	400	1300	R1,R6	7366					6068	1298						
321.1.1	CZ - Hradec Zapad ( CEPS )	DE - Etzenricht ( transpower )	400	1295	R9	3138								3017				121
321.1.2	CZ - Prestice ( CEPS )	DE - Etzenricht ( transpower )	400	1295	R1,R6	8336								6220	336	1440		340
322.1.1	CZ - Hradec Vychod ( CEPS )	DE - Röhrsdorf ( 50Hertz )	400	1145	R2,R3,R9	11777		674							86	1655		
322.1.2	CZ - Hradec Vychod ( CEPS )	DE - Röhrsdorf ( 50Hertz )	400	1145	R2,R3,R9	10588					302	383			94	538		
331.1.1	HU - Sándorfalva ( MAVIR )	RS - Subotica 3 ( EMS )	380	1295	R1	96											96	

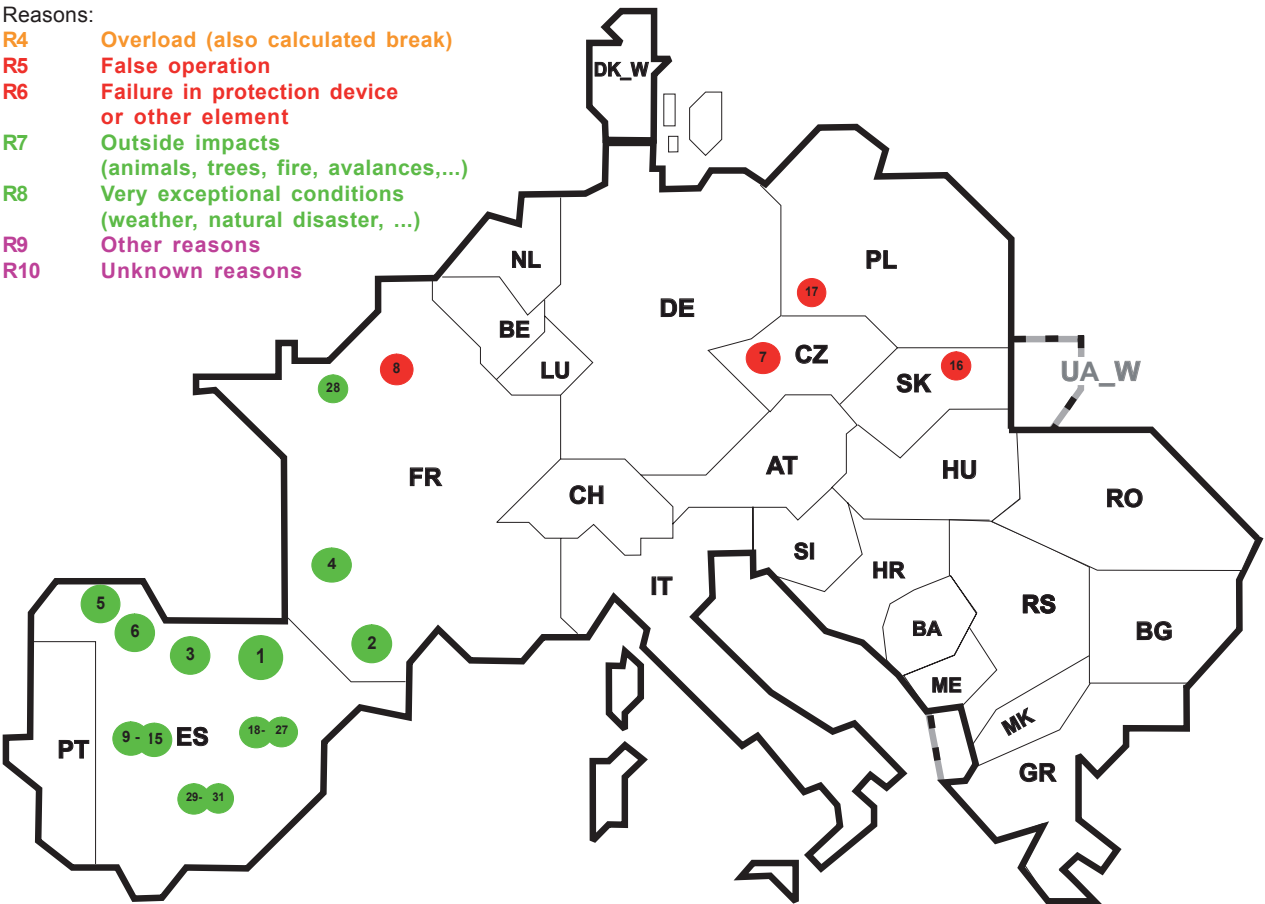
Reasons: R1 - Maintenance, R2 - Repair, R3 - New construction, R4 - Overload (also calculated), R5 - False operation, R6 - Failure in protection device or other element, R7 - Outside impacts (animals, trees, fire, avalance,...), R8 - Very exceptional conditions (weather, natural disaster,...), R9 - Other reasons, R10 - Unknown reasons



Unavailability of international tie lines - Regional Group Continental Europe overview 2009

Circuit ID	From substation	To substation	Voltage [kV]	Thermal conventional transmission capacity [ MVA ]	Major Reason	Time whole year [min]	January [min]	February [min]	March [min]	April [min]	May [min]	June [min]	July [min]	August [min]	September [min]	October [min]	November [min]	December [min]
351.2.1	HR - Pehlin ( HEP-OPS )	SI - Divača ( ELES )	220	366	R8	10						4			6			
371.1.1	HR - Ernestinovo ( HEP-OPS )	RS - Sremska Mitrovica ( EMS )	380	1264	R1	5632									5632			
383.4.1	BA - Višegrad ( NOS BiH )	RS - Zamrsten ( EMS )	110	90	R1	95							95					
383.5.1	BA - Sremska Mitrovica ( NOS BiH )	RS - Ugljevik ( EMS )	380	1264	R1	391						210				181		
384.1.1	RS - Kosovo B ( EMS )	ME - Ribarevine ( AD Prenos )	380	1264	R1,R5,R10	4234							24		592	1614	2004	
384.2.1	RS - Bajina Basta ( EMS )	ME - Pljevlja 2 ( AD Prenos )	220	350	R1,R2	5711						5574					137	
384.3.1	RS - Pozega ( EMS )	ME - Pljevlja 2 ( AD Prenos )	220	365	R1	5582						5442					140	
384.4.1	RS - Zamrsten ( EMS )	ME - Pljevlja 1 ( AD Prenos )	110	70	R1	46						46						
391.1.1	MK - Skopje 1 ( MEPSO )	RS - Kosovo A ( EMS )	220	311	R9	525600	44640	40320	44580	43200	44640	44640	43200	44640	43200	44700	43200	44640
391.2.1	MK - Skopje 1 ( MEPSO )	RS - Kosovo A ( EMS )	220	311	R9	525600	44640	40320	44580	43200	44640	43200	44640	44640	43200	44700	43200	44640
391.3.1	MK - Skopje 5 ( MEPSO )	RS - Kosovo B ( EMS )	380	1218	R1	1722										1722		
401.1.1	DE - Herrenvyk ( transpower )	SE - Kruseberg ( Svdkraft/Vattenfall )	450	600	R1,R7	66104		18358	41328			100		1077	5241			
404.1.1	CZ - Nosovice ( CEPS )	SK - Varin ( SEPS )	400	1205	R2	13439											11136	2303
410.1.1	CZ - Liskovec ( CEPS )	SK - Pov. Bystrica ( SEPS )	220	221	R2,R3,R7,R9	29104		609	15362	8370		53	737		2269	1704		
420.1.1	CZ - Sokolnice ( CEPS )	SK - Senica ( SEPS )	220	213	R2	53935									11130	42805		
424.1.1	CZ - Sokolnice ( CEPS )	SK - Krizovany ( SEPS )	400	1205	R2	7591							7591					
430.1.1	CZ - Sokolnice ( CEPS )	SK - Stupava ( SEPS )	400	1363	R2	26693						80				26613		
440.1.1	UA W - Mukachevo ( NPC Ukrenergo )	SK - V.Kapusany ( SEPS )	400	1186	R1,R7	12757			7784	26					4947			
443.1.1	CZ - Albrechtice ( CEPS )	PL - Dobrzeń ( PSE Operator S.A. )	400	1088	R1,R9	5508					5331						177	
444.1.1	CZ - Nosovice ( CEPS )	PL - Wielopole ( PSE Operator S.A. )	400	1088	R1,R9	6438					6257						181	
450.1.1	CZ - Liskovec ( CEPS )	PL - Kopanina ( PSE Operator S.A. )	220	399	R1,R9	58036	7720	20158						270	2275	486		27127
460.1.1	CZ - Liskovec ( CEPS )	PL - Bujaków ( PSE Operator S.A. )	220	399	R1	1200								279		921		
501.1.2	DE - Vierraden ( 50Hertz )	PL - Krajnik ( PSE Operator S.A. )	220	402	R1	673									673			
502.1.1	DE - Hagenwerder ( 50Hertz )	PL - Mikulowa ( PSE Operator S.A. )	380	1302	R1	2623				2623								
502.1.2	DE - Hagenwerder ( 50Hertz )	PL - Mikulowa ( PSE Operator S.A. )	380	1302	R1	14712				14712								
601.1.1	ES - Puerto de la Cruz ( REE )	MA - Melloussa 1 ( ONE )	380	715	R1,R2	8819	2880				348	3614		321		173	1483	
601.1.2	ES - Puerto de la Cruz ( REE )	MA - Melloussa 2 ( ONE )	380	715	R1	7890	1440		5700					750				
700.1.1	PL - Krosno Iskrzynia ( PSE Operator S.A. )	SK - Lemešany ( SEPS )	400	1252	R1	6146								6146				
700.1.2	PL - Krosno Iskrzynia ( PSE Operator S.A. )	SK - Lemešany ( SEPS )	400	1252	R1	6146								6146				
702.1.1	PL - Zamość ( PSE Operator S.A. )	UA - Dobrotvir ( NPC Ukrenergo )	220	309	R10	14											14	
704.1.1	PL - Słupsk ( PSE Operator S.A. )	SE - Stårmö ( SvK )	450	600	R1,R2,R7,R10	11989	2091	100	17	2686		206		41	6259	589		
710.1.1	HU - Győr ( MAVIR )	SK - Gabčíkovo ( SEPS )	400	1330	R2	36262								29587	5719	773		183
711.1.1	HU - Göd ( MAVIR )	SK - Levice ( SEPS )	400	1330	R2,R9	37181			22558	13630			993					
720.1.1	HU - Albertirsa ( MAVIR )	UA W - Zahidno Ukrainka ( NPC Ukrenergo )	750	4010	R1,R2	56787				6874	42326					7587		
721.1.1	HU - Sajoşzöged ( MAVIR )	UA W - Mukachevo ( NPC Ukrenergo )	400	1390	R1	6374								1094	5280			
722.1.1	HU - Kisvárda ( MAVIR )	UA W - Mukachevo ( NPC Ukrenergo )	220	209	R1	15862				3401			6799	882	4780			
722.1.2	HU - Tiszaölök ( MAVIR )	UA W - Mukachevo ( NPC Ukrenergo )	220	209	R1	15942						2482	10623	910	1927			
731.1.1	HU - Békéscsaba ( MAVIR )	RO - Nadab ( Transelectrica )	400	1300	R1	2078			272	1806								
740.1.1	RO - Rosiori ( Transelectrica )	UA W - Mukachevo ( NPC Ukrenergo )	400	1135	R1,R6	19230			6366	6395			101		6368			
753.1.1	RO - Isaccea ( Transelectrica )	MD - Vulcanesti ( Moldenergo )	400	1135	R1	42861				42861								

Reasons: R1 - Maintenance, R2 - Repair, R3 - New construction, R4 - Overload (also calculated), R5 - False operation, R6 - Failure in protection device or other element, R7 - Outside impacts (animals, trees, fire, avalance,...), R8 - Very exceptional conditions (weather, natural disaster,...), R9 - Other reasons, R10 - Unknown reasons

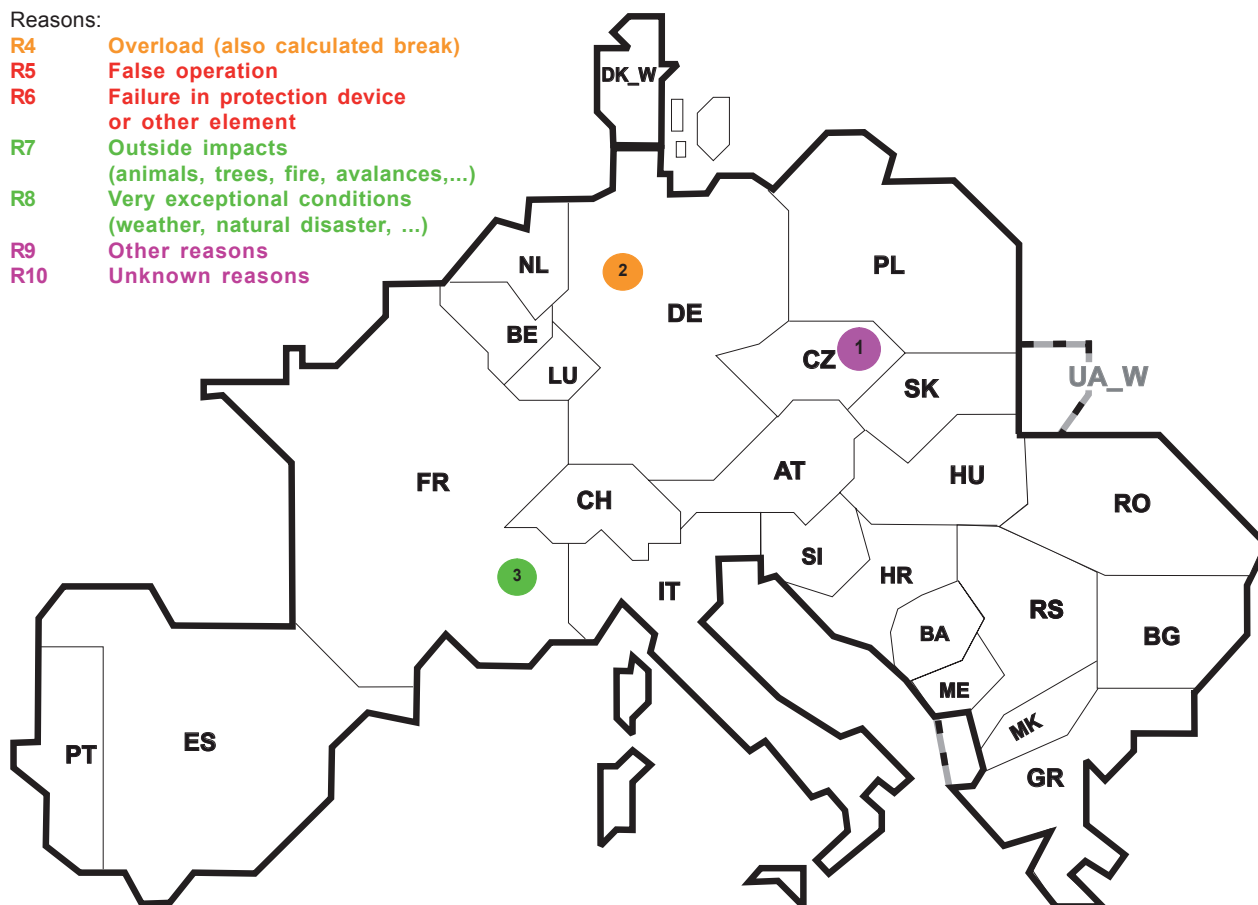


No <sup>2</sup>	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	ES	Ayala	R8	917	9060	1214	1,783
2	FR	Vich	R8	497	254	117	0,523
3	ES	Aluminio	R8	237	605	80	0,462
4	FR	Colayrac	R8	381	64	354	0,401
5	ES	Sabon	R8	122	31990	12937	0,237
6	ES	San Vicente	R8	70	4180	20435	0,136
7	CZ	Prestice	R5	11	130	5	0,089
8	FR	Charenton	R6	64	72	53	0,067
9	ES	La Jara	R8	33	330	607	0,065
10	ES	Tambre II	R8	31	5410	5424	0,060
11	ES	Rojales	R8	31	6027	9212	0,060
12	ES	Cervello	R8	28	8188	19891	0,054
13	ES	Meson	R8	24	72	8868	0,047
14	ES	Vimianzo	R8	16	3570	4223	0,031
15	ES	Palmeral	R8	12	4190	5274	0,024
12	SK	Sucany	R6	3	15	3	0,057
16	PL	Klikowa	R6	8	9	54	0,030
18	ES	S.M.Salina	R8	7	359	109	0,013
19	ES	Sidegasa	R8	6	2470	5998	0,012
20	ES	Mazaricos	R8	6	918	212	0,011
21	ES	Portodemouros	R8	5	2030	15	0,010
22	ES	Castellbisbal	R8	4	6837	4706	0,008
23	ES	Puerto	R8	4	9824	957	0,007
24	ES	La Grela	R8	3	7769	612	0,007
25	ES	Cayetano	R8	2	650	478	0,005
26	ES	Elche	R8	2	345	3316	0,004
27	ES	San Boi	R8	1	1430	10	0,002
28	FR	Fliers	R7	2	8	18	0,002
29	ES	P.G.R.	R8	1	1662	1492	0,002
30	ES	Mondragon	R8	1	9	253	0,001
31	ES	Meirama	R8	1	1105	4601	0,001

<sup>1</sup> ( year [in min] \* energy not supplied ) / consumption last 12 months  
<sup>2</sup> Only events with energy not supplied over 0 MWh are be shown.

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 <sup>2</sup>	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	CZ	Cebin	R9	13	198	4	0,105
2	DE	Lüstringen	R4	9	50	10	0,009
3	FR	Cordeac	R8	4	14	15	0,004

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

<sup>2</sup> Only events with energy not supplied over 0 MWh are shown.

Reasons:

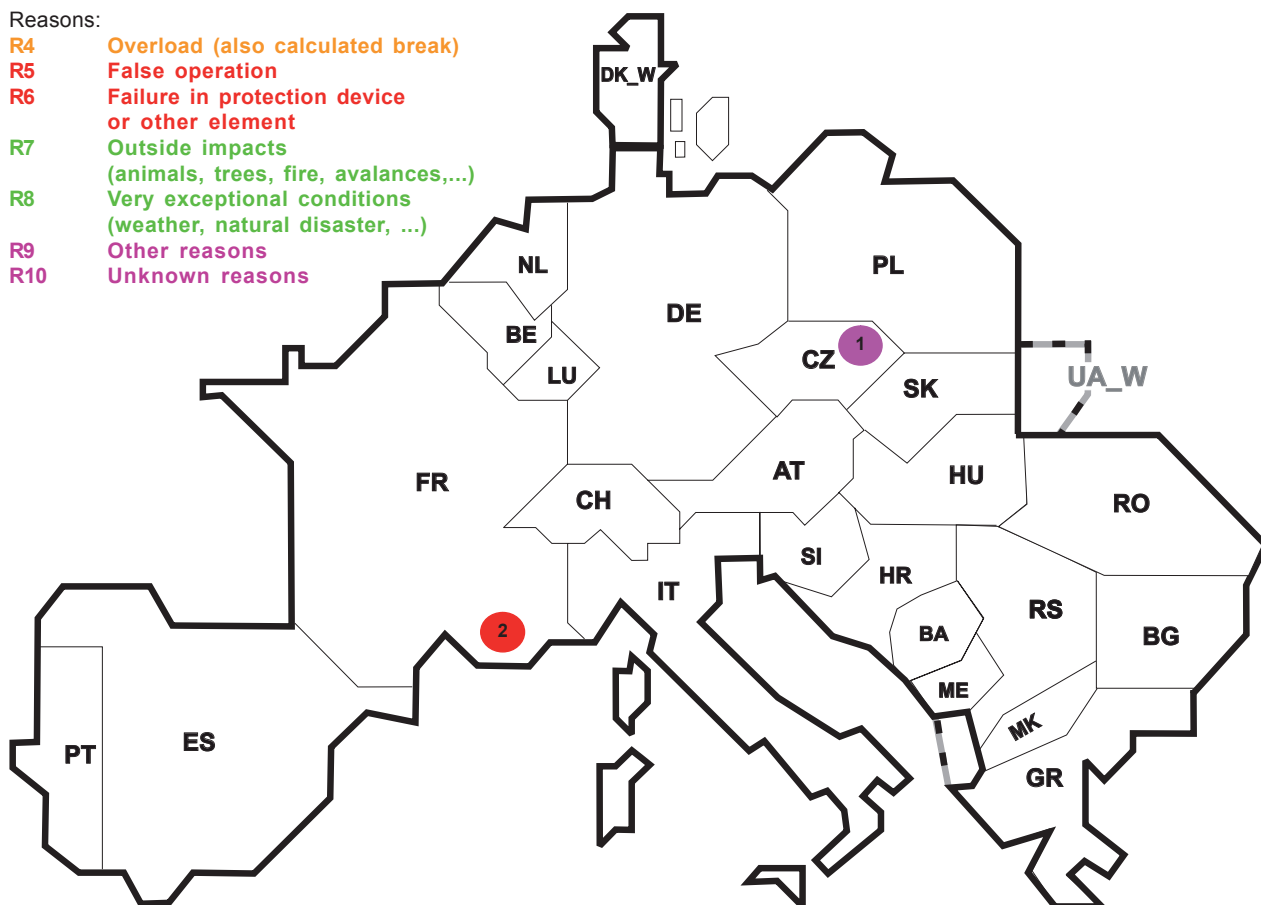
R4 Overload (also calculated break)

R5 False operation

R6 Failure in protection device  
or other elementR7 Outside impacts  
(animals, trees, fire, avalanches,...)R8 Very exceptional conditions  
(weather, natural disaster, ...)

R9 Other reasons

R10 Unknown reasons



No <sup>2</sup>	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	CZ	Horni Zivotice	R9	7	82	5	0,057
2	FR	Coudon	R6	4	25	7	0,004

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

<sup>2</sup> Only events with energy not supplied over 0 MWh are shown.

Reasons:

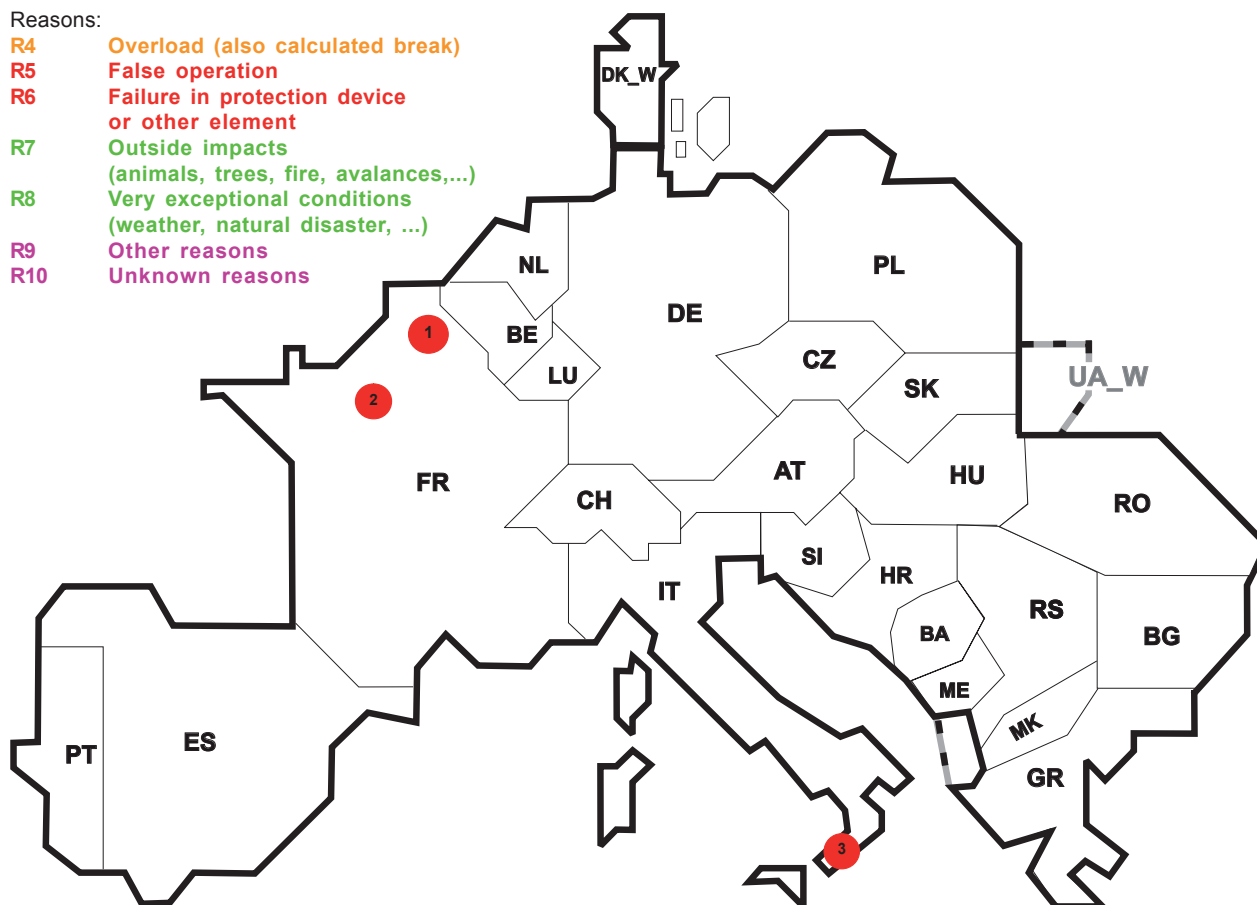
R4 Overload (also calculated break)

R5 False operation

R6 Failure in protection device  
or other elementR7 Outside impacts  
(animals, trees, fire, avalanches,...)R8 Very exceptional conditions  
(weather, natural disaster, ...)

R9 Other reasons

R10 Unknown reasons



No <sup>2</sup>	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	FR	Hellèmes	R5	23	56	25	0,024
2	FR	Vaupalière	R6	15	42	22	0,016
3	IT	Corriolo	R6	8	16	32	0,012

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

<sup>2</sup> Only events with energy not supplied over 0 MWh are be shown.

Reasons:

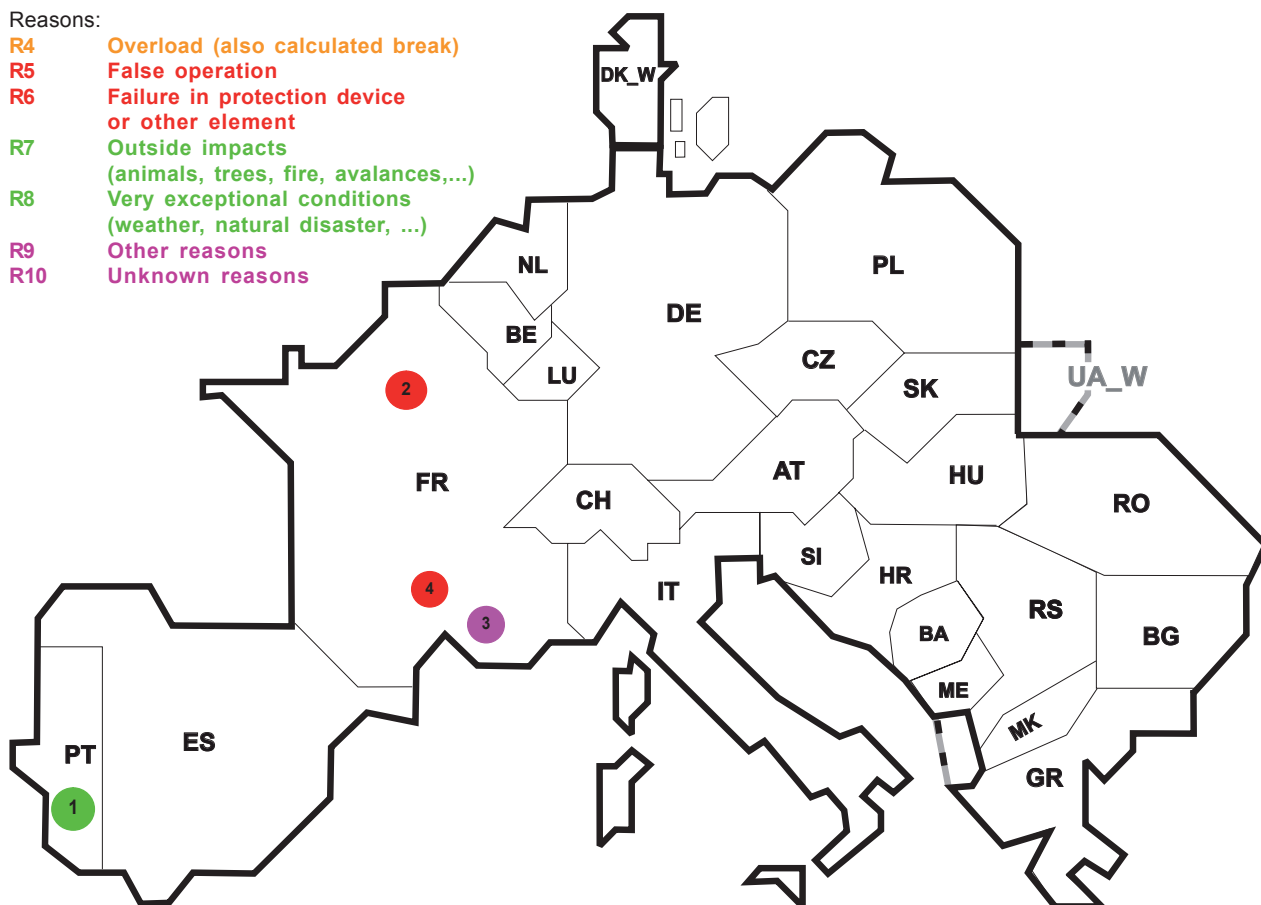
R4 Overload (also calculated break)

R5 False operation

R6 Failure in protection device  
or other elementR7 Outside impacts  
(animals, trees, fire, avalanches,...)R8 Very exceptional conditions  
(weather, natural disaster, ...)

R9 Other reasons

R10 Unknown reasons



No <sup>2</sup>	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	PT	Siderurgia do Seixal - Longos	R7	15	0	100	0,156
2	FR	Chesnoy	R6	113	29	235	0,121
3	FR	Enco de Botte	R10	4	1	216	0,004
4	FR	Aqueducs	R6	1	15	5	0,001

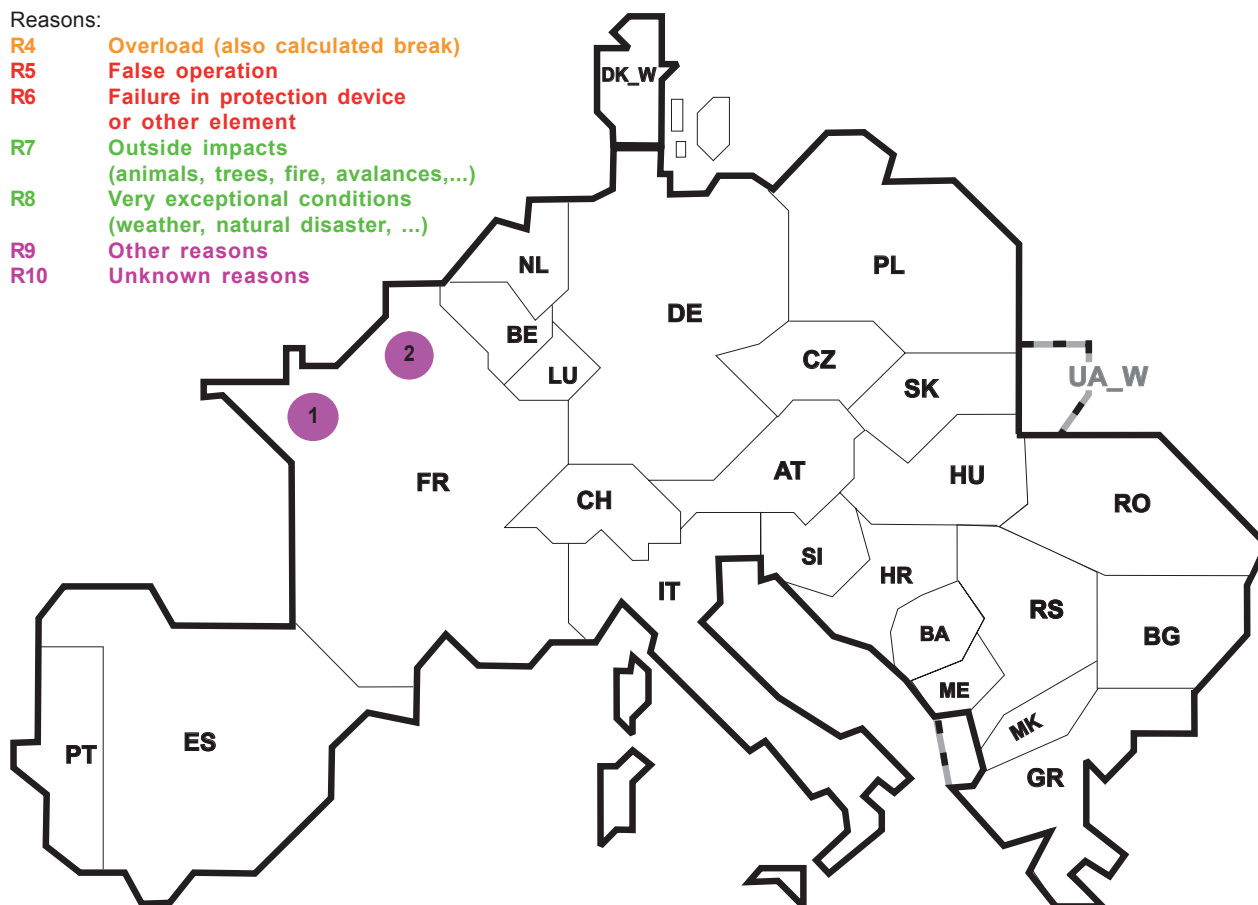
<sup>1</sup> ( year [in min] \* energy not supplied ) / consumption last 12 months

<sup>2</sup> Only events with energy not supplied over 0 MWh are shown.



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 <sup>2</sup>	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	FR	Loscoat	R9	57	67	51	0,061
2	FR	Guarbecque	R9	6	7	48	0,006

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

<sup>2</sup> Only events with energy not supplied over 0 MWh are be shown.

Reasons:

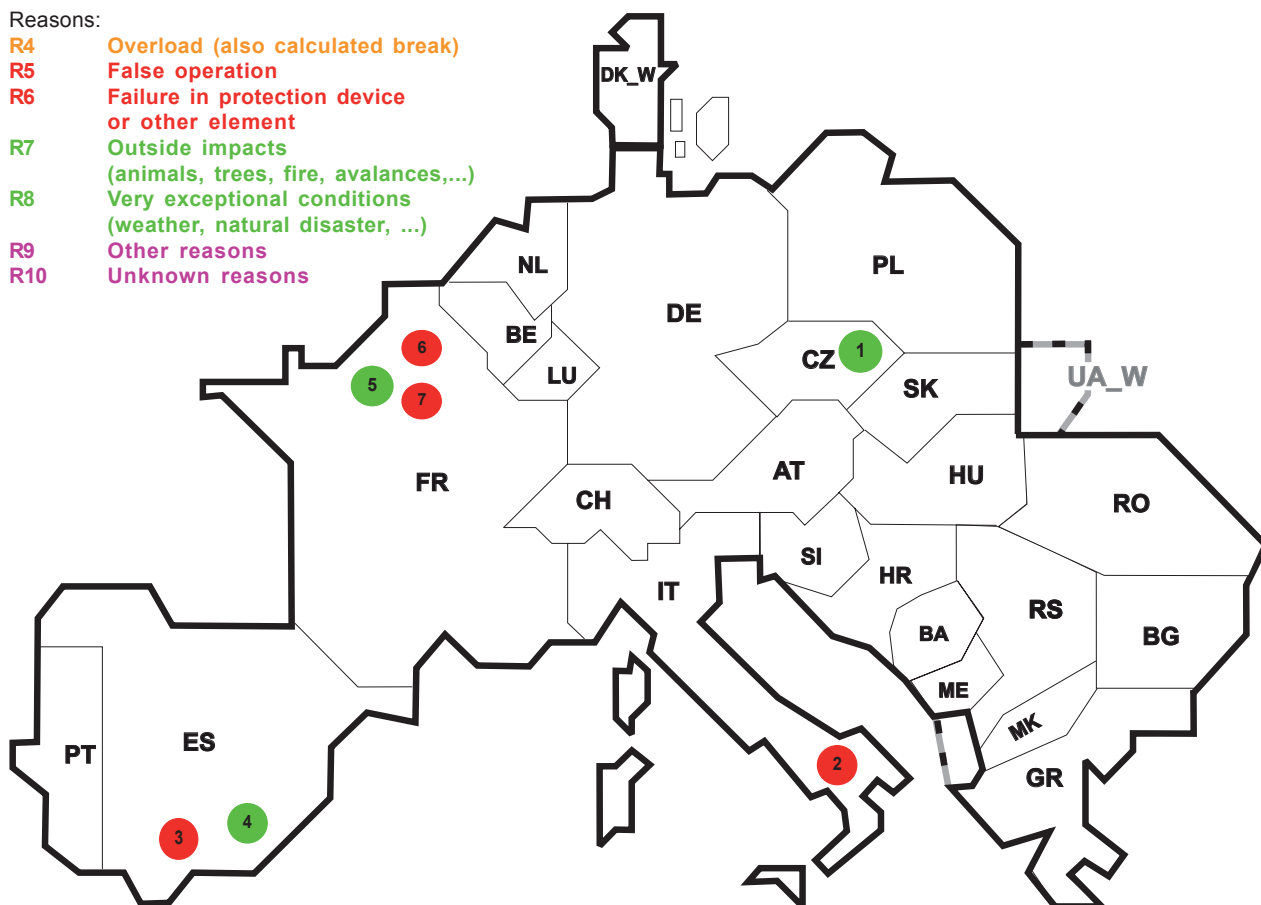
R4 Overload (also calculated break)

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R9 Other reasons

R10 Unknown reasons

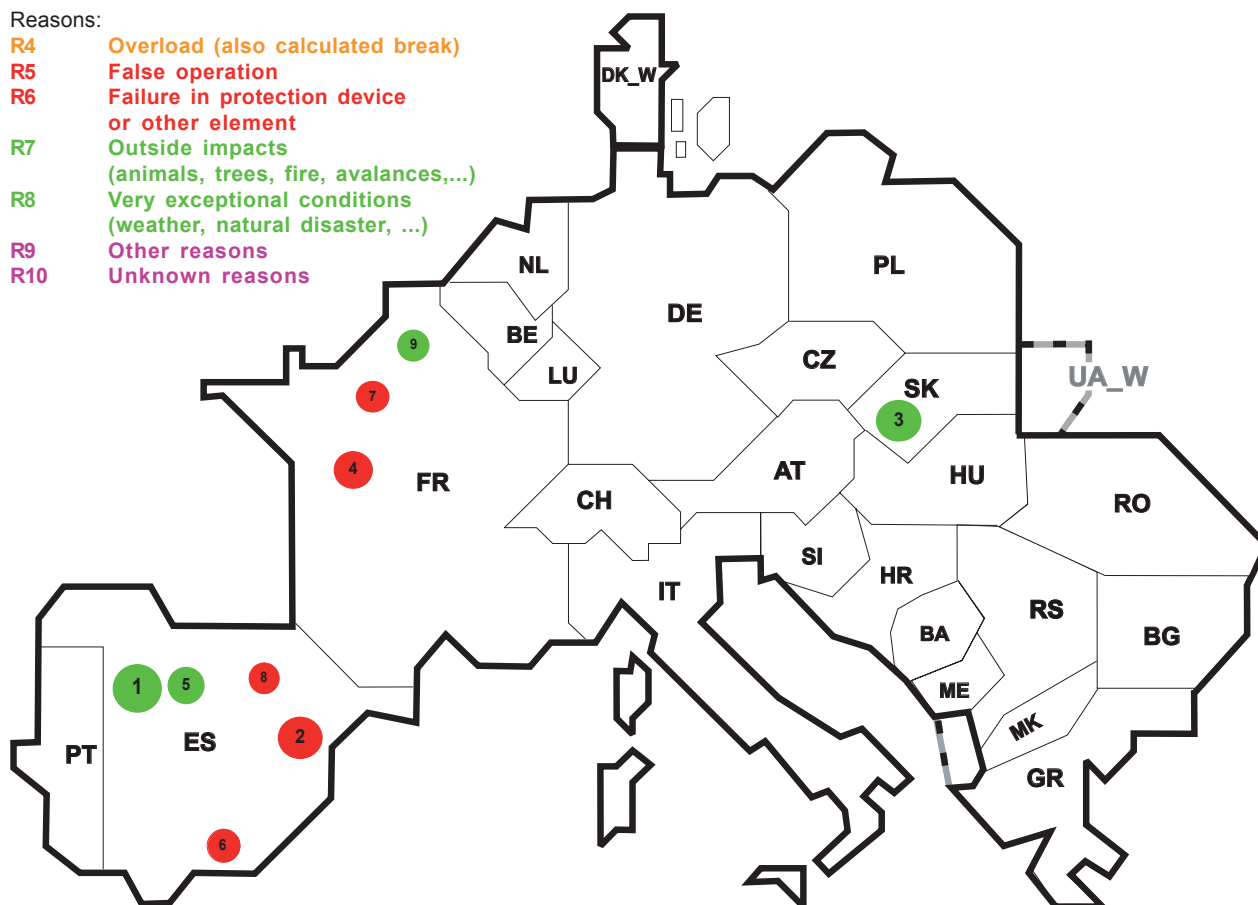


No <sup>2</sup>	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	CZ	Bezdecin	R8	85	0	32	0,715
2	IT	Astroni	R6	400	75	414	0,648
3	ES	Nueva Casares	R6	12	4610	13	0,025
4	ES	Segorbe	R7	8	16	56	0,015
5	FR	Plessis Gassot	R8	7	27	15	0,007
6	FR	Fosses	R5	6	61	6	0,006
7	FR	Cuperly	R5	3	10	20	0,004

<sup>1</sup> ( year [in min] \* energy not supplied ) / consumption last 12 months<sup>2</sup> Only events with energy not supplied over 0 MWh are shown.

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 <sup>2</sup>	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	ES	Palencia	R7	24	3130	53	0,048
2	ES	Castellet	R5	14	51	3070	0,029
3	SK	Sucany	R7	1	12	2	0,020
4	FR	Distre Y643	R6	18	30	37	0,020
5	ES	Palencia	R7	3	3570	5	0,006
6	ES	Fortuna	R6	2	2970	354	0,004
7	FR	Port Jérôme	R6	2	18	7	0,002
8	ES	Ayala	R5	1	250	27	0,002
9	FR	Amiens	R7	1	5	7	0,001

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

<sup>2</sup> Only events with energy not supplied over 0 MWh are be shown.

Reasons:

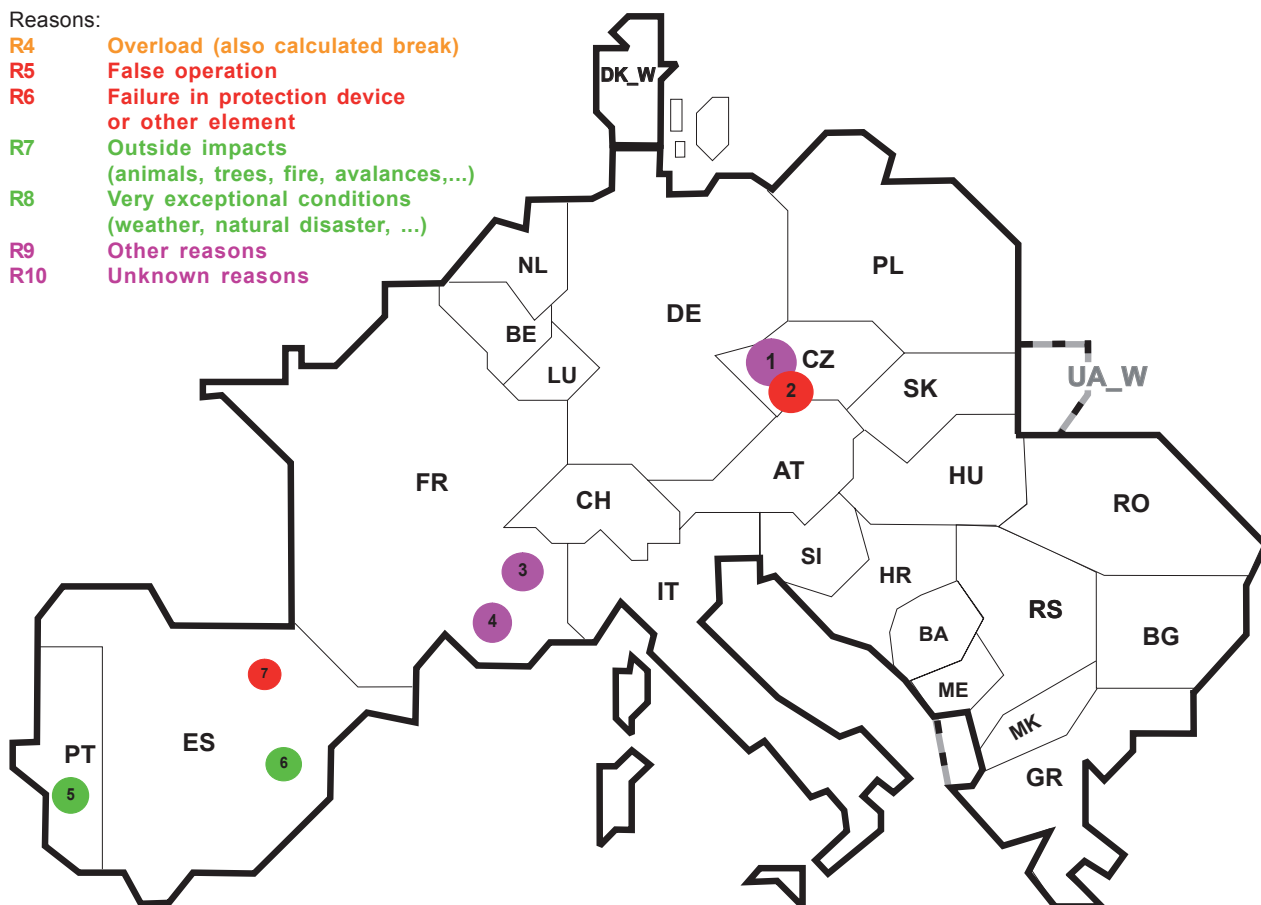
R4 Overload (also calculated break)

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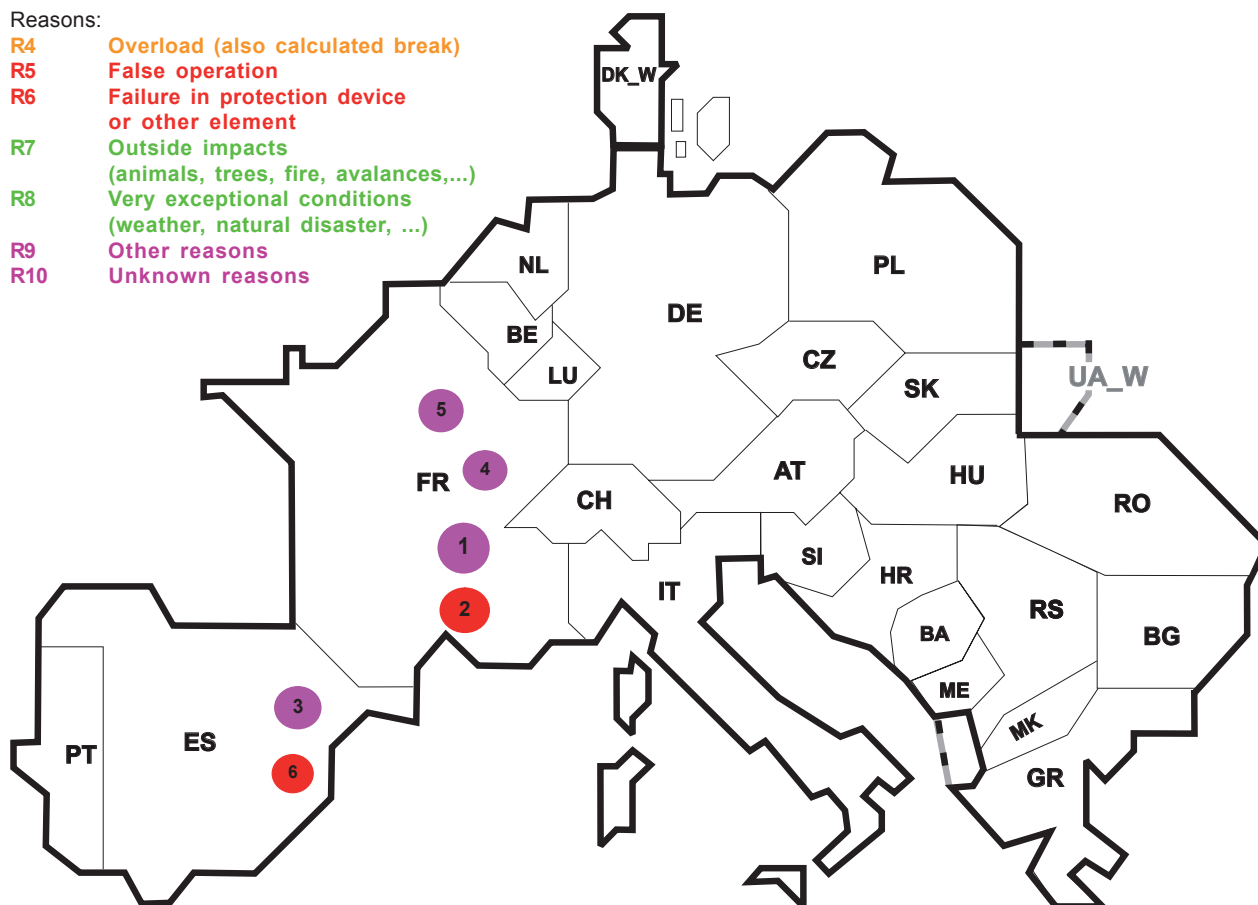


No <sup>2</sup>	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	CZ	Chodov	R9	16	0	6	0,140
2	CZ	Prestice	R6	8	0	5	0,068
3	FR	Cordéac	R10	16	35	26	0,017
4	FR	Menuel	R10	12	40	18	0,013
5	PT	Subestacao de Fernao Ferro	R7	1	0	1	0,008
6	ES	Petrel	R7	2	4880	1767	0,003
7	ES	Alcores	R6	2	25	4	0,003

<sup>1</sup> ( year [in min] \* energy not supplied ) / consumption last 12 months<sup>2</sup> Only events with energy not supplied over 0 MWh are shown.

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 <sup>2</sup>	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	FR	Contamine	R9	74	1	4468	0,079
2	FR	Langlois	R6	65	115	34	0,070
3	ES	Sabon	R10	24	764	19	0,049
4	FR	Cize	R9	23	70	19	0,024
5	FR	Montcroisette	R9	5	31	9	0,005
6	ES	Petrel	R5	2	284	4	0,003

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

<sup>2</sup> Only events with energy not supplied over 0 MWh are shown.

Reasons:

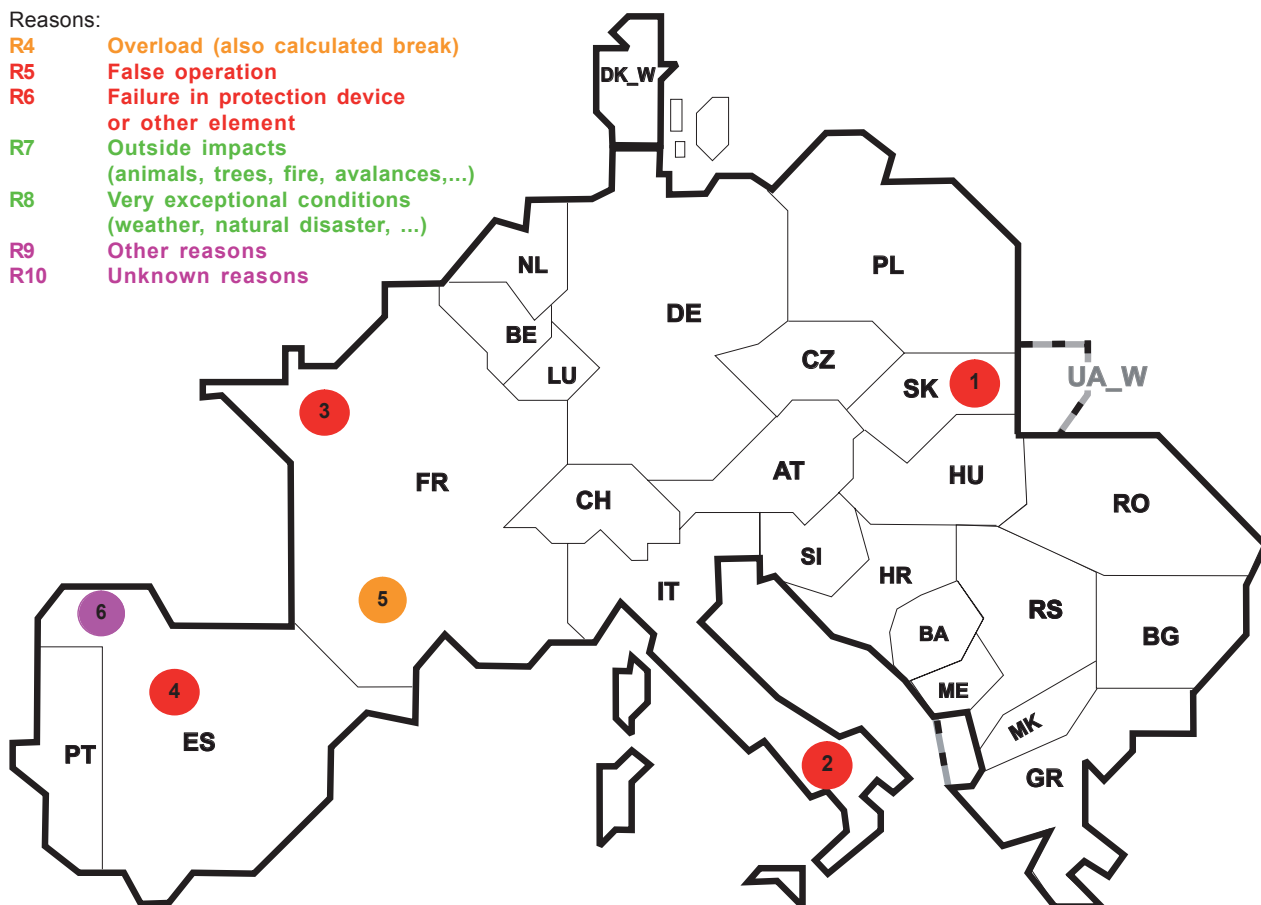
R4 Overload (also calculated break)

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R9 Other reasons

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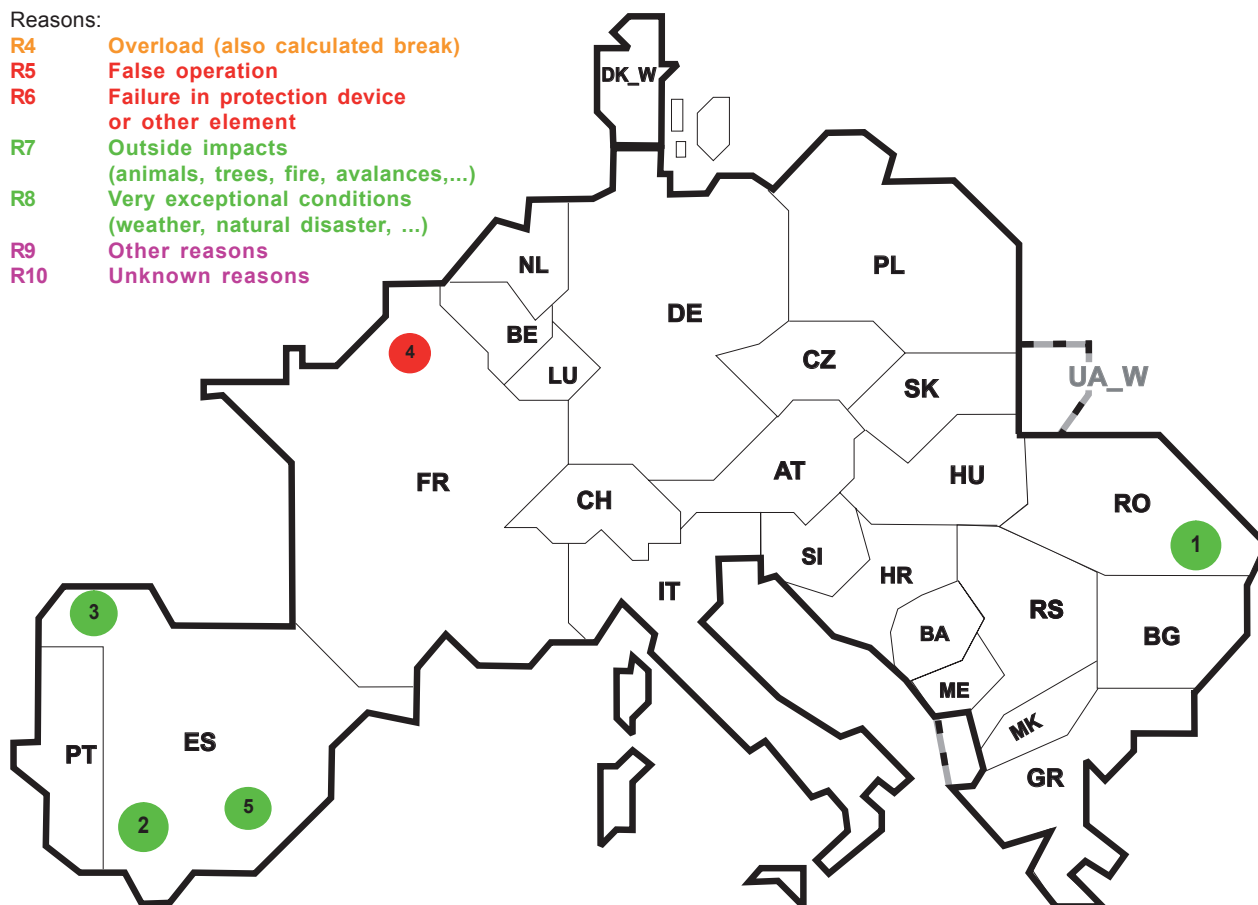


No <sup>2</sup>	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	SK	Medzibrod	R5	4	118	9	0,091
2	IT	Napoli	R6	10	45	14	0,017
3	FR	Loscoat	R6	4	13	19	0,004
4	ES	Sanchinarro	R6	2	28	58	0,003
5	FR	Hourat	R4	2	11	12	0,002
6	ES	Mazaricos	R10	1	1	376	0,001

<sup>1</sup> ( year [in min] \* energy not supplied ) / consumption last 12 months<sup>2</sup> Only events with energy not supplied over 0 MWh are shown.

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 <sup>2</sup>	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	RO	Tulcea	R8	486	1298	87	5,042
2	ES	Puerto Real	R8	9	366	11	0,017
3	ES	Lourizan	R8	7	6948	11	0,014
4	FR	Villiers le Bel	R6	10	116	5	0,011
5	ES	Velle	R7	5	2047	2	0,010

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

<sup>2</sup> Only events with energy not supplied over 0 MWh are be shown.

Inventory											
Country	Reported year	Fossil fuels power units						Nuclear power units			
		10 MW ≤ x < 200 MW		200 MW ≤ x < 400 MW		≥ 400 MW		Total		Total	
		Number	MW	Number	MW	Number	MW	Number	MW	Number	MW
AT	2008	62	3146	8	2735	0	0	70	5881	0	0
BA	2009	9	512	6	1445	0	0	15	1957	0	0
BE <sup>1</sup>	2009	68	3087	13	3631	3	1380	84	8098	7	5825
BG	2009	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	2008	20	332	0	0	0	0	20	332	5	3220
CZ	2009	174	10118	0	0	1	460	175	10578	6	3597 <sup>2</sup>
DE <sup>2</sup>	2000	403	23572	66	20178	47	27749	516	71499	17 <sup>2</sup>	20300 <sup>2</sup>
DK_W	2008	31	899	8	2776	1	626	40	4301	0	0
ES	2008	784	22148	51	18190	39	24207	874	64545	8	7465
FR	2009	183	6073	20	4698	24	12206	227	22977	58	63130
GR	2009	26	2718	19	5566	0	0	45	8284	0	0
HR	2004	24	1137	2	508	0	0	26	1645	0	0
HU	2008	63	3468	9	1892	0	0	72	5360	4	1822
IT	2009	1488	18832	105	31260	36	22066	1629	72158	0	0
LU	2009	0	0	1	385	0	0	1	385	0	0
ME	2007	1	190	0	0	0	0	1	190	0	0
MK	2004	2	301	3	606	0	0	5	907	0	0
NL	2009	115	3938	19	5609	18	9714	152	19261	1	480
PL <sup>3</sup>	2009	n.a.	13122	60	14725	4	1881	n.a.	29728	0	0
PT	2009	52	1997	16	4888	2	870	70	7755	0	0
RO	2009	76	5214	12	3176	0	0	88	8390	2	1300
RS	2009	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
SI	2007	2	276	1	312	1	672	4	1260	1	696
SK	2009	34	1918	0	0	0	0	34	1918	4	1820
RG CE <sup>4</sup>		3617	122998	419	122580	176	101831	4148	347409	113	109655
UA W	2008	16	2347	0	0	0	0	16	2347	0	0

The 'Fossil fuels power units' number and capacity contain also information regarding units that also burn biomass, biogas or waste besides fossil fuels.

<sup>2</sup>Reported year of thermal nuclear units 2009

Units with the capacity <10MW are included in the range 10 MW-200 MW. No precise information about number of units with the capacity <50MW, available from TSO operational database.

The country code RG CE (Regional Group Continental Europe) represents the former UCTE (Union for the Co-ordination of Transmission of Electricity); Calculated sum except Bulgaria and Serbia.



# Inventory of hydro power units $\geq 1$ MW as of 31 December 2009

Inventory of hydro power units											
Country	Reported year	1 MW ≤ x < 10 MW		10 MW ≤ x < 50 MW		50 MW ≤ x < 100 MW		≥ 100 MW		Total	
		Number	MW	Number	MW	Number	MW	Number	MW	Number	MW
AT	2008	582	910	100	2496	19	1473	27	6918	728	11797
BA	2009	1	8	14	337	12	774	7	945	34	2064
BE	2009	27	95	4	144	0	0	6	1164	31	239
BG	2009	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	2008	185	650	101	2475	40	2705	36	7508	362	13338
CZ	2009	74	384	6	212	6	484	6	1100	92	2180
DE	2000	234	898	78	1648	14	1026	15	4841	341	8413
DK_W	2008	10	11	0	0	0	0	0	0	10	11
ES	2008	495	1690	140	3184	42	2897	38	11038	715	18809
FR	2009	523	1675	175	4322	39	2876	59	16029	796	24902
GR <sup>1</sup>	2009	86 <sup>1</sup>	151 <sup>1</sup>	5	84	2	120	11	2846	104	3201
HR	2004	22	69	21	576	6	453	8	978	57	2076
HU	2008	11	46	0	0	0	0	0	0	11	46
IT	2009	682	2189	233	5498	29	1964	42	11620	986	21271
LU	2009	3	20	1	11	0	0	1	1096	5	1127
ME	2007	3	8	0	0	0	0	2	649	5	657
MK	2004	22	36	3	73	3	265	1	150	29	524
NL	2009	3	12	2	25	0	0	0	0	5	37
PL <sup>2</sup>	2009	74	151	21	504	5	292	8	1256	108	2203
PT	2009	110	404	37	893	33	2199	8	1395	188	4891
RO	2009	175	883	112	2062	17	1039	11	1869	315	5853
RS	2009	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
SI	2007	1	8	11	314	5	319	2	230	19	871
SK	2009	29	176	36	700	10	820	6	734	81	2430
RG CE <sup>3</sup>		3352	10474	1100	25558	282	19706	294	72366	5022	126940
UA_W	2008	5	27	0	0	0	0	0	0	5	27

<sup>1</sup> Within the range 1MW-10MW, the following units are included: 45 units ( $< 1$  MW) with total capacity 29 MW, 41 units ( $> 1$  MW and  $< 10$  MW) with total capacity 122 MW.

<sup>2</sup> Additionally 124MW in 818 Hydro power units with the capacity  $< 1$  MW.

<sup>3</sup> The country code RG CE (Regional Group Continental Europe) represents the former UCTE (Union for the Co-ordination of Transmission of Electricity); Calculated sum except Bulgaria and Serbia.



**I. ENTSO-E 2009**

**II. ENTSO-E Regional Group**

**Continental Europe (RG CE)**

**III. Glossary of terms**



## Glossary of statistical terms

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The Glossary of statistical terms contains all terms used in this Statistical Yearbook. The corresponding explanations are available on the ENTSO-E internet site [www.entsoe.eu](http://www.entsoe.eu) under "Resources / Data Portal / Statistical Glossary".

Term	Definition
Alternating Current ( AC )	An electric current that reverses its direction at regularly intervals.
Circuit length	The circuit length of an electrical line or cable is the actual length of each of its conductors or the mean of the lengths of the conductors, if there is any appreciable difference in their lengths.
Classification of Power units	<p>According to the category of Primary Energy and fuel used for electricity generation, the ENTSO-E statistics considers the following classification in its publications:</p> <ul style="list-style-type: none"> <li>• Hydro</li> <li>• Nuclear</li> <li>• Thermal Conventional</li> <li>• Other Renewable (...of which wind)</li> <li>• Not clearly identifiable</li> </ul> <p>In some publications, thermal conventional is also split into lignite, hard coal, gas, oil and mixed fuels and non attributable fuels.</p>
Consumption	See Load and relations to consumption in the following document: <a href="http://www.entsoe.eu/resources/data_portal/consumption_data/Load_and_Consumption_Data.pdf">www.entsoe.eu/resources/data_portal/consumption_data/Load_and_Consumption_Data.pdf</a>
Consumption of Pumps	The electrical energy absorbed by the motor pumps in raising the water into the upper reservoir for the generation of electrical energy. It should include the electrical energy consumed by the auxiliary equipment and transformer losses during pumping. See also Pumped Storage.
Control Area	It is a coherent part of the ENTSO-E interconnected system (usually coinciding with the territory of a company, a country or a geographical area, physically demarcated by the position of points or measurement of the interchanged power and energy to the remaining interconnected network), operated by a single TSO, with physical loads and controllable generation units connected within the Control Area. A Control Area a control block that has its own subordinate control in the may be a coherent part of hierarchy of secondary control (see also the Glossary in the Operation Handbook).
Conventional Transmission Capacity	A theoretical value based on parameters standardised within ENTSO-E (Continental Europe) for calculation of the thermal load capacity of each tie line. These are: ambient temperature of + 35°C, wind velocity of 0,56 m/s at a right angle to the line, as well as the voltage of the line.
Cross frontier line	See Tie line.
Direct Current ( DC )	Direct current or DC electricity is the continuous movement of electrons from an area of negative (-) charges to an area of positive (+) charges through a conducting material.

## Glossary of statistical terms

Term	Definition
Electricity Balance ( Electricity Supply Situation )	Computes the consumption of electricity from the supply side (not metered in final consumer). In the ENTSO-E, it is presented as the sum of Net Production (split by Classification of Power Units) minus the Consumption of Pumps plus Exchange Balance. Due to fact that consumption is computed from the supply side, the electricity balance includes the distribution and Transmission Losses.
Energy Not Supplied ( ENS )	An estimation of the energy not supplied to final customers due to incidents in the transmission network.
Equivalent Time of Interruption	The duration of an interruption in minutes multiplied by the energy not supplied divided by the consumption for the last 12 months. This value allows a direct comparison of interruptions that occurred during a year.
Exchange Balance	The difference between the import and export physical flows on each interconnection line of a country.
Hydro	Electricity derived from the potential and kinetic energy content of water. It can be classified as: Storage Hydro, Run of River, Pure Pumped Storage and Mixed Pumped Storage.
Load	The hourly average active power absorbed by all installations connected to the transmission network or to the distribution network, excluding the pumps of the pumped-storage stations and the consumption of generating auxiliaries, but network losses are included.
Net Generating Capacity	<p>Net Generating Capacity of a power station is the maximum electrical net active power it can produce continuously throughout a long period of operation in normal conditions, where:</p> <ul style="list-style-type: none"> <li>• "net" means the difference between, on the one hand, the gross generating capacity of the alternator(s) and, on the other hand, the auxiliary equipments' load and the losses in the main transformers of the power station;</li> <li>• for thermal plants "normal conditions" means average external conditions (weather, climate...) and full availability of fuels;</li> <li>• for hydro and wind units, "normal conditions" refer to the usual maximum availability of primary energies, i.e. optimum water or wind conditions.</li> </ul> <p>Net Generating Capacity of a country is the sum of the individual Net Generating Capacity of all power stations connected to either the transmission grid or to the distribution grid.</p>
Mixed Pumped Storage	Pumped Storage with a significant cumulative flow into the upper reservoir.
Net Generation ( Net Production )	It is the Gross Generation less the electrical energy absorbed by Generating Auxiliaries and the losses in the main generator transformers.
Network Reliability	Reliability is a general term encompassing all the measures of the ability of the system, generally given as numerical indices, to deliver electricity to all points of utilisation within acceptable standards and in the amounts desired. Network reliability (comprising generation and transmission facilities) can be described by two basic and functional attributes: Adequacy and Security.
Not Clearly Identifiable Sources	Not Clearly Identifiable Sources comprise Power Plants or Power Units, which, according to the primary energy used, cannot be categorised.

## Glossary of statistical terms

Term	Definition
Nuclear	Electricity generated by the use of thermal energy released from the fission of nuclear fuel in a reactor.
Other Renewable Energy Sources	In the ENTSO-E statistics, this category comprises all Renewable Energy Sources except total Hydro production.
Peak Load	The maximum hourly demand during a period of time: day, month or year. (Maximum Load)
Physical Energy Exchange	Physical Energy Flow: Physical Export, Physical Import: It represents the real movements of energy between neighbouring countries metered in cross-border tie lines in both directions, in the system and out of the system.
Power Produced in Parallel Operation	It is the sum of the net electrical power produced in power stations participating in synchronous operation. It takes into account the spinning reserve, but excludes units injecting into systems, which are coupled to the interconnected network only by an AC / DC-link, and those, which cannot be operated with 50 Hz. Since January 2007, these data are no longer collected.
Protection Device	Equipment applied to electric power systems to detect abnormal and intolerable conditions and to initiate corrective actions to ensure continuity of electric service, to limit injury to people and to limit damage to equipment. These devices include lightning arresters, surge protectors, fuses and relays with associated circuit breakers, reclosers and so forth.
Pumped Storage	A hydro unit in which water can be raised by means of pumps and stored, to be used later for the generation of electrical energy. It can be classified as: Pure Pumped Storage and Mixed Pumped Storage.
Pure Pumped Storage	Pumped Storage without a significant natural cumulative flow into the upper reservoir.
Reference points	The dates and times for which power data are collected. Reference points are characteristic enough of the entire period studied to limit the data to be collected to the data at the reference points.
Renewable Energy Sources (Renewables)	It means renewable non-fossil energy sources (wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases).
Representativity (National representativity Index)	This is a specific ENTSO-E term, which generally means that certain values might not cover the whole country. It is expressed as a percentage. There might be differences between the approaches of the ENTSO-E statistics and System Adequacy reports.
Run of River	A hydro unit at which the head installation uses the cumulative flow continuously and normally operates on base load.
Scheduled (Program, Declared) Energy	Scheduled (Program, Declared) Energy Flow : The program export (respectively import) of electricity in one member state on the basis of an underlying contractual take-up (program import (respectively export)) of electricity will arrangement to the effect that the simultaneous corresponding take place in another Member State or a third country.

## Glossary of statistical terms

Term	Definition
Storage Hydro	A hydro unit, at which the head installations store their cumulative flows wholly or partially in their retaining works (dam) in order to generate electricity later. Depending on the period required to fill a reservoir, storage hydro can be defined as follows: pondage (between 2 and 400 hours) and reservoir (>400 hours). These head installations are normally operated in such a way as to allow load following. By extension, when the operation of a head installation is directly related to that of a reservoir upstream and the intermediate inflows are negligible, these head installations must be considered to belong to the same category as the one who governs them.
Substation	Facility equipment that steps up or steps down the voltage in utility power lines. Voltage is stepped up where power is sent through long distance transmission lines, and stepped down where the power is to enter local distribution lines. They can be classified as normal outside substation, armoured substation and underground substation.
System Adequacy	System adequacy of a power system is a measure of the ability of a power system to supply the load in all the steady states in which the power system may exist considering standards conditions. System adequacy is analysed through Generation Adequacy and Transmission Adequacy (main focus on generation capacity and load and on simultaneous interconnection transmission capacity). Remark: The Operation Handbook currently contains a slightly different definition.
Thermal Conventional	Electricity generated by an electric power plant using mainly coal, petroleum (derivates) or gas as its primary source of energy. In ENTSO-E statistics, we use the term “conventional” for the production of electricity with a thermal process that is not generated using Nuclear or Renewable Energy Sources.
Tie Line	A transmission line connecting two countries.
Transit	An energy flow that occurs in a country, which is neither the source nor the sink of the energy flow. The energy flow arrives in the grid over one border and leaves the country over one or more borders
Transmission Losses	The difference between the fed-in (generation) and the delivery energy to distributors. Own needs for the operation of the grid are included.
Transmission System Operator ( TSO )	A company that is responsible for operating, maintaining and developing the transmission system for a control area and its interconnections.
Vertical Load	The total amount of power flows out of the transmission network into distribution and large customer networks.
Wind energy	Kinetic energy in wind used to generate electricity in wind turbines.





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