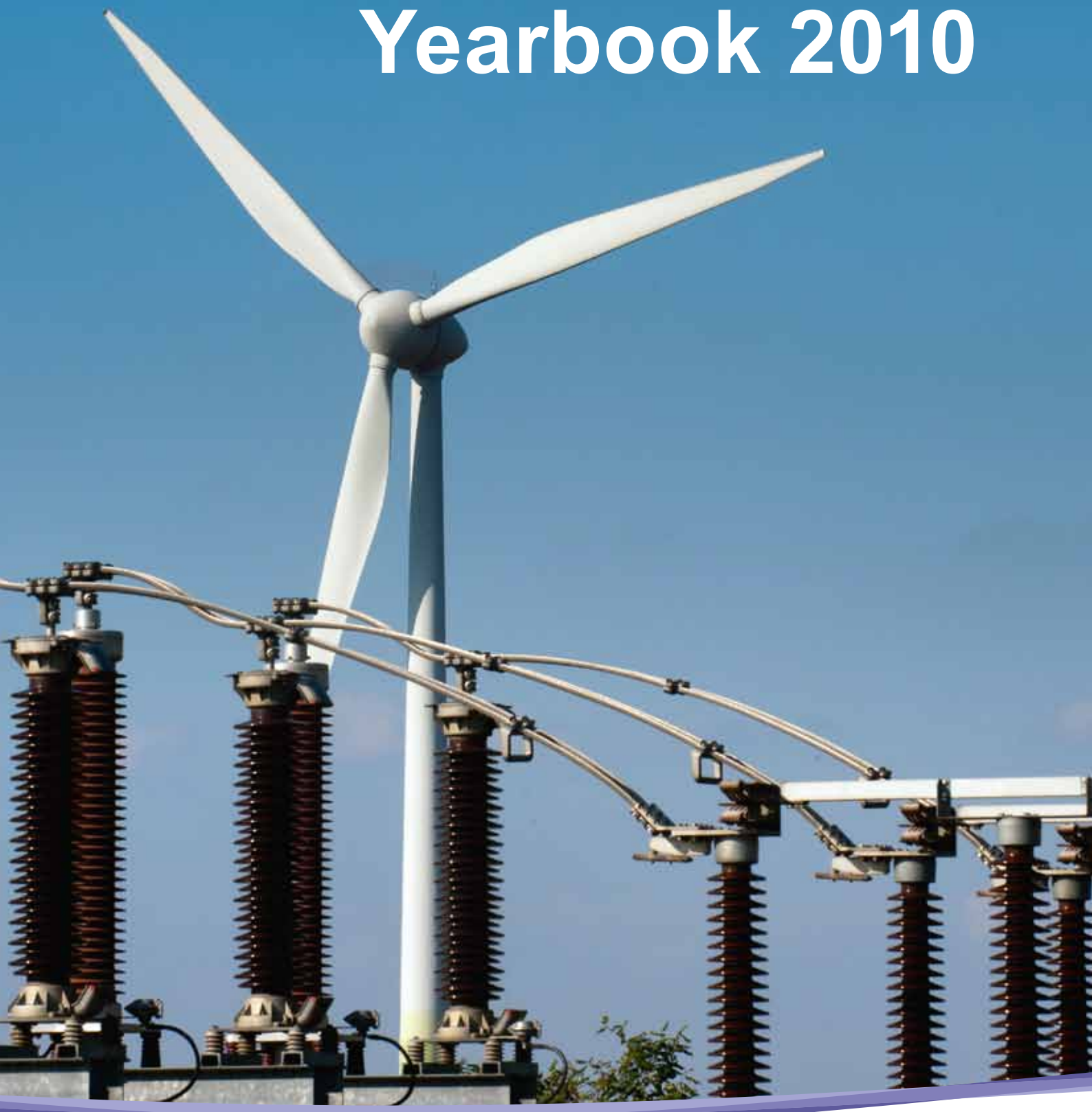
Statistical Yearbook 2010



European Network of
Transmission System Operators
for Electricity

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1. Introduction and common information

Background on the ENTSO-E Statistical Yearbook 2010

Although the Statistical Yearbook is a report with a long history, originally issued by former UCTE, the 2010 edition is the first issue, covering all 41 ENTSO-E members, across 34 countries.

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.

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

Throughout the years 2009, 2010 and 2011, the ENTSO-E Data Expert Group has been working intensively on consolidating the collection of statistical data from all member TSOs´countries.

This edition has been reorganized in order to help the readers to find data more easily. Links to the ENTSO-E statistical database have been also added and are available on www.entsoe.eu/resources/data portal.

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 41 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, Statistical 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 Statistical Data Correspondents of member TSOs' countries. 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 www.entsoe.eu.

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.

ENTSO-E member companies

Country	Company	Abbreviation
AT	Austrian Power Grid AG	APG
	VKW-Netz AG	VKW-Netz
BA	Nezavisni operator sustava u Bosni i Hercegovini	NOS BiH
BE	Elia system Operator SA	Elia
BG	Electroenergien Sistemen Operator EAD	ESO
CH	swissgrid	swissgrid ag
CY	Cyprus Transmission System Operator	Cyprus TSO
CZ	CEPS a.s.	CEPS
DE	EnBW Transportnetze AG	EnBW TNG
	TenneT TSO GmbH	TTG
	Amprion GmbH	Amprion
	50 Hertz Transmission GmbH	50 Hertz
DK	Energinet.dk	Energinet.dk
EE	Elering OÜ	Elering OÜ
		(since April 2011 Elering AS)
ES	Red Eléctrica de España S.A.	REE
FI	Fingrid Oyj	Fingrid
FR	Réseau de Transport d'Electricité	RTE
GB	National Grid Electricity Transmission plc	National Grid
	System Operation Northern Ireland Ltd	SONI **(NI)**
	Scottish and Southern Energy plc	SSE
	Scottish Power Transmission plc	SP Transmissionplc
GR	Hellenic Transmission System Operator S.A.	HTSO
HR	HEP-Operator prijenosnog sustava d.o.o.	HEP-OPS
HU	MAVIR Magyar Villamosenergia-ipari Átviteli Rends-	
	zerirányító Zártkörűen Működő Részvénytársaság	MAVIR ZRt.
IE	EirGrid plc	EirGrid
IS	Landsnet hf	Landsnet
IT	Terna - Rete Elettrica Nazionale SpA	Terna
LT	LITGRID AB	LITGRID AB
LU	Creos Luxembourg S.A.	Creos Luxembourg
LV	AS Augstsprieguma tĪkls	Augstsprieguma tĪkls
ME	Crnogorski elektroprenosni sistem AD	CGES AD
MK	Macedonian Transmission System Operator AD	MEPSO
NL	TenneT TSO B.V.	TenneT TSO
NO	Statnett SF	Statnett
PL	PSE Operator S.A.	PSE Operator
PT	Rede Eléctrica Nacional, S.A.	REN
RO	CN Transelectrica S.A.	Transelectrica
RS	JP Elektromreža Srbije	EMS
SE	Affärsverket Svenska Kraftnät	Svenska Kraftnät
SI	Elektro Slovenija d.o.o.	ELES
SK	Slovenska elektrizacna prenosova sustava, a.s.	SEPS

Statistical Data Correspondents

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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ENTSO-E Net generation, exchanges and consumption 2010

Overview ENTSO-E in figures 2010 - Electricity system data of member TSOs' countries

Countries		AT[1]	BA	BE[2]	BG	CH[3,4]	CY	CZ	DE[5]	DK	EE
Net generation "All values are calculated to represent 100% of the national values"											
Nuclear power	GWh	0	0	45729	14181	25205	0	26441	133373	0	0
Fossil fuels	GWh	24638	7684	35845	21084	2208	5202	48713	344278	26294	10465
Hydro power	GWh	36496	7870	1659	5431	37450	0	3380	21698	23	27
Other renewable net generation	GWh	n.a.	0	6631	331	1389	33	948	73801	10445	836
- of which wind	GWh	n.a.	0	1260	331	24	33	334	36665	7813	276
- of which solar	GWh	n.a.	0	237	0	0	0	604	10874	0	0
Non-identifiable	GWh	9551	0	0	0	0	0	0	0	0	0
Total net generation	**GWh**	**70685**	**15554**	**89864**	**41027**	**66252**	**5235**	**79482**	**573150**[6]	**36762**	**11328**
Consumption "All values are calculated to represent 100% of the national values"											
Consumption	**GWh**	**68324**	**11725**	**88619**	**31537**	**65709**	**5235**	**63736**	**547422**	**35640**	**8011**
Variation (compared with 2009)	%	4,1	6,6	5,7	-3,2	4,3	4,4	3,5	4,1	2,4	12,6
Transmision network losses percentage consumption	%										
Net generation capacity as of 31 December 2010 "All values are identical with the national values and their representativity"											
NGC Nuclear	MW	0	0	5945	2000	3220	0	3666	20300	0	0
NGC Fossil fuels	MW	7389	1506	8668	6451	355	1385	10892	69300	8867	2324
NGC Hydro power	MW	12665	1971	1421	3108	13464	0	2203	10700	9	4
NGC Renewable ernergy sources	MW	1031	0	2659	513	328	82	2177	47400	3802	156
- of which wind	MW	1002	0	888	488	12	82	218	26600	3802	156
- of which solar	MW	0	0	766	25	34	0	1959	16600	0	0
NGC Other sources	MW	0	0	0	0	212	0	0	4500	697	0
NGC Total	**MW**	**21085**	**3477**	**18693**	**12072**	**17579**	**1467**	**18938**	**152200**	**13375**	**2484**
Representativity of the values	%	100	100	100	99	100	100	100	100	100	100

Countries		PL[9,10]	PT	RO	RS	SE	SI	SK	ENTSO-E	UA_W[11]
Net generation "All values are calculated to represent 100% of the national values"										
Nuclear power	GWh	0	0	10686	0	55626	5377	13577	**896054**	0
Fossil fuels	GWh	140270	22315	25284	28508	7803	4794	5620	**1660307**	5358
Hydro power	GWh	3405	16247	20174	12453	66215	4249	5525	**585015**	152
Other renewable net generation	GWh	2108	11530	402	0	15386	0	476	**255236**	0
- of which wind	GWh	1843	9023	290	0	3479	0	7	**141496**	0
- of which solar		0	207	0	0	0	0	9	**21220**	0
Non-identifiable	GWh	0	0	0	0	0	0	930	**11818**	0
Total net generation	**GWh**	**145783**	**50092**	**56546**	**40961**	**145030**	**14420**	**26128**	**3408428**	**5510**
Consumption "All values are calculated to represent 100% of the national values"										
Consumption	**GWh**	**143591**	**52206**	**53362**	**39525**	**147090**	**12248**	**26641**	**3380485**	**4352**
Variation (compared with 2009)	%	4,9	1,6	5,4	-3,3	6,3	8,0	4,7	**4,4**	9,8
Transmision network losses percentage consumption	%								**1,5**	
Net generation capacity as of 31 December 2010 "All values are identical with the national values and their representativity"										
NGC Nuclear	MW	0	0	1300	0	9151	696	1820	**134379**	0
NGC Fossil fuels	MW	29612	8547	9166	5475	5035	1282	2614	**451988**	2225
NGC Hydro power	MW	2331	4988	6087	2884	16200	1063	2478	**197270**	27
NGC Renewable ernergy sources	MW	1366	4370	501	0	5315	0	143	**125417**	0
- of which wind	MW	1274	3705	479	0	2163	0	3	**81143**	0
- of which solar	MW	0	122	0	0	0	0	82	**28172**	0
NGC Other sources	MW	0	0	0	0	0	0	725	**6576**	0
NGC Total	**MW**	**33309**	**17905**	**17054**	**8359**	**35701**	**3041**	**7780**	**915630**	**2252**
Representativity of the values	%	100	97	100	100	100	100	100		100

ES	FI	FR	GB	GR	HR	HU	IE	IS [7]	IT	LT	LU	LV	ME	MK	NI [8]	NL	NO
59310	21884	407877	58203	0	0	14830	0	0	0	0	0	0	0	0	0	3755	0
117579	30961	59453	261758	37920	4801	16503	23025	12	220938	3690	2879	2847	1267	4282	6581	99539	5267
44617	12765	67995	5794	7457	8313	181	726	12484	53798	1281	1458	3496	2738	2316	8	0	117286
57955	10646	14984	6814	2503	135	2267	2820	4183	15970	357	178	101	0	0	724	10391	892
43357	293	9603	6523	2062	117	503	2820	0	9047	223	55	47	0	0	666	3995	808
6718	0	562	0	133	1	0	0	0	1875	0	0	0	0	0	0	0	0
364	711	0	0	0	2	0	248	0	0	0	0	0	0	0	12	0	0
279825	**76967**	**550309**	**332569**	**47880**	**13251**	**33781**	**26819**	**16679**	**290706**	**5328**	**4515**	**6444**	**4005**	**6598**	**7325**	**113685**	**123445**
267034	**87467**	**513292**	**335709**	**53551**	**17594**	**38976**	**27001**	**16679**	**330455**	**10276**	**6690**	**7316**	**4044**	**8328**	**9180**	**116460**	**129792**
3,1	7,6	5,5	6,7	0,1	0,5	2,5	2,9	2,3	3,2	7,6	8,0	4,1	11,0	6,8	4,1	3,1	6,7
7525	2646	63130	10608	0	0	1892	0	0	0	0	0	0	0	0	0	480	0
44753	9004	27403	62535	9396	1781	6181	6219	121	74976	2539	509	848	210	1157	2317	22005	1166
19040	3133	25418	3887	3215	2113	50	508	1883	21521	875	1128	1555	660	503	4	37	30164
24860	2254	7559	2630	1322	116	630	1538	575	9992	193	95	59	0	0	358	2943	450
19821	197	5603	2630	1039	79	240	1538	0	5814	161	43	37	0	0	346	2273	450
4104	0	762	0	153	0	0	0	0	3470	0	27	0	0	0	0	68	0
131	44	0	45	0	0	0	208	0	0	0	0	0	0	0	14	0	0
96309	**17081**	**123510**	**79705**	**13933**	**4010**	**8753**	**8473**	**2579**	**106489**	**3607**	**1732**	**2462**	**870**	**1660**	**2693**	**25465**	**31780**
100	100	100	89	100	100	100	100	100	100	99	100	100	100	100	100	100	100

1 Other renewable net generation is included in non-identifiable net generation.

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

3 Calculations of net generation and consumption based on the ENTSO-E database differ from the official values from the Swiss Federal Office of Energy.

4 NGC values as of 31 December 2009

5 Common, public supply

6 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 545,077 TWh.

7 Other renewable net production = geothermal

8 9 Generating Units (1805MW) are capable of running on mixed fuels - The data has identified which fuel type these have been run on and been added into the appropriate fuel typ.

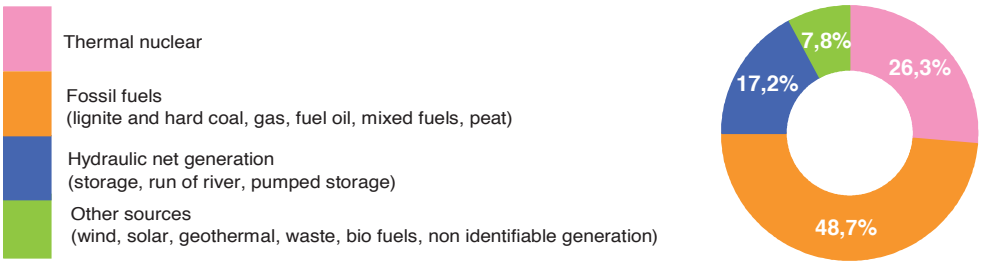
9 Operational data

10 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.

11 UA_W represents the so-called Burshtyn Island synchronously interconnected with ENTSO-E area.

Net electricity generation[1] and its structure

Overview generation mix in ENTSO-E member TSOs' countries

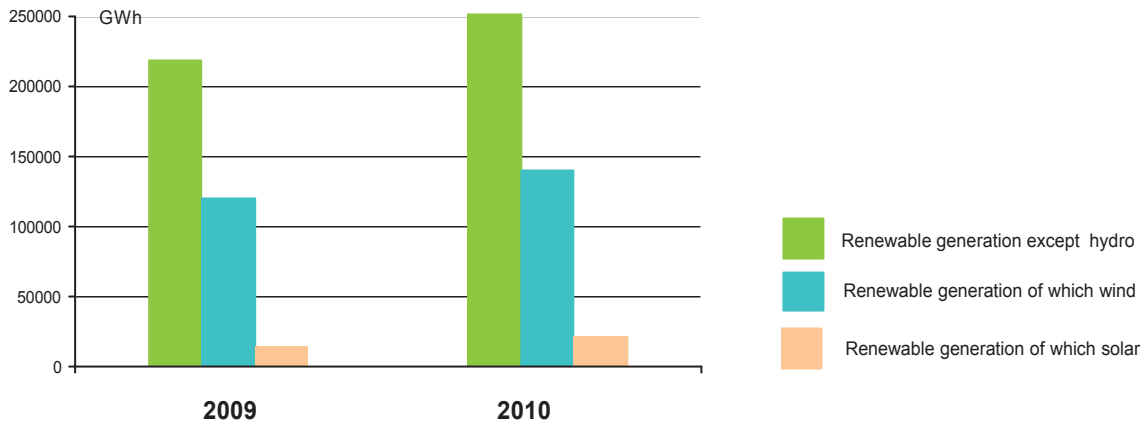


Country	Nuclear thermal		Fossil fuels		Hydro power		Other renewable		of which wind	of which solar	Non-identifiable		Total	
	TWh	%	TWh	%	TWh	%	TWh	%	TWh	TWh	TWh	%	TWh	
AT [3]	0	0	24,6	34,9	36,5	51,6	n.a.	n.a.	n.a.	n.a.	9,6	13,5	**69,0**	
BA	0	0	7,7	49,4	7,9	50,6	0	0	0	0	0	0	**15,6**	
BE [4]	45,7	50,9	35,8	39,9	1,7	1,8	6,6	7,3	1,3	0,2	0	0	**89,7**	[2]
BG	14,2	34,6	21,1	51,4	5,4	13,2	0,3	0,8	0,3	0	0	0	**41,0**	
CH	25,2	38,0	2,2	3,3	37,4	56,5	1,3	2,1	0,02	0	0	0	**66,2**	[2]
CY	0	0	5,2	99,4	0	0	0,1	0,3	0	0	0	0	**5,2**	
CZ	26,4	33,3	48,7	61,3	3,4	4,2	1,0	1,2	0,3	0,6	0	0	**79,5**	[2]
DE [5]	133,4	23,3	344,3	60,1	21,7	3,8	73,8	12,9	36,7	10,9	0	0	**573,2**	[2,6]
DK	0	0	26,3	71,5	0,02	0,1	10,4	28,4	7,8	0	0	0	**36,8**	[2]
EE	0	0	10,5	92,4	0,03	0,2	0,8	7,4	0,3	0	0	0	**11,3**	
ES	59,3	21,2	117,6	42,1	44,4	15,9	58,0	20,7	43,4	6,7	0,4	0,1	**279,8**	
FI	21,9	28,4	31,0	40,2	12,8	16,6	10,6	13,8	0,3	0	0,7	1,0	**77,0**	
FR	407,9	74,1	59,4	10,8	68,0	12,4	15,0	2,7	9,6	0,6	0	0	**550,3**	
GB	58,2	17,5	261,8	78,7	5,8	1,7	6,8	2,1	6,5	0	0	0	**332,6**	
GR	0	0	37,9	79,2	7,4	15,6	2,5	5,2	2,0	0,1	0	0	**47,9**	[2]
HR	0	0	4,8	36,2	8,3	62,7	0,1	1,0	0,01	1,0	2	0,02	**13,2**	
HU	14,8	43,9	16,5	48,9	0,2	0,5	2,3	6,7	0,5	0	0	0	**33,8**	
IE	0	0	23,0	85,8	0,7	2,7	2,8	10,5	2,8	0	0,3	1,0	**26,8**	[2]
IS	0	0	0,01	0,1	12,5	74,8	4,2	25,1	0	0	0	0	**16,7**	
IT	0	0	220,9	76,0	53,9	18,5	16,0	5,5	9,1	1,9	0	0	**209,7**	
LT	0	0	3,7	69,2	1,3	24,0	0,4	6,7	0,2	0	0	0	**5,3**	[2]
LU	0	0	2,9	63,8	1,5	32,3	0,2	3,9	0,1	0	0	0	**4,5**	
LV	0	0	2,8	44,2	3,5	54,2	0,1	1,6	0,05	0	0	0	**6,4**	
ME	0	0	1,3	31,6	2,7	68,4	0	0	0	0	0	0	**4,0**	
MK	0	0	4,2	64,9	2,3	35,1	0	0	0	0	0	0	**6,6**	
NI	0	0	6,6	89,8	0,01	1,0	0,7	9,9	0,7	0	0,01	0,2	**7,3**	
NL	3,8	3,3	99,5	87,6	0	0	10,4	9,1	4,0	0	0	0	**113,7**	
NO	0	0	5,3	4,3	117,3	95,0	0,9	0,7	0,8	0	0	0	**123,4**	[2]
PL [7]	0	0	140,3	96,2	3,4	2,3	2,1	1,4	1,8	0	0	0	**145,8**	[2]
PT	0	0	22,3	44,6	16,2	32,4	11,5	23,0	9,0	0,2	0	0	**51,7**	[2]
RO	10,6	18,9	25,3	44,7	20,2	35,7	0,4	0,7	0,3	0	0	0	**56,6**	
RS	0	0	28,5	69,6	12,4	30,4	0	0	0	0	0	0	**41,0**	
SE	55,6	38,4	7,8	5,4	66,2	45,7	15,4	10,6	3,5	0	0	0	**145,3**	[2]
SI	5,4	37,3	4,8	33,2	4,2	29,5	0	0	0	0	0	0	**14,4**	
SK	13,6	52,0	5,6	21,5	5,5	21,1	0,5	1,8	0,01	0,01	0,9	3,6	**26,1**	[2]
Sum [8]	**896,0**	**26,3**	**1660,3**	**48,7**	**585,0**	**17,2**	**255,2**	**7,4**	**141,5**	**21,2**	**11,8**	**0,4**	**3408,4**	[2]
UA_W	0	0	5,4	97,2	0,1	2,8	0	0	0	0	0	0	**5,5**	

[1] All net generation values are calculated to represent 100% of the national values.
[2] Including deliveries from industry.
[3] Other renewable net generation is included in non-identifiable net generation.
[4] The reported figures are best estimates based on actual measurements and extrapolations.
[5] 100% available as of 12 monthly values.
[6] 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 545,077 TWh.
[7] Operational data
[8] ENTSO-E calculated sum of the member TSOs´ countries

Other renewable generation [1] including wind and solar power 2009 and 2010

Renewable generation except hydro of which wind and of which solar in ENTSO-E member TSOs' countries [1]

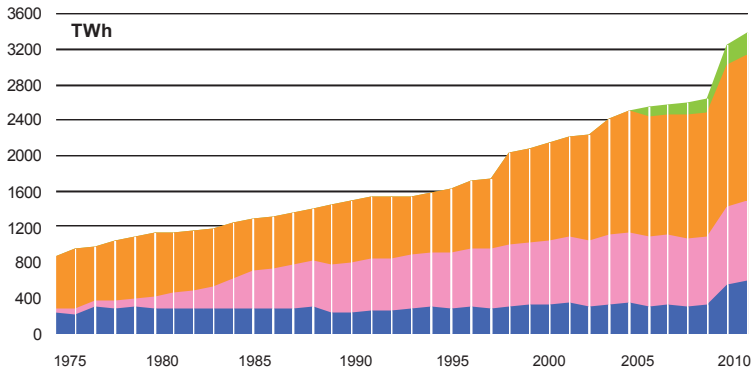


month	other renew [2]	of which wind [2]	of which solar [2]	other renew	of which wind	of which solar
	2009 GWh	2009 GWh	2009 GWh	2010 GWh	2010 GWh	2010 GWh
January				21286	12406	583
February				21616	13067	842
March				24143	14365	1491
April				19362	9655	2051
May				20500	10596	2261
June				17241	7911	2431
July				18548	8557	3005
August				19402	9327	2640
September				19425	10282	2193
October				24338	14563	1900
November				24715	15483	1040
December				24660	15284	783
Sum 2009	**219566**	**121763**	**14921**	**Sum 2010**	**255236**	**141496**	**21200**

[1] All values are calculated to represent 100% of the national values.
Calculation based on the ENTSO-E statistical database.

[2] Monthly data of the year 2009 of all member TSOs' countries are not available.
The monthly statistical data collection is entered from January 2010 on.

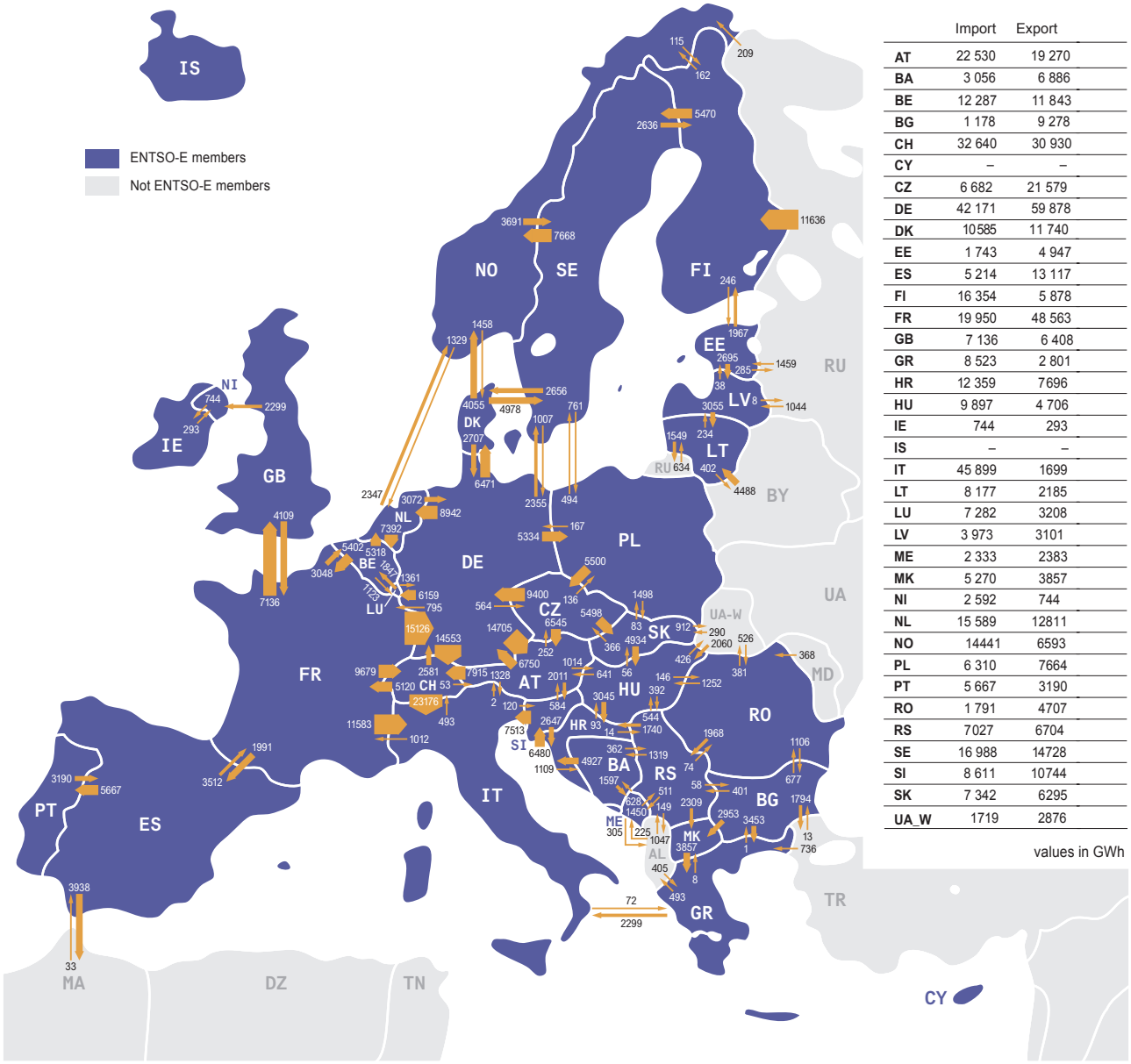
Development of net electricity generation [1]



Year	Hydro power TWh	Thermal nuclear TWh	Fossil fuels TWh	Other sources [2] TWh	Total 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 [3]	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 [4]	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 [5]	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 [6]	294,2	759,4	1402,3	143,3	2607,1
2008	306,5	774,8	1384,1	170,0	2643,8
2009 [7]	540,2	877,0	1595,1	223,8	3236,2
2010	585,0	896,0	1660,3	267,0	3408,4

[1] Values of detailed generation are national values; total net generation data are calculated to represent 100% of the national values.
[2] 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").
[3] As of September 1995 total German values
[4] Including values of CZ, HU, PL, SK as of 1998
[5] Including values of RO, BG as of 2003
[6] Including values of DK_W as of June 2007
[7] All yearly data from 1975 to 2008 are statistical data from the Regional Group Continental Europe (former UCTE). From year 2009 on calculated statistical data of ENTSO-E.

Physical energy flows 2010 - Graphical overview in GWh



Consolidated physical import and export in GWh[1]

	Import	Export
AT	22 530	19 270
BA	3 056	6 886
BE	12 287	11 843
BG	1 178	9 278
CH	32 640	30 930
CY	–	–
CZ	6 682	21 579
DE	42 171	59 878
DK	10585	11 740
EE	1 743	4 947
ES	5 214	13 117
FI	16 354	5 878
FR	19 950	48 563
GB	7 136	6 408
GR	8 523	2 801
HR	12 359	7696
HU	9 897	4 706
IE	744	293
IS	–	–
IT	45 899	1699
LT	8 177	2185
LU	7 282	3208
LV	3 973	3101
ME	2 333	2383
MK	5 270	3857
NI	2 592	744
NL	15 589	12811
NO	14441	6593
PL	6 310	7664
PT	5 667	3190
RO	1 791	4707
RS	7027	6704
SE	16 988	14728
SI	8 611	10744
SK	7 342	6295
UA_W	1719	2876

values in GWh

Sum of physical energy flows between ENTSO-E countries = 347172 GWh [2]

Total physical energy flows = 381594 GWh [2]

[1] 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.
[2] Calculation based on the detailed physical energy flows in the table on page 16

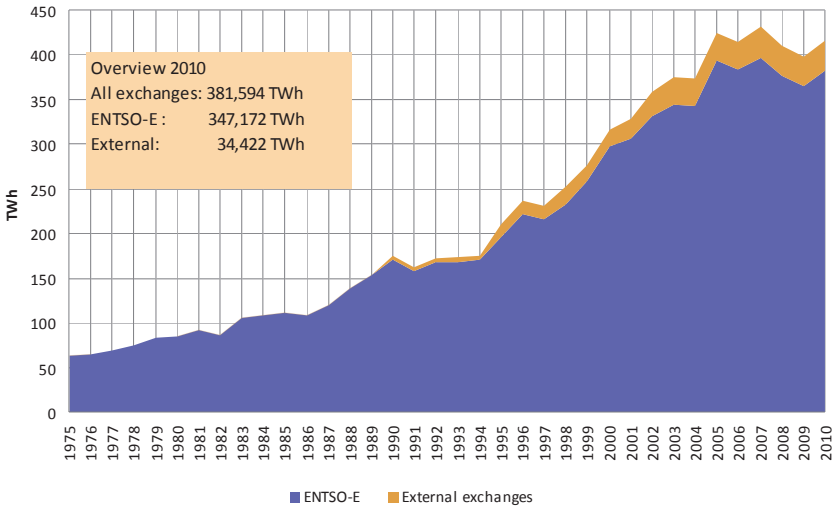
Exporting countries	Importing countries																																				
	AT	BA	BE	BG	CH	CZ	DE	DK	EE	ES	FI	FR	GB	GR	HR	HU	IE	IT	LT	LU	LV	ME	MK	NI	NL	NO	PL	PT	RO	RS	SE	SI	SK	UA_W	AL [2]	BY [2]	MA [2]	MD [2]	RU [2]	TR [2]	UA [2]
AT	-	-	-	-	7915	252	6750	-	-	-	-	-	-	-	-	1014	-	1328	-	-	-	-	-	-	-	-	-	-	-	-	2011	-	-	-	-	-	-	-	-	-	-
BA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4927	-	-	-	-	-	-	1597	-	-	-	-	-	-	-	362	-	-	-	-	-	-	-	-	-	-
BE	-	-	-	-	-	-	-	-	-	-	-	5402	-	-	-	-	-	-	-	1123	-	-	-	-	5318	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BG	-	-	-	-	-	-	-	-	-	-	-	-	-	3453	-	-	-	-	-	-	-	-	2953	-	-	-	-	-	677	1794	-	-	-	-	-	-	-	-	401	-
CH	53	-	-	-	-	-	2581	-	-	-	-	5120	-	-	-	-	-	23176	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CZ	6545	-	-	-	-	-	9400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	136	-	-	-	-	5498	-	-	-	-	-	-	-	-
DE	14705	-	-	-	14553	564	-	6471	-	-	-	795	-	-	-	-	-	-	-	6159	-	-	-	-	8942	-	5334	-	-	-	2355	-	-	-	-	-	-	-	-	-
DK	-	-	-	-	-	-	2707	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4055	-	-	-	4978	-	-	-	-	-	-	-	-	-	-
EE	-	-	-	-	-	-	-	-	-	-	1967	-	-	-	-	-	-	-	-	-	2695	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	285	-	-
ES	-	-	-	-	-	-	-	-	-	-	-	3512	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5667	-	-	-	-	-	-	-	3938	-	-	-	-
FI	-	-	-	-	-	-	-	-	246	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	162	-	-	-	5470	-	-	-	-	-	-	-	0	-	-
FR	-	-	3048	-	9679	-	15126	-	-	1991	-	-	7136	-	-	-	-	11583	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GB	-	-	-	-	-	-	-	-	-	-	-	4109	-	-	-	-	-	-	-	-	-	-	-	2299	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GR	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2299	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	493	-	-	-	-	0	-
HR	-	1109	-	-	-	-	-	-	-	-	-	-	-	-	-	93	-	-	-	-	-	-	-	-	-	-	-	-	-	14	-	6480	-	-	-	-	-	-	-	-
HU	641	-	-	-	-	-	-	-	-	-	-	-	-	-	3045	-	-	-	-	-	-	-	-	-	-	-	-	-	146	392	-	-	56	426	-	-	-	-	-	-
IE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	293	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IT	2	-	-	-	493	-	-	-	-	-	-	1012	-	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	-	-	-	-	-	-	-	-	-
LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	234	-	-	-	-	-	-	-	-	-	-	-	-	-	402	-	-	1549	-	-
LU	-	-	1847	-	-	-	1361	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LV	-	-	-	-	-	-	-	-	38	-	-	-	-	-	-	-	-	-	3055	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-
ME	-	628	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1450	-	-	-	305	-	-	-	-	-	-
MK	-	-	-	0	-	-	-	-	-	-	-	-	-	3857	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-
NI	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	744	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NL	-	-	7392	-	-	-	3072	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2347	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NO	-	-	-	-	-	-	-	1458	-	-	115	-	-	-	-	-	-	-	-	-	-	-	-	-	1329	-	-	-	-	3691	-	-	-	-	-	-	-	0	-	-
PL	-	-	-	-	-	5500	167	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	494	-	1498	-	-	0	-	-	-	-	0
PT	-	-	-	-	-	-	-	-	-	3190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RO	-	-	-	1106	-	-	-	-	-	-	-	-	-	-	-	1252	-	-	-	-	-	-	-	-	-	-	-	-	-	1968	-	-	381	-	-	-	-	0	-	-
RS	-	1319	-	58	-	-	-	-	-	-	-	-	-	-	1740	544	-	-	-	-	-	511	2309	-	-	-	-	-	74	-	-	-	-	149	-	-	-	-	-	-
SE	-	-	-	-	-	-	1007	2656	-	-	2636	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7668	761	-	-	-	-	-	-	-	-	-	-	-	-	-
SI	584	-	-	-	-	-	-	-	-	-	-	-	-	-	2647	-	-	7513	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SK	-	-	-	-	-	366	-	-	-	-	-	-	-	-	-	4934	-	-	-	-	-	-	-	-	-	-	83	-	-	-	-	-	912	-	-	-	-	-	-	-
UA_W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2060	-	-	-	-	-	-	-	-	-	-	-	-	526	-	-	290	-	-	-	-	-	-	-	-
AL [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	405	-	-	-	-	-	-	-	225	-	-	-	-	-	-	-	1047	-	-	-	-	-	-	-	-	-	-
BY [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4488	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MA [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	368	-	-	-	-	-	-	-	-	-	-	-
RU [2]	-	-	-	-	-	-	-	-	1459	-	11636	-	-	-	-	-	-	-	634	-	1044	-	-	-	-	209	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TR [2]	-	-	-	13	-	-	-	-	-	-	-	-	-	736	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UA [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-

[1] Detailed harmonized values from the ENTSO-E statistical database.

[2] In synchroneous operation with ENTSO-E countries (not ENTSO-E members):
Albania (AL), Belarus (BY), Morocco (MA), Republic of Moldavia (MD), Russia (RU), Republic of Turkey (TR), Ukraine (UA)

Development of physical exchanges on tie lines

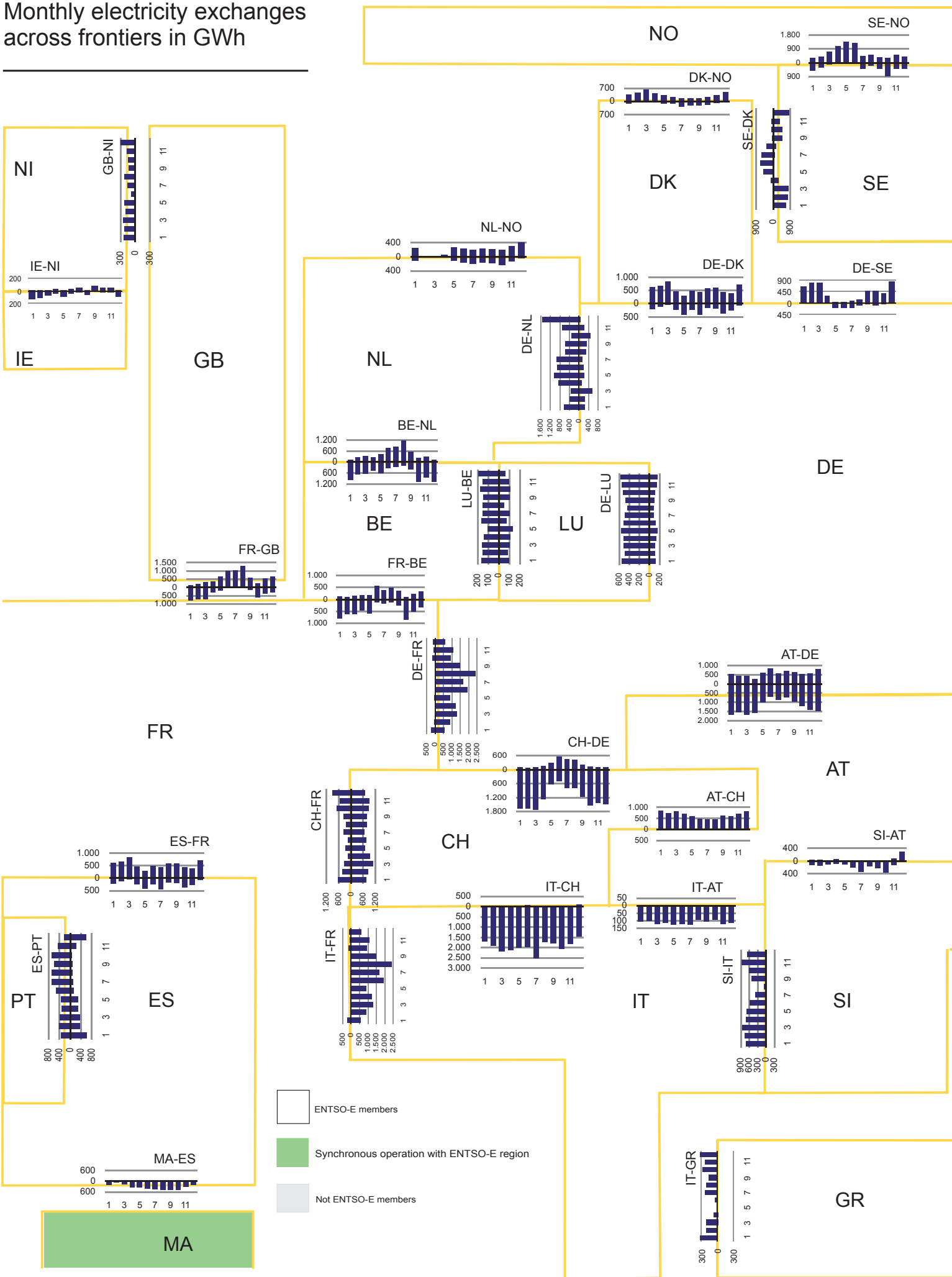
Development of overall cross-border border exchanges of ENTSO-E member TSOs' countries since 1975



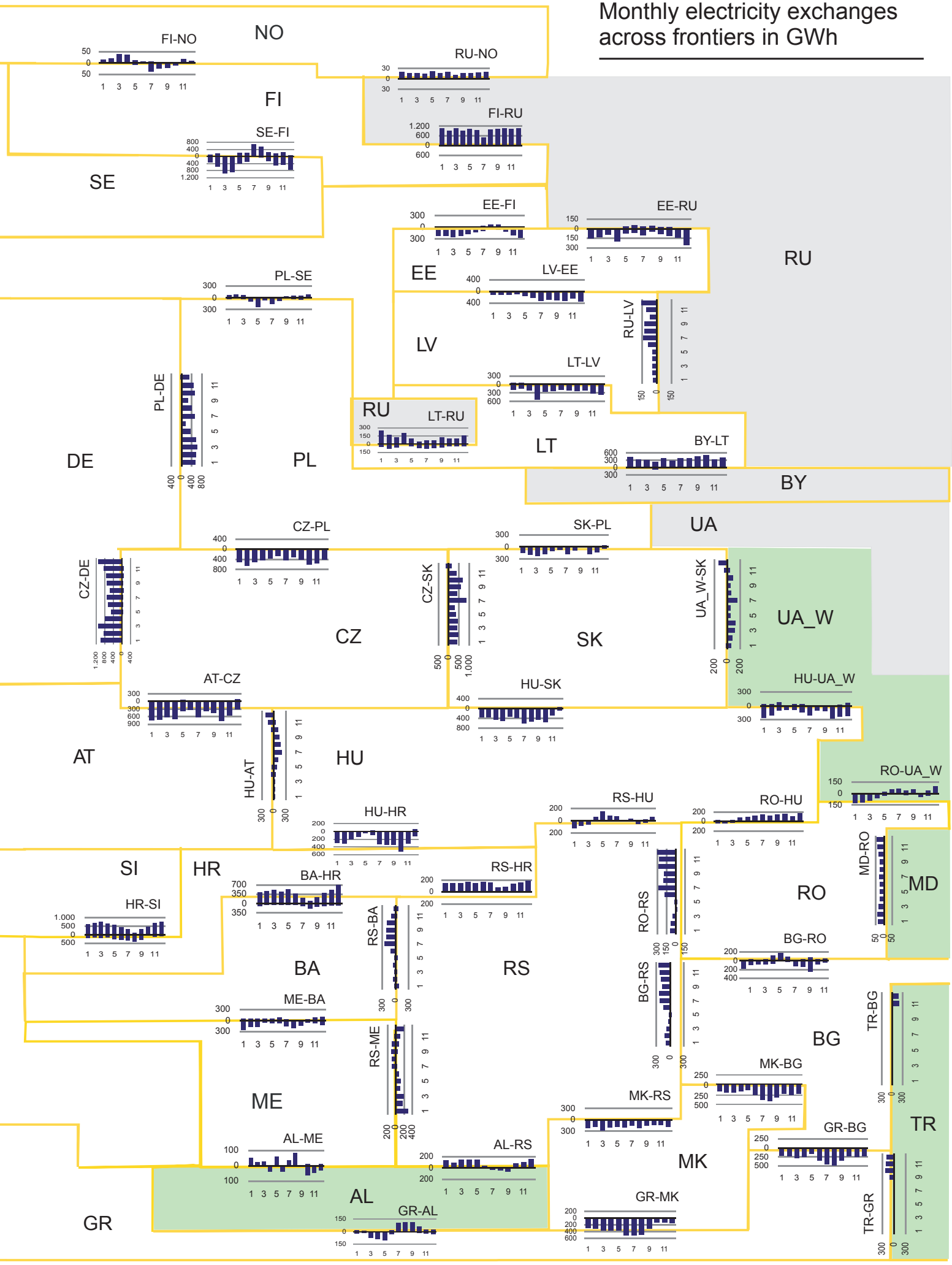
Year	Sum of total electricity exchanges	External exchanges
	TWh	TWh
1975	62,8	0,0
1976	65,4	0,0
1977	68,8	0,0
1978	74,3	0,0
1979	82,7	0,0
1980	84,1	0,0
1981	91,6	0,0
1982	85,7	0,0
1983	105,9	0,0
1984	108,9	0,0
1985	111,2	0,0
1986	108,8	0,0
1987	119,3	0,0
1988	138,6	0,0
1989	154,2	0,0
1990 [1]	170,9	4,6
1991	157,8	5,1
1992	168,2	4,4
1993	168,3	4,7
1994	170,2	5,0
1995 [2,3]	195,4	14,9
1996	221,7	15,8
1997	215,6	15,7
1998	232,7	20,2
1999	257,6	19,4
2000	297,3	18,4
2001	306,0	22,6
2002	332,0	26,3
2003	344,1	31,1
2004	342,5	31,6
2005	393,1	31,5
2006	383,2	31,0
2007	395,9	35,5
2008	376,4	33,6
2009 [4]	364,7	33,8
2010	381,6	34,4

1 External exchanges of the Nordic countries are reliable since 1990
2 Reliable Baltic data is available since 1995
3 There were no exchanges between Republic of Ireland and Northern Ireland before 1995
4 External exchanges include Albania, Belarus, Moldavia, Morocco, Russia, Turkey and Ukraine-West since 2009

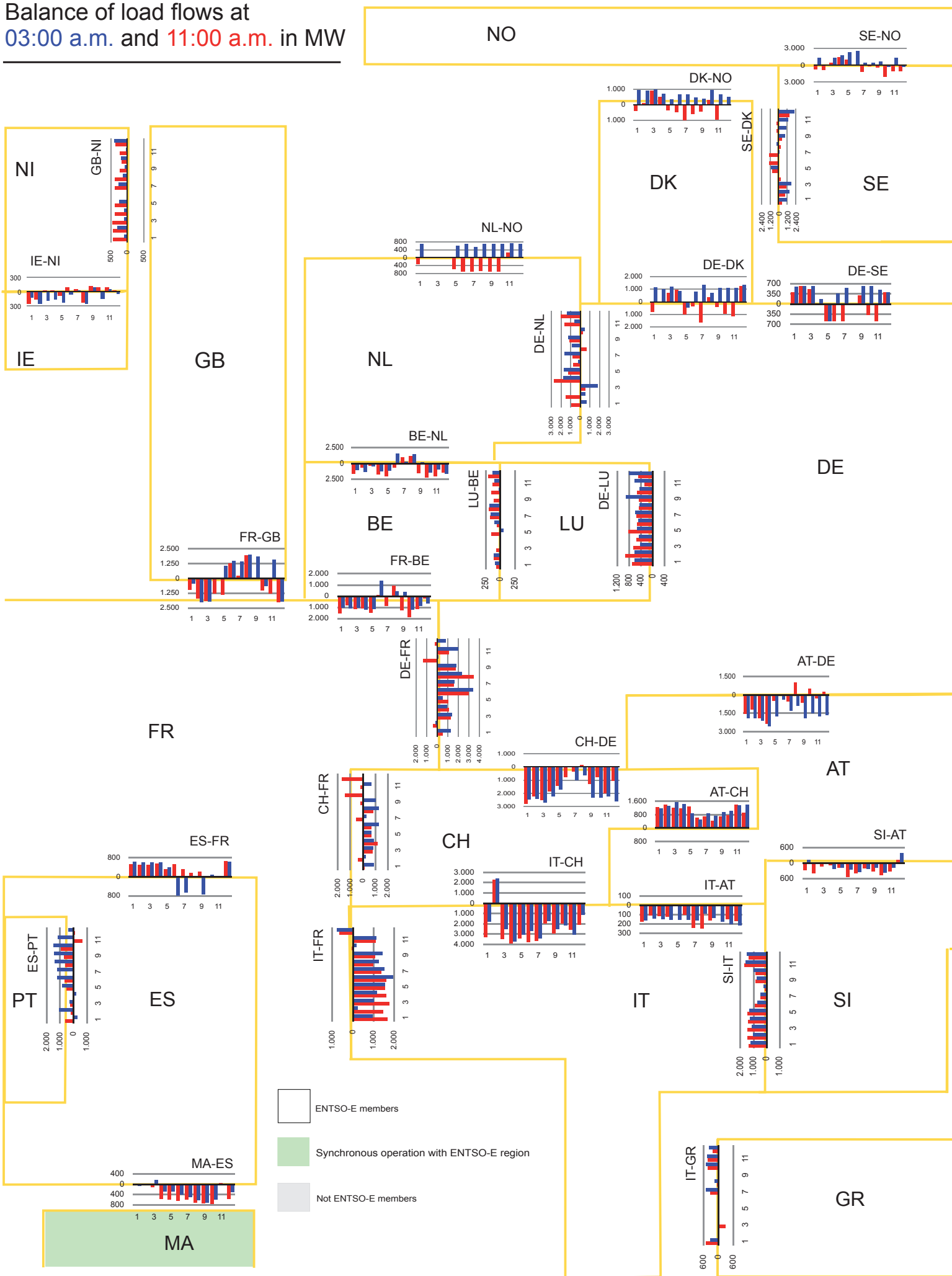
Monthly electricity exchanges across frontiers in GWh



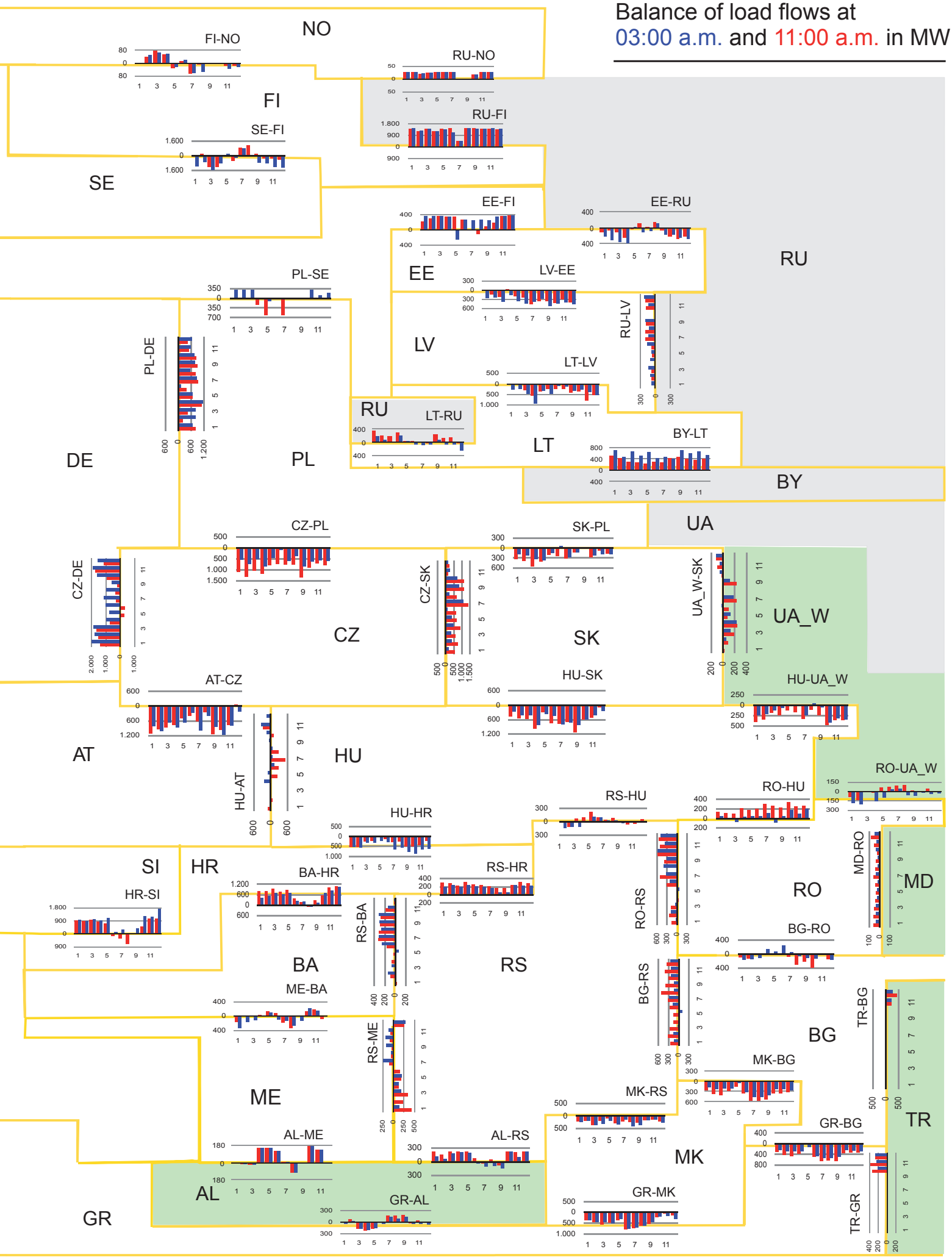
Monthly electricity exchanges across frontiers in GWh



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



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

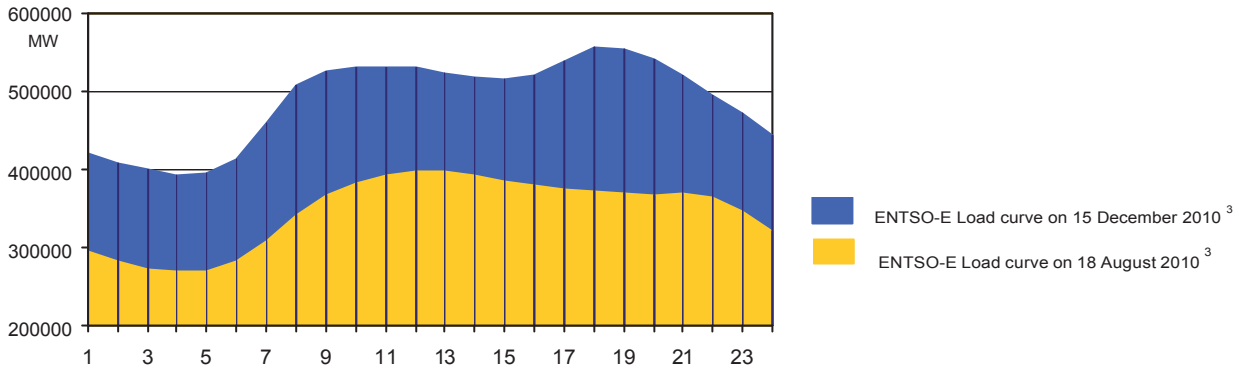


National annual maximum load in each country [1]

Country	Date	Day	Time	MW	Δ % [2]
AT [3]	15 December	Wednesday	05:00 p.m.	10755	n.a.
BA	31 December	Friday	05:30 p.m.	2173	7,0
BE	01 December	Wednesday	05:45 p.m.	14166	2,4
BG	26 January	Tuesday	06:30 p.m.	7270	1,1
CH	15 December	Wednesday	07:15 p.m.	10749	4,8
CY	03 August	Tuesday	01:15 p.m.	1148	3,9
CZ	27 January	Wednesday	05:00 p.m.	10384	1,2
DE	01 December	Wednesday	06:00 p.m.	79900	9,5
DK	01 December	Wednesday	06:00 p.m.	6348	1,0
EE	28 January	Thursday	04:45 p.m.	1587	4,6
ES	12 January	Tuesday	07:00 p.m.	44486	0,0
FI [4]	28 January	Thursday	07:00 a.m.	14588	3,2
FR	15 December	Wednesday	07:00 p.m.	96710	4,7
GB	07 December	Tuesday	06:30 p.m.	60100	1,6
GR [5]	15 July	Thursday	12:00 a.m.	9793	0,3
HR	16 December	Thursday	06:00 p.m.	3121	0,0
HU	01 December	Wednesday	04:45 p.m.	6064	1,1
IE	21 December	Tuesday	07:00 p.m.	5090	4,7
IS	21 December	Tuesday	09:00 p.m.	2010	- 4,3
IT	16 July	Friday	12:00 a.m.	56425	8,8
LT	22 December	Wednesday	04:00 p.m.	1707	0,4
LU	02 December	Thursday	07:00 p.m.	1107	6,7
LV	27 January	Wednesday	05:00 p.m.	1323	- 1,3
ME	17 December	Friday	06:00 p.m.	712	n.a.
MK	18 December	Saturday	03:00 p.m.	1627	1,1
NI [6]	22 December	Wednesday	07:00 p.m.	1777	7,1
NL	13 December	Monday	05:30 p.m.	17728	1,0
NO	06 January	Wednesday	08:00 a.m.	23994	9,0
PL [7]	26 January	Tuesday	05:30 p.m.	23583	3,2
PT	11 January	Monday	07:45 p.m.	9403	2,0
RO	13 December	Monday	05:00 p.m.	8464	2,6
RS	31 December	Friday	06:00 p.m.	7656	2,8
SE	22 December	Wednesday	05:30 p.m.	26690	6,8
SI	16 December	Thursday	06:00 p.m.	1970	1,8
SK	17 December	Friday	05:00 p.m.	4342	5,1
UA_W	16 December	Thursday	06:00 p.m.	1118	10,9

[1] The maximum load values of each country are specified in the System Adequacy Retrospect 2010 published on 30 June 2011 under www.entsoe.eu/resources/publications/system development.
[2] As compared to the last year.
[3] Peak load is not available. Therefore peak load at 3rd Wednesdays was taken.
[4] One hour average values
[5] There is a reduction up to 200 MW to the annual peak load.
[6] Extreme cold weather conditions experienced during November & December 2010.
[7] Measuring step: 15minutes

Highest and lowest load in each country on 3rd Wednesday in 2010



Highest load 3rd Wednesday of each country [1]

Lowest load 3rd Wednesday of each country [1]

Country	MW	Date	Time	MW	Date	Time
AT	10755	15 December	05:00 p.m.	5520	18 August	03:00 a.m.
BA	2051	15 December	06:00 p.m.	941	16 June	04:00 a.m.
BE [2]	13810	15 December	07:00 p.m.	6924	21 July	07:00 a.m.
BG	6640	15 December	07:00 p.m.	2868	19 May	05:00 a.m.
CH	10835	15 December	06:00 p.m.	5016	18 August	04:00 a.m.
CY	983	18 August	02:00 p.m.	337	21 April	04:00 a.m.
CZ	10307	15 December	05:00 p.m.	5361	21 July	04:00 a.m.
DE	83090	15 December	06:00 p.m.	47117	16 June	03:00 a.m.
DK	6312	15 December	06:00 p.m.	2556	21 July	05:00 a.m.
EE	1495	20 January	05:00 p.m.	490	21 July	04:00 a.m.
ES	42301	15 December	08:00 p.m.	18991	21 April	03:00 a.m.
FI	13923	15 December	04:00 p.m.	6970	21 July	04:00 a.m.
FR	96710	15 December	07:00 p.m.	36206	18 August	04:00 a.m.
GB	59008	15 December	07:00 p.m.	23081	15 September	05:00 a.m.
GR	9698	21 July	01:00 p.m.	3941	20 October	04:00 a.m.
HR	3116	15 December	07:00 p.m.	1289	19 May	04:00 a.m.
HU	5937	15 December	05:00 p.m.	3284	18 August	04:00 a.m.
IE	4664	15 December	07:00 p.m.	1850	18 August	05:00 a.m.
IS	2113	15 December	07:00 p.m.	1668	21 April	03:00 a.m.
IT	54927	15 December	06:00 p.m.	23288	18 August	05:00 a.m.
LT	1787	15 December	05:00 p.m.	751	16 June	04:00 a.m.
LU	1047	20 January	07:00 p.m.	545	18 August	04:00 a.m.
LV	1257	20 January	05:00 p.m.	455	16 June	04:00 a.m.
ME	589	20 January	07:00 p.m.	322	15 September	04:00 a.m.
MK	1535	15 December	06:00 p.m.	587	16 June	06:00 a.m.
NI	1684	15 December	07:00 p.m.	603	21 July	07:00 a.m.
NL	18187	15 December	06:00 p.m.	9125	16 June	05:00 a.m.
NO	21852	15 December	10:00 a.m.	8816	21 July	06:00 a.m.
PL	23081	15 December	05:00 p.m.	12043	16 June	05:00 a.m.
PT	8800	17 February	09:00 p.m.	4340	18 August	05:00 a.m.
RO	8313	15 December	06:00 p.m.	4768	15 September	03:00 a.m.
RS	7034	15 December	06:00 p.m.	2691	15 September	04:00 a.m.
SE	25807	15 December	06:00 p.m.	9172	21 July	04:00 a.m.
SI	1919	15 December	07:00 p.m.	1014	15 September	04:00 a.m.
SK	4326	15 December	05:00 p.m.	2491	18 August	03:00 a.m.
ENTSO-E [3]	**557280**	**15 December**	**06:00 p.m.**	**268918**	**18 August**	**04.00 a.m.**
UA_W	1087	15 December	06:00 p.m.	348	21 July	04:00 a.m.

[1] All values are calculated to represent 100% of the national values.
[2] The reported figures are best estimated based on actual measurements.
[3] Calculated load values as sum of the ENTSO-E member TSOs´ countries

Net generating capacity on 31 December 2009 and 2010 in MW

	NGC Nuclear		NGC Fossil fuels		NGC Hydro power		NGC Renewable		of which wind		of which solar		NGC Other resources		NGC Sum		Representativity [1]	
	MW		MW		MW		MW		MW		MW		MW		MW		%	
Country	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009
AT	0	0	7389	7250	12665	12469	1031	1014	1002	993	0	0	0	0	21085	20733	100	100
BA	0	0	1506	1957	1971	2064	0	0	0	0	0	0	0	0	3477	4021	100	100
BE	5945	5902	8668	8590	1421	1413	2659	1758	888	500	766	339	0	0	18693	17663	100	100
BG	2000	2000	6451	6523	3108	2993	513	361	488	360	25	1	0	0	12072	11877	99,8	99
CH [2]	3220	3220	355	355	13464	13464	328	328	12	12	34	34	212	212	17579	17579	100	100
CY	0	0	1385	1335	0	0	82	0	82	0	0	0	0	0	1467	1335	100	100
CZ	3666	3597	10892	10647	2203	2180	2177	658	218	193	1959	465	0	0	18938	17082	100	100
DE	20300	20300	69300	71300	10700	10400	47400	37500	26600	24900	16600	7900	4500	0	152200	139500	100	100
DK	0	0	8867	9159	9	9	3802	4151	3802	3482	0	0	697	44	13375	13363	100	100
EE	0	0	2324	2252	4	4	156	167	156	167	0	0	0	0	2484	2423	100	100
ES	7525	7465	44753	42603	19040	19032	24860	23329	19821	18879	4104	3550	131	131	96309	92560	100	100
FI	2646	2646	9004	8815	3133	3074	2254	2054	197	147	0	0	44	85	17081	16674	100	100
FR	63130	63130	27403	26158	25418	25341	7559	5606	5603	4396	762	185	0	0	123510	120235	100	100
GB	10608	10612	62535	59918	3887	4044	2630	1553	2630	1553	0	0	45	45	79705	76172	89	89
GR	0	0	9396	8284	3215	3200	1322	1144	1039	917	153	46	0	0	13933	12628	100	100
HR	0	0	1781	1810	2113	2086	116	107	79	70	0	0	0	0	4010	4003	100	100
HU	1892	1822	6181	6154	50	50	630	549	240	169	0	0	0	0	8753	8575	100	100
IE	0	0	6219	5461	508	512	1538	1260	1538	1260	0	0	208	186	8473	7419	100	100
IS	0	0	121	121	1883	1883	575	575	0	0	0	0	0	0	2579	2579	100	100
IT	0	0	74976	73360	21521	21371	9992	6716	5814	4879	3370	1142	0	0	106489	101447	100	100
LT	0	1183	2539	2539	875	850	193	89	161	89	0	0	0	62	3607	4723	99	98
LU	0	0	509	498	1128	1128	95	80	43	43	27	25	0	0	1732	1706	100	100
LV	0	0	848	867	1555	1543	59	41	37	0	0	0	0	0	2462	2451	100	100
ME	0	0	210	210	660	660	0	0	0	0	0	0	0	0	870	870	100	100
MK	0	0	1157	907	503	503	0	0	0	0	0	0	0	0	1660	1410	100	100
NI	0	0	2317	2286	4	4	358	320	346	310	0	0	14	12	2693	2622	100	100
NL	480	480	22005	22902	37	37	2943	3031	2273	2220	68	55	0	0	25465	26450	100	100
NO	0	0	1166	900	30164	29617	450	442	450	442	0	0	0	0	31780	30959	100	100
PL	0	0	29612	29728	2331	2327	1366	719	1274	649	0	0	0	0	33309	32774	100	100
PT	0	0	8547	7743	4988	4973	4370	3945	3705	3357	122	95	0	0	17905	16661	97	97
RO	1300	1300	9166	8773	6087	5904	501	22	479	14	0	0	0	0	17054	15999	100	100
RS	0	0	5475	5240	2884	2880	0	0	0	0	0	0	0	0	8359	8120	100	100
SE	9151	9342	5035	5502	16200	16203	5315	4666	2163	1560	0	0	0	0	35701	35713	100	100
SI	696	700	1282	1315	1063	879	0	0	0	0	0	0	0	0	3041	2894	100	100
SK	1820	1820	2614	2742	2478	2478	143	61	3	3	82	0	725	0	7780	7101	100	100
ENTSOE [3]	**134379**	**135519**	**451988**	**444204**	**197270**	**195575**	**125417**	**102246**	**81143**	**71397**	**28172**	**13837**	**6576**	**565**	**915630**	**878321**		
UA_W	0	0	2225	2225	27	27	0	0	0	0	0	0	0	0	2252	2252	100	100

[1] 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.).
[2] Year 2010 NGC capacity as of 31 December 2009
[3] Calculated sum of ENTSO-E member TSOs´countries

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	2010	6	810	3	696	0	0	9	1506	0	0
BE	2010	69	3159	12	3586	3	1380	84	8125	7	5945
BG	2010	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
CY	2010	28	1385	0	0	0	0	28	1385	0	0
CZ [1]	2010	n.a.	10661	0	0	1	460	n.a.	11121	6	3666 [2]
DE [2]	2000	403	23572	66	20178	47	27749	516	71499	17 [2]	20300
DK	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
EE	2010	19	2303	0	0	0	0	19	2303	0	0
ES	2010	191	5243	49	16816	37	20413	277	42472	8	7525
FI	2010	110	5500	10	2355	1	565	121	8420	4	2671
FR	2010	185	6454	20	4698	26	13090	231	24242	58	63130
GB	2010	51	2184	26	8405	89	51946	166	62535	22	10608
GR	2010	23	2585	19	5566	3	1244	45	9395	0	0
HR	2004	24	1137	2	508	0	0	26	1645	0	0
HU	2010	58	2966	13	2715	0	0	71	5681	4	1892
IE	2010	24	1771	8	2313	4	2135	36	6219	0	0
IS	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IT	2010	1488	18832	106	31630	38	22706	1632	73168	0	0
LT	2010	15	1387	4	1200	0	0	19	2587	0	0
LU	2010	0	0	1	385	0	0	1	385	0	0
LV	2010	8	540	1	291	0	0	9	831	0	0
ME	2007	1	190	0	0	0	0	1	190	0	0
MK	2010	2	301	4	856	0	0	6	1157	0	0
NI	2010	12	940	4	966	1	402	17	2308	0	0
NL	2010	123	4539	19	5623	19	10154	161	20316	1	480
NO [3]	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
PL	2010	n.a.	13014	60	14715	4	1883	n.a.	29612	0	0
PT	2010	49	1991	16	4888	4	1707	69	8586	0	0
RO	2010	82	5559	12	3366	0	0	94	8925	2	1300
RS	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
SE	2010	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	2010	39	2296	1	288	0	0	40	2584	4	1820
ENTSO-E [4]		**3094**	**123073**	**465**	**135091**	**278**	**156506**	**3772**	**414670**	**139**	**123253**
UA_W	2010	16	2347	0	0	0	0	16	2347	0	0

[1] Fossil fuels >= 5MW
[2] Reported year of thermal nuclear units 2010
[3] 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.
[4] Calculated sum except BG, DK, IS, NO, RS and SE

Inventory of hydro power units											
		1 MW ≤ x < 10 MW		10 MW ≤ x < 50 MW		50 MW ≤ x < 100 MW		≥ 100 MW		**Total**	
Country	**Reported year**	Number	MW	Number	MW	Number	MW	Number	MW	Number	MW
AT	2008	582	910	100	2496	19	1473	27	6918	728	11797
BA	2010	n.a.	n.a.	13	343	12	765	6	863	31	1971
BE	2010	28	97	4	144	0	0	6	1164	38	1405
BG	2010	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
CY	2010	0	0	0	0	0	0	0	0	0	0
CZ	2010	n.a.	280	10	239	6	484	6	1100	n.a.	2103
DE	2000	234	898	78	1648	14	1026	15	4841	341	8413
DK	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
EE	2010	n.a.	4	0	0	0	0	0	0	n.a.	4
ES	2010	518	1740	137	3122	43	2942	38	11038	736	18842
FI	2010	94	351	65	2328	7	434	0	0	166	3113
FR	2010	542	1712	175	4321	39	2876	59	16048	815	24957
GB	2010	4	33	25	577	10	835	11	2442	50	3887
GR	2010	95	165	5	84	2	120	11	2845	113	3214
HR	2004	22	69	21	576	6	453	8	978	57	20756
HU	2010	10	44	0	0	0	0	0	0	10	44
IE	2010	5	20	11	196	4	292	0	0	20	508
IS	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IT	2010	700	2210	238	5575	29	1964	42	11620	1009	21369
LT	2010	4	8	4	101	0	0	4	900	12	1009
LU	2010	3	20	1	11	1	1	1	1096	6	1128
LV	2010	1	1	4	72	21	1455	0	0	26	1528
ME	2007	3	8	0	0	0	0	2	649	5	657
MK	2010	12	15	3	73	3	265	1	150	19	503
NI	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
NL	2010	3	12	2	25	0	0	0	0	5	37
NO	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
PL[1]	2010	74	151	21	504	5	292	8	1256	108	2203
PT	2010	114	396	4	903	33	2199	8	1395	159	4893
RO	2010	191	985	97	2118	17	1175	9	1670	314	5948
RS	2010	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
SE	2010	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	2010	29	190	36	734	10	820	6	734	81	2478
ENTSO-E[2]		**3454**	**10977**	**1166**	**28979**	**326**	**22895**	**306**	**75445**	**5230**	**156972**
UA_W	2010	5	27	0	0	0	0	0	0	5	27

[1] Additionally 129 MW in 840 Hydro power units with the capacity <1MW.
[2] Calculated sum except BG, DK, IS, NI, NO, RS and SE

European Network of
Transmission System Operators
for Electricity

entsoe

Yearly values operation and physical exchanges

Yearly values operation and physical exchanges per country for the years 2005, 2009 and 2010

Statistical database as of 31 August 2011

Page

[1] Yearly values operation are available from the year 2009 on. Exchanges with "Other" are imports and exports between the ENTSO-E member TSOs' countries and Albania (AL), Belarus (BY), Morocco (MA), Republic of Moldavia (MD), Russia (RU), Republic of Turkey (TR) and Ukraine (UA).
Detailed monthly information are available on the ENTSO-E website www.entsoe.eu/Resources.

[2] Yearly values before the year 2007 are data of the whole country Serbia&Montenegro (CS) and available on the ENTSO-E website.

[3] FYROM = Former Yugoslav Republic of Macedonia

[4] Generation and load values are operational data.

[5] Ukraine West represents the so-called Burshtyn Island synchronously interconnected with ENTSO-E area.

Sum of ENTSO-E

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	n.a.
			2009	877029
			2010	896054
Fossil fuels net generation	GWh	Σ	2005	n.a.
			2009	1595133
			2010	1649195
Hydraulic net generation	GWh	Σ	2005	n.a.
			2009	540164
			2010	584343
Other renewable net generation	GWh	Σ	2005	n.a.
			2009	210815
			2010	248789
- of which wind	GWh	Σ	2005	n.a.
			2009	121763
			2010	138271
- of which solar	GWh	Σ	2005	n.a.
			2009	14921
			2010	21220
Non-identifiable net generation	GWh	Σ	2005	n.a.
			2009	12996
			2010	11818
Total net generation	GWh	Σ	2005	n.a.
			2009 [1]	3236238
calculated to represent 100% of the national values			2010 [1]	3408428
Sum of physical imports	GWh	Σ	2005	n.a.
			2009	352035
			2010	367285
Sum of physical exports	GWh	Σ	2005	n.a.
			2009	341252
			2010	351727
Total exchange balance	GWh	Σ	2005	n.a.
			2009	n.a.
			2010	16989
Consumption of pumps	GWh	Σ	2005	n.a.
			2009	n.a.
			2010	44953
National electrical consumption,	GWh	Σ	2005	n.a.
			2009	3236796
calculated to represent 100% of the national values			2010	3380485
Consumption load 3:00 a.m. on the 3rd Wednesday,	MW	max.	2005	n.a.
			2009	n.a.
calculated to represent 100% of the national values			15.12.10	399606
Consumption load 11:00 a.m. on the 3rd Wednesday,	MW	max.	2005	n.a.
			2009	n.a.
calculated to represent 100% of the national values			15.12.10	530075
Highest load on the 3rd Wednesday,	MW	max.	2005	n.a.
			2009	n.a.
calculated to represent 100% of the national values			15.12.10	557280
Time of highest load on the 3rd Wednesday		CET	2005	n.a.
			2009	n.a.
			15.12.10	18:00

[1] Including deliveries from industry

Annual physical electricity exchange in interconnected operation (GWh)

EXPORTING COUNTRIES / **IMPORTING COUNTRIES**

	Year	AT	BA	BE	BG	CH	CZ	DE	DK	EE	ES	FI	FR	GB	GR	HR	HU	IE
AT	2005					9119	12	6995									809	
	2009					8653	262	7061									1393	
	2010					7915	252	6750									1014	
BA	2005															2735		
	2009															3280		
	2010															4927		
BE	2005												2222					
	2009												6630					
	2010												5402					
BG	2005														4553			
	2009														3418			
	2010														3453			
CH	2005	211						1573					2637					
	2009	24						2636					4164					
	2010	53						2581					5120					
CZ	2005	6114						13022										
	2009	6859						8687										
	2010	6545						9400										
DE	2005	15371				18074	405		583				494					
	2009	14956				13142	965		3615				1436					
	2010	14705				14553	564		6471				795					
DK	2005							10383										
	2009							6232										
	2010							2707										
EE	2005											n.a.						
	2009											1786						
	2010											1967						
ES	2005												749					
	2009												2351					
	2010												3512					
FI	2005									n.a.								
	2009									87								
	2010									246								
FR	2005			6755		9974		16233			7284			11509				
	2009			1709		8311		10607			3957			6889				
	2010			3048		9679		15126			1991			7136				
GB	2005												791					
	2009												3358					
	2010												4109					
GR	2005				0													
	2009				0													
	2010				1													
HR	2005		1340														0	
	2009		974														8	
	2010		1109														93	
HU	2005	857														6689		
	2009	240														3310		
	2010	641														3045		
IE	2005																	
	2009																	
	2010																	
IT	2005	2				131							702		268			
	2009	0				510							1215		314			
	2010	2				493							1012		72			
LT	2005																	
	2009																	
	2010																	
LU	2005			2368				785										
	2009			1868				728										
	2010			1847				1361										
LV	2005									n.a.								
	2009									497								
	2010									38								
ME	2005																	
	2009		294															
	2010		628															
MK	2005				0										796			
	2009				0										3811			
	2010				0										3857			
NI	2005													n.a.				n.a.
	2009													14				997
	2010													0				744
NL	2005			5075				325										
	2009			5789				3510										
	2010			7392				3072										
NO	2005								4711			164						
	2009								3828			113						
	2010								1458			115						
PL	2005						11165	1046										
	2009						6866	135										
	2010						5500	167										
PT	2005										2806							
	2009										2819							
	2010										3190							
RO	2005				797												1190	
	2009				2618												587	
	2010				1106												1252	
RS	2005		911		4											4138	16	
	2009		1571		46											1707	75	
	2010		1319		58											1740	544	
SE	2005							3100	2317			7193						
	2009							968	667			1855						
	2010							1007	2656			2636						
SI	2005	533														1076		
	2009	470														3574		
	2010	584														2647		
SK	2005						762										8806	
	2009						141										6000	
	2010						366										4934	
UA_W	2005																4814	
	2009																2908	
	2010																2060	
Other	2005				0					n.a.	111	n.a.			15			
	2009				0					2642	8	11708			61			
	2010				13					1459	33	11636			1141			
Sum of import	**2005**	**23088**	**2251**	**14198**	**801**	**37298**	**12344**	**53462**	**7611**	**n.a.**	**10201**	**n.a.**	**7595**	**n.a.**	**5632**	**14638**	**15635**	**n.a.**
	2009	**22549**	**2839**	**9366**	**2664**	**30616**	**8234**	**40564**	**8110**	**3226**	**6784**	**15462**	**19154**	**6903**	**7604**	**11871**	**10971**	**997**
	2010	**22530**	**3056**	**12287**	**1178**	**32640**	**6682**	**42171**	**10585**	**1743**	**5214**	**16354**	**19950**	**7136**	**8523**	**12359**	**9897**	**744**

IT	LT	LU	LV	ME	MK	NI	NL	NO	PL	PT	RO	RS	SE	SI	SK	UA_W	Other	Sum of export
1497 1198 1328														1341 2527 2011				**19773 21094 19270**
				2195 1597								893 361 362						**3628 5836 6886**
		1374 911 1123					4433 3773 5318											**8029 11314 11843**
					334 2802 2953						730 230 677	2760 1184 1794					0 0 401	**8377 7634 9278**
25407 24958 23176																		**29828 31782 30930**
									63 129 136						5772 6557 5498			**24971 22232 21579**
		5033 5115 6159					19260 8870 8942		2266 5618 5334				437 1189 2355					**61923 54906 59878**
								466 1449 4055					399 1985 4978					**11248 9666 11740**
			n.a. 1138 2695														n.a. 205 285	**n.a. 3129 4947**
										9477 7439 5667							898 4598 3938	**11124 14388 13117**
								131 128 162					1394 3162 5470					**n.a. 3377 5878**
14493 11808 11583																		**66248 43281 48563**
						n.a. 1992 2299												**n.a. 5350 6408**
711 2184 2299					71 6 8												1056 1034 493	**1838 3224 2801**
												2 0 14		7944 5196 6480				**9286 6178 7696**
											146 307 146	1693 1365 392			0 0 56	26 241 426		**9411 5463 4706**
						n.a. 216 293												**n.a. 216 293**
														0 60 120				**1103 2099 1699**
			n.a. 3066 234														n.a. 4649 1951	**n.a. 7715 2185**
																		3153 2596 3208
	n.a. 1495 3055																n.a. 611 8	**n.a. 2603 3101**
												893 1450					614 305	**1801 2383**
												1 3 0						**797 3814 3857**
																		n.a. 1011 744
								1257 2347										**5400 10556 12811**
							2814 1329						10816 7898 3691				0 0 0	**15691 14653 6593**
													1182 254 494		2792 2338 1498		0 0 0	**16185 9593 7659**
																		2806 2819 3190
												2503 1648 1968				30 3 381	0 0 0	**4520 4856 4707**
				852 511	1990 2330 2309						33 55 74						193 103 149	**7285 6739 6704**
								2836 2648 7668	817 1394 761									**16263 7532 14728**
7931 6799 7513																		**9540 10843 10744**
									0 64 83							1722 1477 912		**11290 7682 6295**
											683 1380 526				4 101 290			**5501 4389 2876**
	n.a. 3287 5122		n.a. 54 1044	47 225				215 227 209	1859 199 0		14 411 368	711 425 1047						
50039 46947 45899	**n.a. 4782 8177**	**6407 6026 7282**	**n.a. 4258 3973**	**3094 2333**	**2395 5138 5270**	**n.a. 2208 2592**	**23693 15457 15589**	**3648 5709 14441**	**5005 7404 6314**	**9477 7439 5667**	**1606 2383 1791**	**8563 5879 7027**	**14228 14488 16988**	**9285 7783 8611**	**8568 8996 7342**	**1778 1721 1719**		

Thermal nuclear net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005	24068
			2009	20686
			2010	24638
Hydraulic net generation	GWh	Σ	2005	35511
			2009	38627
			2010	36496
Other renewable net generation [1]	GWh	Σ	2005	n.a.
			2009	n.a.
			2010	n.a.
- of which wind [1]	GWh	Σ	2005	n.a.
			2009	n.a.
			2010	n.a.
- of which solar [1]	GWh	Σ	2005	n.a.
			2009	n.a.
			2010	n.a.
Non-identifiable net generation	GWh	Σ	2005	3796
			2009	9495
			2010	9551
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005	63800
			2009	68808
			2010	70685
Sum of physical imports	GWh	Σ	2005	23088
			2009	22549
			2010	22530
Sum of physical exports	GWh	Σ	2005	19773
			2009	21094
			2010	19270
Total exchange balance	GWh	Σ	2005	2651
			2009	789
			2010	2203
Consumption of pumps	GWh	Σ	2005	3277
			2009	3962
			2010	4564
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	63174
			2009	65635
			2010	68324
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	16.02.05	7762
			16.12.09	7144
			15.12.10	7935
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	19.01.05	10323
			16.12.09	10490
			15.12.10	10351
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	19.01.05	10521
			16.12.09	10821
			15.12.10	10755
Time of highest load on the 3rd Wednesday		CET	19.01.05	18:00
			16.12.09	17:00
			15.12.10	17:00

[1] Other renewable net generation is included in non-identifiable net generation.

Physical exchanges in interconnected operation [1]

MM_YY	AT→CH	AT→CZ	AT→DE	AT→HU	AT→IT	AT→SI	Total_EXP	CH→AT	CZ→AT	DE→AT	HU→AT	IT→AT	SI→AT	Total_IMP	Total_IMP - Total_EXP
	Export (-)							Import (+)							Balance
I.05	725	0	448	23	142	126	1464	12	755	1639	59	0	75	2540	1076
II.05	821	0	455	52	123	116	1567	0	554	1475	24	0	40	2093	526
III.05	905	1	545	67	124	68	1710	0	501	1577	19	2	42	2141	431
IV.05	899	0	637	165	122	116	1939	0	510	1323	22	0	14	1869	-70
V.05	752	1	680	74	137	76	1720	147	376	1019	20	0	6	1568	-152
VI.05	764	3	734	76	129	128	1834	0	313	1029	12	0	68	1422	-412
VII.05	730	0	753	57	109	154	1803	0	260	1065	183	0	20	1528	-275
VIII.05	516	3	704	49	122	110	1504	34	494	858	153	0	50	1589	85
IX.05	606	2	533	106	122	134	1503	4	481	985	50	0	46	1566	63
X.05	856	1	497	71	129	186	1740	0	621	1277	103	0	28	2029	289
XI.05	637	0	514	45	119	93	1408	14	583	1343	126	0	58	2124	716
XII.05	908	1	495	24	119	34	1581	0	666	1781	86	0	86	2619	1038
2005	**9119**	**12**	**6995**	**809**	**1497**	**1341**	**19773**	**211**	**6114**	**15371**	**857**	**2**	**533**	**23088**	**3315**
I.09	680	3	364	68	116	52	1283	3	732	1722	40	0	167	2664	1381
II.09	677	6	404	52	106	14	1259	0	584	1566	46	0	174	2370	1111
III.09	723	9	530	174	119	42	1597	0	573	1382	2	0	89	2046	449
IV.09	770	51	789	97	126	192	2025	0	346	985	27	0	5	1363	-662
V.09	569	84	842	207	101	250	2053	1	243	698	3	0	0	945	-1108
VI.09	768	34	936	96	17	210	2061	2	467	916	12	0	1	1398	-663
VII.09	535	19	774	143	76	381	1928	8	539	766	7	0	1	1321	-607
VIII.09	611	19	627	186	70	284	1797	3	564	969	5	0	1	1542	-255
IX.09	770	11	461	138	106	380	1866	6	557	1261	28	0	0	1852	-14
X.09	783	17	643	141	124	305	2013	1	593	1310	38	0	5	1947	-66
XI.09	846	3	342	33	126	169	1519	0	879	1627	27	0	18	2551	1032
XII.09	921	6	349	58	111	248	1693	0	782	1754	5	0	9	2550	857
2009	**8653**	**262**	**7061**	**1393**	**1198**	**2527**	**21094**	**24**	**6859**	**14956**	**240**	**0**	**470**	**22549**	**1455**
I.10	861	12	510	31	106	127	1647	0	735	1663	15	0	35	2448	801
II.10	747	4	419	35	102	146	1453	0	718	1513	7	0	36	2274	821
III.10	814	5	415	36	119	104	1493	0	620	1675	5	0	33	2333	840
IV.10	703	4	249	42	112	80	1190	1	690	1577	69	0	55	2392	1202
V.10	614	54	596	83	125	111	1583	1	367	1000	60	0	30	1458	-125
VI.10	486	40	804	115	119	204	1768	4	323	701	16	0	10	1054	-714
VII.10	461	5	544	201	127	337	1675	17	624	853	9	0	0	1503	-172
VIII.10	450	27	702	168	93	170	1610	14	382	733	14	2	6	1151	-459
IX.10	623	23	617	140	104	233	1740	6	449	969	27	0	1	1452	-288
X.10	615	1	539	113	91	364	1723	6	767	1178	65	0	3	2019	296
XI.10	724	10	562	37	118	130	1581	1	555	1376	149	0	72	2153	572
XII.10	817	67	793	13	112	5	1807	3	315	1467	205	0	303	2293	486
2010	**7915**	**252**	**6750**	**1014**	**1328**	**2011**	**19270**	**53**	**6545**	**14705**	**641**	**2**	**584**	**22530**	**3260**

[1] 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".

Bosnia-Herzegovina

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005	6604
			2009	8037
			2010	7684
Hydraulic net generation	GWh	Σ	2005	5998
			2009	5954
			2010	7870
Other renewable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
- of which wind	GWh	Σ	2005	0
			2009	0
			2010	0
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005	12602
			2009	13991
			2010	15554
Sum of physical imports	GWh	Σ	2005	2251
			2009	2839
			2010	3056
Sum of physical exports	GWh	Σ	2005	3628
			2009	5836
			2010	6886
Total exchange balance	GWh	Σ	2005	-1411
			2009	-2990
			2010	-3827
Consumption of pumps	GWh	Σ	2005	0
			2009	0
			2010	2
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	11191
			2009	11001
			2010	11725
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	16.02.05	1161
			16.12.09	1133
			15.12.10	1220
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	1688
			16.12.09	1753
			15.12.10	1812
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	1891
			16.12.09	1890
			15.12.10	2051
Time of highest load on the 3rd Wednesday		CET	21.12.05	18:00
			16.12.09	18:00
			15.12.10	18:00

Physical exchanges in interconnected operation [1]

Bosnia-Herzegovina | GWh

MM_YY	BA→CS	BA→HR	BA→ME	BA→RS	Total_EXP	HR→CS	HR→BA	ME→BA	RS→BA	Total_IMP	Total_IMP - Total_EXP
	Export (-)					Import (+)					Balance
I.05	93	275			368	82	107			189	-179
II.05	45	225			270	100	131			231	-39
III.05	67	352			419	80	90			170	-249
IV.05	54	257			311	51	85			136	-175
V.05	42	194			236	59	79			138	-98
VI.05	20	245			265	133	102			235	-30
VII.05	77	183			260	44	143			187	-73
VIII.05	142	161			303	34	139			173	-130
IX.05	59	238			297	72	74			146	-151
X.05	100	222			322	70	103			173	-149
XI.05	86	184			270	123	163			286	16
XII.05	108	199			307	63	124			187	-120
2005	**893**	**2735**			**3628**	**911**	**1340**			**2251**	**-1377**
I.09		322	202	27	551		73	43	142	258	-293
II.09		450	177	23	650		43	55	92	190	-460
III.09		345	246	36	627		68	16	120	204	-423
IV.09		345	104	28	477		75	33	78	186	-291
V.09		245	131	39	415		78	20	86	184	-231
VI.09		266	239	43	548		82	10	134	226	-322
VII.09		196	235	32	463		91	7	127	225	-238
VIII.09		130	216	27	373		123	5	130	258	-115
IX.09		199	159	16	374		102	5	219	326	-48
X.09		255	161	26	442		77	19	159	255	-187
XI.09		348	73	15	436		60	61	180	301	-135
XII.09		179	252	49	480		102	20	104	226	-254
2009		**3280**	**2195**	**361**	**5836**		**974**	**294**	**1571**	**2839**	**-2997**
I.10		426	258	71	755		97	46	29	172	-583
II.10		465	181	30	676		53	44	54	151	-525
III.10		520	178	38	736		61	50	32	143	-593
IV.10		448	61	20	529		67	57	64	188	-341
V.10		528	74	54	656		69	55	22	146	-510
VI.10		373	77	7	457		57	89	114	260	-197
VII.10		207	155	7	369		115	33	247	395	26
VIII.10		111	210	8	329		206	10	209	425	96
IX.10		229	139	12	380		121	26	211	358	-22
X.10		400	62	14	476		99	42	197	338	-138
XI.10		522	70	32	624		86	78	95	259	-365
XII.10		698	132	69	899		78	98	45	221	-678
2010		**4927**	**1597**	**362**	**6886**		**1109**	**628**	**1319**	**3056**	**-3830**

[1] 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".

Belgium

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	45336
			2009	44960
			2010	45729
Fossil fuels net generation	GWh	Σ	2005	34085
			2009	34772
			2010	35845
Hydraulic net generation	GWh	Σ	2005	1596
			2009	1744
			2010	1659
Other renewable net generation	GWh	Σ	2005	2381
			2009	6048
			2010	6631
- of which wind	GWh	Σ	2005	225
			2009	988
			2010	1260
- of which solar	GWh	Σ	2005	n.a.
			2009	162
			2010	237
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 [1]	83398
			2009 [1]	87524
			2010 [1]	89864
Sum of physical imports	GWh	Σ	2005	14198
			2009	9366
			2010	12287
Sum of physical exports	GWh	Σ	2005	8029
			2009	11314
			2010	11843
Total exchange balance	GWh	Σ	2005	6304
			2009	-1836
			2010	541
Consumption of pumps	GWh	Σ	2005	1775
			2009	1883
			2010	1786
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	87927
			2009	83805
			2010	88619
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	16.02.05	10492
			16.12.09	10103
			15.12.10	10906
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	19.01.05	12500
			16.12.09	12599
			15.12.10	13154
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	19.01.05	13235
			16.12.09	13352
			15.12.10	13810
Time of highest load on the 3rd Wednesday		CET	19.01.05	19:00
			16.12.09	18:00
			15.12.10	19:00

[1] Including deliveries from industry

Physical exchanges in interconnected operation [1]

MM_YY	BE→FR	BE→LU	BE→NL	Total_EXP	FR→BE	LU→BE	NL→BE	Total_IMP	Total_IMP - Total_EXP
	Export (-)				Import (+)				Balance
I.05	299	92	120	511	264	232	688	1184	673
II.05	442	101	80	623	163	48	789	1000	377
III.05	392	109	173	674	416	229	761	1406	732
IV.05	253	100	95	448	180	218	592	990	542
V.05	66	108	464	638	593	198	235	1026	388
VI.05	54	94	690	838	916	183	102	1201	363
VII.05	194	129	683	1006	377	205	123	705	-301
VIII.05	73	88	807	968	1060	189	92	1341	373
IX.05	27	137	673	837	1135	217	120	1472	635
X.05	61	145	338	544	716	216	234	1166	622
XI.05	97	146	201	444	627	204	564	1395	951
XII.05	264	125	109	498	308	229	775	1312	814
2005	**2222**	**1374**	**4433**	**8029**	**6755**	**2368**	**5075**	**14198**	**6169**
I.09	492	79	87	658	238	188	632	1058	400
II.09	318	74	128	520	274	150	455	879	359
III.09	400	49	199	648	249	162	334	745	97
IV.09	457	77	148	682	130	153	420	703	21
V.09	288	76	531	895	276	140	228	644	-251
VI.09	509	75	363	947	162	101	427	690	-257
VII.09	891	86	366	1343	36	158	419	613	-730
VIII.09	538	56	857	1451	55	181	291	527	-924
IX.09	645	90	474	1209	83	166	266	515	-694
X.09	772	91	238	1101	55	181	707	943	-158
XI.09	619	90	150	859	64	155	801	1020	161
XII.09	701	68	232	1001	87	133	809	1029	28
2009	**6630**	**911**	**3773**	**11314**	**1709**	**1868**	**5789**	**9366**	**-1948**
I.10	805	96	111	1012	111	160	947	1218	206
II.10	601	88	258	947	84	153	670	907	-40
III.10	610	104	326	1040	140	157	623	920	-120
IV.10	449	108	264	821	153	142	456	751	-70
V.10	596	133	428	1157	155	102	586	843	-314
VI.10	117	73	745	935	566	160	326	1052	117
VII.10	178	100	841	1119	380	154	246	780	-339
VIII.10	126	52	1168	1346	478	152	183	813	-533
IX.10	248	103	571	922	359	145	392	896	-26
X.10	849	108	200	1157	80	173	1067	1320	163
XI.10	499	99	282	880	222	154	828	1204	324
XII.10	324	59	124	507	320	195	1068	1583	1076
2010	**5402**	**1123**	**5318**	**11843**	**3048**	**1847**	**7392**	**12287**	**444**

[1] 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

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	18656
			2009	14256
			2010	14181
Fossil fuels net generation	GWh	Σ	2005	20943
			2009	20407
			2010	21084
Hydraulic net generation	GWh	Σ	2005	4664
			2009	3880
			2010	5431
Other renewable net generation	GWh	Σ	2005	0
			2009	0
			2010	331
- of which wind	GWh	Σ	2005	0
			2009	0
			2010	331
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005	44263
			2009	38543
			2010	41027
Sum of physical imports	GWh	Σ	2005	801
			2009	2664
			2010	1135
Sum of physical exports	GWh	Σ	2005	8377
			2009	7634
			2010	9278
Total exchange balance	GWh	Σ	2005	-7642
			2009	-5121
			2010	-8517
Consumption of pumps	GWh	Σ	2005	538
			2009	846
			2010	973
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	36083
			2009	32576
			2010	31537
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	16.02.05	4854
			18.02.09	4543
			15.12.10	4399
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	5814
			16.12.09	5801
			20.01.10	6076
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	6222
			18.02.09	6426
			15.12.10	6640
Time of highest load on the 3rd Wednesday		CET	21.12.05	19:00
			18.02.09	20:00
			15.12.10	19:00

Physical exchanges in interconnected operation [1]

Bulgaria

GWh

MM_YY	BG→CS	BG→GR	BG→MK	BG→RO	BG→RS	BG→TR	Total_EXP	CS→BG	GR→BG	MK→BG	RO→BG	RS→BG	TR→BG	Total_IMP	Total_IMP - Total_EXP
	Export (-)							Import (+)							Balance
I.05	262	408	0	23		0	693	0	0	0	81		0	81	-612
II.05	327	411	0	29		0	767	0	0	0	60		0	60	-707
III.05	283	375	0	109		0	767	0	0	0	12		0	12	-755
IV.05	218	319	3	100		0	640	0	0	0	22		0	22	-618
V.05	229	211	0	90		0	530	0	0	0	3		0	3	-527
VI.05	210	377	2	84		0	673	0	0	0	15		0	15	-658
VII.05	205	436	30	54		0	725	0	0	0	68		0	68	-657
VIII.05	89	395	29	29		0	542	0	0	0	87		0	87	-455
IX.05	116	367	24	69		0	576	0	0	0	57		0	57	-519
X.05	154	373	82	86		0	695	4	0	0	99		0	103	-592
XI.05	312	431	79	55		0	877	0	0	0	141		0	141	-736
XII.05	355	450	85	2		0	892	0	0	0	152		0	152	-740
2005	**2760**	**4553**	**334**	**730**		**0**	**8377**	**4**	**0**	**0**	**797**		**0**	**801**	**-7576**
I.09		271	292	0	139	0	702		0	0	333	0	0	333	-369
II.09		285	252	0	135	0	672		0	0	285	0	0	285	-387
III.09		328	271	0	90	0	689		0	0	356	0	0	356	-333
IV.09		213	65	0	51	0	329		0	0	217	1	0	218	-111
V.09		212	186	34	17	0	449		0	0	180	15	0	195	-254
VI.09		352	282	2	19	0	655		0	0	208	13	0	221	-434
VII.09		438	352	2	29	0	821		0	0	217	14	0	231	-590
VIII.09		300	245	1	95	0	641		0	0	197	3	0	200	-441
IX.09		242	217	62	124	0	645		0	0	121	0	0	121	-524
X.09		244	139	100	161	0	644		0	0	175	0	0	175	-469
XI.09		272	264	28	235	0	799		0	0	64	0	0	64	-735
XII.09		261	237	1	89	0	588		0	0	265	0	0	265	-323
2009		**3418**	**2802**	**230**	**1184**	**0**	**7634**		**0**	**0**	**2618**	**46**	**0**	**2664**	**-4970**
I.10		214	183	12	87	0	496		0	0	175	5	0	180	-316
II.10		227	202	27	124	0	580		1	0	85	0	0	86	-494
III.10		279	198	22	71	0	570		0	0	80	3	0	83	-487
IV.10		243	171	25	37	0	476		0	0	73	17	0	90	-386
V.10		167	139	118	24	0	448		0	0	62	33	0	95	-353
VI.10		345	258	167	148	0	918		0	0	2	0	0	2	-916
VII.10		458	387	93	226	0	1164		0	0	23	0	0	23	-1141
VIII.10		480	412	21	233	0	1146		0	0	115	0	0	115	-1031
IX.10		353	314	31	174	0	872		0	0	134	0	0	134	-738
X.10		220	216	72	193	0	701		0	0	239	0	0	239	-462
XI.10		245	245	36	226	209	961		0	0	76	0	12	88	-873
XII.10		222	228	53	251	192	946		0	0	42	0	1	43	-903
2010		**3453**	**2953**	**677**	**1794**	**401**	**9278**		**1**	**0**	**1106**	**58**	**13**	**1178**	**-8100**

[1] 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".

Switzerland

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	22020
			2009	26119
			2010	25205
Fossil fuels net generation	GWh	Σ	2005	2207
			2009	2029
			2010	2208
Hydraulic net generation	GWh	Σ	2005	32759
			2009	37136
			2010	37450
Other renewable net generation	GWh	Σ	2005	932
			2009	1210
			2010	1389
- of which wind	GWh	Σ	2005	6
			2009	24
			2010	24
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 [1]	57918
			2009 [1]	66494
			2010 [1]	66252
Sum of physical imports	GWh	Σ	2005	37298
			2009	30616
			2010	32640
Sum of physical exports	GWh	Σ	2005	29828
			2009	31782
			2010	30930
Total exchange balance	GWh	Σ	2005	7760
			2009	-959
			2010	1951
Consumption of pumps	GWh	Σ	2005	2631
			2009	2523
			2010	2494
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005 [2]	63047
			2009 [2]	63012
			2010 [2]	65709
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	16.02.05	7741
			16.12.09	7931
			15.12.10	8381
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	9724
			16.12.09	10108
			20.01.10	10532
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	9724
			16.12.09	10261
			15.12.10	10835
Time of highest load on the 3rd Wednesday		CET	21.12.05	11:00
			18.02.09	18:00
			15.12.10	18:00

[1] Including deliveries from industry

[2] Calculations based on the ENTSO-E database differ from the official values of the Swiss Federal Office of Energy.

Physical exchanges in interconnected operation [1]

MM_YY	CH→AT	CH→DE	CH→FR	CH→IT	Total_EXP	AT→CH	DE→CH	FR→CH	IT→CH	Total_IMP	Total_IMP - Total_EXP
	Export (-)					Import (+)					Balance
I.05	12	34	255	2243	2544	725	1864	951	0	3540	996
II.05	0	38	327	2430	2795	821	1797	605	0	3223	428
III.05	0	68	268	2421	2757	905	1650	787	0	3342	585
IV.05	0	75	129	2354	2558	899	1811	820	0	3530	972
V.05	147	150	82	2284	2663	752	1184	914	6	2856	193
VI.05	0	104	237	2020	2361	764	1135	804	7	2710	349
VII.05	0	186	327	2139	2652	730	1487	591	7	2815	163
VIII.05	34	286	90	1753	2163	516	1424	807	7	2754	591
IX.05	4	218	179	1951	2352	606	1014	751	8	2379	27
X.05	0	155	80	2378	2613	856	1313	1059	6	3234	621
XI.05	14	145	186	1957	2302	637	1523	1078	16	3254	952
XII.05	0	114	477	1477	2068	908	1872	807	74	3661	1593
2005	**211**	**1573**	**2637**	**25407**	**29828**	**9119**	**18074**	**9974**	**131**	**37298**	**7470**
I.09	3	112	275	2112	2502	680	1738	1044	50	3512	1010
II.09	0	75	139	2071	2285	677	1631	1014	22	3344	1059
III.09	0	113	37	2301	2451	723	1247	1266	18	3254	803
IV.09	0	246	293	1993	2532	770	647	563	28	2008	-524
V.09	1	582	252	2050	2885	569	347	444	46	1406	-1479
VI.09	2	485	477	2119	3083	768	480	322	77	1647	-1436
VII.09	8	408	497	2631	3544	535	417	335	48	1335	-2209
VIII.09	3	210	493	1936	2642	611	664	442	23	1740	-902
IX.09	6	136	389	2207	2738	770	1119	624	33	2546	-192
X.09	1	131	568	1784	2484	783	1406	653	77	2919	435
XI.09	0	51	248	1901	2200	846	1606	750	59	3261	1061
XII.09	0	87	496	1853	2436	921	1840	854	29	3644	1208
2009	**24**	**2636**	**4164**	**24958**	**31782**	**8653**	**13142**	**8311**	**510**	**30616**	**-1166**
I.10	0	90	652	1686	2428	861	1656	745	52	3314	886
II.10	0	57	426	1903	2386	747	1660	840	27	3274	888
III.10	0	90	324	2185	2599	814	1713	1084	45	3656	1057
IV.10	1	143	147	2126	2417	703	1260	924	44	2931	514
V.10	1	270	276	2003	2550	614	639	672	60	1985	-565
VI.10	4	548	165	1953	2670	486	486	748	65	1785	-885
VII.10	17	428	362	2503	3310	461	781	641	27	1910	-1400
VIII.10	14	406	246	1730	2396	450	795	786	9	2040	-356
IX.10	6	216	377	1784	2383	623	1146	783	17	2569	186
X.10	6	124	697	2043	2870	615	1520	858	16	3009	139
XI.10	1	106	543	1817	2467	724	1433	902	27	3086	619
XII.10	3	103	905	1443	2454	817	1464	696	104	3081	627
2010	**53**	**2581**	**5120**	**23176**	**30930**	**7915**	**14553**	**9679**	**493**	**32640**	**1710**

[1] 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

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	23255
			2009	25665
			2010	26441
Fossil fuels net generation	GWh	Σ	2005	49861
			2009	46983
			2010	48713
Hydraulic net generation	GWh	Σ	2005	3016
			2009	2969
			2010	3380
Other renewable net generation	GWh	Σ	2005	62
			2009	373
			2010	948
- of which wind	GWh	Σ	2005	22
			2009	289
			2010	334
- of which solar	GWh	Σ	2005	n.a.
			2009	77
			2010	604
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 [1]	76194
			2009 [1]	75990
			2010 [1]	79482
Sum of physical imports	GWh	Σ	2005	12344
			2009	8234
			2010	6682
Sum of physical exports	GWh	Σ	2005	24971
			2009	22232
			2010	21579
Total exchange balance	GWh	Σ	2005	-12634
			2009	-13644
			2010	-14949
Consumption of pumps	GWh	Σ	2005	867
			2009	748
			2010	797
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	62693
			2009	61598
			2010	63736
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	16.02.05	7943
			18.02.09	7764
			15.12.10	7989
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	16.02.05	9339
			16.12.09	9465
			15.12.10	9944
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	16.02.05	9576
			16.12.09	9836
			15.12.10	10307
Time of highest load on the 3rd Wednesday		CET	16.02.05	17:00
			16.12.09	17:00
			15.12.10	17:00

[1] Including deliveries from industry

Physical exchanges in interconnected operation [1]

MM_YY	CZ→AT	CZ→DE	CZ→PL	CZ→SK	Total_EXP	AT→CZ	DE→CZ	PL→CZ	SK→CZ	Total_IMP	Total_IMP - Total_EXP
	Export (-)					Import (+)					Balance
I.05	755	935	2	547	2239	0	69	1091	55	1215	-1024
II.05	554	976	2	510	2042	0	51	1024	49	1124	-918
III.05	501	1232	4	538	2275	1	28	1046	35	1110	-1165
IV.05	510	1093	3	457	2063	0	4	887	43	934	-1129
V.05	376	1130	10	473	1989	1	0	768	10	779	-1210
VI.05	313	1138	8	414	1873	3	0	710	49	762	-1111
VII.05	260	1100	10	508	1878	0	20	720	55	795	-1083
VIII.05	494	1116	14	375	1999	3	0	552	112	667	-1332
IX.05	481	1007	4	360	1852	2	6	801	79	888	-964
X.05	621	1147	4	474	2246	1	26	1097	89	1213	-1033
XI.05	583	1017	1	530	2131	0	92	1253	105	1450	-681
XII.05	666	1131	1	586	2384	1	109	1216	81	1407	-977
2005	**6114**	**13022**	**63**	**5772**	**24971**	**12**	**405**	**11165**	**762**	**12344**	**-12627**
I.09	732	678	0	663	2073	3	177	859	3	1042	-1031
II.09	584	892	0	525	2001	6	20	691	2	719	-1282
III.09	573	1032	1	575	2181	9	26	610	3	648	-1533
IV.09	346	1186	34	217	1783	51	0	298	44	393	-1390
V.09	243	652	31	347	1273	84	19	341	19	463	-810
VI.09	467	679	24	364	1534	34	9	418	17	478	-1056
VII.09	539	573	10	686	1808	19	47	509	3	578	-1230
VIII.09	564	320	12	570	1466	19	63	476	3	561	-905
IX.09	557	359	11	784	1711	11	127	646	0	784	-927
X.09	593	847	2	685	2127	17	152	642	0	811	-1316
XI.09	879	766	1	507	2153	3	228	740	45	1016	-1137
XII.09	782	703	3	634	2122	6	97	636	2	741	-1381
2009	**6859**	**8687**	**129**	**6557**	**22232**	**262**	**965**	**6866**	**141**	**8234**	**-13998**
I.10	735	971	4	409	2119	12	41	521	24	598	-1521
II.10	718	831	2	475	2026	4	35	643	6	688	-1338
III.10	620	1100	4	421	2145	5	17	511	16	549	-1596
IV.10	690	783	3	457	1933	4	17	451	19	491	-1442
V.10	367	484	18	346	1215	54	47	360	28	489	-726
VI.10	323	632	25	306	1286	40	42	260	34	376	-910
VII.10	624	688	8	861	2181	5	53	442	1	501	-1680
VIII.10	382	560	14	431	1387	27	78	322	22	449	-938
IX.10	449	682	28	591	1750	23	45	416	6	490	-1260
X.10	767	726	11	677	2181	1	92	618	7	718	-1463
XI.10	555	845	5	388	1793	10	78	550	54	692	-1101
XII.10	315	1098	14	136	1563	67	19	406	149	641	-922
2010	**6545**	**9400**	**136**	**5498**	**21579**	**252**	**564**	**5500**	**366**	**6682**	**-14897**

[1] 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".

Germany

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	154531
			2009	127953
			2010	133373
Fossil fuels net generation	GWh	Σ	2005	357573
			2009	330218
			2010	344278
Hydraulic net generation	GWh	Σ	2005	23586
			2009	21453
			2010	21698
Other renewable net generation	GWh	Σ	2005	38382
			2009	68747
			2010	73801
- of which wind	GWh	Σ	2005	28881
			2009	37812
			2010	36665
- of which solar	GWh	Σ	2005	n.a.
			2009	6211
			2010	10874
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 [1]	574072
			2009 [1]	548371
			2010 [1]	573150
Sum of physical imports	GWh	Σ	2005	53462
			2009	40564
			2010	42171
Sum of physical exports	GWh	Σ	2005	61923
			2009	54906
			2010	59878
Total exchange balance	GWh	Σ	2005	-8461
			2009	-14342
			2010	-17707
Consumption of pumps	GWh	Σ	2005	9226
			2009	7172
			2010	8021
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	556385
			2009	526857
			2010	547422
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	58901
			18.02.09	57523
			15.12.10	65661
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	79670
			16.12.09	74923
			15.12.10	80694
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	82527
			18.11.09	80102
			15.12.10	83090
Time of highest load on the 3rd Wednesday		CET	21.12.05	18:00
			18.11.09	18:00
			15.12.10	18:00

[1] Including deliveries from industry

Physical exchanges in interconnected operation [1]

Germany | GWh

MM_YY	DE→AT	DE→CH	DE→CZ	DE→DK	DE→DK_W	DE→DK_E	DE→FR	DE→LU	DE→NL	DE→PL	DE→SE	Total_EXP	AT→DE	CH→DE	CZ→DE	DK→DE	DK_W→DE	DK_E→DE	FR→DE	LU→DE	NL→DE	PL→DE	SE→DE	Total_IMP	Total_IMP - Total_EXP
	Export (-)												Import (+)												Balance
I.05	1639	1864	69		3	36	8	431	2097	361	61	6569	448	34	935		698	224	1009	66	0	3	288	3705	-2864
II.05	1475	1797	51		0	10	130	405	1969	247	12	6096	455	38	976		734	320	698	63	2	17	306	3609	-2487
III.05	1577	1650	28		59	35	214	436	2171	204	67	6441	545	68	1232		669	243	770	69	1	46	199	3842	-2599
IV.05	1323	1811	4		31	17	15	400	2080	142	38	5861	637	75	1093		641	295	1137	60	0	45	286	4269	-1592
V.05	1019	1184	0		78	40	0	405	1143	99	70	4038	680	150	1130		522	232	2067	67	17	95	0	4960	922
VI.05	1029	1135	0		18	11	11	404	1012	41	19	3680	734	104	1138		554	314	1779	61	60	230	309	5283	1603
VII.05	1065	1487	20		2	5	5	421	1081	135	4	4225	753	186	1100		361	342	1412	69	61	118	389	4791	566
VIII.05	858	1424	0		78	43	14	389	959	89	58	3912	704	286	1116		410	259	2364	64	72	167	232	5674	1762
IX.05	985	1014	6		12	4	1	412	942	66	9	3451	533	218	1007		537	155	1735	56	103	219	279	4842	1391
X.05	1277	1313	26		33	17	16	433	1615	241	40	5011	497	155	1147		481	304	1219	66	4	69	269	4211	-800
XI.05	1343	1523	92		8	3	33	445	1890	240	15	5592	514	145	1017		740	332	1281	72	3	27	300	4431	-1161
XII.05	1781	1872	109		17	23	47	452	2301	401	44	7047	495	114	1131		736	280	762	72	2	10	243	3845	-3202
2005	**15371**	**18074**	**405**		**339**	**244**	**494**	**5033**	**19260**	**2266**	**437**	**61923**	**6995**	**1573**	**13022**		**7083**	**3300**	**16233**	**785**	**325**	**1046**	**3100**	**53462**	**-8461**
I.09	1722	1738	177		59	65	66	471	1190	660	32	6180	364	112	678		737	261	1086	78	96	0	210	3622	-2558
II.09	1566	1631	20		34	49	1	419	1165	508	25	5418	404	75	892		658	244	1152	68	73	0	85	3651	-1767
III.09	1382	1247	26		158	125	39	438	811	402	13	4641	530	113	1032		539	189	1172	68	169	4	17	3833	-808
IV.09	985	647	0		235	125	98	388	1251	162	149	4040	789	246	1186		405	67	529	47	75	38	120	3502	-538
V.09	698	347	19		254	147	31	391	822	262	120	3091	842	582	652		362	53	1372	46	130	25	112	4176	1085
VI.09	916	480	9		272	182	280	383	1086	305	141	4054	936	485	679		223	76	625	40	163	25	83	3335	-719
VII.09	766	417	47		67	132	272	412	464	477	119	3173	774	408	573		115	122	633	44	490	9	111	3279	106
VIII.09	969	664	63		184	208	40	406	184	411	124	3253	627	210	320		138	50	1288	62	636	8	58	3397	144
IX.09	1261	1119	127		62	165	52	428	194	526	72	4006	461	136	359		416	76	806	58	738	8	67	3125	-881
X.09	1310	1406	152		86	120	248	461	406	577	56	4822	643	131	847		519	72	464	65	448	11	51	3251	-1571
XI.09	1627	1606	228		189	194	156	432	691	668	113	5904	342	51	766		358	51	682	58	196	2	36	2542	-3362
XII.09	1754	1840	97		214	289	153	486	606	660	225	6324	349	87	703		476	25	798	94	296	5	18	2851	-3473
2009	**14956**	**13142**	**965**		**1814**	**1801**	**1436**	**5115**	**8870**	**5618**	**1189**	**54906**	**7061**	**2636**	**8687**		**4946**	**1286**	**10607**	**728**	**3510**	**135**	**968**	**40564**	**-14342**
I.10	1663	1656	41	614			239	542	643	548	329	6275	510	90	971	205			576	116	239	3	1	2711	-3564
II.10	1513	1660	35	663			57	486	410	584	374	5782	419	57	831	115			910	104	247	0	0	2683	-3099
III.10	1675	1713	17	836			28	511	362	622	293	6057	415	90	1100	47			1308	103	555	0	1	3619	-2438
IV.10	1577	1260	17	465			7	518	881	584	85	5394	249	143	783	232			1244	129	114	0	32	2926	-2468
V.10	1000	639	47	296			52	562	1036	360	31	4023	596	270	484	411			920	155	209	10	230	3285	-738
VI.10	701	486	42	471			3	507	920	161	61	3352	804	548	632	240			1934	111	191	42	220	4722	1370
VII.10	853	781	53	439			6	482	943	525	139	4221	544	428	688	424			1690	82	138	5	199	4198	-23
VIII.10	733	795	78	583			0	435	576	405	127	3732	702	406	560	168			2408	77	291	25	102	4739	1007
IX.10	969	1146	45	594			6	470	584	254	254	4322	617	216	682	178			1507	89	327	16	41	3673	-649
X.10	1178	1520	92	423			168	521	330	513	224	4969	539	124	726	368			924	109	481	1	97	3369	-1600
XI.10	1376	1433	78	377			99	546	707	466	206	5288	562	106	845	257			1096	138	210	16	79	3309	-1979
XII.10	1467	1464	19	710			130	579	1550	312	232	6463	793	103	1098	62			609	148	70	49	5	2937	-3526
2010	**14705**	**14553**	**564**	**6471**			**795**	**6159**	**8942**	**5334**	**2355**	**59878**	**6750**	**2581**	**9400**	**2707**			**15126**	**1361**	**3072**	**167**	**1007**	**42171**	**-17707**

[1] 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".

Denmark

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005	27715
			2009	25284
			2010	26294
Hydraulic net generation	GWh	Σ	2005	23
			2009	20
			2010	23
Other renewable net generation	GWh	Σ	2005	6615
			2009	9119
			2010	10445
- of which wind	GWh	Σ	2005	6615
			2009	6728
			2010	7813
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	0
			2009	38
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 [1]	34353
			2009 [1]	34461
			2010 [1]	36762
Sum of physical imports	GWh	Σ	2005	7611
			2009	8110
			2010	10585
Sum of physical exports	GWh	Σ	2005	11248
			2009	9666
			2010	11740
Total exchange balance	GWh	Σ	2005	-3637
			2009	-1556
			2010	-1122
Consumption of pumps	GWh	Σ	2005	0
			2009	0
			2010	0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	35728
			2009	34793
			2010	35640
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	3653
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	5945
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	6312
Time of highest load on the 3rd Wednesday		CET	2005	n.a.
			2009	n.a.
			15.12.10	18:00

[1] Including deliveries from industry

Physical exchanges in interconnected operation [1]

Denmark | GWh

MM_YY	DK_W→DE	DK_E→DE	DK→DE	DK_W→NO	DK→NO	DK_W→SE	DK→SE	Total_EXP	DE→DK_W	DE→DK_E	DE→DK	NO→DK_W	NO→DK	SE→DK_W	SE→DK	Total_IMP	Total_IMP - Total_EXP
	Export (-)								Import (+)								Balance
I.05	698	224		115		67		1104	3	36		319		70		428	-676
II.05	734	320		27		74		1155	0	10		436		71		517	-638
III.05	669	243		99		127		1138	59	35		362		54		510	-628
IV.05	641	295		24		14		974	31	17		532		201		781	-193
V.05	522	232		47		9		810	78	40		478		228		824	14
VI.05	554	314		9		5		882	18	11		320		286		635	-247
VII.05	361	342		3		0		706	2	5		333		292		632	-74
VIII.05	410	259		24		10		703	78	43		271		255		647	-56
IX.05	537	155		4		0		696	12	4		294		305		615	-81
X.05	481	304		23		7		815	33	17		304		257		611	-204
XI.05	740	332		7		12		1091	8	3		602		180		793	-298
XII.05	736	280		84		74		1174	17	23		460		118		618	-556
2005	**7083**	**3300**		**466**		**399**		**11248**	**339**	**244**		**4711**		**2317**		**7611**	**-3637**
I.09	737	261		149		181		1328	59	65		308		119		551	-777
II.09	658	244		156		100		1158	34	49		263		99		445	-713
III.09	539	189		166		219		1113	158	125		271		66		620	-493
IV.09	405	67		150		131		753	235	125		312		83		755	2
V.09	362	53		143		105		663	254	147		295		99		795	132
VI.09	223	76		141		150		590	272	182		140		42		636	46
VII.09	115	122		32		136		405	67	132		216		63		478	73
VIII.09	138	50		13		297		498	184	208		495		13		900	402
IX.09	416	76		3		219		714	62	165		570		28		825	111
X.09	519	72		84		110		785	86	120		398		31		635	-150
XI.09	358	51		185		163		757	189	194		268		16		667	-90
XII.09	476	25		227		174		902	214	289		292		8		803	-99
2009	**4946**	**1286**		**1449**		**1985**		**9666**	**1814**	**1801**		**3828**		**667**		**8110**	**-1556**
I.10			205		384		680	1269			614		130		3	747	-522
II.10			115		479		790	1384			663		49		2	714	-670
III.10			47		629		796	1472			836		2		7	845	-627
IV.10			232		420		290	942			465		34		126	625	-317
V.10			411		337		44	792			296		124		535	955	163
VI.10			240		243		38	521			471		117		697	1285	764
VII.10			424		163		86	673			439		277		647	1363	690
VIII.10			168		155		132	455			583		204		357	1144	689
IX.10			178		159		467	804			594		214		62	870	66
X.10			368		241		461	1070			423		184		98	705	-365
XI.10			257		352		359	968			377		89		117	583	-385
XII.10			62		493		835	1390			710		34		5	749	-641
2010			**2707**		**4055**		**4978**	**11740**			**6471**		**1458**		**2656**	**10585**	**-1155**

[1] 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".

Estonia

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005	n.a.
			2009	7032
			2010	10465
Hydraulic net generation	GWh	Σ	2005	n.a.
			2009	98
			2010	27
Other renewable net generation	GWh	Σ	2005	n.a.
			2009	405
			2010	836
- of which wind	GWh	Σ	2005	n.a.
			2009	173
			2010	276
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005	n.a.
			2009	7535
			2010	11328
Sum of physical imports	GWh	Σ	2005	n.a.
			2009	3226
			2010	1743
Sum of physical exports	GWh	Σ	2005	n.a.
			2009	3129
			2010	4947
Total exchange balance	GWh	Σ	2005	n.a.
			2009	97
			2010	-3317
Consumption of pumps	GWh	Σ	2005	n.a.
			2009	0
			2010	0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	n.a.
			2009	7112
			2010	8011
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			20.01.10	1038
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			20.01.10	1445
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			20.01.10	1495
Time of highest load on the 3rd Wednesday		CET	2005	n.a.
			2009	n.a.
			20.01.10	17:00

Physical exchanges in interconnected operation [1]

MM_YY	EE→FI	EE→LV	EE→RU	Total_EXP	FI→EE	LV→EE	RU→EE	Total_IMP	Total_IMP - Total_EXP
	Export (-)				Import (+)				Balance
I.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
II.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
III.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IV.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
V.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VI.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VII.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VIII.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IX.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
X.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XI.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XII.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2005	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
I.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
II.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
III.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IV.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
V.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VI.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VII.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VIII.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IX.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
X.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XI.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XII.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2009	**1786**	**1138**	**205**	**3129**	**87**	**497**	**2642**	**3226**	**97**
I.10	213	116	8	337	0	8	149	157	-180
II.10	223	126	7	356	0	1	134	135	-221
III.10	246	126	12	384	0	13	92	105	-279
IV.10	222	90	7	319	1	15	196	212	-107
V.10	172	151	36	359	24	1	77	102	-257
VI.10	121	232	60	413	24	0	63	87	-326
VII.10	90	337	34	461	31	0	102	133	-328
VIII.10	45	284	45	374	61	0	46	107	-267
IX.10	66	314	27	407	65	0	85	150	-257
X.10	101	323	31	455	30	0	114	144	-311
XI.10	200	251	10	461	10	0	144	154	-307
XII.10	268	345	8	621	0	0	257	257	-364
2010	**1967**	**2695**	**285**	**4947**	**246**	**38**	**1459**	**1743**	**-3204**

[1] 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".

Thermal nuclear net generation	GWh	Σ	2005 2009 2010	54978 50422 59310
Fossil fuels net generation	GWh	Σ	2005 2009 2010	152481 143006 114052
Hydraulic net generation	GWh	Σ	2005 2009 2010	22494 28719 44617
Other renewable net generation	GWh	Σ	2005 2009 2010	24508 41554 55057
- of which wind	GWh	Σ	2005 2009 2010	17343 35956 43357
- of which solar	GWh	Σ	2005 2009 2010	n.a. 5460 6718
Non-identifiable net generation	GWh	Σ	2005 2009 2010	0 421 364
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 2009 2010	260468 270732 279825
Sum of physical imports	GWh	Σ	2005 2009 2010	10201 6784 5214
Sum of physical exports	GWh	Σ	2005 2009 2010	11124 14388 13117
Total exchange balance	GWh	Σ	2005 2009 2010	-1343 -8101 -8333
Consumption of pumps	GWh	Σ	2005 2009 2010	6360 3750 4458
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005 2009 2010	252765 258881 267034
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05 21.01.09 15.07.10	27948 25684 25922
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05 16.12.09 17.02.10	38615 43154 40890
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05 16.12.09 15.12.10	40972 44058 42301
Time of highest load on the 3rd Wednesday		CET	21.12.05 16.12.09 15.12.10	19:00 18:00 20:00

Physical exchanges in interconnected operation [1]

Spain | GWh

MM_YY	ES→FR	ES→PT	ES→MA	Total_EXP	FR→ES	PT→ES	MA→ES	Total_IMP	Total_IMP - Total_EXP
	Export (-)				Import (+)				Balance
I.05	8	942	65	1015	948	409	14	1371	356
II.05	30	682	31	743	741	338	15	1094	351
III.05	52	742	48	842	645	281	15	941	99
IV.05	35	683	37	755	646	188	13	847	92
V.05	9	716	64	789	803	158	9	970	181
VI.05	32	677	36	745	715	216	15	946	201
VII.05	77	782	40	899	677	267	10	954	55
VIII.05	30	659	160	849	578	117	1	696	-153
IX.05	56	858	114	1028	402	148	3	553	-475
X.05	113	931	151	1195	419	150	2	571	-624
XI.05	126	894	104	1124	295	181	4	480	-644
XII.05	181	911	48	1140	415	353	10	778	-362
2005	**749**	**9477**	**898**	**11124**	**7284**	**2806**	**111**	**10201**	**-923**
I.09	322	820	166	1308	226	243	3	472	-836
II.09	276	471	206	953	175	349	2	526	-427
III.09	148	545	183	876	429	294	3	726	-150
IV.09	92	732	330	1154	505	149	0	654	-500
V.09	79	698	467	1244	652	173	0	825	-419
VI.09	188	743	444	1375	465	157	0	622	-753
VII.09	250	739	535	1524	443	155	0	598	-926
VIII.09	130	558	551	1239	284	193	0	477	-762
IX.09	129	485	459	1073	212	195	0	407	-666
X.09	163	583	528	1274	195	164	0	359	-915
XI.09	224	654	386	1264	198	214	0	412	-852
XII.09	350	411	343	1104	173	533	0	706	-398
2009	**2351**	**7439**	**4598**	**14388**	**3957**	**2819**	**8**	**6784**	**-7604**
I.10	468	336	195	999	122	617	2	741	-258
II.10	371	416	78	865	47	350	9	406	-459
III.10	440	385	161	986	91	358	12	461	-525
IV.10	363	323	346	1032	36	287	0	323	-709
V.10	239	345	338	922	107	291	0	398	-524
VI.10	229	534	402	1165	246	122	0	368	-797
VII.10	186	671	438	1295	220	100	0	320	-975
VIII.10	75	691	486	1252	458	80	0	538	-714
IX.10	200	603	491	1294	279	87	0	366	-928
X.10	300	689	498	1487	148	70	0	218	-1269
XI.10	201	456	301	958	183	232	1	416	-542
XII.10	440	218	204	862	54	596	9	659	-203
2010	**3512**	**5667**	**3938**	**13117**	**1991**	**3190**	**33**	**5214**	**-7903**

[1] 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".

Thermal nuclear net generation	GWh	Σ	2005	22334
			2009	22601
			2010	21884
Fossil fuels net generation	GWh	Σ	2005	31764
			2009	24869
			2010	30961
Hydraulic net generation	GWh	Σ	2005	13597
			2009	12573
			2010	12765
Other renewable net generation	GWh	Σ	2005	167
			2009	8529
			2010	10646
- of which wind	GWh	Σ	2005	167
			2009	277
			2010	293
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	0
			2009	636
			2010	711
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 [1]	67862
			2009 [1]	69207
			2010 [1]	76967
Sum of physical imports	GWh	Σ	2005	n.a.
			2009	15462
			2010	16354
Sum of physical exports	GWh	Σ	2005	n.a.
			2009	3377
			2010	5878
Total exchange balance	GWh	Σ	2005	n.a.
			2009	n.a.
			2010	10500
Consumption of pumps	GWh	Σ	2005	n.a.
			2009	0
			2010	0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	85006
			2009	81292
			2010	87467
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	11501
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	13591
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	13923
Time of highest load on the 3rd Wednesday		CET	2005	n.a.
			2009	n.a.
			15.12.10	16:00

[1] Including deliveries from industry

Physical exchanges in interconnected operation [1]

MM_YY	FI→EE	FI→NO	FI→SE	FI→RU	Total_EXP	EE→FI	NO→FI	SE→FI	RU→FI	Total_IMP	Total_IMP - Total_EXP
	Export (-)					Import (+)					Balance
I.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
II.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
III.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IV.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
V.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VI.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VII.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VIII.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IX.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
X.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XI.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XII.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2005	**n.a.**	**131**	**1394**	**0**	**n.a.**	**n.a.**	**164**	**7193**	**11312**	**n.a.**	**n.a.**
I.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
II.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
III.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IV.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
V.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VI.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VII.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VIII.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IX.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
X.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XI.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XII.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2009	**87**	**128**	**3162**	**0**	**3377**	**1786**	**113**	**1855**	**11708**	**15462**	**12085**
I.10	0	14	329	0	343	213	3	100	1065	1381	1038
II.10	0	21	557	0	578	223	0	157	932	1312	734
III.10	0	40	946	0	986	246	0	1	1060	1307	321
IV.10	1	36	881	0	918	222	0	11	934	1167	249
V.10	24	13	396	0	433	172	9	191	1019	1391	958
VI.10	24	5	296	0	325	121	4	189	976	1290	965
VII.10	31	5	36	0	72	90	38	698	494	1320	1248
VIII.10	61	0	43	0	104	45	24	570	990	1629	1525
IX.10	65	0	277	0	342	66	21	235	1023	1345	1003
X.10	30	1	502	0	533	101	11	174	1059	1345	812
XI.10	10	17	472	0	499	200	2	234	1031	1467	968
XII.10	0	10	735	0	745	268	3	76	1053	1400	655
2010	**246**	**162**	**5470**	**0**	**5878**	**1967**	**115**	**2636**	**11636**	**16354**	**10476**

[1] 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".

France

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	429978
			2009	389999
			2010	407877
Fossil fuels net generation	GWh	Σ	2005	58956
			2009	54818
			2010	59453
Hydraulic net generation	GWh	Σ	2005	55983
			2009	61753
			2010	67995
Other renewable net generation	GWh	Σ	2005	4321
			2009	12232
			2010	14984
- of which wind	GWh	Σ	2005	992
			2009	7779
			2010	9603
- of which solar	GWh	Σ	2005	n.a.
			2009	139
			2010	562
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005	549238
			2009	518802
			2010	550309
Sum of physical imports	GWh	Σ	2005	7595
			2009	19154
			2010	19950
Sum of physical exports	GWh	Σ	2005	66248
			2009	43281
			2010	48563
Total exchange balance	GWh	Σ	2005	-60248
			2009	-25702
			2010	-30520
Consumption of pumps	GWh	Σ	2005	6590
			2009	6707
			2010	6497
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	482400
			2009	486393
			2010	513292
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	66631
			16.12.09	72868
			15.12.10	78377
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	80254
			16.12.09	85207
			15.12.10	93188
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	82319
			16.12.09	89719
			15.12.10	96710
Time of highest load on the 3rd Wednesday		CET	21.12.05	19:00
			16.12.09	19:00
			15.12.10	19:00

Physical exchanges in interconnected operation [1]

MM_YY	FR→BE	FR→CH	FR→DE	FR→ES	FR→GB	FR←IT	Total_EXP	BE→FR	CH→FR	DE→FR	ES→FR	GB→FR	IT→FR	Total_IMP	Total_IMP - Total_EXP
	Export (-)							Import (+)							Balance
I.05	264	951	1009	948	880	1424	5476	299	255	8	8	105	90	765	-4711
II.05	163	605	698	741	628	1138	3973	442	327	130	30	208	96	1233	-2740
III.05	416	787	770	645	866	1278	4762	392	268	214	52	118	57	1101	-3661
IV.05	180	820	1137	646	872	1246	4901	253	129	15	35	81	49	562	-4339
V.05	593	914	2067	803	1133	1268	6778	66	82	0	9	25	50	232	-6546
VI.05	916	804	1779	715	798	1193	6205	54	237	11	32	55	52	441	-5764
VII.05	377	591	1412	677	860	1238	5155	194	327	5	77	56	43	702	-4453
VIII.05	1060	807	2364	578	1247	873	6929	73	90	14	30	9	59	275	-6654
IX.05	1135	751	1735	402	713	1238	5974	27	179	1	56	91	36	390	-5584
X.05	716	1059	1219	419	1133	1527	6073	61	80	16	113	5	21	296	-5777
XI.05	627	1078	1281	295	1240	1276	5797	97	186	33	126	10	50	502	-5295
XII.05	308	807	762	415	1139	794	4225	264	477	47	181	28	99	1096	-3129
2005	**6755**	**9974**	**16233**	**7284**	**11509**	**14493**	**66248**	**2222**	**2637**	**494**	**749**	**791**	**702**	**7595**	**-58653**
I.09	238	1044	1086	226	467	1116	4177	492	275	66	322	367	130	1652	-2525
II.09	274	1014	1152	175	432	1168	4215	318	139	1	276	203	112	1049	-3166
III.09	249	1266	1172	429	544	1525	5185	400	37	39	148	193	71	888	-4297
IV.09	130	563	529	505	959	1050	3736	457	293	98	92	45	95	1080	-2656
V.09	276	444	1372	652	1312	1083	5139	288	252	31	79	10	64	724	-4415
VI.09	162	322	625	465	790	1001	3365	509	477	280	188	29	74	1557	-1808
VII.09	36	335	633	443	848	979	3274	891	497	272	250	68	96	2074	-1200
VIII.09	55	442	1288	284	620	674	3363	538	493	40	130	167	50	1418	-1945
IX.09	83	624	806	212	203	836	2764	645	389	52	129	361	70	1646	-1118
X.09	55	653	464	195	50	657	2074	772	568	248	163	707	188	2646	572
XI.09	64	750	682	198	316	920	2930	619	248	156	224	597	130	1974	-956
XII.09	87	854	798	173	348	799	3059	701	496	153	350	611	135	2446	-613
2009	**1709**	**8311**	**10607**	**3957**	**6889**	**11808**	**43281**	**6630**	**4164**	**1436**	**2351**	**3358**	**1215**	**19154**	**-24127**
I.10	111	745	576	122	145	811	2510	805	652	239	468	797	115	3076	566
II.10	84	840	910	47	222	1057	3160	601	426	57	371	714	75	2244	-916
III.10	140	1084	1308	91	336	1171	4130	610	324	28	440	701	77	2180	-1950
IV.10	153	924	1244	36	381	1020	3758	449	147	7	363	314	83	1363	-2395
V.10	155	672	920	107	671	861	3386	596	276	52	239	186	55	1404	-1982
VI.10	566	748	1934	246	992	1230	5716	117	165	3	229	14	35	563	-5153
VII.10	380	641	1690	220	1033	1311	5275	178	362	6	186	21	66	819	-4456
VIII.10	478	786	2408	458	1297	839	6266	126	246	0	75	4	96	547	-5719
IX.10	359	783	1507	279	594	947	4469	248	377	6	200	122	48	1001	-3468
X.10	80	858	924	148	247	867	3124	849	697	168	300	599	111	2724	-400
XI.10	222	902	1096	183	548	957	3908	499	543	99	201	355	87	1784	-2124
XII.10	320	696	609	54	670	512	2861	324	905	130	440	282	164	2245	-616
2010	**3048**	**9679**	**15126**	**1991**	**7136**	**11583**	**48563**	**5402**	**5120**	**795**	**3512**	**4109**	**1012**	**19950**	**-28613**

[1] 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".

Thermal nuclear net generation	GWh	Σ	2005	n.a.
			2009	65044
			2010	58203
Fossil fuels net generation	GWh	Σ	2005	n.a.
			2009	244411
			2010	254647
Hydraulic net generation	GWh	Σ	2005	n.a.
			2009	6064
			2010	5207
Other renewable net generation	GWh	Σ	2005	n.a.
			2009	1092
			2010	3327
- of which wind	GWh	Σ	2005	n.a.
			2009	1089
			2010	3327
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005	n.a.
			2009	316612
			2010	332569
Sum of physical imports	GWh	Σ	2005	n.a.
			2009	6903
			2010	7136
Sum of physical exports	GWh	Σ	2005	n.a.
			2009	5350
			2010	6408
Total exchange balance	GWh	Σ	2005	n.a.
			2009	n.a.
			2010	6185
Consumption of pumps	GWh	Σ	2005	n.a.
			2009	n.a.
			2010	3045
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	n.a.
			2009	314600
			2010	335709
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	38283
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	52289
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	59008
Time of highest load on the 3rd Wednesday		CET	2005	n.a.
			2009	n.a.
			15.12.10	19:00

Physical exchanges in interconnected operation [1]

MM_YY	GB→FR	GB→NI	Total_EXP	FR→GB	NI→GB	Total_IMP	Total_IMP - Total_EXP
	Export (-)			Import (+)			Balance
I.05	105	n.a.	n.a.	880	n.a.	n.a.	n.a.
II.05	208	n.a.	n.a.	628	n.a.	n.a.	n.a.
III.05	118	n.a.	n.a.	866	n.a.	n.a.	n.a.
IV.05	81	n.a.	n.a.	872	n.a.	n.a.	n.a.
V.05	25	n.a.	n.a.	1133	n.a.	n.a.	n.a.
VI.05	55	n.a.	n.a.	798	n.a.	n.a.	n.a.
VII.05	56	n.a.	n.a.	860	n.a.	n.a.	n.a.
VIII.05	9	n.a.	n.a.	1247	n.a.	n.a.	n.a.
IX.05	91	n.a.	n.a.	713	n.a.	n.a.	n.a.
X.05	5	n.a.	n.a.	1133	n.a.	n.a.	n.a.
XI.05	10	n.a.	n.a.	1240	n.a.	n.a.	n.a.
XII.05	28	n.a.	n.a.	1139	n.a.	n.a.	n.a.
2005	**791**	**n.a.**	**n.a.**	**11509**	**n.a.**	**n.a.**	**n.a.**
I.09	367	n.a.	n.a.	467	n.a.	n.a.	n.a.
II.09	203	n.a.	n.a.	432	n.a.	n.a.	n.a.
III.09	193	n.a.	n.a.	544	n.a.	n.a.	n.a.
IV.09	45	n.a.	n.a.	959	n.a.	n.a.	n.a.
V.09	10	n.a.	n.a.	1312	n.a.	n.a.	n.a.
VI.09	29	n.a.	n.a.	790	n.a.	n.a.	n.a.
VII.09	68	n.a.	n.a.	848	n.a.	n.a.	n.a.
VIII.09	167	n.a.	n.a.	620	n.a.	n.a.	n.a.
IX.09	361	n.a.	n.a.	203	n.a.	n.a.	n.a.
X.09	707	n.a.	n.a.	50	n.a.	n.a.	n.a.
XI.09	597	n.a.	n.a.	316	n.a.	n.a.	n.a.
XII.09	611	n.a.	n.a.	348	n.a.	n.a.	n.a.
2009	**3358**	**1992**	**5350**	**6889**	**14**	**6903**	**1553**
I.10	797	235	1032	145	0	145	-887
II.10	714	218	932	222	0	222	-710
III.10	701	248	949	336	0	336	-613
IV.10	314	190	504	381	0	381	-123
V.10	186	223	409	671	0	671	262
VI.10	14	82	96	992	0	992	896
VII.10	21	155	176	1033	0	1033	857
VIII.10	4	220	224	1297	0	1297	1073
IX.10	122	134	256	594	0	594	338
X.10	599	139	738	247	0	247	-491
XI.10	355	165	520	548	0	548	28
XII.10	282	290	572	670	0	670	98
2010	**4109**	**2299**	**6408**	**7136**	**0**	**7136**	**728**

[1] 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".

Thermal nuclear net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005	43304
			2009	41617
			2010	37920
Hydraulic net generation	GWh	Σ	2005	5583
			2009	5613
			2010	7457
Other renewable net generation	GWh	Σ	2005	1056
			2009	2280
			2010	2503
- of which wind	GWh	Σ	2005	946
			2009	1909
			2010	2062
- of which solar	GWh	Σ	2005	n.a.
			2009	47
			2010	133
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 [1]	49943
			2009 [1]	49510
			2010 [1]	47880
Sum of physical imports	GWh	Σ	2005	5386
			2009	7604
			2010	8523
Sum of physical exports	GWh	Σ	2005	1838
			2009	3224
			2010	2801
Total exchange balance	GWh	Σ	2005	3781
			2009	4368
			2010	5708
Consumption of pumps	GWh	Σ	2005	848
			2009	386
			2010	37
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	52876
			2009	53492
			2010	53551
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	20.07.05	5993
			15.07.09	5549
			21.07.10	6230
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	20.07.05	8838
			15.07.09	8625
			21.07.10	9279
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	20.07.05	9140
			15.07.09	8936
			16.06.10	9732
Time of highest load on the 3rd Wednesday		CET	20.07.05	13:00
			15.07.09	13:00
			16.06.10	13:00

[1] Including deliveries from industry

Physical exchanges in interconnected operation [1]

MM_YY	GR→BG	GR→IT	GR→MK	GR→AL	GR→TR	Total_EXP	BG→GR	IT→GR	MK→GR	AL→GR	TR→GR	Total_IMP	Total_IMP - Total_EXP
	Export (-)						Import (+)						Balance
I.05	0	119	4	91	0	214	408	0	52	0	0	460	246
II.05	0	72	15	106	0	193	411	0	37	0	0	448	255
III.05	0	285	16	76	0	377	375	0	50	0	0	425	48
IV.05	0	158	0	40	0	198	319	0	90	0	0	409	211
V.05	0	20	1	18	0	39	211	2	82	12	0	307	268
VI.05	0	0	11	55	0	66	377	21	60	3	0	461	395
VII.05	0	0	2	70	0	72	436	74	75	0	0	585	513
VIII.05	0	0	6	71	0	77	395	69	63	0	0	527	450
IX.05	0	27	0	79	0	106	367	38	93	0	0	498	392
X.05	0	2	2	119	0	123	373	27	77	0	0	477	354
XI.05	0	28	2	131	0	161	431	13	81	0	0	525	364
XII.05	0	0	12	200	0	212	450	24	36	0	0	510	298
2005	**0**	**711**	**71**	**1056**	**0**	**1838**	**4553**	**268**	**796**	**15**	**0**	**5632**	**3794**
I.09	0	162	0	135	0	297	271	14	295	0	0	580	283
II.09	0	239	0	43	0	282	285	5	295	7	0	592	310
III.09	0	190	0	87	0	277	328	25	401	0	0	754	477
IV.09	0	222	0	3	0	225	213	53	247	37	0	550	325
V.09	0	126	0	17	0	143	212	23	316	15	0	566	423
VI.09	0	125	0	32	0	157	352	50	456	2	0	860	703
VII.09	0	138	0	44	0	182	438	4	491	0	0	933	751
VIII.09	0	161	0	130	0	291	300	4	355	0	0	659	368
IX.09	0	169	0	143	0	312	242	58	243	0	0	543	231
X.09	0	177	6	167	0	350	244	32	178	0	0	454	104
XI.09	0	207	0	138	0	345	272	30	248	0	0	550	205
XII.09	0	268	0	95	0	363	261	16	286	0	0	563	200
2009	**0**	**2184**	**6**	**1034**	**0**	**3224**	**3418**	**314**	**3811**	**61**	**0**	**7604**	**4380**
I.10	0	312	0	19	0	331	214	2	286	22	0	524	193
II.10	1	200	0	13	0	214	227	1	312	14	0	554	340
III.10	0	206	0	1	0	207	279	15	357	77	0	728	521
IV.10	0	71	0	1	0	72	243	17	356	91	0	707	635
V.10	0	0	0	2	0	2	167	0	359	105	0	631	629
VI.10	0	41	0	17	0	58	345	11	507	26	0	889	831
VII.10	0	239	0	105	0	344	458	3	502	0	0	963	619
VIII.10	0	213	0	114	0	327	480	11	481	0	0	972	645
IX.10	0	163	0	112	0	275	353	1	308	0	109	771	496
X.10	0	282	6	59	0	347	220	5	120	14	230	589	242
XI.10	0	241	1	26	0	268	245	6	128	23	212	614	346
XII.10	0	331	1	24	0	356	222	0	141	33	185	581	225
2010	**1**	**2299**	**8**	**493**	**0**	**2801**	**3453**	**72**	**3857**	**405**	**736**	**8523**	**5722**

[1] 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".

Thermal nuclear net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005	5177
			2009	5190
			2010	4801
Hydraulic net generation	GWh	Σ	2005	6397
			2009	6775
			2010	8313
Other renewable net generation	GWh	Σ	2005	21
			2009	52
			2010	135
- of which wind	GWh	Σ	2005	11
			2009	43
			2010	117
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	1
Non-identifiable net generation	GWh	Σ	2005	0
			2009	7
			2010	2
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 [1]	11595
			2009 [1]	12024
			2010 [1]	13251
Sum of physical imports	GWh	Σ	2005	14638
			2009	11871
			2010	12359
Sum of physical exports	GWh	Σ	2005	9286
			2009	6178
			2010	7696
Total exchange balance	GWh	Σ	2005	5113
			2009	5686
			2010	4479
Consumption of pumps	GWh	Σ	2005	151
			2009	203
			2010	136
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	16557
			2009	17507
			2010	17594
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	1643
			18.02.09	1703
			15.12.10	1919
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	19.01.05	2521
			18.02.09	2794
			15.12.10	2814
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	2810
			18.02.09	3035
			15.12.10	3116
Time of highest load on the 3rd Wednesday		CET	21.12.05	18:00
			18.02.09	20:00
			15.12.10	19:00

[1] Including deliveries from industry

Physical exchanges in interconnected operation [1]

MM_YY	HR→BA	HR→CS	HR→HU	HR→RS	HR→SI	Total_EXP	BA→HR	CS→HR	HU→HR	RS→HR	SI→HR	Total_IMP	Total_IMP - Total_EXP
	Export (-)						Import (-)						Balance
I.05	107	0	0		768	875	275	377	672		22	1346	471
II.05	131	0	0		688	819	225	371	647		46	1289	470
III.05	90	0	0		849	939	352	380	601		29	1362	423
IV.05	85	0	0		737	822	257	318	523		60	1158	336
V.05	79	0	0		578	657	194	265	432		99	990	333
VI.05	102	0	0		611	713	245	300	520		66	1131	418
VII.05	143	1	0		649	793	183	299	621		130	1233	440
VIII.05	139	0	0		477	616	161	284	469		177	1091	475
IX.05	74	0	0		582	656	238	328	418		140	1124	468
X.05	103	0	0		695	798	222	374	517		137	1250	452
XI.05	163	0	0		581	744	184	440	573		140	1337	593
XII.05	124	1	0		729	854	199	402	696		30	1327	473
2005	**1340**	**2**	**0**		**7944**	**9286**	**2735**	**4138**	**6689**		**1076**	**14638**	**5352**
I.09	73		0	0	604	677	322		451	193	126	1092	415
II.09	43		0	0	686	729	450		406	181	72	1109	380
III.09	68		0	0	594	662	345		440	173	157	1115	453
IV.09	75		0	0	533	608	345		309	138	24	816	208
V.09	78		4	0	312	394	245		126	118	385	874	480
VI.09	82		1	0	374	457	266		221	140	375	1002	545
VII.09	91		0	0	320	411	196		169	130	538	1033	622
VIII.09	123		0	0	121	244	130		101	106	506	843	599
IX.09	102		0	0	244	346	199		128	84	452	863	517
X.09	77		0	0	445	522	255		195	147	398	995	473
XI.09	60		3	0	509	572	348		376	186	204	1114	542
XII.09	102		0	0	454	556	179		388	111	337	1015	459
2009	**974**		**8**	**0**	**5196**	**6178**	**3280**		**3310**	**1707**	**3574**	**11871**	**5693**
I.10	97		0	0	614	711	426		299	145	190	1060	349
II.10	53		0	0	708	761	465		313	146	145	1069	308
III.10	61		0	11	751	823	520		203	149	200	1072	249
IV.10	67		1	2	656	726	448		138	174	179	939	213
V.10	69		15	0	585	669	528		46	153	260	987	318
VI.10	57		17	0	445	519	373		90	170	306	939	420
VII.10	115		0	0	333	448	207		331	159	357	1054	606
VIII.10	206		3	0	104	313	111		342	76	415	944	631
IX.10	121		1	1	340	463	229		339	86	322	976	513
X.10	99		0	0	492	591	400		522	133	48	1103	512
XI.10	86		4	0	693	783	522		308	160	136	1126	343
XII.10	78		52	0	759	889	698		114	189	89	1090	201
2010	**1109**		**93**	**14**	**6480**	**7696**	**4927**		**3045**	**1740**	**2647**	**12359**	**4663**

[1] 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".

Thermal nuclear net generation	GWh	Σ	2005	13005
			2009	14570
			2010	14830
Fossil fuels net generation	GWh	Σ	2005	17884
			2009	15817
			2010	16503
Hydraulic net generation	GWh	Σ	2005	200
			2009	222
			2010	181
Other renewable net generation	GWh	Σ	2005	1400
			2009	1904
			2010	2267
- of which wind	GWh	Σ	2005	11
			2009	300
			2010	503
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	585
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 [1]	33089
			2009 [1]	32513
			2010 [1]	33781
Sum of physical imports	GWh	Σ	2005	15635
			2009	10971
			2010	9897
Sum of physical exports	GWh	Σ	2005	9411
			2009	5463
			2010	4706
Total exchange balance	GWh	Σ	2005	6225
			2009	5513
			2010	5195
Consumption of pumps	GWh	Σ	2005	0
			2009	0
			2010	0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	39314
			2009	38026
			2010	38976
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	19.01.05	4459
			18.02.09	4494
			15.12.10	3969
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	19.01.05	5747
			21.01.09	5836
			15.12.10	5430
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	19.01.05	6146
			16.12.09	6252
			15.12.10	5937
Time of highest load on the 3rd Wednesday		CET	19.01.05	17:00
			16.12.09	18:00
			15.12.10	17:00

[1] Including deliveries from industry

Physical exchanges in interconnected operation [1]

Hungary | GWh

MM_YY	HU→AT	HU→CS	HU→HR	HU→RO	HU→RS	HU→SK	HU→UA_W	Total_EXP	AT→HU	CS→HU	HR→HU	RO→HU	RS→HU	SK→HU	UA_W→HU	Total_IMP	Total_IMP - Total_EXP
	Export (-)								Import (-)								Balance
I.05	59	175	672	28		0	0	934	23	0	0	81		918	438	1460	526
II.05	24	198	647	8		0	0	877	52	0	0	99		822	406	1379	502
III.05	19	90	601	18		0	15	743	67	2	0	82		785	386	1322	579
IV.05	22	100	523	19		0	3	667	165	6	0	45		680	403	1299	632
V.05	20	129	432	11		0	2	594	74	0	0	112		653	389	1228	634
VI.05	12	140	520	7		0	0	679	76	0	0	113		612	353	1154	475
VII.05	183	132	621	13		0	0	949	57	0	0	94		895	228	1274	325
VIII.05	153	181	469	6		0	5	814	49	0	0	102		581	373	1105	291
IX.05	50	99	418	10		0	1	578	106	3	0	97		500	412	1118	540
X.05	103	90	517	18		0	0	728	71	3	0	105		744	426	1349	621
XI.05	126	124	573	4		0	0	827	45	2	0	136		749	509	1441	614
XII.05	86	235	696	4		0	0	1021	24	0	0	124		867	491	1506	485
2005	**857**	**1693**	**6689**	**146**		**0**	**26**	**9411**	**809**	**16**	**0**	**1190**		**8806**	**4814**	**15635**	**6224**
I.09	40		451	14	160	0	2	667	68		0	50	0	546	351	1015	348
II.09	46		406	3	122	0	4	581	52		0	81	0	422	295	850	269
III.09	2		440	9	142	0	15	608	174		0	53	0	610	355	1192	584
IV.09	27		309	8	65	0	20	429	97		0	75	3	403	192	770	341
V.09	3		126	21	36	0	30	216	207		4	80	19	421	47	778	562
VI.09	12		221	51	43	0	32	359	96		1	32	36	459	203	827	468
VII.09	7		169	22	86	0	12	296	143		0	42	6	654	267	1112	816
VIII.09	5		101	26	98	0	21	251	186		0	45	0	374	197	802	551
IX.09	28		128	21	81	0	6	264	138		0	46	2	563	306	1055	791
X.09	38		195	35	117	0	15	400	141		0	31	9	514	248	943	543
XI.09	27		376	21	149	0	25	598	33		3	49	0	451	226	762	164
XII.09	5		388	76	266	0	59	794	58		0	3	0	583	221	865	71
2009	**240**		**3310**	**307**	**1365**	**0**	**241**	**5463**	**1393**		**8**	**587**	**75**	**6000**	**2908**	**10971**	**5508**
I.10	15		299	33	123	0	44	514	31		0	37	3	353	256	680	166
II.10	7		313	31	86	0	42	479	35		0	27	2	373	215	652	173
III.10	5		203	30	61	0	80	379	36		0	32	16	447	107	638	259
IV.10	69		138	12	6	0	11	236	42		1	82	63	517	83	788	552
V.10	60		46	14	0	0	48	168	83		15	90	158	339	89	774	606
VI.10	16		90	3	5	0	47	161	115		17	123	88	393	140	876	715
VII.10	9		331	2	1	0	2	345	201		0	143	70	602	214	1230	885
VIII.10	14		342	9	15	0	11	391	168		3	119	18	539	96	943	552
IX.10	27		339	5	9	0	23	403	140		1	144	35	447	118	885	482
X.10	65		522	0	51	0	14	652	113		0	165	6	558	284	1126	474
XI.10	149		308	4	32	3	33	529	37		4	114	26	280	241	702	173
XII.10	205		114	3	3	53	71	449	13		52	176	59	86	217	603	154
2010	**641**		**3045**	**146**	**392**	**56**	**426**	**4706**	**1014**		**93**	**1252**	**544**	**4934**	**2060**	**9897**	**5191**

[1] 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".

			2005	n.a.
Thermal nuclear net generation	GWh	Σ	2009	0
			2010	0
			2005	n.a.
Fossil fuels net generation	GWh	Σ	2009	22118
			2010	23025
			2005	n.a.
Hydraulic net generation	GWh	Σ	2009	1244
			2010	726
			2005	n.a.
Other renewable net generation	GWh	Σ	2009	3149
			2010	2820
			2005	n.a.
- of which wind	GWh	Σ	2009	2979
			2010	2820
			2005	n.a.
- of which solar	GWh	Σ	2009	0
			2010	0
			2005	n.a.
Non-identifiable net generation	GWh	Σ	2009	87
			2010	248
			2005	n.a.
Total net generation	GWh	Σ	2009 [1]	26598
calculated to represent 100% of the national values			2010 [1]	26819
			2005	n.a.
Sum of physical imports	GWh	Σ	2009	997
			2010	744
			2005	n.a.
Sum of physical exports	GWh	Σ	2009	216
			2010	293
			2005	n.a.
Total exchange balance	GWh	Σ	2009	n.a.
			2010	469
			2005	n.a.
Consumption of pumps	GWh	Σ	2009	n.a.
			2010	287
			2005	n.a.
National electrical consumption,	GWh	Σ	2009	26248
calculated to represent 100% of the national values			2010	27001
			2005	n.a.
Consumption load 3:00 a.m. on the 3rd Wednesday,	MW	max.	2009	n.a.
calculated to represent 100% of the national values			15.12.10	2906
			2005	n.a.
Consumption load 11:00 a.m. on the 3rd Wednesday,	MW	max.	2009	n.a.
calculated to represent 100% of the national values			15.12.10	3960
			2005	0
Highest load on the 3rd Wednesday,	MW	max.	2009	0
calculated to represent 100% of the national values			15.12.10	4664
			2005	n.a.
Time of highest load on the 3rd Wednesday		CET	2009	n.a.
			15.12.10	19:00

[1] Including deliveries from industry

Physical exchanges in interconnected operation [1]

MM_YY	IE→NI	Total_EXP	NI→IE	Total_IMP	Total_IMP - Total_EXP
	Export (-)		Import (+)		Balance
I.05	n.a.	n.a.	n.a.	n.a.	n.a.
II.05	n.a.	n.a.	n.a.	n.a.	n.a.
III.05	n.a.	n.a.	n.a.	n.a.	n.a.
IV.05	n.a.	n.a.	n.a.	n.a.	n.a.
V.05	n.a.	n.a.	n.a.	n.a.	n.a.
VI.05	n.a.	n.a.	n.a.	n.a.	n.a.
VII.05	n.a.	n.a.	n.a.	n.a.	n.a.
VIII.05	n.a.	n.a.	n.a.	n.a.	n.a.
IX.05	n.a.	n.a.	n.a.	n.a.	n.a.
X.05	n.a.	n.a.	n.a.	n.a.	n.a.
XI.05	n.a.	n.a.	n.a.	n.a.	n.a.
XII.05	n.a.	n.a.	n.a.	n.a.	n.a.
2005	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
I.09	n.a.	n.a.	n.a.	n.a.	n.a.
II.09	n.a.	n.a.	n.a.	n.a.	n.a.
III.09	n.a.	n.a.	n.a.	n.a.	n.a.
IV.09	n.a.	n.a.	n.a.	n.a.	n.a.
V.09	n.a.	n.a.	n.a.	n.a.	n.a.
VI.09	n.a.	n.a.	n.a.	n.a.	n.a.
VII.09	n.a.	n.a.	n.a.	n.a.	n.a.
VIII.09	n.a.	n.a.	n.a.	n.a.	n.a.
IX.09	n.a.	n.a.	n.a.	n.a.	n.a.
X.09	n.a.	n.a.	n.a.	n.a.	n.a.
XI.09	n.a.	n.a.	n.a.	n.a.	n.a.
XII.09	n.a.	n.a.	n.a.	n.a.	n.a.
2009	**216**	**216**	**997**	**997**	**781**
I.10	5	5	135	135	130
II.10	9	9	106	106	97
III.10	14	14	72	72	58
IV.10	19	19	50	50	31
V.10	3	3	102	102	99
VI.10	18	18	45	45	27
VII.10	41	41	24	24	-17
VIII.10	17	17	54	54	37
IX.10	73	73	15	15	-58
X.10	37	37	23	23	-14
XI.10	48	48	26	26	-22
XII.10	9	9	92	92	83
2010	**293**	**293**	**744**	**744**	**451**

[1] 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".

Cyprus

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	n.a
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005	n.a.
			2009	5014
			2010	5202
Hydraulic net generation	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Other renewable net generation	GWh	Σ	2005	n.a.
			2009	0
			2010	33
- of which wind	GWh	Σ	2005	n.a.
			2009	0
			2010	33
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005	n.a.
			2009	5014
			2010	5235
Sum of physical imports	GWh	Σ	2005	0
			2009	0
			2010	0
Sum of physical exports	GWh	Σ	2005	0
			2009	0
			2010	0
Total exchange balance	GWh	Σ	2005	0
			2009	0
			2010	0
Consumption of pumps	GWh	Σ	2005	0
			2009	0
			2010	0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	n.a.
			2009	5014
			2010	5235
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			2010	n.a.
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			2010	n.a.
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			2010	983
Time of highest load on the 3rd Wednesday		CET	2005	n.a.
			2009	n.a.
			2010	14:00

Iceland

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005	8
			2009	0
			2010	12
Hydraulic net generation	GWh	Σ	2005	7013
			2009	12300
			2010	12484
Other renewable net generation	GWh	Σ	2005	1658
			2009	4600
			2010	4183
- of which wind	GWh	Σ	2005	0
			2009	0
			2010	0
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005	8679
			2009	16900
			2010	16679
Sum of physical imports	GWh	Σ	2005	0
			2009	0
			2010	0
Sum of physical exports	GWh	Σ	2005	0
			2009	0
			2010	0
Total exchange balance	GWh	Σ	2005	0
			2009	0
			2010	0
Consumption of pumps	GWh	Σ	2005	0
			2009	0
			2010	0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	8679
			2009	16300
			2010	16679
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	1906
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	2086
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	2113
Time of highest load on the 3rd Wednesday		CET	2005	n.a.
			2009	n.a.
			15.12.10	19:00

Italy

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005	241071
			2009	216196
			2010	220938
Hydraulic net generation	GWh	Σ	2005	42386
			2009	52843
			2010	53798
Other renewable net generation	GWh	Σ	2005	7368
			2009	12179
			2010	15970
- of which wind	GWh	Σ	2005	2330
			2009	6485
			2010	9047
- of which solar	GWh	Σ	2005	n.a.
			2009	676
			2010	1875
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005	290825
			2009	281218
			2010	290706
Sum of physical imports	GWh	Σ	2005	50039
			2009	46947
			2010	45899
Sum of physical exports	GWh	Σ	2005	1103
			2009	2099
			2010	1699
Total exchange balance	GWh	Σ	2005	48936
			2009	44848
			2010	44200
Consumption of pumps	GWh	Σ	2005	9320
			2009	5798
			2010	4451
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	330441
			2009	320268
			2010	330455
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	20.07.05	33627
			15.07.09	31917
			21.07.10	35755
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	20.07.05	52820
			15.07.09	50472
			21.07.10	53959
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	54115
			16.12.09	50963
			15.12.10	54927
Time of highest load on the 3rd Wednesday		CET	21.12.05	18:00
			16.12.09	18:00
			15.12.10	18:00

Physical exchanges in interconnected operation [1]

MM_YY	IT→AT	IT→CH	IT→FR	IT→GR	IT→SI	Total_EXP	AT→IT	CH→IT	FR→IT	GR→IT	SI→IT	Total_IMP	Total_IMP - Total_EXP
	Export (-)						Import (+)						Balance
I.05	0	0	90	0	0	90	142	2243	1424	119	789	4717	4627
II.05	0	0	96	0	0	96	123	2430	1138	72	725	4488	4392
III.05	2	0	57	0	0	59	124	2421	1278	285	789	4897	4838
IV.05	0	0	49	0	0	49	122	2354	1246	158	842	4722	4673
V.05	0	6	50	2	0	58	137	2284	1268	20	580	4289	4231
VI.05	0	7	52	21	0	80	129	2020	1193	0	630	3972	3892
VII.05	0	7	43	74	0	124	109	2139	1238	0	732	4218	4094
VIII.05	0	7	59	69	0	135	122	1753	873	0	372	3120	2985
IX.05	0	8	36	38	0	82	122	1951	1238	27	546	3884	3802
X.05	0	6	21	27	0	54	129	2378	1527	2	834	4870	4816
XI.05	0	16	50	13	0	79	119	1957	1276	28	548	3928	3849
XII.05	0	74	99	24	0	197	119	1477	794	0	544	2934	2737
2005	**2**	**131**	**702**	**268**	**0**	**1103**	**1497**	**25407**	**14493**	**711**	**7931**	**50039**	**48936**
I.09	0	50	130	14	0	194	116	2112	1116	162	541	4047	3853
II.09	0	22	112	5	1	140	106	2071	1168	239	678	4262	4122
III.09	0	18	71	25	0	114	119	2301	1525	190	647	4782	4668
IV.09	0	28	95	53	0	176	126	1993	1050	222	727	4118	3942
V.09	0	46	64	23	4	137	101	2050	1083	126	573	3933	3796
VI.09	0	77	74	50	4	205	17	2119	1001	125	638	3900	3695
VII.09	0	48	96	4	2	150	76	2631	979	138	599	4423	4273
VIII.09	0	23	50	4	12	89	70	1936	674	161	99	2940	2851
IX.09	0	33	70	58	24	185	106	2207	836	169	404	3722	3537
X.09	0	77	188	32	4	301	124	1784	657	177	599	3341	3040
XI.09	0	59	130	30	2	221	126	1901	920	207	672	3826	3605
XII.09	0	29	135	16	7	187	111	1853	799	268	622	3653	3466
2009	**0**	**510**	**1215**	**314**	**60**	**2099**	**1198**	**24958**	**11808**	**2184**	**6799**	**46947**	**44848**
I.10	0	52	115	2	21	190	106	1686	811	312	727	3642	3452
II.10	0	27	75	1	5	108	102	1903	1057	200	775	4037	3929
III.10	0	45	77	15	7	144	119	2185	1171	206	862	4543	4399
IV.10	0	44	83	17	28	172	112	2126	1020	71	726	4055	3883
V.10	0	60	55	0	4	119	125	2003	861	0	697	3686	3567
VI.10	0	65	35	11	10	121	119	1953	1230	41	580	3923	3802
VII.10	0	27	66	3	6	102	127	2503	1311	239	394	4574	4472
VIII.10	2	9	96	11	12	130	93	1730	839	213	72	2947	2817
IX.10	0	17	48	1	6	72	104	1784	947	163	526	3524	3452
X.10	0	16	111	5	14	146	91	2043	867	282	610	3893	3747
XI.10	0	27	87	6	5	125	118	1817	957	241	880	4013	3888
XII.10	0	104	164	0	2	270	112	1443	512	331	664	3062	2792
2010	**2**	**493**	**1012**	**72**	**120**	**1699**	**1328**	**23176**	**11583**	**2299**	**7513**	**45899**	**44200**

[1] 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".

Lithuania

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	n.a.
			2009	10025
			2010	0
Fossil fuels net generation	GWh	Σ	2005	n.a.
			2009	2188
			2010	3216
Hydraulic net generation	GWh	Σ	2005	n.a.
			2009	1060
			2010	1196
Other renewable net generation	GWh	Σ	2005	n.a.
			2009	218
			2010	295
- of which wind	GWh	Σ	2005	n.a.
			2009	141
			2010	193
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005	n.a.
			2009 [1]	13492
			2010 [1]	5328
Sum of physical imports	GWh	Σ	2005	n.a.
			2009	4782
			2010	8177
Sum of physical exports	GWh	Σ	2005	n.a.
			2009	7715
			2010	2185
Total exchange balance	GWh	Σ	2005	n.a.
			2009	-2933
			2010	5992
Consumption of pumps	GWh	Σ	2005	n.a.
			2009	1006
			2010	1043
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	n.a.
			2009	9554
			2010	10276
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	1090
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	1728
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	1787
Time of highest load on the 3rd Wednesday		CET	2005	n.a.
			2009	n.a.
			15.12.10	17:00

[1] Including deliveries from industry

Physical exchanges in interconnected operation [1]

MM_YY	LT→LV	LT→BY	LT→RU	Total_EXP	LV→LT	BY→LT	RU→LT	Total_IMP	Total_IMP - Total_EXP
	Export (-)				I^mport (+)				Balance
I.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
II.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
III.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IV.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
V.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VI.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VII.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VIII.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IX.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
X.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XI.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XII.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2005	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
I.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
II.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
III.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IV.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
V.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VI.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VII.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VIII.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IX.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
X.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XI.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XII.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2009	**3066**	**2608**	**2041**	**7715**	**1495**	**2467**	**820**	**4782**	**-2933**
I.10	58	23	246	327	181	431	52	664	337
II.10	62	36	175	273	139	325	81	545	272
III.10	23	31	124	178	217	308	57	582	404
IV.10	0	73	209	282	539	243	6	788	506
V.10	18	33	106	157	255	391	35	681	524
VI.10	8	16	46	70	230	295	69	594	524
VII.10	8	22	73	103	177	384	83	644	541
VIII.10	20	37	73	130	214	382	78	674	544
IX.10	4	29	129	162	226	453	58	737	575
X.10	29	35	104	168	202	509	36	747	579
XI.10	3	36	109	148	309	342	42	693	545
XII.10	1	31	155	187	366	425	37	828	641
2010	**234**	**402**	**1549**	**2185**	**3055**	**4488**	**634**	**8177**	**5992**

[1] 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".

Luxembourg

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005	3040
			2009	2809
			2010	2879
Hydraulic net generation	GWh	Σ	2005	860
			2009	824
			2010	1458
Other renewable net generation	GWh	Σ	2005	107
			2009	163
			2010	178
- of which wind	GWh	Σ	2005	53
			2009	64
			2010	55
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005	4070
			2009	3796
			2010	4515
Sum of physical imports	GWh	Σ	2005	6407
			2009	6026
			2010	7282
Sum of physical exports	GWh	Σ	2005	3153
			2009	2596
			2010	3208
Total exchange balance	GWh	Σ	2005	3261
			2009	3430
			2010	4074
Consumption of pumps	GWh	Σ	2005	1103
			2009	1031
			2010	1899
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	6235
			2009	6195
			2010	6690
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	16.11.05	770
			18.03.09	763
			20.01.10	779
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.09.05	919
			18.03.09	928
			20.01.10	1021
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	16.11.05	942
			18.11.09	998
			20.01.10	1047
Time of highest load on the 3rd Wednesday		CET	16.11.05	19:00
			18.11.09	18:00
			20.01.10	19:00

Physical exchanges in interconnected operation [1]

MM_YY	LU→BE	LU→DE	Total_EXP	BE→LU	DE→LU	Total_IMP	Total_IMP - Total_EXP
	Export (-)			Import (+)			Balance
I.05	232	66	298	92	431	523	225
II.05	48	63	111	101	405	506	395
III.05	229	69	298	109	436	545	247
IV.05	218	60	278	100	400	500	222
V.05	198	67	265	108	405	513	248
VI.05	183	61	244	94	404	498	254
VII.05	205	69	274	129	421	550	276
VIII.05	189	64	253	88	389	477	224
IX.05	217	56	273	137	412	549	276
X.05	216	66	282	145	433	578	296
XI.05	204	72	276	146	445	591	315
XII.05	229	72	301	125	452	577	276
2005	**2368**	**785**	**3153**	**1374**	**5033**	**6407**	**3254**
I.09	188	78	266	79	471	550	284
II.09	150	68	218	74	419	493	275
III.09	162	68	230	49	438	487	257
IV.09	153	47	200	77	388	465	265
V.09	140	46	186	76	391	467	281
VI.09	101	40	141	75	383	458	317
VII.09	158	44	202	86	412	498	296
VIII.09	181	62	243	56	406	462	219
IX.09	166	58	224	90	428	518	294
X.09	181	65	246	91	461	552	306
XI.09	155	58	213	90	432	522	309
XII.09	133	94	227	68	486	554	327
2009	**1868**	**728**	**2596**	**911**	**5115**	**6026**	**3430**
I.10	160	116	276	96	542	638	362
II.10	153	104	257	88	486	574	317
III.10	157	103	260	104	511	615	355
IV.10	142	129	271	108	518	626	355
V.10	102	155	257	133	562	695	438
VI.10	160	111	271	73	507	580	309
VII.10	154	82	236	100	482	582	346
VIII.10	152	77	229	52	435	487	258
IX.10	145	89	234	103	470	573	339
X.10	173	109	282	108	521	629	347
XI.10	154	138	292	99	546	645	353
XII.10	195	148	343	59	579	638	295
2010	**1847**	**1361**	**3208**	**1123**	**6159**	**7282**	**4074**

[1] 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".

Thermal nuclear net generation	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005	n.a.
			2009	1605
			2010	2847
Hydraulic net generation	GWh	Σ	2005	n.a.
			2009	3425
			2010	3496
Other renewable net generation	GWh	Σ	2005	n.a.
			2009	87
			2010	101
- of which wind	GWh	Σ	2005	n.a.
			2009	49
			2010	47
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	n.a.
			2009	260
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005	n.a.
			2009	5376
			2010	6444
Sum of physical imports	GWh	Σ	2005	n.a.
			2009	4258
			2010	3973
Sum of physical exports	GWh	Σ	2005	n.a.
			2009	2603
			2010	3101
Total exchange balance	GWh	Σ	2005	n.a.
			2009	n.a.
			2010	872
Consumption of pumps	GWh	Σ	2005	n.a.
			2009	n.a.
			2010	0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	n.a.
			2009	7029
			2010	7316
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			20.01.10	731
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			20.01.10	1169
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			20.01.10	1257
Time of highest load on the 3rd Wednesday		CET	2005	n.a.
			2009	n.a.
			20.01.10	17:00

Physical exchanges in interconnected operation [1]

MM_YY	LV→EE	LV→LT	LV→RU	Total_EXP	EE→LV	LT→LV	RU→LV	Total_IMP	Total_IMP - Total_EXP
	Export (-)				Import (+)				Balance
I.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
II.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
III.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IV.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
V.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VI.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VII.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VIII.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IX.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
X.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XI.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XII.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2005	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
I.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
II.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
III.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IV.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
V.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VI.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VII.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VIII.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IX.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
X.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XI.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XII.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2009	**497**	**1495**	**611**	**2603**	**1138**	**3066**	**54**	**4258**	**1655**
I.10	8	181	3	192	116	58	39	213	21
II.10	1	139	0	140	126	62	48	236	96
III.10	13	217	4	234	126	23	45	194	-40
IV.10	15	539	1	555	90	0	48	138	-417
V.10	1	255	0	256	151	18	42	211	-45
VI.10	0	230	0	230	232	8	91	331	101
VII.10	0	177	0	177	337	8	138	483	306
VIII.10	0	214	0	214	284	20	127	431	217
IX.10	0	226	0	226	314	4	128	446	220
X.10	0	202	0	202	323	29	69	421	219
XI.10	0	309	0	309	251	3	111	365	56
XII.10	0	366	0	366	345	1	158	504	138
2010	**38**	**3055**	**8**	**3101**	**2695**	**234**	**1044**	**3973**	**872**

[1] 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".

Montenegro

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005 2009 2010	 0 0
Fossil fuels net generation	GWh	Σ	2005 2009 2010	 621 1267
Hydraulic net generation	GWh	Σ	2005 2009 2010	 1953 2738
Other renewable net generation	GWh	Σ	2005 2009 2010	 0 0
- of which wind	GWh	Σ	2005 2009 2010	 0 0
- of which solar	GWh	Σ	2005 2009 2010	 0 0
Non-identifiable net generation	GWh	Σ	2005 2009 2010	 0 0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 2009 2010	 2574 4005
Sum of physical imports	GWh	Σ	2005 2009 2010	 3094 2333
Sum of physical exports	GWh	Σ	2005 2009 2010	 1801 2383
Total exchange balance	GWh	Σ	2005 2009 2010	 1068 39
Consumption of pumps	GWh	Σ	2005 2009 2010	 0 0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005 2009 2010	 3642 4044
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005 18.02.09 20.01.10	 455 427
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005 18.02.09 20.01.10	 571 532
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005 18.02.09 20.01.10	 633 589
Time of highest load on the 3rd Wednesday		CET	2005 18.02.09 20.01.10	 18:00 19:00

Physical exchanges in interconnected operation [1]

Montenegro | GWh

MM_YY	ME→BA	ME→RS	ME→AL	Total_EXP	BA→ME	RS→ME	AL→ME	Total_IMP	Total_IMP - Total_EXP
	Export (-)				Import (+)				Balance
I.05									
II.05									
III.05									
IV.05									
V.05									
VI.05									
VII.05									
VIII.05									
IX.05									
X.05									
XI.05									
XII.05									
2005									
I.09	43	137	110	290	202	26	0	228	-62
II.09	55	177	0	232	177	4	0	181	-51
III.09	16	122	107	245	246	31	0	277	32
IV.09	33	121	3	157	104	19	30	153	-4
V.09	20	58	20	98	131	53	17	201	103
VI.09	10	29	88	127	239	59	0	298	171
VII.09	7	19	82	108	235	99	0	334	226
VIII.09	5	14	71	90	216	128	0	344	254
IX.09	5	4	58	67	159	171	0	330	263
X.09	19	43	75	137	161	100	0	261	124
XI.09	61	32	0	93	73	118	0	191	98
XII.09	20	137	0	157	252	44	0	296	139
2009	**294**	**893**	**614**	**1801**	**2195**	**852**	**47**	**3094**	**1293**
I.10	46	301	51	398	258	2	0	260	-138
II.10	44	166	24	234	181	12	0	193	-41
III.10	50	196	29	275	178	10	5	193	-82
IV.10	57	112	2	171	61	18	38	117	-54
V.10	55	130	61	246	74	18	6	98	-148
VI.10	89	75	1	165	77	10	37	124	-41
VII.10	33	34	35	102	155	92	0	247	145
VIII.10	10	19	82	111	210	93	0	303	192
IX.10	26	44	0	70	139	106	0	245	175
X.10	42	74	9	125	62	95	62	219	94
XI.10	78	104	2	184	70	46	48	164	-20
XII.10	98	195	9	302	132	9	29	170	-132
2010	**628**	**1450**	**305**	**2383**	**1597**	**511**	**225**	**2333**	**-50**

[1] 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".

Thermal nuclear net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005	4994
			2009	5009
			2010	4282
Hydraulic net generation	GWh	Σ	2005	1481
			2009	1243
			2010	2316
Other renewable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
- of which wind	GWh	Σ	2005	0
			2009	0
			2010	0
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005	6475
			2009	6252
			2010	6598
Sum of physical imports	GWh	Σ	2005	2395
			2009	5138
			2010	5270
Sum of physical exports	GWh	Σ	2005	797
			2009	3814
			2010	3857
Total exchange balance	GWh	Σ	2005	1599
			2009	1544
			2010	1730
Consumption of pumps	GWh	Σ	2005	0
			2009	0
			2010	0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	8074
			2009	7796
			2010	8328
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	1073
			18.02.09	947
			15.12.10	1087
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	1359
			18.02.09	1217
			15.12.10	1357
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	1450
			18.02.09	1374
			15.12.10	1535
Time of highest load on the 3rd Wednesday		CET	21.12.05	18:00
			18.02.09	19:00
			15.12.10	18:00

Physical exchanges in interconnected operation [1]

FYROM | GWh

MM_YY	MK→BG	MK→CS	MK→GR	MK→RS	Total_EXP	BG→MK	CS→MK	GR→MK	GR→RS	Total_IMP	Total_IMP - Total_EXP
	Export (-)					Import (-)					Balance
I.05	0	0	52		52	0	234	4		238	186
II.05	0	0	37		37	0	164	15		179	142
III.05	0	0	50		50	0	129	16		145	95
IV.05	0	0	90		90	3	124	0		127	37
V.05	0	0	82		82	0	212	1		213	131
VI.05	0	0	60		60	2	171	11		184	124
VII.05	0	0	75		75	30	200	2		232	157
VIII.05	0	0	63		63	29	177	6		212	149
IX.05	0	1	93		94	24	133	0		157	63
X.05	0	0	77		77	82	78	2		162	85
XI.05	0	0	81		81	79	182	2		263	182
XII.05	0	0	36		36	85	186	12		283	247
2005	**0**	**1**	**796**		**797**	**334**	**1990**	**71**		**2395**	**1598**
I.09	0		295	0	295	292		0	204	496	201
II.09	0		295	0	295	252		0	236	488	193
III.09	0		401	0	401	271		0	261	532	131
IV.09	0		247	0	247	65		0	170	235	-12
V.09	0		316	0	316	186		0	210	396	80
VI.09	0		456	0	456	282		0	262	544	88
VII.09	0		491	0	491	352		0	295	647	156
VIII.09	0		355	0	355	245		0	161	406	51
IX.09	0		243	3	246	217		0	79	296	50
X.09	0		178	0	178	139		6	110	255	77
XI.09	0		248	0	248	264		0	102	366	118
XII.09	0		286	0	286	237		0	240	477	191
2009	**0**		**3811**	**3**	**3814**	**2802**		**6**	**2330**	**5138**	**1324**
I.10	0		286	0	286	183		0	224	407	121
II.10	0		312	0	312	202		0	188	390	78
III.10	0		357	0	357	198		0	291	489	132
IV.10	0		356	0	356	171		0	206	377	21
V.10	0		359	0	359	139		0	191	330	-29
VI.10	0		507	0	507	258		0	203	461	-46
VII.10	0		502	0	502	387		0	163	550	48
VIII.10	0		481	0	481	412		0	222	634	153
IX.10	0		308	0	308	314		0	161	475	167
X.10	0		120	0	120	216		6	139	361	241
XI.10	0		128	0	128	245		1	135	381	253
XII.10	0		141	0	141	228		1	186	415	274
2010	**0**		**3857**	**0**	**3857**	**2953**		**8**	**2309**	**5270**	**1413**

[1] 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".

GB Northern Ireland

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005 2009 2010	n.a. 0 0
Fossil fuels net generation	GWh	Σ	2005 2009 2010	n.a. 6970 6581
Hydraulic net generation	GWh	Σ	2005 2009 2010	n.a. 10 8
Other renewable net generation	GWh	Σ	2005 2009 2010	n.a. 806 724
- of which wind	GWh	Σ	2005 2009 2010	n.a. 2 666
- of which solar	GWh	Σ	2005 2009 2010	n.a. 0 0
Non-identifiable net generation	GWh	Σ	2005 2009 2010	n.a. 0 12
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 2009 2010	n.a. 7786 7325
Sum of physical imports	GWh	Σ	2005 2009 2010	n.a. 2208 2592
Sum of physical exports	GWh	Σ	2005 2009 2010	n.a. 1011 744
Total exchange balance	GWh	Σ	2005 2009 2010	n.a. n.a. 1855
Consumption of pumps	GWh	Σ	2005 2009 2010	n.a. n.a. 0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005 2009 2010	n.a. 8820 9180
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005 2009 15.12.10	n.a. n.a. 938
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005 2009 15.12.10	n.a. n.a. 1488
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005 2009 15.12.10	n.a. n.a. 1684
Time of highest load on the 3rd Wednesday		CET	2005 2009 15.12.10	n.a. n.a. 19:00

Physical exchanges in interconnected operation [1]

MM_YY	NI→GB	NI→IE	Total_EXP	GB→NI	IE→NI	Total_IMP	Total_IMP - Total_EXP
	Export (-)			Import (+)			Balance
I.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
II.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
III.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IV.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
V.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VI.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VII.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VIII.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IX.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
X.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XI.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XII.05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2005	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
I.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
II.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
III.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IV.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
V.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VI.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VII.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
VIII.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IX.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
X.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XI.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
XII.09	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2009	**14**	**997**	**1011**	**1992**	**216**	**2208**	**1197**
I.10	0	135	135	235	5	240	105
II.10	0	106	106	218	9	227	121
III.10	0	72	72	248	14	262	190
IV.10	0	50	50	190	19	209	159
V.10	0	102	102	223	3	226	124
VI.10	0	45	45	82	18	100	55
VII.10	0	24	24	155	41	196	172
VIII.10	0	54	54	220	17	237	183
IX.10	0	15	15	134	73	207	192
X.10	0	23	23	139	37	176	153
XI.10	0	26	26	165	48	213	187
XII.10	0	92	92	290	9	299	207
2010	**0**	**744**	**744**	**2299**	**293**	**2592**	**1848**

[1] 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".

			2005	3772
Thermal nuclear net generation	GWh	Σ	2009	4018
			2010	3755
			2005	86093
Fossil fuels net generation	GWh	Σ	2009	95569
			2010	99539
			2005	85
Hydraulic net generation	GWh	Σ	2009	0
			2010	0
			2005	6416
Other renewable net generation	GWh	Σ	2009	8333
			2010	10391
			2005	2009
- of which wind	GWh	Σ	2009	4589
			2010	3995
			2005	n.a.
- of which solar	GWh	Σ	2009	0
			2010	0
			2005	0
Non-identifiable net generation	GWh	Σ	2009	0
			2010	0
			2005 [1]	96366
Total net generation	GWh	Σ	2009 [1]	107920
calculated to represent 100% of the national values			2010 [1]	113685
			2005	23693
Sum of physical imports	GWh	Σ	2009	15457
			2010	15589
			2005	5400
Sum of physical exports	GWh	Σ	2009	10556
			2010	12811
			2005	18292
Total exchange balance	GWh	Σ	2009	4987
			2010	2775
			2005	0
Consumption of pumps	GWh	Σ	2009	0
			2010	0
			2005	114658
National electrical consumption,	GWh	Σ	2009	112907
calculated to represent 100% of the national values			2010	116460
			16.11.05	9702
Consumption load 3:00 a.m. on the 3rd Wednesday,	MW	max.	18.11.09	10551
calculated to represent 100% of the national values			15.12.10	10605
			16.02.05	16439
Consumption load 11:00 a.m. on the 3rd Wednesday,	MW	max.	16.12.09	16768
calculated to represent 100% of the national values			15.12.10	17219
			16.11.05	16858
Highest load on the 3rd Wednesday,	MW	max.	18.11.09	17840
calculated to represent 100% of the national values			15.12.10	18187
			16.11.05	18:00
Time of highest load on the 3rd Wednesday		CET	18.11.09	18:00
			15.12.10	18:00

[1] Including deliveries from industry

Physical exchanges in interconnected operation [1]

MM_YY	NL→BE	NL→DE	NL→NO	Total_EXP	BE→NL	DE→NL	NO→NL	Total_IMP	Total_IMP - Total_EXP
	Export (-)				Import (+)				Balance
I.05	688	0		688	120	2097		2217	1529
II.05	789	2		791	80	1969		2049	1258
III.05	761	1		762	173	2171		2344	1582
IV.05	592	0		592	95	2080		2175	1583
V.05	235	17		252	464	1143		1607	1355
VI.05	102	60		162	690	1012		1702	1540
VII.05	123	61		184	683	1081		1764	1580
VIII.05	92	72		164	807	959		1766	1602
IX.05	120	103		223	673	942		1615	1392
X.05	234	4		238	338	1615		1953	1715
XI.05	564	3		567	201	1890		2091	1524
XII.05	775	2		777	109	2301		2410	1633
2005	**5075**	**325**		**5400**	**4433**	**19260**		**23693**	**18293**
I.09	632	96	61	789	87	1190	353	1630	841
II.09	455	73	20	548	128	1165	106	1399	851
III.09	334	169	138	641	199	811	281	1291	650
IV.09	420	75	42	537	148	1251	61	1460	923
V.09	228	130	99	457	531	822	94	1447	990
VI.09	427	163	171	761	363	1086	193	1642	881
VII.09	419	490	144	1053	366	464	217	1047	-6
VIII.09	291	636	82	1009	857	184	297	1338	329
IX.09	266	738	28	1032	474	194	412	1080	48
X.09	707	448	85	1240	238	406	351	995	-245
XI.09	801	196	174	1171	150	691	234	1075	-96
XII.09	809	296	213	1318	232	606	215	1053	-265
2009	**5789**	**3510**	**1257**	**10556**	**3773**	**8870**	**2814**	**15457**	**4901**
I.10	947	239	242	1428	111	643	115	869	-559
II.10	670	247	0	917	258	410	0	668	-249
III.10	623	555	0	1178	326	362	0	688	-490
IV.10	456	114	58	628	264	881	2	1147	519
V.10	586	209	274	1069	428	1036	114	1578	509
VI.10	326	191	231	748	745	920	153	1818	1070
VII.10	246	138	193	577	841	943	206	1990	1413
VIII.10	183	291	240	714	1168	576	160	1904	1190
IX.10	392	327	207	926	571	584	169	1324	398
X.10	1067	481	200	1748	200	330	240	770	-978
XI.10	828	210	298	1336	282	707	125	1114	-222
XII.10	1068	70	404	1542	124	1550	45	1719	177
2010	**7392**	**3072**	**2347**	**12811**	**5318**	**8942**	**1329**	**15589**	**2778**

[1] 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".

Thermal nuclear net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005	976
			2009	3555
			2010	5267
Hydraulic net generation	GWh	Σ	2005	136465
			2009	128282
			2010	117286
Other renewable net generation	GWh	Σ	2005	507
			2009	1007
			2010	892
- of which wind	GWh	Σ	2005	507
			2009	1007
			2010	808
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 [1]	137948
			2009 [1]	132843
			2010 [1]	123445
Sum of physical imports	GWh	Σ	2005	3648
			2009	5709
			2010	14441
Sum of physical exports	GWh	Σ	2005	15691
			2009	14653
			2010	6593
Total exchange balance	GWh	Σ	2005	n.a.
			2009	n.a.
			2010	7537
Consumption of pumps	GWh	Σ	2005	n.a.
			2009	0
			2010	1190
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	125908
			2009	121604
			2010	129792
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	17165
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	21350
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005	n.a.
			2009	n.a.
			15.12.10	21852
Time of highest load on the 3rd Wednesday		CET	2005	n.a.
			2009	n.a.
			15.12.10	10:00

[1]Including deliveries from industry

Physical exchanges in interconnected operation [1]

Norway | GWh

MM_YY	NO→DK_W	NO→DK	NO→FI	NO→NL	NO→SE	NO→RU	Total_EXP	DK_W→NO	DK→NO	FI→NO	NL→NO	SE→NO	RU→NO	Total_IMP	Total_IMP - Total_EXP
	Export (-)							Import (+)							Balance
I.05	319		n.a.		n.a.	n.a.	n.a.	115		n.a.		n.a.	n.a.	n.a.	n.a.
II.05	436		n.a.		n.a.	n.a.	n.a.	27		n.a.		n.a.	n.a.	n.a.	n.a.
III.05	362		n.a.		n.a.	n.a.	n.a.	99		n.a.		n.a.	n.a.	n.a.	n.a.
IV.05	532		n.a.		n.a.	n.a.	n.a.	24		n.a.		n.a.	n.a.	n.a.	n.a.
V.05	478		n.a.		n.a.	n.a.	n.a.	47		n.a.		n.a.	n.a.	n.a.	n.a.
VI.05	320		n.a.		n.a.	n.a.	n.a.	9		n.a.		n.a.	n.a.	n.a.	n.a.
VII.05	333		n.a.		n.a.	n.a.	n.a.	3		n.a.		n.a.	n.a.	n.a.	n.a.
VIII.05	271		n.a.		n.a.	n.a.	n.a.	24		n.a.		n.a.	n.a.	n.a.	n.a.
IX.05	294		n.a.		n.a.	n.a.	n.a.	4		n.a.		n.a.	n.a.	n.a.	n.a.
X.05	304		n.a.		n.a.	n.a.	n.a.	23		n.a.		n.a.	n.a.	n.a.	n.a.
XI.05	602		n.a.		n.a.	n.a.	n.a.	7		n.a.		n.a.	n.a.	n.a.	n.a.
XII.05	460		n.a.		n.a.	n.a.	n.a.	84		n.a.		n.a.	n.a.	n.a.	n.a.
2005	**4711**		**164**		**10816**	**0**	**15691**	**466**		**131**		**2836**	**215**	**3648**	**-12043**
I.09	308		n.a.	353	n.a.	n.a.	n.a.	149		n.a.	61	n.a.	n.a.	n.a.	n.a.
II.09	263		n.a.	106	n.a.	n.a.	n.a.	156		n.a.	20	n.a.	n.a.	n.a.	n.a.
III.09	271		n.a.	281	n.a.	n.a.	n.a.	166		n.a.	138	n.a.	n.a.	n.a.	n.a.
IV.09	312		n.a.	61	n.a.	n.a.	n.a.	150		n.a.	42	n.a.	n.a.	n.a.	n.a.
V.09	295		n.a.	94	n.a.	n.a.	n.a.	143		n.a.	99	n.a.	n.a.	n.a.	n.a.
VI.09	140		n.a.	193	n.a.	n.a.	n.a.	141		n.a.	171	n.a.	n.a.	n.a.	n.a.
VII.09	216		n.a.	217	n.a.	n.a.	n.a.	32		n.a.	144	n.a.	n.a.	n.a.	n.a.
VIII.09	495		n.a.	297	n.a.	n.a.	n.a.	13		n.a.	82	n.a.	n.a.	n.a.	n.a.
IX.09	570		n.a.	412	n.a.	n.a.	n.a.	3		n.a.	28	n.a.	n.a.	n.a.	n.a.
X.09	398		n.a.	351	n.a.	n.a.	n.a.	84		n.a.	85	n.a.	n.a.	n.a.	n.a.
XI.09	268		n.a.	234	n.a.	n.a.	n.a.	185		n.a.	174	n.a.	n.a.	n.a.	n.a.
XII.09	292		n.a.	215	n.a.	n.a.	n.a.	227		n.a.	213	n.a.	n.a.	n.a.	n.a.
2009	**3828**		**113**	**2814**	**7898**	**0**	**14653**	**1449**		**128**	**1257**	**2648**	**227**	**5709**	**-8944**
I.10		130	3	115	508	0	756		384	14	242	294	20	954	198
II.10		49	0	0	323	0	372		479	21	0	400	17	917	545
III.10		2	0	0	120	0	122		629	40	0	721	17	1407	1285
IV.10		34	0	2	69	0	105		420	36	58	1075	15	1604	1499
V.10		124	9	114	30	0	277		337	13	274	1388	21	2033	1756
VI.10		117	4	153	51	0	325		243	5	231	1269	17	1765	1440
VII.10		277	38	206	396	0	917		163	5	193	449	20	830	-87
VIII.10		204	24	160	177	0	565		155	0	240	504	11	910	345
IX.10		214	21	169	378	0	782		159	0	207	350	17	733	-49
X.10		184	11	240	871	0	1306		241	1	200	294	16	752	-554
XI.10		89	2	125	368	0	584		352	17	298	510	18	1195	611
XII.10		34	3	45	400	0	482		493	10	404	414	20	1341	859
2010		**1458**	**115**	**1329**	**3691**	**0**	**6593**		**4055**	**162**	**2347**	**7668**	**209**	**14441**	**7848**

[1] 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".

Poland

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005 [2]	140182
			2009 [2]	135759
			2010 [2]	140270
Hydraulic net generation	GWh	Σ	2005	3550
			2009	2897
			2010	3405
Other renewable net generation	GWh	Σ	2005	224
			2009	1259
			2010	2108
- of which wind	GWh	Σ	2005	132
			2009	1051
			2010	1843
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 [1]	143956
			2009 [1]	139915
			2010 [1]	145783
Sum of physical imports	GWh	Σ	2005	5005
			2009	7404
			2010	6310
Sum of physical exports	GWh	Σ	2005	16185
			2009	9593
			2010	7664
Total exchange balance	GWh	Σ	2005	-11188
			2009	-2205
			2010	-1355
Consumption of pumps	GWh	Σ	2005	2156
			2009	894
			2010	837
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	130612
			2009	136816
			2010	143591
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	14958
			16.12.09	14845
			15.12.10	15742
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	19929
			16.12.09	20889
			15.12.10	21538
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	21578
			16.12.09	22425
			15.12.10	23081
Time of highest load on the 3rd Wednesday		CET	21.12.05	17:00
			16.12.09	17:00
			15.12.10	17:00

[1] Including deliveries from industry

[2] Fossil fuel and renewable: Energy from co-firing (biomass combustion in lignite/hard coal power stations) is classified as energy from fossil fuels installations. Power/energy comes from industry and based on oil and gas is classified as hard coal.

Physical exchanges in interconnected operation [1]

Poland | GWh

MM_YY	PL→CZ	PL→DE	PL→SE	PL→SK	PL→BY	PL→UA	Total_EXP	CZ→PL	DE→PL	SE→PL	SK→PL	BY→PL	UA→PL	Total_IMP	Total_IMP - Total_EXP
	Export (-)							Import (+)							Balance
I.05	1091	3	8	297	0	0	1399	2	361	324	0	80	82	849	-550
II.05	1024	17	8	282	0	0	1331	2	247	211	0	74	76	610	-721
III.05	1046	46	121	260	0	0	1473	4	204	1	0	80	82	371	-1102
IV.05	887	45	174	272	0	0	1378	3	142	4	0	72	74	295	-1083
V.05	768	95	177	213	0	0	1253	10	99	18	0	75	64	266	-987
VI.05	710	230	21	199	0	0	1160	8	41	163	0	76	96	384	-776
VII.05	720	118	118	127	0	0	1083	10	135	34	0	42	90	311	-772
VIII.05	552	167	59	28	0	0	806	14	89	0	0	48	98	249	-557
IX.05	801	219	20	156	0	0	1196	4	66	36	0	75	91	272	-924
X.05	1097	69	178	272	0	0	1616	4	241	4	0	85	79	413	-1203
XI.05	1253	27	49	348	0	0	1677	1	240	22	0	83	77	423	-1254
XII.05	1216	10	249	338	0	0	1813	1	401	0	0	85	75	562	-1251
2005	**11165**	**1046**	**1182**	**2792**	**0**	**0**	**16185**	**63**	**2266**	**817**	**0**	**875**	**984**	**5005**	**-11180**
I.09	859	0	24	310	0	0	1193	0	660	231	0	0	0	891	-302
II.09	691	0	27	224	0	0	942	0	508	146	0	0	0	654	-288
III.09	610	4	48	264	0	0	926	1	402	55	0	0	0	458	-468
IV.09	298	38	55	99	0	0	490	34	162	35	11	0	0	242	-248
V.09	341	25	7	71	0	0	444	31	262	161	30	0	0	484	40
VI.09	418	25	8	72	0	0	523	24	305	118	19	0	10	476	-47
VII.09	509	9	15	155	0	0	688	10	477	203	1	0	0	691	3
VIII.09	476	8	1	96	0	0	581	12	411	154	2	0	0	579	-2
IX.09	646	8	0	205	0	0	859	11	526	122	1	0	63	723	-136
X.09	642	11	0	294	0	0	947	2	577	69	0	0	67	715	-232
XI.09	740	2	21	283	0	0	1046	1	668	76	0	0	59	804	-242
XII.09	636	5	48	265	0	0	954	3	660	24	0	0	0	687	-267
2009	**6866**	**135**	**254**	**2338**	**0**	**0**	**9593**	**129**	**5618**	**1394**	**64**	**0**	**199**	**7404**	**-2189**
I.10	521	3	74	147	0	0	745	4	548	26	4	0	0	582	-163
II.10	643	0	89	187	0	0	919	2	584	0	0	0	0	586	-333
III.10	511	0	74	220	0	0	805	4	622	21	1	0	0	648	-157
IV.10	451	0	12	168	0	0	631	3	584	93	2	0	0	682	51
V.10	360	10	5	99	0	0	474	18	360	232	10	0	0	620	146
VI.10	260	42	0	63	0	0	365	25	161	66	20	0	0	272	-93
VII.10	442	5	7	179	0	0	633	8	525	160	0	0	0	693	60
VIII.10	322	25	2	87	0	0	436	14	405	78	6	0	0	503	67
IX.10	416	16	44	1	0	0	477	28	254	5	8	0	0	295	-182
X.10	618	1	49	176	0	0	844	11	513	36	0	0	0	560	-284
XI.10	550	16	59	126	0	0	751	5	466	39	1	0	0	511	-240
XII.10	406	49	79	45	0	0	579	14	312	5	31	0	0	362	-217
2010	**5500**	**167**	**494**	**1498**	**0**	**0**	**7659**	**136**	**5334**	**761**	**83**	**0**	**0**	**6314**	**-1345**

[1] 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".

Thermal nuclear net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005	33263
			2009	27839
			2010	22315
Hydraulic net generation	GWh	Σ	2005	4910
			2009	8720
			2010	16247
Other renewable net generation	GWh	Σ	2005	3515
			2009	9468
			2010	11530
- of which wind	GWh	Σ	2005	1726
			2009	7492
			2010	9023
- of which solar	GWh	Σ	2005	n.a.
			2009	140
			2010	207
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 [1]	43612
			2009 [1]	47555
			2010 [1]	50092
Sum of physical imports	GWh	Σ	2005	9477
			2009	7439
			2010	5667
Sum of physical exports	GWh	Σ	2005	2806
			2009	2819
			2010	3190
Total exchange balance	GWh	Σ	2005	6819
			2009	4777
			2010	2624
Consumption of pumps	GWh	Σ	2005	567
			2009	928
			2010	510
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	49864
			2009	51404
			2010	52206
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	5559
			16.12.09	5827
			15.12.10	5350
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	7811
			16.12.09	8330
			17.02.10	7849
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	8669
			16.12.09	9242
			17.02.10	8800
Time of highest load on the 3rd Wednesday		CET	21.12.05	20:00
			16.12.09	20:00
			17.02.10	21:00

[1] Including deliveries from industry

Physical exchanges in interconnected operation [1]

MM_YY	PT→ES	Total_EXP	ES→PT	Total_IMP	Total_IMP - Total_EXP
	Export (-)		Import (+)		Balance
I.05	409	409	942	942	533
II.05	338	338	682	682	344
III.05	281	281	742	742	461
IV.05	188	188	683	683	495
V.05	158	158	716	716	558
VI.05	216	216	677	677	461
VII.05	267	267	782	782	515
VIII.05	117	117	659	659	542
IX.05	148	148	858	858	710
X.05	150	150	931	931	781
XI.05	181	181	894	894	713
XII.05	353	353	911	911	558
2005	**2806**	**2806**	**9477**	**9477**	**6671**
I.09	243	243	820	820	577
II.09	349	349	471	471	122
III.09	294	294	545	545	251
IV.09	149	149	732	732	583
V.09	173	173	698	698	525
VI.09	157	157	743	743	586
VII.09	155	155	739	739	584
VIII.09	193	193	558	558	365
IX.09	195	195	485	485	290
X.09	164	164	583	583	419
XI.09	214	214	654	654	440
XII.09	533	533	411	411	-122
2009	**2819**	**2819**	**7439**	**7439**	**4620**
I.10	617	617	336	336	-281
II.10	350	350	416	416	66
III.10	358	358	385	385	27
IV.10	287	287	323	323	36
V.10	291	291	345	345	54
VI.10	122	122	534	534	412
VII.10	100	100	671	671	571
VIII.10	80	80	691	691	611
IX.10	87	87	603	603	516
X.10	70	70	689	689	619
XI.10	232	232	456	456	224
XII.10	596	596	218	218	-378
2010	**3190**	**3190**	**5667**	**5667**	**2477**

[1] 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".

Thermal nuclear net generation	GWh	Σ	2005 2009 2010	5132 10810 10686
Fossil fuels net generation	GWh	Σ	2005 2009 2010	29764 26901 25284
Hydraulic net generation	GWh	Σ	2005 2009 2010	19908 15548 20174
Other renewable net generation	GWh	Σ	2005 2009 2010	0 0 402
- of which wind	GWh	Σ	2005 2009 2010	0 0 290
- of which solar	GWh	Σ	2005 2009 2010	n.a. 0 0
Non-identifiable net generation	GWh	Σ	2005 2009 2010	0 0 0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 2009 2010	54804 53259 56546
Sum of physical imports	GWh	Σ	2005 2009 2010	1606 2383 1791
Sum of physical exports	GWh	Σ	2005 2009 2010	4520 4856 4707
Total exchange balance	GWh	Σ	2005 2009 2010	-2919 -2471 -2919
Consumption of pumps	GWh	Σ	2005 2009 2010	0 150 265
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005 2009 2010	51885 50638 53362
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	19.01.05 16.12.09 15.12.10	6269 5735 5856
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	19.01.05 16.12.09 15.12.10	7328 7413 7662
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05 16.12.09 15.12.10	7974 8035 8313
Time of highest load on the 3rd Wednesday		CET	21.12.05 16.12.09 15.12.10	18:00 18:00 18:00

Physical exchanges in interconnected operation [1]

MM_YY	RO→BG	RO→CS	RO→HU	RO→RS	RO→UA_W	RO→MD	Total_EXP	BG→RO	CS→RO	HU→RO	RS→RO	UA_W→RO	MD→RO	Total_IMP	Total_IMP - Total_EXP
	Export (-)							Import (+)							Balance
I.05	81	280	81		0	0	442	23	0	28		56	14	121	-321
II.05	60	304	99		6	0	469	29	0	8		70	0	107	-362
III.05	12	241	82		13	0	348	109	0	18		51	0	178	-170
IV.05	22	187	45		0	0	254	100	0	19		60	0	179	-75
V.05	3	51	112		2	0	168	90	8	11		43	0	152	-16
VI.05	15	98	113		1	0	227	84	2	7		53	0	146	-81
VII.05	68	115	94		0	0	277	54	13	13		73	0	153	-124
VIII.05	87	138	102		2	0	329	29	7	6		43	0	85	-244
IX.05	57	164	97		0	0	318	69	0	10		47	0	126	-192
X.05	99	213	105		0	0	417	86	3	18		69	0	176	-241
XI.05	141	348	136		6	0	631	55	0	4		45	0	104	-527
XII.05	152	364	124		0	0	640	2	0	4		73	0	79	-561
2005	**797**	**2503**	**1190**		**30**	**0**	**4520**	**730**	**33**	**146**		**683**	**14**	**1606**	**-2914**
I.09	333		50	243	0	0	626	0		14	0	105	123	242	-384
II.09	285		81	178	0	0	544	0		3	0	81	84	168	-376
III.09	356		53	150	0	0	559	0		9	0	103	85	197	-362
IV.09	217		75	60	0	0	352	0		8	2	70	24	104	-248
V.09	180		80	79	0	0	339	34		21	7	102	14	178	-161
VI.09	208		32	71	0	0	311	2		51	11	115	14	193	-118
VII.09	217		42	61	0	0	320	2		22	6	117	14	161	-159
VIII.09	197		45	94	0	0	336	1		26	28	103	12	170	-166
IX.09	121		46	135	0	0	302	62		21	0	92	12	187	-115
X.09	175		31	189	3	0	398	100		35	0	143	0	278	-120
XI.09	64		49	227	0	0	340	28		21	0	137	17	203	-137
XII.09	265		3	161	0	0	429	1		76	1	212	12	302	-127
2009	**2618**		**587**	**1648**	**3**	**0**	**4856**	**230**		**307**	**55**	**1380**	**411**	**2383**	**-2473**
I.10	175		37	89	1	0	302	12		33	5	122	35	207	-95
II.10	85		27	85	0	0	197	27		31	3	115	38	214	17
III.10	80		32	51	1	0	164	22		30	7	92	33	184	20
IV.10	73		82	16	5	0	176	25		12	26	62	26	151	-25
V.10	62		90	23	23	0	198	118		14	25	27	23	207	9
VI.10	2		123	179	53	0	357	167		3	0	7	23	200	-157
VII.10	23		143	279	60	0	505	93		2	0	6	29	130	-375
VIII.10	115		119	203	41	0	478	21		9	8	16	23	77	-401
IX.10	134		144	189	55	0	522	31		5	0	6	23	65	-457
X.10	239		165	282	7	0	693	72		0	0	45	32	149	-544
XI.10	76		114	269	38	0	497	36		4	0	26	38	104	-393
XII.10	42		176	303	97	0	618	53		3	0	2	45	103	-515
2010	**1106**		**1252**	**1968**	**381**	**0**	**4707**	**677**		**146**	**74**	**526**	**368**	**1791**	**-2916**

[1] 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".

Thermal nuclear net generation	GWh	Σ	2005 2009 2010	 0 0
Fossil fuels net generation	GWh	Σ	2005 2009 2010	 30027 28508
Hydraulic net generation	GWh	Σ	2005 2009 2010	 11093 12453
Other renewable net generation	GWh	Σ	2005 2009 2010	 0 0
- of which wind	GWh	Σ	2005 2009 2010	 0 0
- of which solar	GWh	Σ	2005 2009 2010	 0 0
Non-identifiable net generation	GWh	Σ	2005 2009 2010	 0 0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 2009 2010	 41120 40961
Sum of physical imports	GWh	Σ	2005 2009 2010	 5879 7027
Sum of physical exports	GWh	Σ	2005 2009 2010	 6739 6704
Total exchange balance	GWh	Σ	2005 2009 2010	 649 -321
Consumption of pumps	GWh	Σ	2005 2009 2010	 915 1115
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005 2009 2010	 40854 39525
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005 18.02.09 15.12.10	 4887 5161
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005 18.02.09 15.12.10	 6424 6491
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	2005 18.02.09 15.12.10	 6923 7034
Time of highest load on the 3rd Wednesday		CET	2005 18.02.09 15.12.10	 19:00 18:00

Physical exchanges in interconnected operation [1]

Serbia | GWh

MM_YY	RS [2]→BA	RS [2]→BG	RS [2]→HR	RS [2]→HU	RS→ME	RS [2]→MK	RS [2]→RO	RS [2]→AL	Total_EXP	BA→RS [2]	BG→RS [2]	HR→RS [2]	HU→RS [2]	ME→RS	MK→RS [2]	RO→RS [2]	AL→RS [2]	Total_IMP	Total_IMP - Total_EXP
	Export (-)									Import (+)									Balance
I.05	82	0	377	0		234	0	7	700	93	262	0	175		0	280	78	888	188
II.05	100	0	371	0		164	0	0	635	45	327	0	198		0	304	112	986	351
III.05	80	0	380	2		129	0	1	592	67	283	0	90		0	241	102	783	191
IV.05	51	0	318	6		124	0	7	506	54	218	0	100		0	187	63	622	116
V.05	59	0	265	0		212	8	2	546	42	229	0	129		0	51	77	528	-18
VI.05	133	0	300	0		171	2	7	613	20	210	0	140		0	98	61	529	-84
VII.05	44	0	299	0		200	13	18	574	77	205	1	132		0	115	44	574	0
VIII.05	34	0	284	0		177	7	8	510	142	89	0	181		0	138	25	575	65
IX.05	72	0	328	3		133	0	12	548	59	116	0	99		1	164	55	494	-54
X.05	70	4	374	3		78	3	26	558	100	154	0	90		0	213	48	605	47
XI.05	123	0	440	2		182	0	39	786	86	312	0	124		0	348	31	901	115
XII.05	63	0	402	0		186	0	66	717	108	355	1	235		0	364	15	1078	361
2005	**911**	**4**	**4138**	**16**		**1990**	**33**	**193**	**7285**	**893**	**2760**	**2**	**1693**		**1**	**2503**	**711**	**8563**	**1278**
I.09	142	0	193	0	26	204	0	2	567	27	139	0	160	137	0	243	40	746	179
II.09	92	0	181	0	4	236	0	0	513	23	135	0	122	177	0	178	74	709	196
III.09	120	0	173	0	31	261	0	3	588	36	90	0	142	122	0	150	36	576	-12
IV.09	78	1	138	3	19	170	2	0	411	28	51	0	65	121	0	60	95	420	9
V.09	86	15	118	19	53	210	7	5	513	39	17	0	36	58	0	79	47	276	-237
VI.09	134	13	140	36	59	262	11	14	669	43	19	0	43	29	0	71	15	220	-449
VII.09	127	14	130	6	99	295	6	15	692	32	29	0	86	19	0	61	6	233	-459
VIII.09	130	3	106	0	128	161	28	22	578	27	95	0	98	14	0	94	4	332	-246
IX.09	219	0	84	2	171	79	0	23	578	16	124	0	81	4	3	135	9	372	-206
X.09	159	0	147	9	100	110	0	9	534	26	161	0	117	43	0	189	23	559	25
XI.09	180	0	186	0	118	102	0	4	590	15	235	0	149	32	0	227	39	697	107
XII.09	104	0	111	0	44	240	1	6	506	49	89	0	266	137	0	161	37	739	233
2009	**1571**	**46**	**1707**	**75**	**852**	**2330**	**55**	**103**	**6739**	**361**	**1184**	**0**	**1365**	**893**	**3**	**1648**	**425**	**5879**	**-860**
I.10	29	5	145	3	2	224	5	0	413	71	87	0	123	301	0	89	135	806	393
II.10	54	0	146	2	12	188	3	0	405	30	124	0	86	166	0	85	94	585	180
III.10	32	3	149	16	10	291	7	0	508	38	71	11	61	196	0	51	145	573	65
IV.10	64	17	174	63	18	206	26	0	568	20	37	2	6	112	0	16	145	338	-230
V.10	22	33	153	158	18	191	25	0	600	54	24	0	0	130	0	23	142	373	-227
VI.10	114	0	170	88	10	203	0	4	589	7	148	0	5	75	0	179	37	451	-138
VII.10	247	0	159	70	92	163	0	35	766	7	226	0	1	34	0	279	1	548	-218
VIII.10	209	0	76	18	93	222	8	41	667	8	233	0	15	19	0	203	1	479	-188
IX.10	211	0	86	35	106	161	0	62	661	12	174	1	9	44	0	189	0	429	-232
X.10	197	0	133	6	95	139	0	7	577	14	193	0	51	74	0	282	86	700	123
XI.10	95	0	160	26	46	135	0	0	462	32	226	0	32	104	0	269	104	767	305
XII.10	45	0	189	59	9	186	0	0	488	69	251	0	3	195	0	303	157	978	490
2010	**1319**	**58**	**1740**	**544**	**511**	**2309**	**74**	**149**	**6704**	**362**	**1794**	**14**	**392**	**1450**	**0**	**1968**	**1047**	**7027**	**323**

[1] 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". [2] RS data year 2005 are imports and exports of CS.

Thermal nuclear net generation	GWh	Σ	2005	69461
			2009	50023
			2010	55626
Fossil fuels net generation	GWh	Σ	2005	12195
			2009	4822
			2010	7803
Hydraulic net generation	GWh	Σ	2005	72143
			2009	65251
			2010	66215
Other renewable net generation	GWh	Σ	2005	930
			2009	13603
			2010	15386
- of which wind	GWh	Σ	2005	930
			2009	2523
			2010	3479
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	0
			2009	43
			2010	0
Total net generation	GWh	Σ	2005 [1]	154729
			2005 [1]	133742
calculated to represent 100% of the national values			2005 [1]	145030
Sum of physical imports	GWh	Σ	2005	14228
			2009	14488
			2010	16988
Sum of physical exports	GWh	Σ	2005	16263
			2009	7532
			2010	14728
Total exchange balance	GWh	Σ	2005	n.a.
			2009	n.a.
			2010	2078
Consumption of pumps	GWh	Σ	2005	n.a.
			2009	0
			2010	18
National electrical consumption,	GWh	Σ	2005	147332
			2009	138346
calculated to represent 100% of the national values			2010	147090
Consumption load 3:00 a.m. on the 3rd Wednesday,	MW	max.	2005	n.a.
			2009	n.a.
calculated to represent 100% of the national values			15.12.10	19868
Consumption load 11:00 a.m. on the 3rd Wednesday,	MW	max.	2005	n.a.
			2009	n.a.
calculated to represent 100% of the national values			15.12.10	25243
Highest load on the 3rd Wednesday,	MW	max.	2005	n.a.
			2009	n.a.
calculated to represent 100% of the national values			15.12.10	25807
Time of highest load on the 3rd Wednesday		CET	2005	n.a.
			2009	n.a.
			15.12.10	18:00

[1] Including deliveries from industry

Physical exchanges in interconnected operation [1]

MM_YY	SE→DE	SE→DK_W	SE→DK	SE→FI	SE→NO	SE→PL	Total_EXP	DE→SE	DK_W→SE	DK→SE	FI→SE	NO→SE	PL→SE	Total_IMP	Total_IMP - Total_EXP
	Export (-)							Import (+)							Balance
I.05	288	70		n.a.	n.a.	324	n.a.	61	67		n.a.	n.a.	8	n.a.	n.a.
II.05	306	71		n.a.	n.a.	211	n.a.	12	74		n.a.	n.a.	8	n.a.	n.a.
III.05	199	54		n.a.	n.a.	1	n.a.	67	127		n.a.	n.a.	121	n.a.	n.a.
IV.05	286	201		n.a.	n.a.	4	n.a.	38	14		n.a.	n.a.	174	n.a.	n.a.
V.05	0	228		n.a.	n.a.	18	n.a.	70	9		n.a.	n.a.	177	n.a.	n.a.
VI.05	309	286		n.a.	n.a.	163	n.a.	19	5		n.a.	n.a.	21	n.a.	n.a.
VII.05	389	292		n.a.	n.a.	34	n.a.	4	0		n.a.	n.a.	118	n.a.	n.a.
VIII.05	232	255		n.a.	n.a.	0	n.a.	58	10		n.a.	n.a.	59	n.a.	n.a.
IX.05	279	305		n.a.	n.a.	36	n.a.	9	0		n.a.	n.a.	20	n.a.	n.a.
X.05	269	257		n.a.	n.a.	4	n.a.	40	7		n.a.	n.a.	178	n.a.	n.a.
XI.05	300	180		n.a.	n.a.	22	n.a.	15	12		n.a.	n.a.	49	n.a.	n.a.
XII.05	243	118		n.a.	n.a.	0	n.a.	44	74		n.a.	n.a.	249	n.a.	n.a.
2005	**3100**	**2317**		**7193**	**2836**	**817**	**16263**	**437**	**399**		**1394**	**10816**	**1182**	**14228**	**-2035**
I.09	210	119		n.a.	n.a.	231	n.a.	32	181		n.a.	n.a.	24	n.a.	n.a.
II.09	85	99		n.a.	n.a.	146	n.a.	25	100		n.a.	n.a.	27	n.a.	n.a.
III.09	17	66		n.a.	n.a.	55	n.a.	13	219		n.a.	n.a.	48	n.a.	n.a.
IV.09	120	83		n.a.	n.a.	35	n.a.	149	131		n.a.	n.a.	55	n.a.	n.a.
V.09	112	99		n.a.	n.a.	161	n.a.	120	105		n.a.	n.a.	7	n.a.	n.a.
VI.09	83	42		n.a.	n.a.	118	n.a.	141	150		n.a.	n.a.	8	n.a.	n.a.
VII.09	111	63		n.a.	n.a.	203	n.a.	119	136		n.a.	n.a.	15	n.a.	n.a.
VIII.09	58	13		n.a.	n.a.	154	n.a.	124	297		n.a.	n.a.	1	n.a.	n.a.
IX.09	67	28		n.a.	n.a.	122	n.a.	72	219		n.a.	n.a.	0	n.a.	n.a.
X.09	51	31		n.a.	n.a.	69	n.a.	56	110		n.a.	n.a.	0	n.a.	n.a.
XI.09	36	16		n.a.	n.a.	76	n.a.	113	163		n.a.	n.a.	21	n.a.	n.a.
XII.09	18	8		n.a.	n.a.	24	n.a.	225	174		n.a.	n.a.	48	n.a.	n.a.
2009	**968**	**667**		**1855**	**2648**	**1394**	**7532**	**1189**	**1985**		**3162**	**7898**	**254**	**14488**	**6956**
I.10	1		3	100	294	26	424	329		680	329	508	74	1920	1496
II.10	0		2	157	400	0	559	374		790	557	323	89	2133	1574
III.10	1		7	1	721	21	751	293		796	946	120	74	2229	1478
IV.10	32		126	11	1075	93	1337	85		290	881	69	12	1337	0
V.10	230		535	191	1388	232	2576	31		44	396	30	5	506	-2070
VI.10	220		697	189	1269	66	2441	61		38	296	51	0	446	-1995
VII.10	199		647	698	449	160	2153	139		86	36	396	7	664	-1489
VIII.10	102		357	570	504	78	1611	127		132	43	177	2	481	-1130
IX.10	41		62	235	350	5	693	254		467	277	378	44	1420	727
X.10	97		98	174	294	36	699	224		461	502	871	49	2107	1408
XI.10	79		117	234	510	39	979	206		359	472	368	59	1464	485
XII.10	5		5	76	414	5	505	232		835	735	400	79	2281	1776
2010	**1007**		**2656**	**2636**	**7668**	**761**	**14728**	**2355**		**4978**	**5470**	**3691**	**494**	**16988**	**2260**

[1] 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".

Slovenia

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005 2009 2010	5609 5458 5377
Fossil fuels net generation	GWh	Σ	2005 2009 2010	4601 4696 4794
Hydraulic net generation	GWh	Σ	2005 2009 2010	3002 4272 4249
Other renewable net generation	GWh	Σ	2005 2009 2010	0 0 0
- of which wind	GWh	Σ	2005 2009 2010	0 0 0
- of which solar	GWh	Σ	2005 2009 2010	n.a. 0 0
Non-identifiable net generation	GWh	Σ	2005 2009 2010	0 0 0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 2009 2010	13212 14426 14420
Sum of physical imports	GWh	Σ	2005 2009 2010	9285 7783 8611
Sum of physical exports	GWh	Σ	2005 2009 2010	9540 10843 10744
Total exchange balance	GWh	Σ	2005 2009 2010	-445 -3089 -2172
Consumption of pumps	GWh	Σ	2005 2009 2010	0 0 0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005 2009 2010	12767 11337 12248
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05 16.12.09 15.12.10	1416 1095 1349
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05 16.12.09 15.12.10	1991 1763 1804
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05 16.12.09 15.12.10	2074 1895 1919
Time of highest load on the 3rd Wednesday		CET	21.12.05 16.12.09 15.12.10	08:00 18:00 19:00

Physical exchanges in interconnected operation [1]

Slovenia | GWh

MM_YY	SI→AT	SI→HR	SI→IT	Total_EXP	AT→SI	HR→SI	IT→SI	Total_IMP	Total_IMP - Total_EXP
	Export (-)				Import (+)				Balance
I.05	75	22	789	886	126	768	0	894	8
II.05	40	46	725	811	116	688	0	804	-7
III.05	42	29	789	860	68	849	0	917	57
IV.05	14	60	842	916	116	737	0	853	-63
V.05	6	99	580	685	76	578	0	654	-31
VI.05	68	66	630	764	128	611	0	739	-25
VII.05	20	130	732	882	154	649	0	803	-79
VIII.05	50	177	372	599	110	477	0	587	-12
IX.05	46	140	546	732	134	582	0	716	-16
X.05	28	137	834	999	186	695	0	881	-118
XI.05	58	140	548	746	93	581	0	674	-72
XII.05	86	30	544	660	34	729	0	763	103
2005	**533**	**1076**	**7931**	**9540**	**1341**	**7944**	**0**	**9285**	**-255**
I.09	167	126	541	834	52	604	0	656	-178
II.09	174	72	678	924	14	686	1	701	-223
III.09	89	157	647	893	42	594	0	636	-257
IV.09	5	24	727	756	192	533	0	725	-31
V.09	0	385	573	958	250	312	4	566	-392
VI.09	1	375	638	1014	210	374	4	588	-426
VII.09	1	538	599	1138	381	320	2	703	-435
VIII.09	1	506	99	606	284	121	12	417	-189
IX.09	0	452	404	856	380	244	24	648	-208
X.09	5	398	599	1002	305	445	4	754	-248
XI.09	18	204	672	894	169	509	2	680	-214
XII.09	9	337	622	968	248	454	7	709	-259
2009	**470**	**3574**	**6799**	**10843**	**2527**	**5196**	**60**	**7783**	**-3060**
I.10	35	190	727	952	127	614	21	762	-190
II.10	36	145	775	956	146	708	5	859	-97
III.10	33	200	862	1095	104	751	7	862	-233
IV.10	55	179	726	960	80	656	28	764	-196
V.10	30	260	697	987	111	585	4	700	-287
VI.10	10	306	580	896	204	445	10	659	-237
VII.10	0	357	394	751	337	333	6	676	-75
VIII.10	6	415	72	493	170	104	12	286	-207
IX.10	1	322	526	849	233	340	6	579	-270
X.10	3	48	610	661	364	492	14	870	209
XI.10	72	136	880	1088	130	693	5	828	-260
XII.10	303	89	664	1056	5	759	2	766	-290
2010	**584**	**2647**	**7513**	**10744**	**2011**	**6480**	**120**	**8611**	**-2133**

[1] 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".

Thermal nuclear net generation	GWh	Σ	2005	16376
			2009	13097
			2010	13577
Fossil fuels net generation	GWh	Σ	2005	5508
			2009	6277
			2010	5620
Hydraulic net generation	GWh	Σ	2005	4571
			2009	4683
			2010	5525
Other renewable net generation	GWh	Σ	2005	6
			2009	389
			2010	476
- of which wind	GWh	Σ	2005	6
			2009	5
			2010	7
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	9
Non-identifiable net generation	GWh	Σ	2005	2497
			2009	0
			2010	930
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005 [1]	29141
			2009 [1]	24446
			2010 [1]	26128
Sum of physical imports	GWh	Σ	2005	8568
			2009	8996
			2010	7342
Sum of physical exports	GWh	Σ	2005	11290
			2009	7682
			2010	6295
Total exchange balance	GWh	Σ	2005	-2721
			2009	1312
			2010	1041
Consumption of pumps	GWh	Σ	2005	137
			2009	322
			2010	528
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	26283
			2009	25436
			2010	26641
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	19.01.05	3373
			18.02.09	3158
			15.12.10	3390
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	19.01.05	4010
			18.02.09	3948
			15.12.10	4126
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	4323
			16.12.09	4056
			15.12.10	4326
Time of highest load on the 3rd Wednesday		CET	21.12.05	17:00
			16.12.09	18:00
			15.12.10	17:00

[1]Including deliveries from industry

Physical exchanges in interconnected operation [1]

Slovak Republic | GWh

MM_YY	SK→CZ	SK→HU	SK→PL	SK→UA_W	Total_EXP	CZ→SK	HU→SK	PL→SK	UA_W→SK	Total_IMP	Total_IMP - Total_EXP
	Export (-)					Import (+)					Balance
I.05	55	918	0	187	1160	547	0	297	0	844	-316
II.05	49	822	0	172	1043	510	0	282	0	792	-251
III.05	35	785	0	99	919	538	0	260	0	798	-121
IV.05	43	680	0	169	892	457	0	272	0	729	-163
V.05	10	653	0	141	804	473	0	213	0	686	-118
VI.05	49	612	0	109	770	414	0	199	0	613	-157
VII.05	55	895	0	69	1019	508	0	127	2	637	-382
VIII.05	112	581	0	83	776	375	0	28	2	405	-371
IX.05	79	500	0	104	683	360	0	156	0	516	-167
X.05	89	744	0	157	990	474	0	272	0	746	-244
XI.05	105	749	0	210	1064	530	0	348	0	878	-186
XII.05	81	867	0	222	1170	586	0	338	0	924	-246
2005	**762**	**8806**	**0**	**1722**	**11290**	**5772**	**0**	**2792**	**4**	**8568**	**-2722**
I.09	3	546	0	152	701	663	0	310	9	982	281
II.09	2	422	0	74	498	525	0	224	9	758	260
III.09	3	610	0	182	795	575	0	264	7	846	51
IV.09	44	403	11	106	564	217	0	99	7	323	-241
V.09	19	421	30	37	507	347	0	71	19	437	-70
VI.09	17	459	19	67	562	364	0	72	10	446	-116
VII.09	3	654	1	136	794	686	0	155	5	846	52
VIII.09	3	374	2	144	523	570	0	96	5	671	148
IX.09	0	563	1	112	676	784	0	205	5	994	318
X.09	0	514	0	172	686	685	0	294	8	987	301
XI.09	45	451	0	117	613	507	0	283	10	800	187
XII.09	2	583	0	178	763	634	0	265	7	906	143
2009	**141**	**6000**	**64**	**1477**	**7682**	**6557**	**0**	**2338**	**101**	**8996**	**1314**
I.10	24	353	4	64	445	409	0	147	22	578	133
II.10	6	373	0	79	458	475	0	187	10	672	214
III.10	16	447	1	119	583	421	0	220	8	649	66
IV.10	19	517	2	131	669	457	0	168	7	632	-37
V.10	28	339	10	52	429	346	0	99	12	457	28
VI.10	34	393	20	51	498	306	0	63	9	378	-120
VII.10	1	602	0	158	761	861	0	179	5	1045	284
VIII.10	22	539	6	64	631	431	0	87	11	529	-102
IX.10	6	447	8	55	516	591	0	1	15	607	91
X.10	7	558	0	95	660	677	0	176	13	866	206
XI.10	54	280	1	39	374	388	3	126	46	563	189
XII.10	149	86	31	5	271	136	53	45	132	366	95
2010	**366**	**4934**	**83**	**912**	**6295**	**5498**	**56**	**1498**	**290**	**7342**	**1047**

[1] 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".

Ukraine West

Yearly values / Operation

Thermal nuclear net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Fossil fuels net generation	GWh	Σ	2005	7976
			2009	6509
			2010	5358
Hydraulic net generation	GWh	Σ	2005	110
			2009	121
			2010	152
Other renewable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
- of which wind	GWh	Σ	2005	0
			2009	0
			2010	0
- of which solar	GWh	Σ	2005	n.a.
			2009	0
			2010	0
Non-identifiable net generation	GWh	Σ	2005	0
			2009	0
			2010	0
Total net generation calculated to represent 100% of the national values	GWh	Σ	2005	8086
			2009	6630
			2010	5510
Sum of physical imports	GWh	Σ	2005	1778
			2009	1721
			2010	1719
Sum of physical exports	GWh	Σ	2005	5501
			2009	4389
			2010	2876
Total exchange balance	GWh	Σ	2005	-3724
			2009	-2666
			2010	-1158
Consumption of pumps	GWh	Σ	2005	0
			2009	0
			2010	0
National electrical consumption, calculated to represent 100% of the national values	GWh	Σ	2005	4362
			2009	3964
			2010	4352
Consumption load 3:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	19.01.05	726
			18.02.09	601
			15.12.10	691
Consumption load 11:00 a.m. on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	833
			16.12.09	833
			15.12.10	970
Highest load on the 3rd Wednesday, calculated to represent 100% of the national values	MW	max.	21.12.05	978
			16.12.09	991
			15.12.10	1087
Time of highest load on the 3rd Wednesday		CET	21.12.05	17:00
			16.12.09	17:00
			15.12.10	18:00

Physical exchanges in interconnected operation [1]

Ukraine West | GWh

MM_YY	UA_W→HU	UA_W→RO	UA_W→SK	Total_EXP	HU→UA_W	RO→UA_W	SK→UA_W	Total_IMP	Total_IMP - Total_EXP
	Export (-)				Import (+)				Balance
I.05	438	56	0	494	0	0	187	187	-307
II.05	406	70	0	476	0	6	172	178	-298
III.05	386	51	0	437	15	13	99	127	-310
IV.05	403	60	0	463	3	0	169	172	-291
V.05	389	43	0	432	2	2	141	145	-287
VI.05	353	53	0	406	0	1	109	110	-296
VII.05	228	73	2	303	0	0	69	69	-234
VIII.05	373	43	2	418	5	2	83	90	-328
IX.05	412	47	0	459	1	0	104	105	-354
X.05	426	69	0	495	0	0	157	157	-338
XI.05	509	45	0	554	0	6	210	216	-338
XII.05	491	73	0	564	0	0	222	222	-342
2005	**4814**	**683**	**4**	**5501**	**26**	**30**	**1722**	**1778**	**-3723**
I.09	351	105	9	465	2	0	152	154	-311
II.09	295	81	9	385	4	0	74	78	-307
III.09	355	103	7	465	15	0	182	197	-268
IV.09	192	70	7	269	20	0	106	126	-143
V.09	47	102	19	168	30	0	37	67	-101
VI.09	203	115	10	328	32	0	67	99	-229
VII.09	267	117	5	389	12	0	136	148	-241
VIII.09	197	103	5	305	21	0	144	165	-140
IX.09	306	92	5	403	6	0	112	118	-285
X.09	248	143	8	399	15	3	172	190	-209
XI.09	226	137	10	373	25	0	117	142	-231
XII.09	221	212	7	440	59	0	178	237	-203
2009	**2908**	**1380**	**101**	**4389**	**241**	**3**	**1477**	**1721**	**-2668**
I.10	256	122	22	400	44	1	64	109	-291
II.10	215	115	10	340	42	0	79	121	-219
III.10	107	92	8	207	80	1	119	200	-7
IV.10	83	62	7	152	11	5	131	147	-5
V.10	89	27	12	128	48	23	52	123	-5
VI.10	140	7	9	156	47	53	51	151	-5
VII.10	214	6	5	225	2	60	158	220	-5
VIII.10	96	16	11	123	11	41	64	116	-7
IX.10	118	6	15	139	23	55	55	133	-6
X.10	284	45	13	342	14	7	95	116	-226
XI.10	241	26	46	313	33	38	39	110	-203
XII.10	217	2	132	351	71	97	5	173	-178
2010	**2060**	**526**	**290**	**2876**	**426**	**381**	**912**	**1719**	**-1157**

[1] 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".

European Network of
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Load values diagrams of each country on the 3rd Wednesday 2010 [1]

[1] **All values are calculed to represent 100% of the national values**
Statistical database as of 31 August 2011

Load diagrams on the 3rd Wednesday

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

CY: Only the highest and lowest load values of each month are available.

PL: Operational data

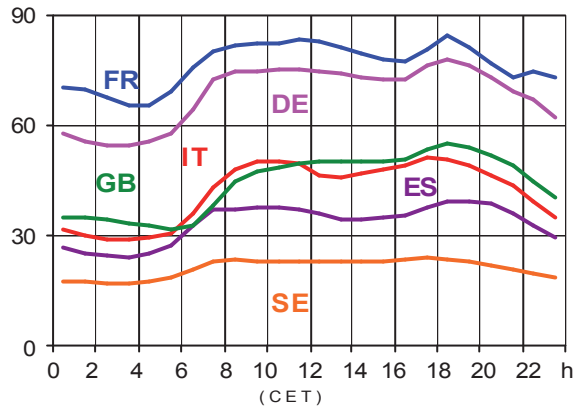
UA_W: Ukraine West represents the so-called Burshtyn Island synchronously interconnected with ENTSO-E area.

ENTSO-E: Calculated load values as sum of the member TSOs' countries

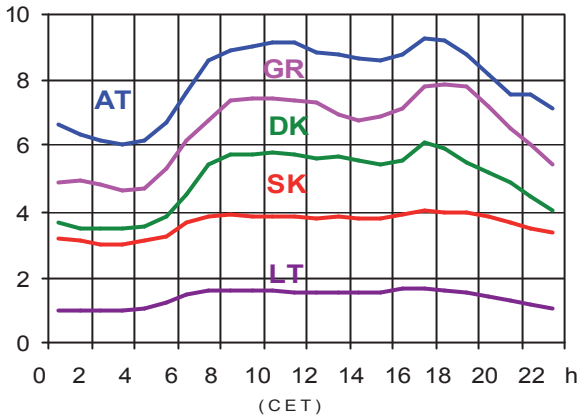
The tables with the detailed hourly load values of each country on the 3rd Wednesday 2010 are published under www.entsoe.eu / resources / publications / general reports / statistical yearbooks / statistical yearbook 2010.

Load diagrams on the 3rd Wednesday in GW

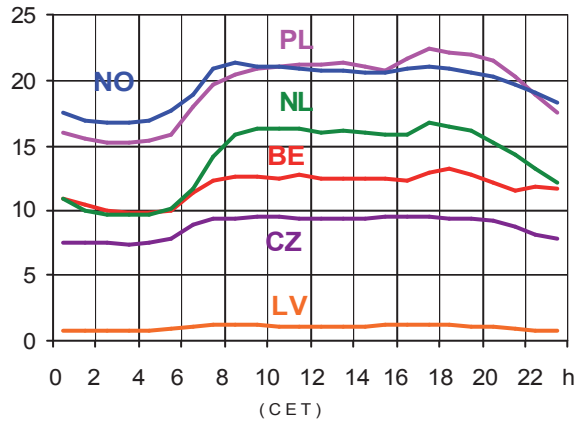
20.01.2010 **(in GW)**



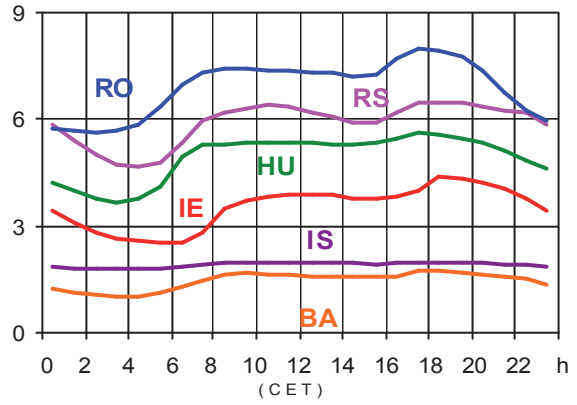
20.01.2010 **(in GW)**



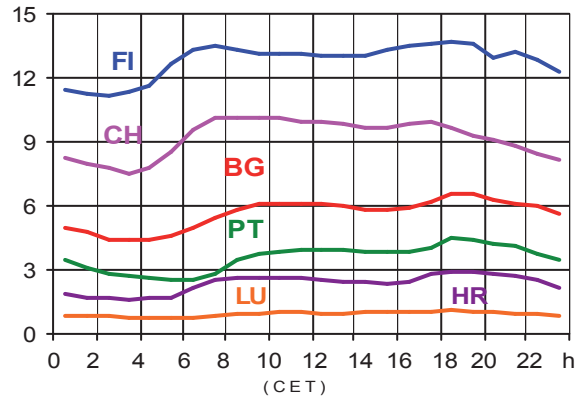
20.01.2010 **(in GW)**



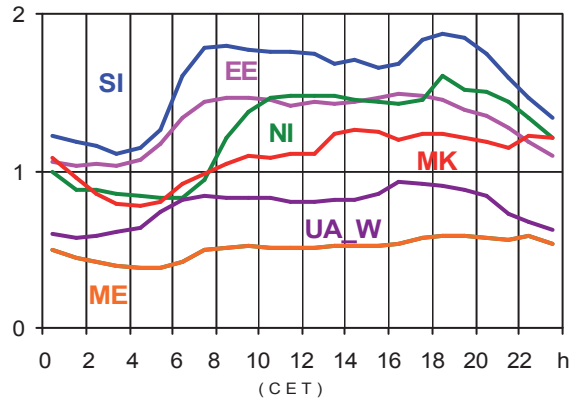
20.01.2010 **(in GW)**



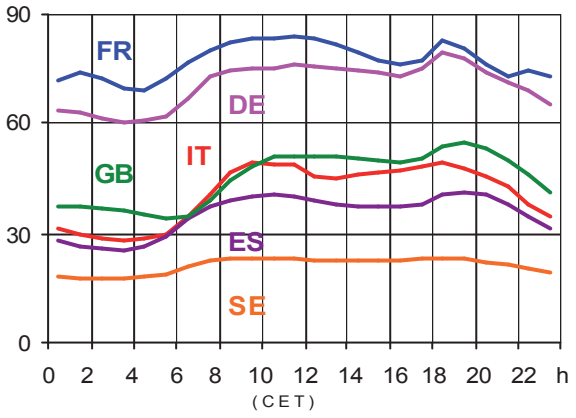
20.01.2010 **(in GW)**



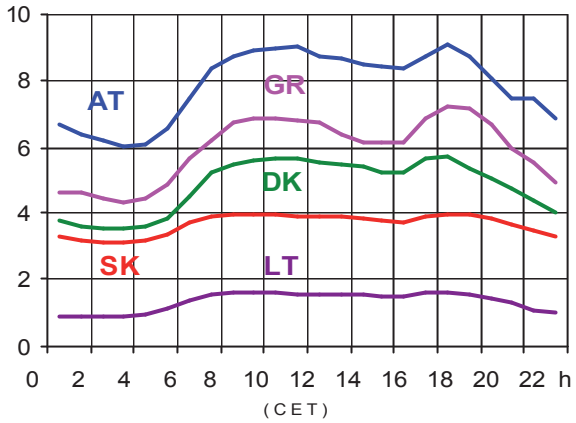
20.01.2010 **(in GW)**



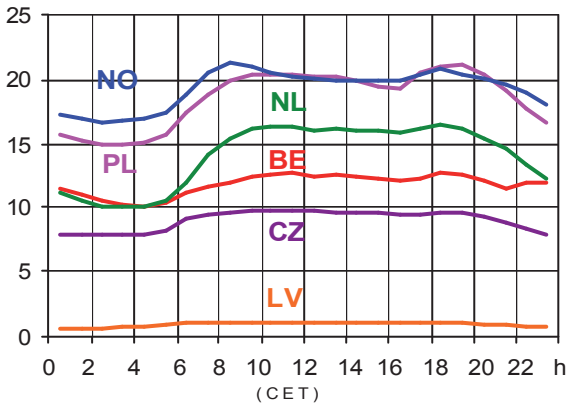
17.02.2010 (in GW)



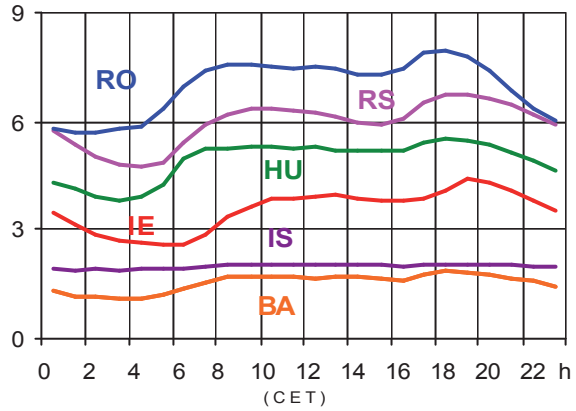
17.02.2010 (in GW)



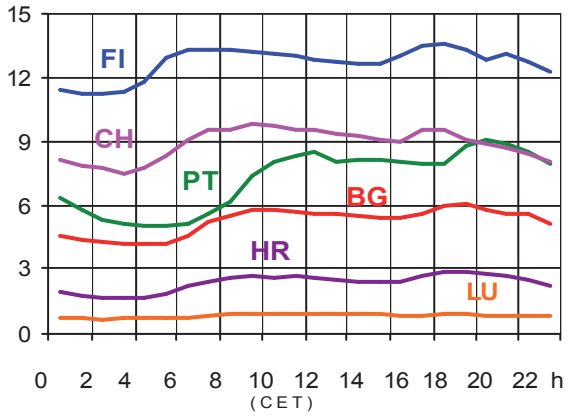
17.02.2010 (in GW)



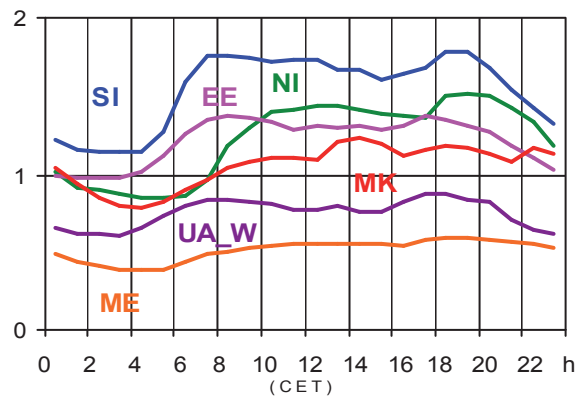
17.02.2010 (in GW)



17.02.2010 (in GW)

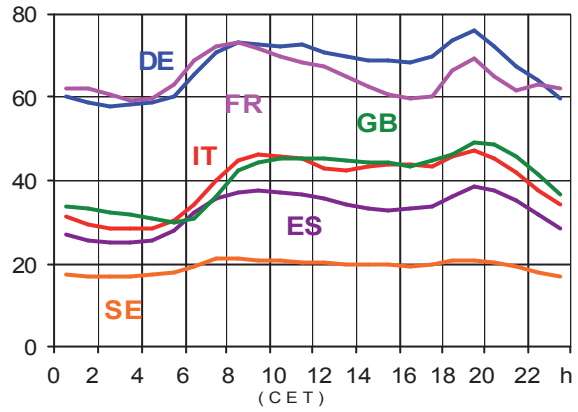


17.02.2010 (in GW)

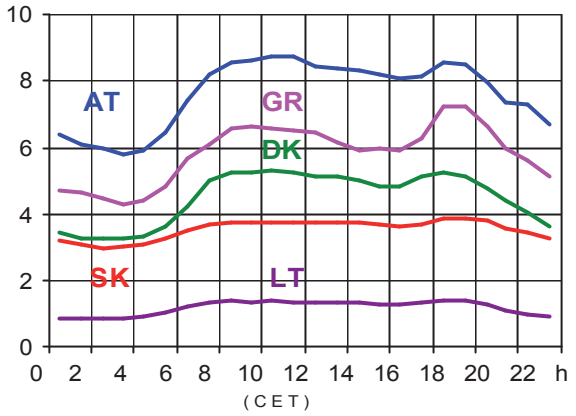


Load diagrams on the 3rd Wednesday in GW

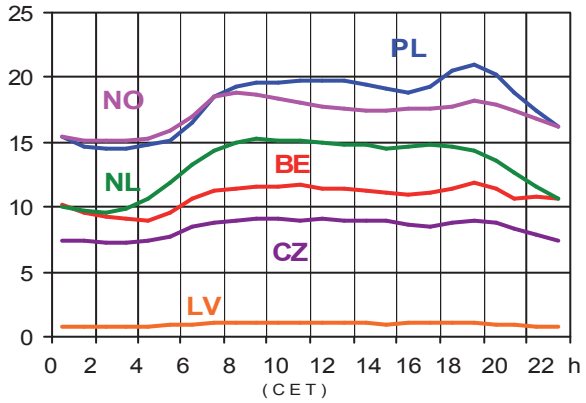
17.03.2010 **(in GW)**



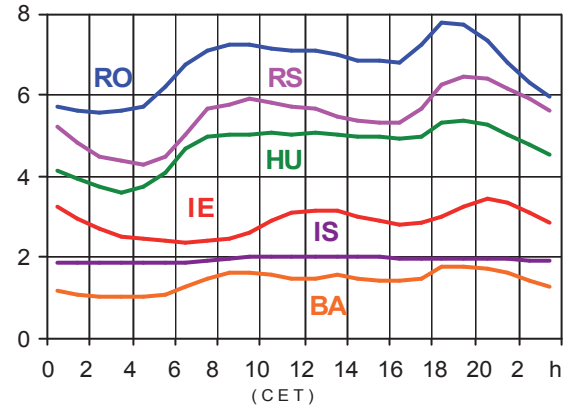
17.03.2010 **(in GW)**



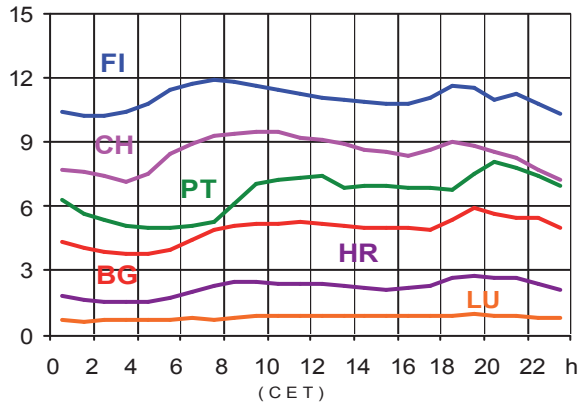
17.03.2010 **(in GW)**



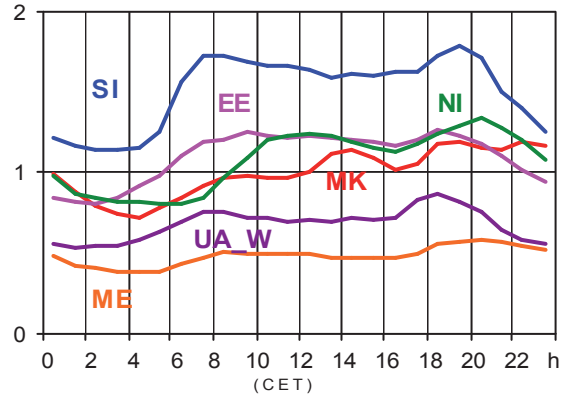
17.03.2010 **(in GW)**



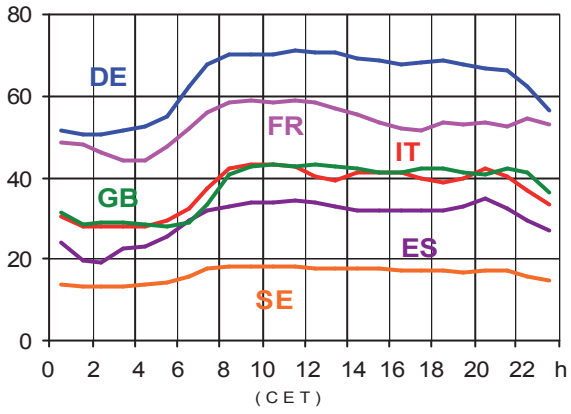
17.03.2010 **(in GW)**



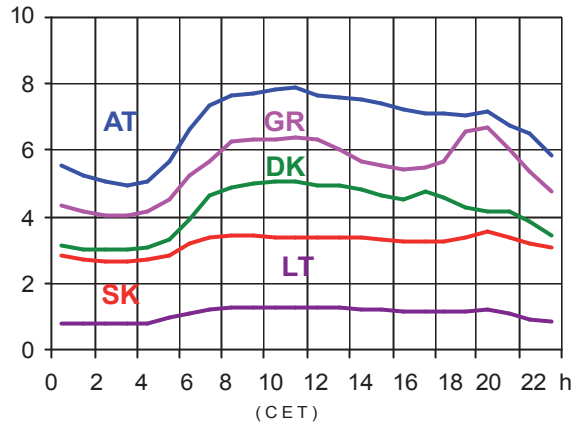
17.03.2010 **(in GW)**



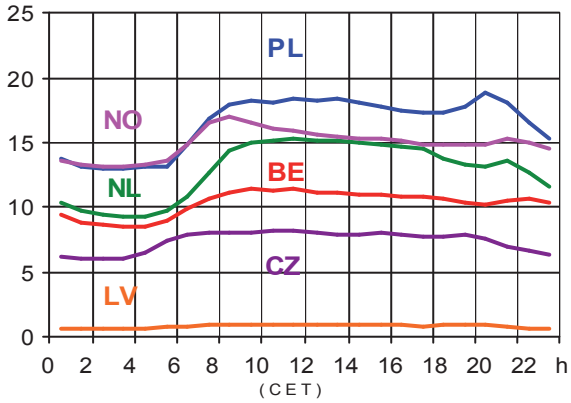
21.04.2010 (in GW)



21.04.2010 (in GW)



21.04.2010 (in GW)



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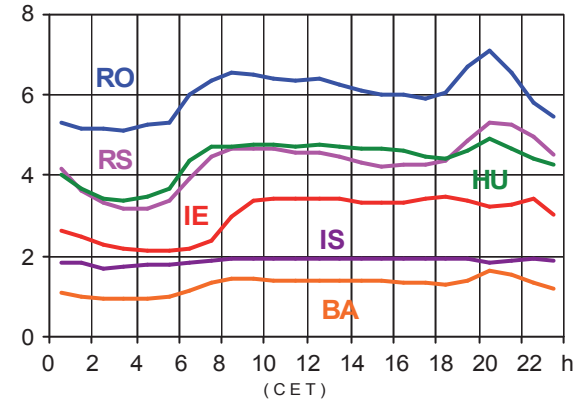

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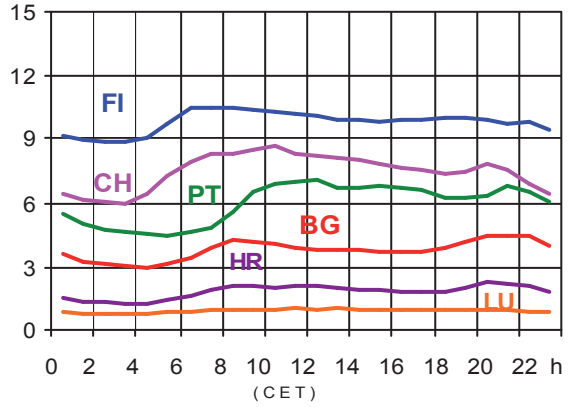

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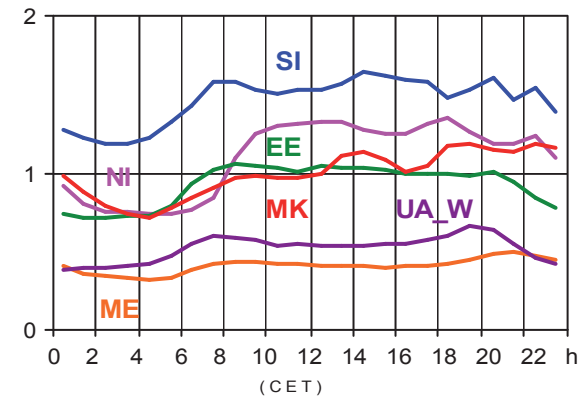
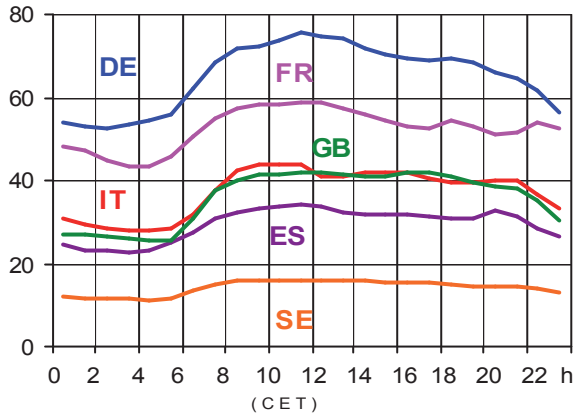
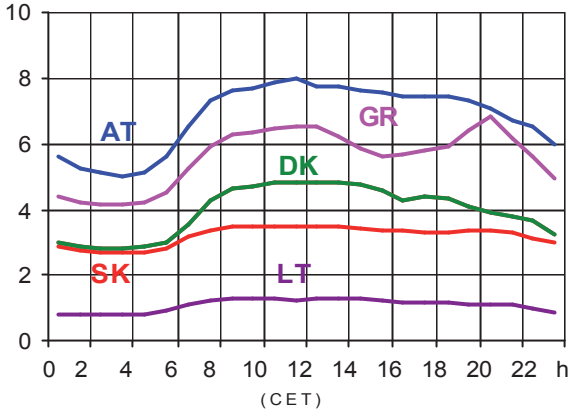


Load diagrams on the 3rd Wednesday in GW

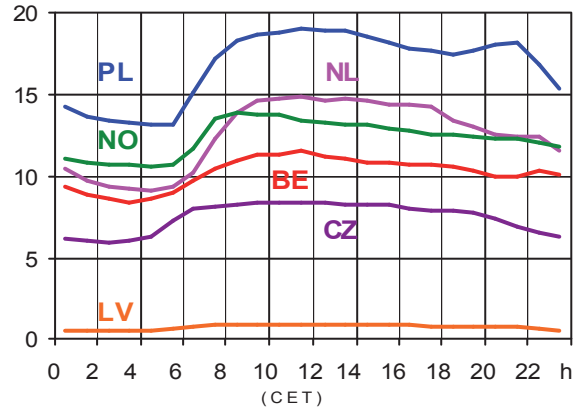
19.05.2010 (in GW)



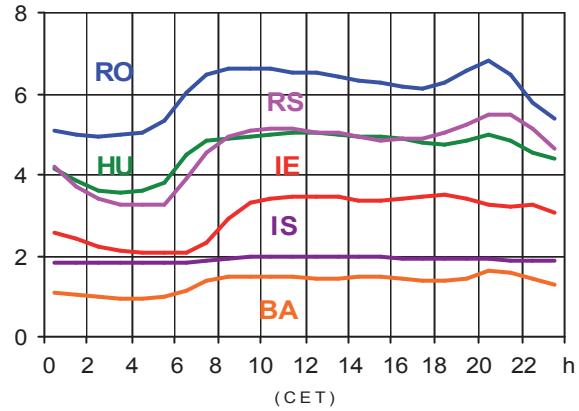
19.05.2010 (in GW)



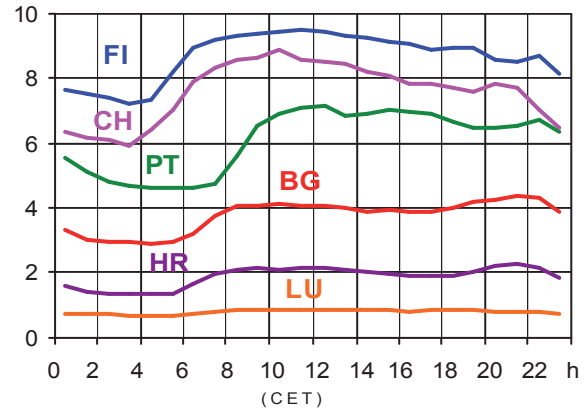
19.05.2010 (in GW)



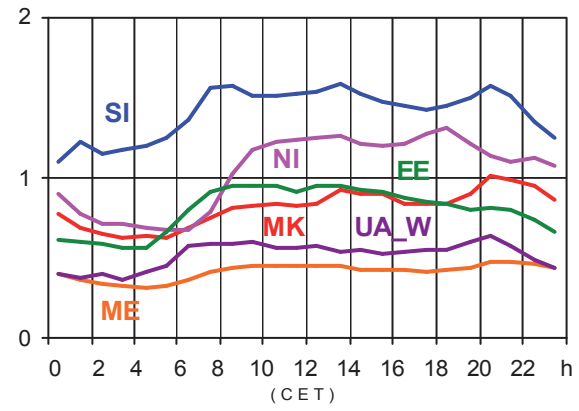
19.05.2010 (in GW)



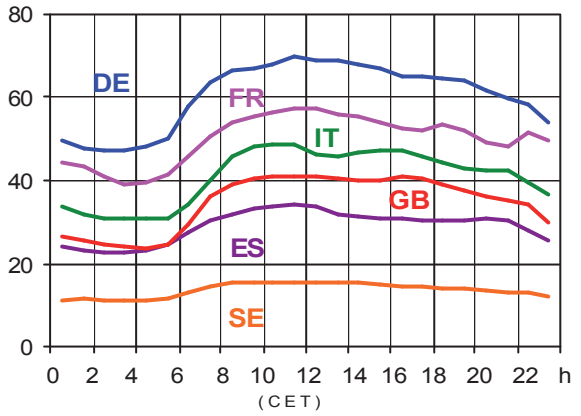
19.05.2010 (in GW)



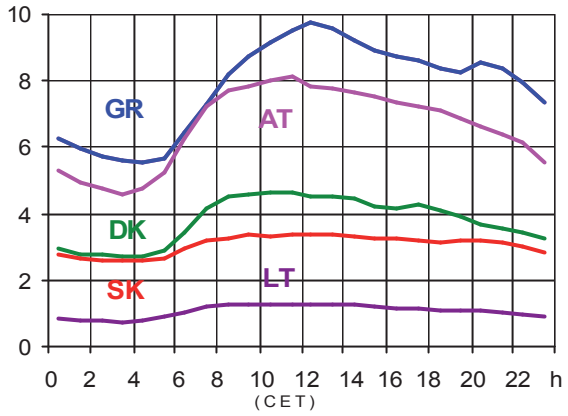
19.05.2010 (in GW)



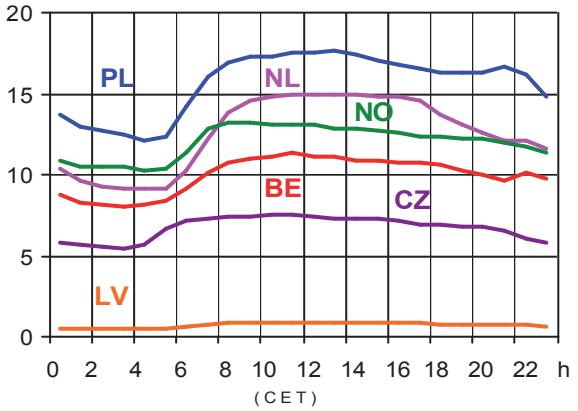
16.06.2010 (in GW)



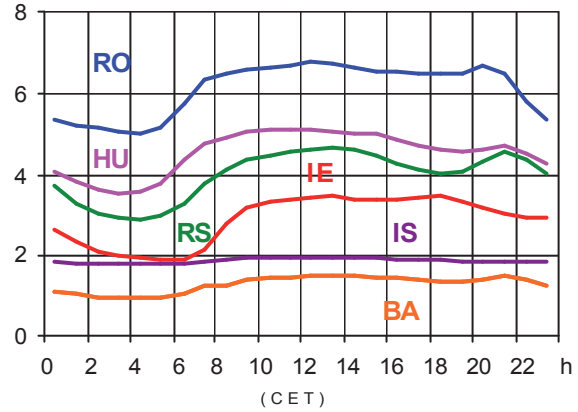
16.06.2010 (in GW)



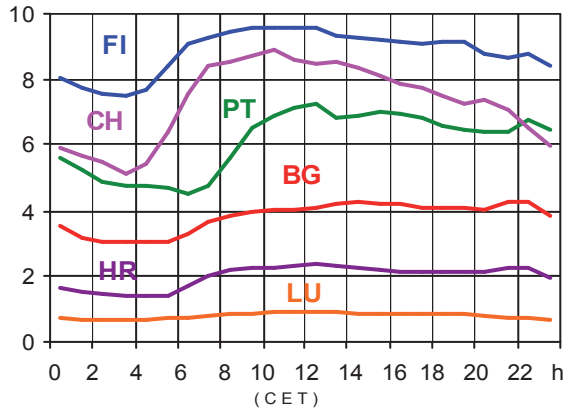
16.06.2010 (in GW)



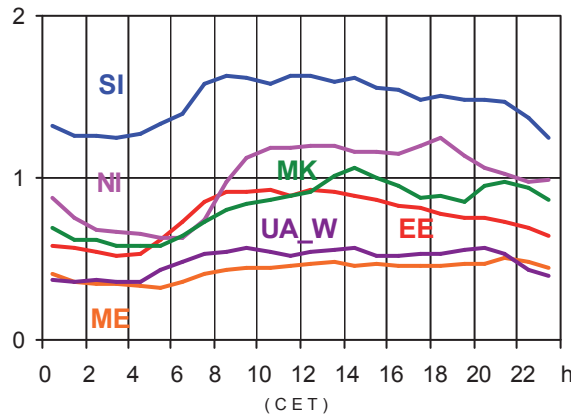
16.06.2010 (in GW)



16.06.2010 (in GW)

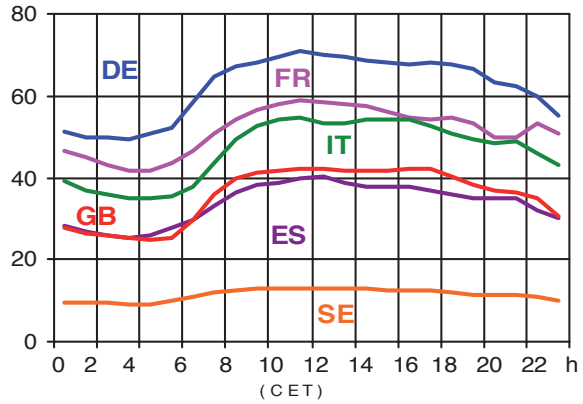


16.06.2010 (in GW)

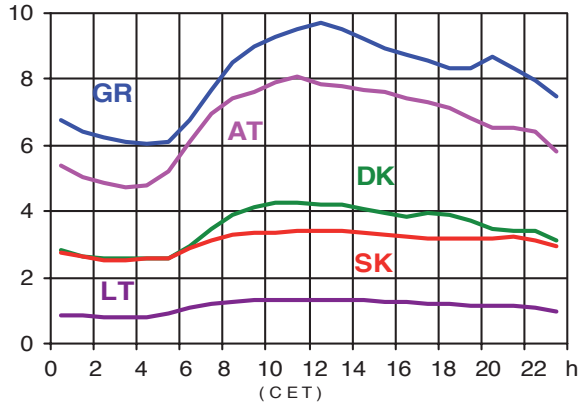


Load diagrams on the 3rd Wednesday in GW

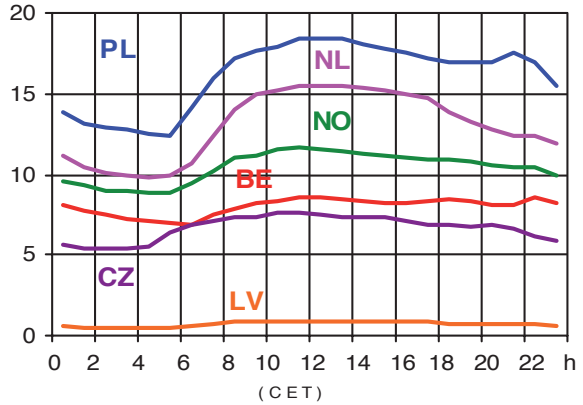
21.07.2010 **(in GW)**



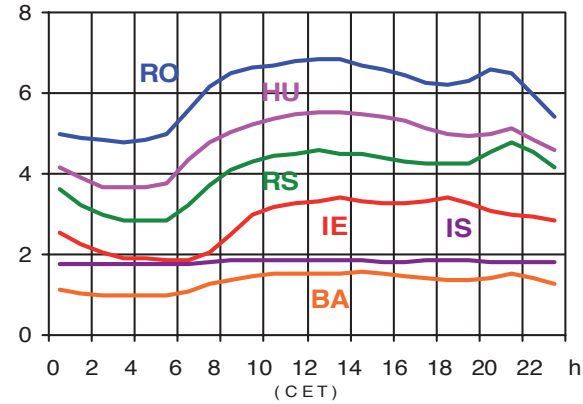
21.07.2010 **(in GW)**



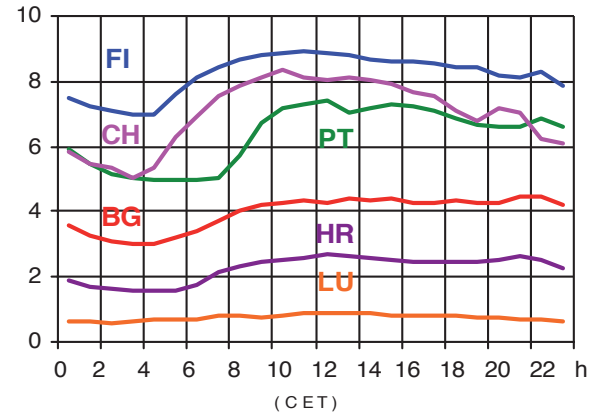
21.07.2010 **(in GW)**



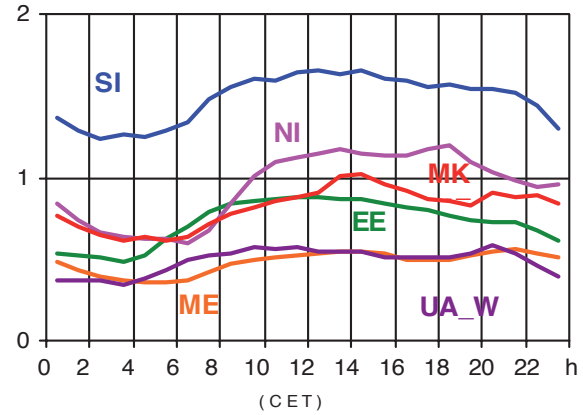
21.07.2010 **(in GW)**



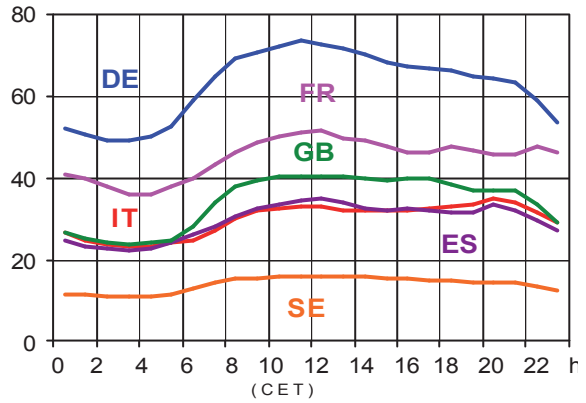
21.07.2010 **(in GW)**



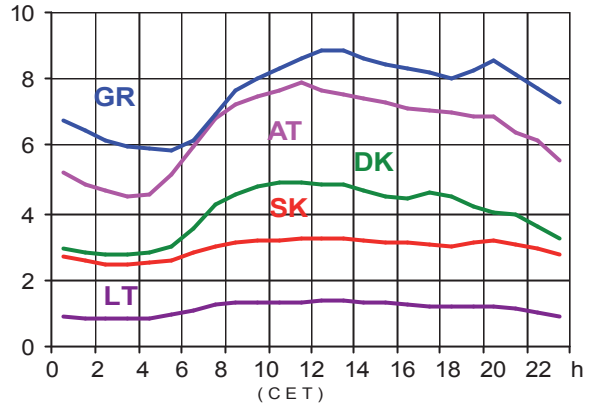
21.07.2010 **(in GW)**



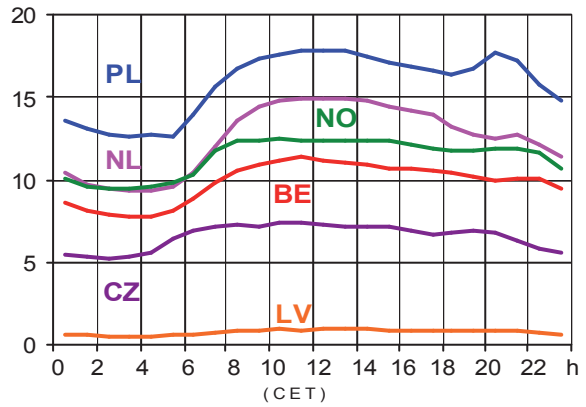
18.08.2010 (in GW)



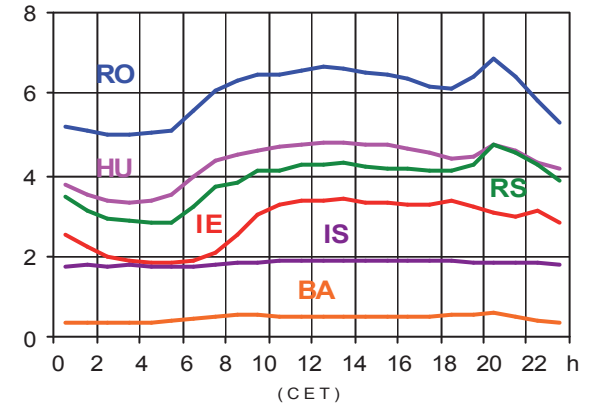
18.08.2010 (in GW)



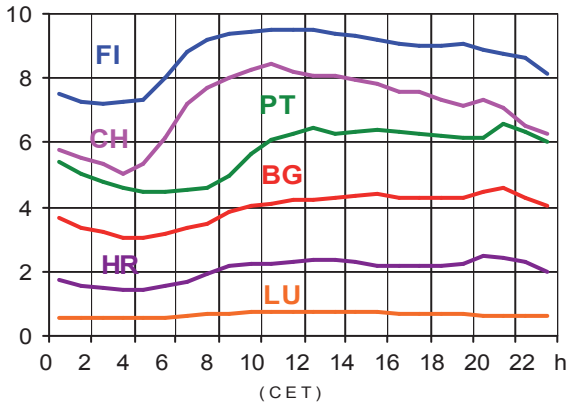
18.08.2010 (in GW)



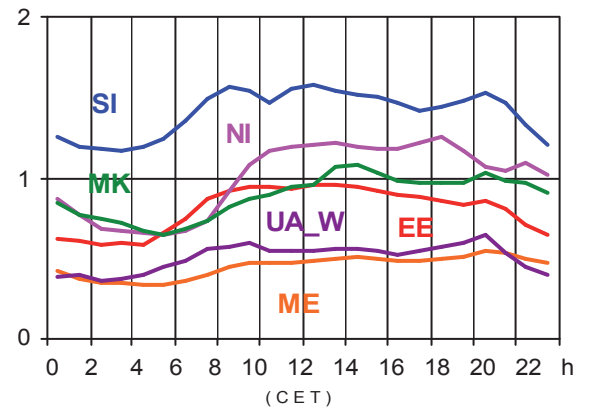
18.08.2010 (in GW)



18.08.2010 (in GW)

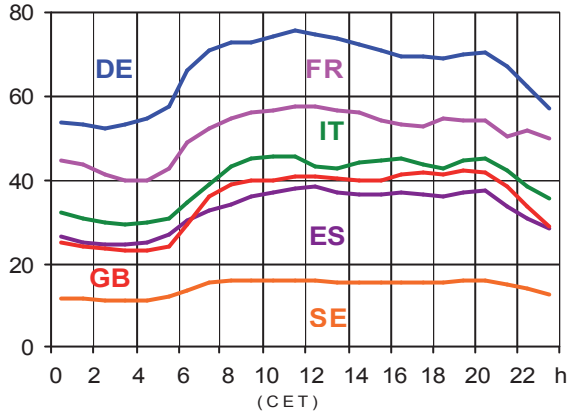


18.08.2010 (in GW)

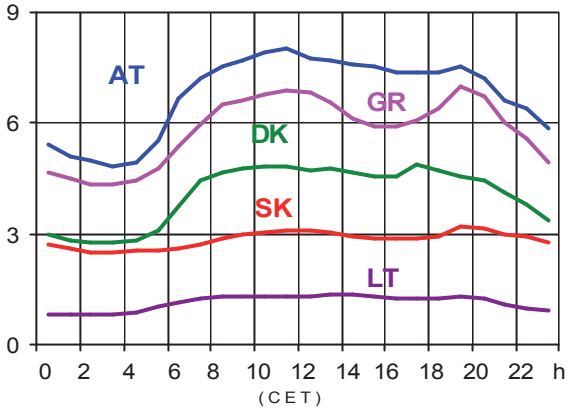


Load diagrams on the 3rd Wednesday in GW

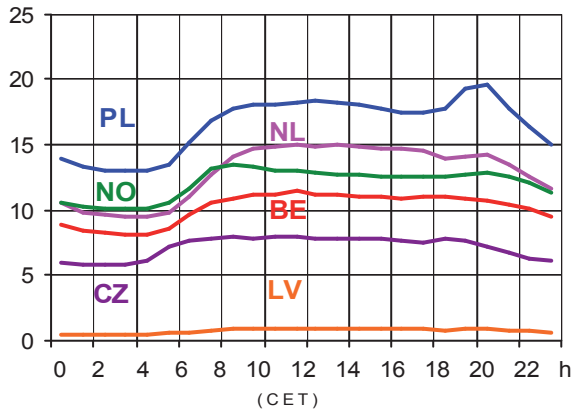
15.09.2010 (in GW)



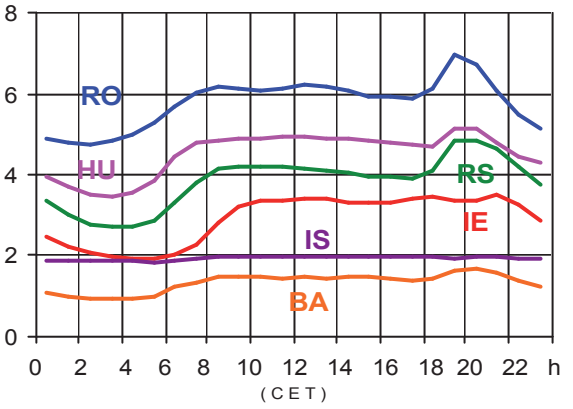
15.09.2010 (in GW)



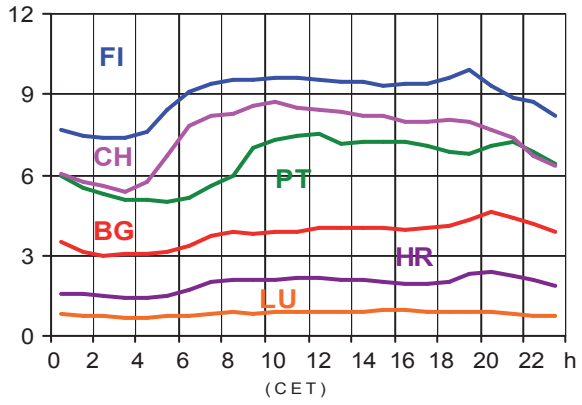
15.09.2010 (in GW)



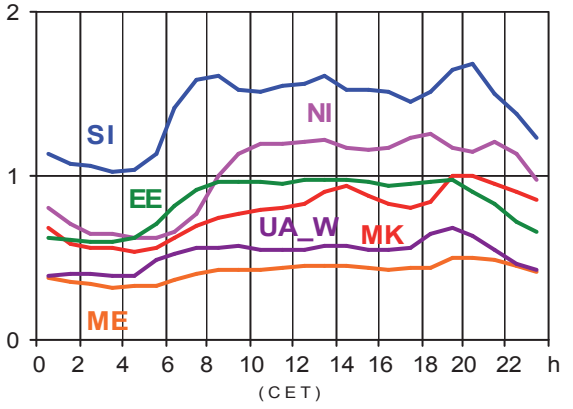
15.09.2010 (in GW)



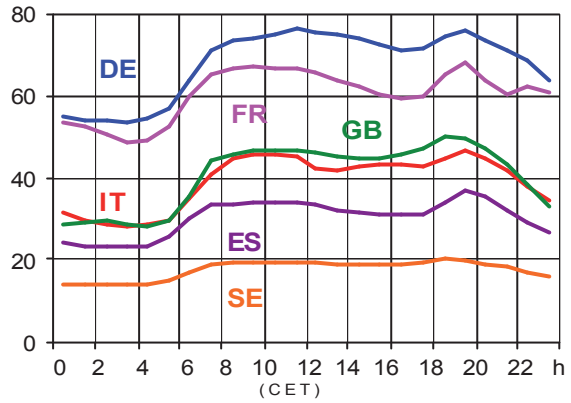
15.09.2010 (in GW)



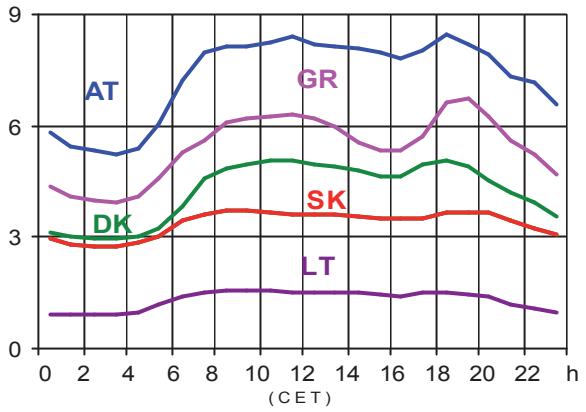
15.09.2010 (in GW)



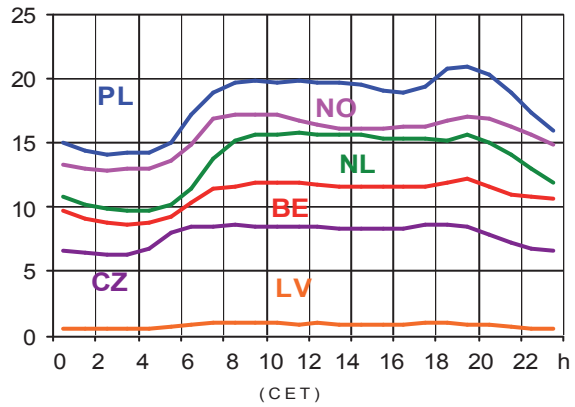
20.10.2010 (in GW)



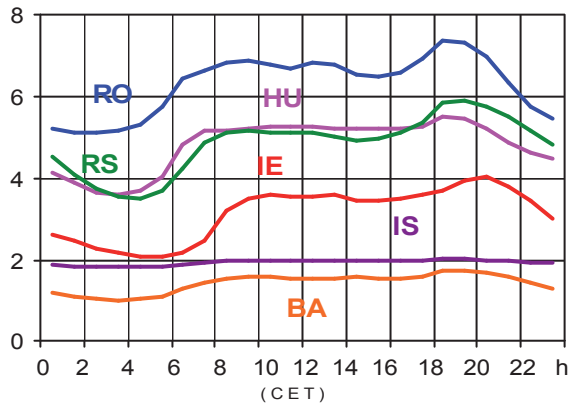
20.10.2010 (in GW)



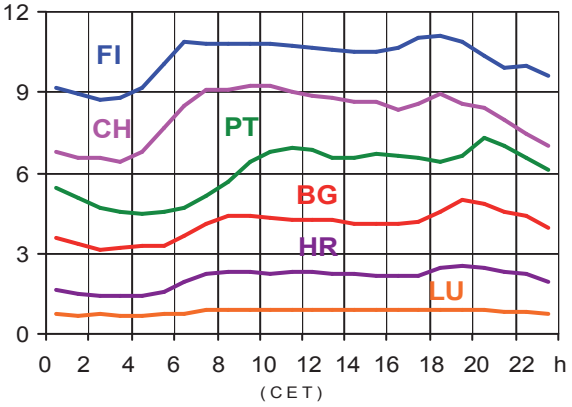
20.10.2010 (in GW)



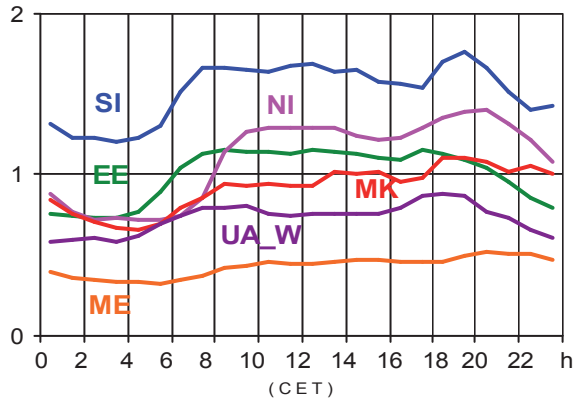
20.10.2010 (in GW)



20.10.2010 (in GW)

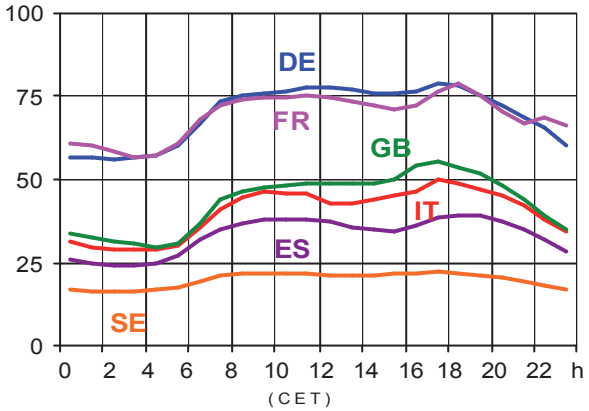


20.10.2010 (in GW)

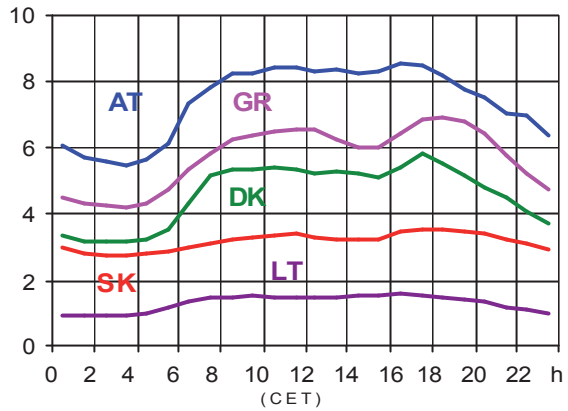


Load diagrams on the 3rd Wednesday in GW

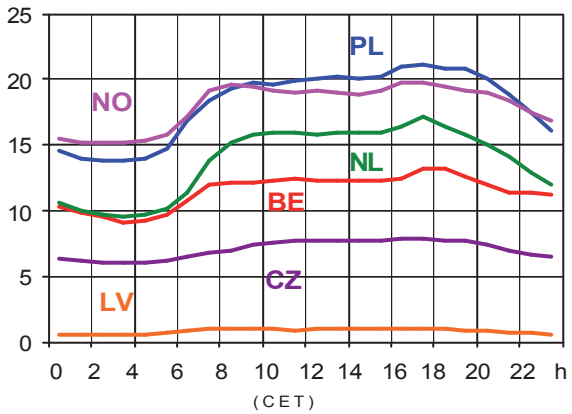
17.11.2010 **(in GW)**



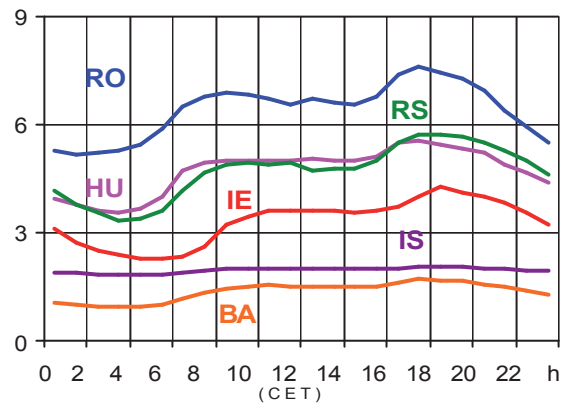
17.11.2010 **(in GW)**



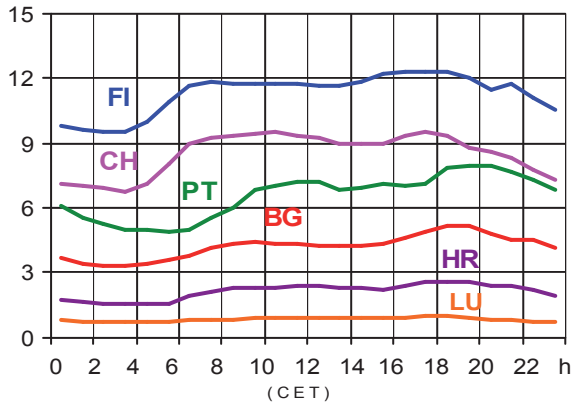
17.11.2010 **(in GW)**



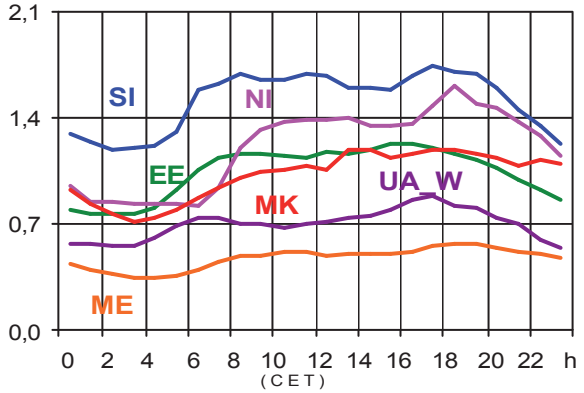
17.11.2010 **(in GW)**



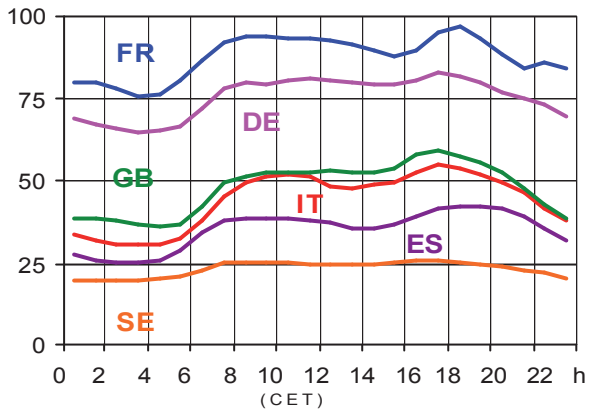
17.11.2010 **(in GW)**



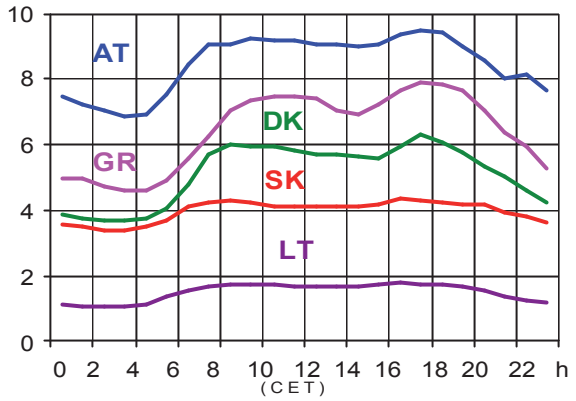
17.11.2010 **(in GW)**



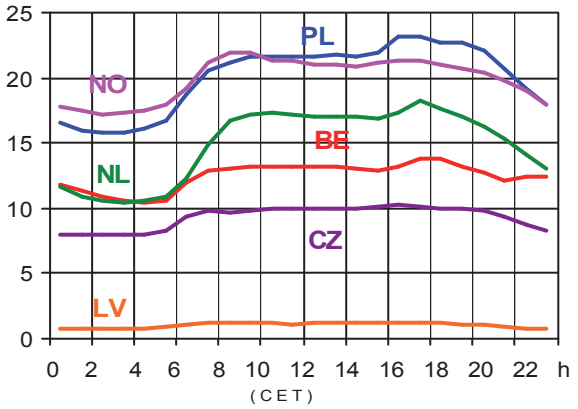
15.12.2010 (in GW)



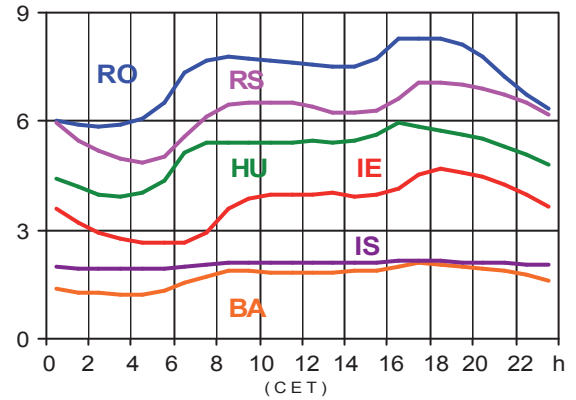
15.12.2010 (in GW)



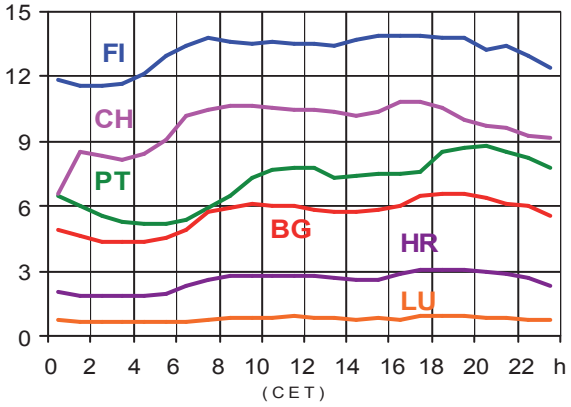
15.12.2010 (in GW)



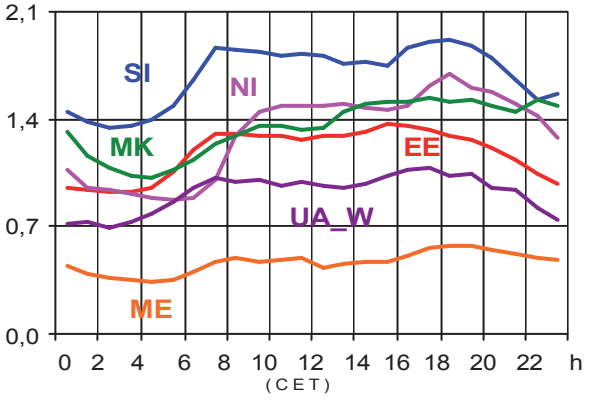
15.12.2010 (in GW)



15.12.2010 (in GW)

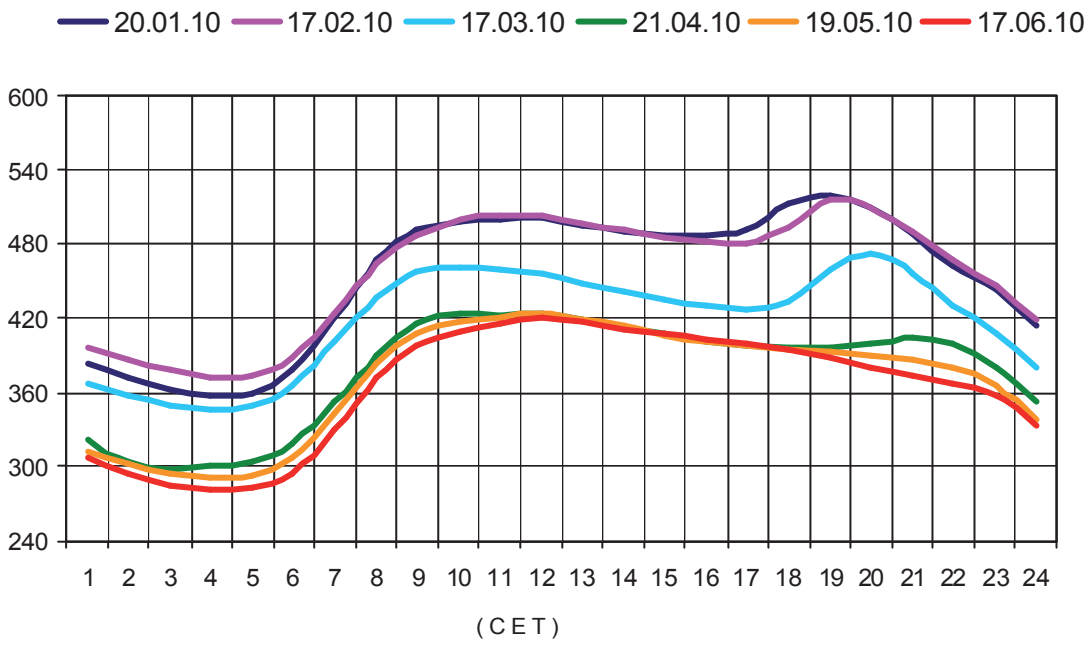


15.12.2010 (in GW)



Load diagrams on the 3rd Wednesday in GW

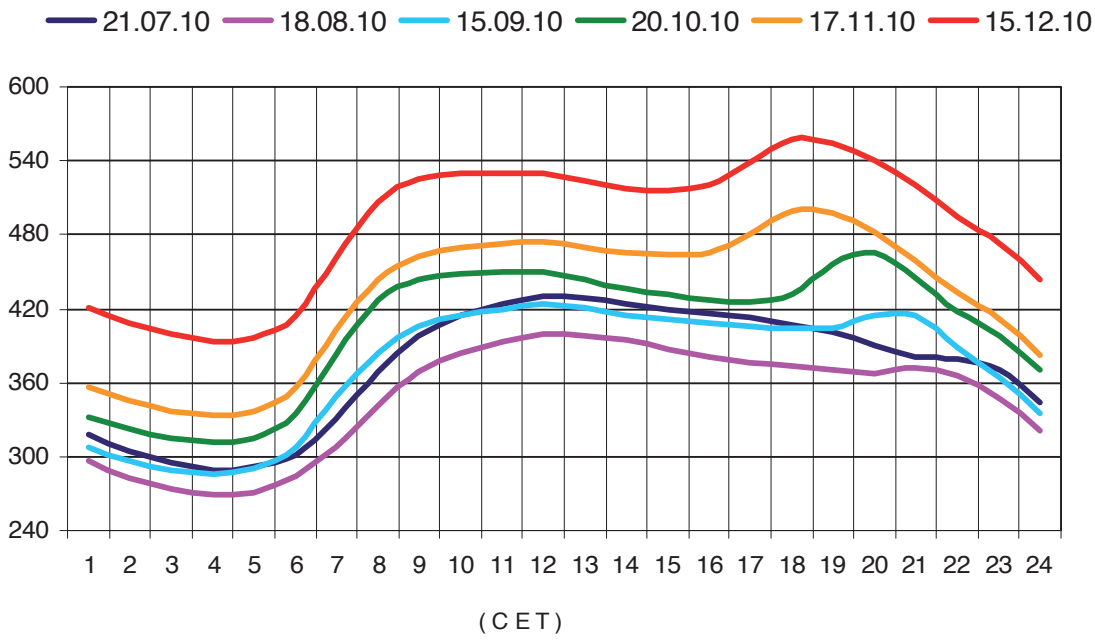
ENTSO-E monthly load diagrams as sum of the member TSOs´countries January - June 2010 in GW



Percentage as referred to total values (%)

	AT	BA	BE	BG	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GR	HR	HU	IE
20.01.10	100	100	100	100	100	100	100	91	100	100	98	100	100	100	100	100	100	99
17.02.10	100	100	100	100	100	100	100	91	100	100	98	100	100	97	100	100	100	99
17.03.10	100	100	100	100	100	100	100	91	100	100	98	100	100	97	100	100	100	99
21.04.10	100	100	100	100	100	100	100	91	100	100	98	100	100	97	100	100	100	100
19.05.10	100	100	100	100	100	100	100	91	100	100	98	100	100	97	100	100	100	100
16.06.10	100	100	100	100	100	100	100	91	100	100	98	100	100	97	100	100	100	100
21.07.10	100	100	100	100	100	100	100	91	100	100	98	100	100	96	100	100	100	100
18.08.10	100	100	100	100	100	100	100	91	100	100	98	100	100	96	100	100	100	100
15.09.10	100	100	100	100	100	100	100	91	100	100	98	100	100	95	100	100	100	100
20.10.10	100	100	100	100	100	100	100	91	100	100	98	100	100	95	100	100	100	100
17.11.10	100	100	100	100	100	100	100	91	100	100	98	100	100	95	100	100	100	100
15.12.10	100	100	100	100	100	100	100	91	100	100	98	100	100	96	100	100	100	100

ENTSO-E monthly load diagrams as sum of the member TSOs´countries July - December 2010 in GW



Percentage as referred to total values (%)

	IS	IT	LT	LU	LV	ME	MK	NI	NL	NO	PL	PT	RO	RS	SE	SI	SK	UA_W
20.01.10	100	100	93	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17.02.10	100	100	92	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17.03.10	100	100	92	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
21.04.10	100	100	95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
19.05.10	100	100	95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16.06.10	100	100	95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
21.07.10	100	100	95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
18.08.10	100	100	95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
15.09.10	100	100	95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
20.10.10	100	100	94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17.11.10	100	100	94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
15.12.10	100	100	94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

European Network of
Transmission System Operators
for Electricity

entsoe

System information

Statistical database as of 31 August 2011

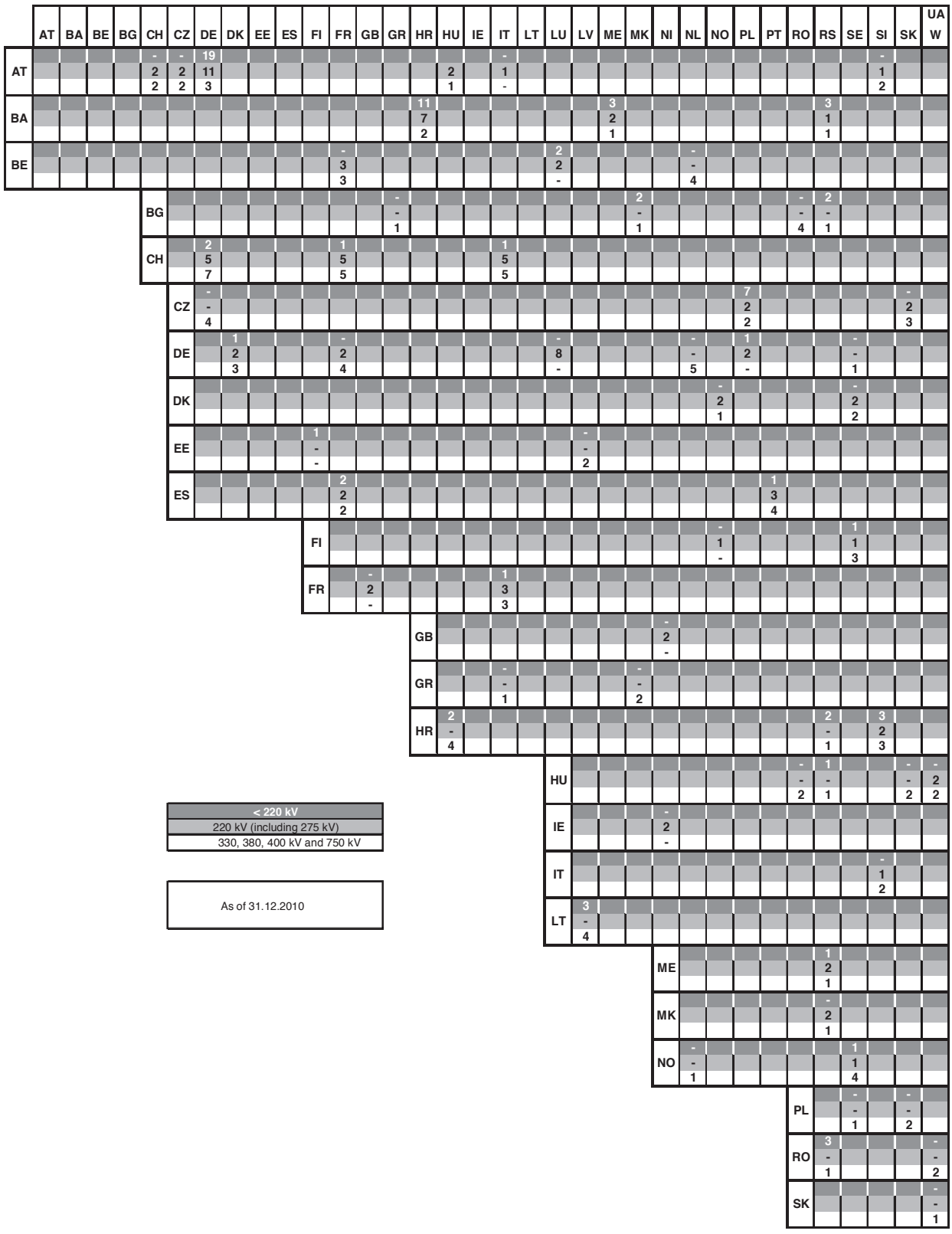
Inventory of transmission network installations as of 31 December 2010

Lenghts of AC circuits in km										
Country	< 220 kV	of which cable	220 kV	of which cable	330 kV	of which cable	380/400 kV	of which cable	750 kV	of which cable
AT [1]			1850	3			1388	54		
BA			1525	0			865	0		
BE			427	n.a.			1326	n.a.		
BG			2815	0			2327	0	85	0
CH			4918	23			1788	8		
CY [2]	1227	120								
CZ			1909	0			3479	0		
DE			14616	39			20264	70		
DK			430	196			1263	371		
EE	3537	114	184	0	1540	0				
ES			17110	254			18765	55		
FI [3]			2602	0			4275	0		
FR			26492	1004			21374	3		
GB			6077	476			11913	271		
GR			11732	267			4319	5		
HR			1210	0			1248	0		
HU			1481	0			2762	0	268	0
IE			1850	117			439	0		
IS			851	0						
IT			11284	431			10713	466		
LT	5007	39			1672	0				
LU			259	18						
LV	3946	63			1258	0				
ME			400	0			280	0		
MK			103	0			507	0		
NI	1282	85	828	4						
NL [4]			613	2			2013	1		
NO [1]			445	0			8355	442		
PL [5]			8004	1			5303	0	114	0
PT			3467	42			1973	0		
RO			4755	0			4867	0	159	0
RS			2234	0			1693	0		
SE [6]			4469	30			10708	8		
SI			328	0			508	0		
SK			728	0			1521	0		
ENTSO-E [7]	**14999**	**421**	**135996**	**2906**	**4470**	**0**	**146236**	**1754**	**626**	**0**
UA_W [8]			755	0	42	0	339	0	208	0

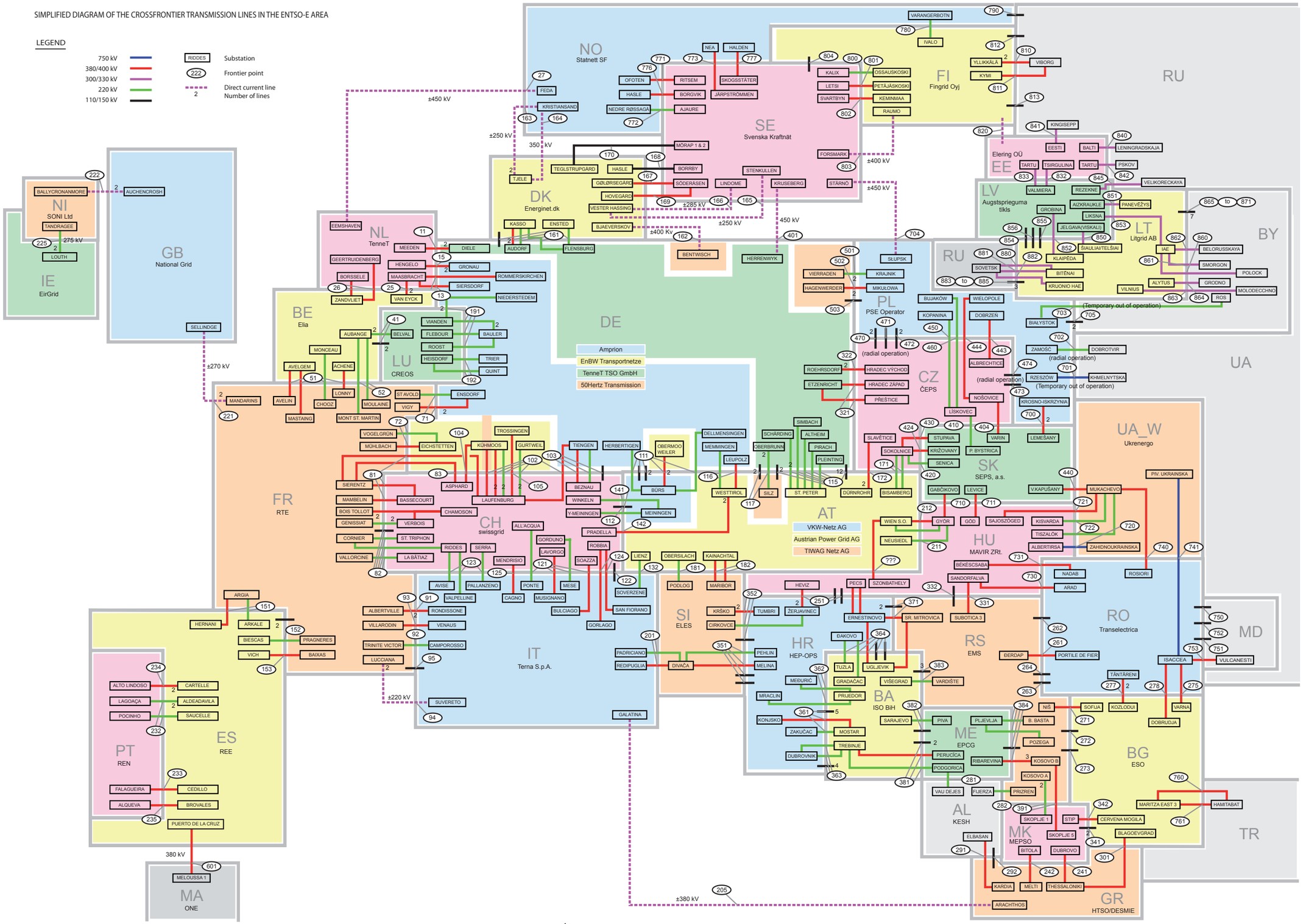
[1] Values as of 31 December 2009
[2] Lengths < 220 kV as of 31 December 2009
[3] Additional 400 kV 33 km of DC overhead line and 100 km DC submarine cable.
[4] Additionally DC 450 kV submarine cable 290 km.
[5] Additionally 254km (total lenght) of 450kV DC submarine cable SwePol Link between Poland and Sweden.
[6] Additionally 550 km of 750 kV HVDC of which 460 km cable.
[7] ENTSO-E calculated sum of the member TSOs´ countries
[8] Ukraine West represent the so-called Burshtyn Island synchronously interconnected with ENTSO-E area.

Number of circuits < 220 kV, 220 kV and over 220 kV on cross frontier transmission lines

Number of < 220 kV and ≥ 220 kV circuits on cross-frontier transmission lines between ENTSO-E member TSOs' countries and UA_W :



Simplified diagram of the cross-frontier transmission lines of the synchronous area of ENTSO-E as of 31 December 2010



	Observations
[1]	Limited by phase shifting transformer in Meeden
[2]	Limited by phase shifting transformer in Meeden
[3]	DC submarine cable
[4]	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	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	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	TenneT TSO GmbH	NL	Meeden	TenneT TSO B.V.		380		1382	1000 [1]			
11.1.2	DE	Diele	TenneT TSO GmbH	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		1645				
15.1.2	DE	Gronau	Amprion	NL	Hengelo	TenneT TSO B.V.		380		1645				
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			
27.1.1	NO	Feda	Statnett	NL	Eemshaven	TenneT TSO B.V.		450		700 [3,4]				
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	Mastaing	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				
52.2.1	BE	Aubange	Elia	FR	Mont St Martin	RTE		220		381				
71.1.1	DE	Ensdorf	Amprion	FR	Vigy	RTE		380		1790				
71.1.2	DE	Ensdorf	Amprion	FR	Vigy	RTE		380		1790				
71.2.1	DE	Ensdorf	Amprion	FR	St-Avold	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	Pougny	SFM C-P		130		52	42			11 [9]
82.4.1	CH	La Bâtiaz	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	1264 [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	Obermooweiler	EnBW Transportnetze		380		1369				
111.1.2	AT	Bürs	VIW	DE	Obermooweiler	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	Vorderwald	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	APG	DE	Neuötting	TenneT TSO GmbH		110		90 [23]			82 [24]	
115.2.1	AT	Braunau	APG	DE	Stammham	TenneT TSO GmbH		110		102			82 [25]	
115.4.1	AT	Antiesenhofen	APG	DE	Egglfing	TenneT TSO GmbH		110		102				

*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
[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]	Limited by transformer in Enstedt
[39]	Limited by transformer in Kassø
[40]	Transducer at Kassø
[41]	Transducer at Kassø
[42]	DC submarine and underground cable
[43]	DC submarine and underground cable
[44]	DC submarine and underground cable
[45]	Under water cable
[46]	Under water cable
[47]	Under water cable
[48]	Generator line in radial operation - interconnected operation impossible
[49]	Installed at Vianden
[50]	Generator line in radial operation - interconnected operation impossible
[51]	Installed at Vianden

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	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
115.5.1	AT	St. Peter	APG	DE	Altheim	TenneT TSO GmbH		220		301				
115.6.1	AT	St. Peter	APG	DE	Simbach	TenneT TSO GmbH		220		301				
115.7.1	AT	St. Peter	APG	DE	Ering	TenneT TSO GmbH		110		152	137		114 [26]	
115.7.2	AT	St. Peter	APG	DE	Ering	TenneT TSO GmbH		110		152	137		114 [27]	
115.8.1	AT	St. Peter	APG	DE	Egglfing	TenneT TSO GmbH		110		105				
115.9.1	AT	St. Peter	APG	DE	Pirach	TenneT TSO GmbH		220		518	457 [28]			
115.10.1	AT	St. Peter	APG	DE	Pleinting	TenneT TSO GmbH		220		449	457 [29]			
115.11.1	AT	Ranna	EAGOÖ-Netz	DE	Passau/Hauzenberg	TenneT TSO GmbH		110		90 [30]				
115.12.1	AT	Oberaudorf	ÖBK	DE	Rosenheim	TenneT TSO GmbH		110		93				
115.13.1	AT	Oberaudorf	ÖBK	DE	Kiefersfelden	TenneT TSO GmbH		110		102				
115.14.1	AT	Antiesenhofen	EAGOÖ-Netz	DE	Weidach	Thüga		110		130				
115.14.2	AT	Antiesenhofen	EAGOÖ-Netz	DE	Weidach	Thüga		110		130				
115.15.1	AT	Aigerding	APG / EAGOÖ-Netz	DE	Passau	ÖBK		110		102				
115.16.1 [31]	AT	St. Peter	APG	DE	Schärding	ÖBK		220		301			229 [32]	
115.16.2 [33]	AT	St. Peter	APG	DE	Schärding	ÖBK		220		301			229 [34]	
115.17.1	AT	Kufstein	TIWAG-Netz	DE	Oberaudorf	TenneT TSO GmbH		110		90				
115.17.2	AT	Ebbs	TIWAG-Netz	DE	Oberaudorf	TenneT TSO GmbH		110		127				
116.1.1	AT	Westtirol	APG	DE	Leupolz	Amprion		380		1316				
116.2.1	AT	Westtirol	APG	DE	Memmingen	Amprion		220		762				
117.1.1	AT	Silz	TIWAG-Netz	DE	Oberbrunn	TenneT TSO GmbH		220		793	762 [35]			
117.1.2	AT	Silz	TIWAG-Netz	DE	Oberbrunn	TenneT TSO GmbH		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	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	APG	CH	Pradella	swissgrid		380		1340				
142.2.1	AT	Westtirol	APG	CH	Pradella	swissgrid		380		1340				
151.1.1	ES	Hernani	REE	FR	Argia	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	Vich	REE	FR	Baixas	RTE		380		1105				
161.1.1	DE	Flensburg	TenneT TSO GmbH	DK	Ensted	Energinet.dk		220		332	305 [38]			
161.2.1	DE	Flensburg	TenneT TSO GmbH	DK	Kassø	Energinet.dk		220		332	305 [39]			
161.3.1	DE	Audorf	TenneT TSO GmbH	DK	Kassø	Energinet.dk		380		1078	658 [40]			
161.3.2	DE	Audorf	TenneT TSO GmbH	DK	Kassø	Energinet.dk		380		1078	658 [41]			
161.4.1	DE	Flensburg UW Nord	TenneT TSO GmbH	DK	Ensted	Energinet.dk		150		150				
162.1.1 [42]	DE	Bentwisch	50Hertz	DK	Bjæverskov	Energinet.dk		400		600				
163.1.1 [43]	NO	Kristiansand	Statnett SF	DK	Tjele	Energinet.dk		250		250				
163.1.2 [44]	NO	Kristiansand	Statnett SF	DK	Tjele	Energinet.dk		250		250				
164.1.1 [45]	NO	Kristiansand	Statnett SF	DK	Tjele	Energinet.dk		350		350				
165.1.1 [46]	SE	Stenkullen	Svenska Kraftnät	DK	Vester Hassing	Energinet.dk				125				
166.1.1 [47]	SE	Lindome	Svenska Kraftnät	DK	Vester Hassing	Energinet.dk		285		360				
167.1.1	SE	Söderåsen	Svenska Kraftnät	DK	Gørløsegård	Energinet.dk		400						
168.1.1	SE	Borrby	E.ON Elnät Sverige AB	DK	Bornholm	Energinet.dk		60		51				
169.1.1	SE	Söderåsen	Svenska Kraftnät	DK	Hovegård	Energinet.dk		400						
170.1.1	SE	Mörarp 1and 2	E.ON Elnät Sverige AB	DK	Teglstrupgård	Energinet.dk		130		311				
171.1.1	AT	Bisamberg	APG	CZ	Sokolnice	CEPS		220		250				
171.2.1	AT	Bisamberg	APG	CZ	Sokolnice	CEPS		220		250				
172.1.1	AT	Dürnrohr	APG	CZ	Slavetice	CEPS		380		1559				
172.1.2	AT	Dürnrohr	APG	CZ	Slavetice	CEPS		380		1559				
181.1.1	AT	Obersielach	APG	SI	Podlog	ELES		220		320				
182.1.1	AT	Kainachtal	APG	SI	Maribor	ELES		380		1164				
182.2.1	AT	Kainachtal	APG	SI	Maribor	ELES		380		1164				
191.1.1	DE	Niederstedem	Amprion	LU	Vianden	SEO		220		490	460 [48,49]			
191.1.2	DE	Niederstedem	Amprion	LU	Vianden	SEO		220		490	230			
191.2.1	DE	Bauler	Amprion	LU	Vianden	SEO		220		730	345 [50,51]			

*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
[52]	Generator line in radial operation - interconnected operation impossible
[53]	Installed at Vianden
[54]	The 400kV DC link between GR-IT is composed of an overhead line and a submarine cable
[55]	DC submarine cable
[56]	Unit is MW instead of MVA
[57]	DC submarine cable
[58]	Unit is MW instead of MVA
[59]	DC submarine cable
[60]	DC submarine cable
[61]	Due to Existing Constraints the following applies to the 275kV double circuit tie line (both 225.1.1 AND 225.2.1):IE Louth to NI Tandragee = 380MWNI Tandragee to IE Louth
[62]	Due to Existing Constraints the following applies to the 275kV double circuit tie line (both 225.1.1 AND 225.2.1):IE Louth to NI Tandragee = 380MWNI Tandragee to IE Louth
[63]	In May 2007 out of operation 150 kV line Bitola1-Amyndeo; from June 2007 the new 400 kV line Bitola2-Meliti in operation
[64]	Limited by the connected network
[65]	Nominal voltage in Croatia
[66]	Limited by the connected network
[67]	Nominal voltage in Croatia
[68]	Built for 750 kV
[69]	4500 MVA at 750 kV
[70]	Limited by the Albanian network
[71]	Capacity of current transformers at Bistrica
[72]	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	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
191.2.2	DE	Bauler	Amprion	LU	Vianden	SEO		220		730	230 [52,53]			
191.3.1	DE	Bauler	Amprion	LU	Flebour	Creos Luxembourg		220		490				
191.4.1	DE	Bauler	Amprion	LU	Roost	Creos Luxembourg		220		490				
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	Divača	ELES		380		1619				
201.2.1	IT	Padriciano	Terna	SI	Divača	ELES		220		320				
205.1.1 [54]	IT	Galatina	Terna	GR	Arachthos	HTSO		380		500				
211.1.1	AT	Wien Süd-Ost	APG	HU	Györ	MAVIR		220		209				
211.1.2	AT	Neusiedl	APG	HU	Györ	MAVIR		220		209				
212.1.1	AT	Wien Süd-Ost	APG	HU	Györ	MAVIR		380		1514				
213.1.1	AT	Wien Süd-Ost	APG	HU	Szombathely	MAVIR		380		1514				
221.1.1	FR	Mandarins	RTE	GB	Sellindge	National Grid		270 [55]		1000 [56]				
221.2.1	FR	Mandarins	RTE	GB	Sellindge	National Grid		270 [57]		1000 [58]				
222.1.1	NI	Ballycronanmore	SONI Ltd	GB	Auchencrosh	National Grid		250 [59]		250				
222.2.1	NI	Ballycronanmore	SONI Ltd	GB	Auchencrosh	National Grid		250 [60]		250				
225.2.1	NI	Tandragee	SONI Ltd	IE	Louth	EirGrid		275		660 [61]				
225.2.1	NI	Tandragee	SONI Ltd	IE	Louth	EirGrid		275		660 [62]				
231.1.1	ES	Las Conchas	REE	PT	Lindoso	REN		132		90				
232.1.1	ES	Aldeadávila	REE	PT	Pocinho	REN		220		374				
232.2.1	ES	Aldeadávila	REE	PT	Pocinho	REN		220		374				
232.2.1	ES	Aldeadávila	REE	PT	Lagoaça	REN		400		1469				
232.3.1	ES	Saucelle	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 [63]	MK	Bitola	MEPSO	GR	Meliti	HTSO		400		1300				
251.1.1	HU	Lenti	MAVIR	HR	Nedeljanec	HEP-OPS		120		79	50 [64]	110 [65]		
251.2.1	HU	Siklos	MAVIR	HR	Donji Miholjac	HEP-OPS		120		114	50 [66]	110 [67]		
251.3.1	HU	Héviz	MAVIR	HR	Zerjavinec	HEP-OPS		400		1246				
251.3.2	HU	Héviz	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	Sip	EMS	RO	Gura V aii	Transelectrica		110		87			19	
271.1.1	BG	Sofija 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	B G	Varna	ESO	750	400 [68]		2168 [69]				
277.1.1	RO	Tântareni	Transelectrica	B G	Kozlodui	ESO		400		1300		1000		
277.1.2	RO	Tântareni	Transelectrica	B G	Kozlodui	ESO		400		1300		1107		
278.1.1	RO	Isaccea	Transelectrica	B G	Dobrudja	ESO		400		1135			830	
281.1.1	AL	Vau i Dejës	KESH	M E	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 [70]			
292.1.1	AL	Bistrica	KESH	GR	Mourtos	HTSO		150		120	40 [71]			
293.1.1	TR	Babaeski	TEIAS	GR	Nea Santa	HTSO		400		2000				
301.1.1	BG	Blagoevgrad	ESO	GR	Thessaloniki	HTSO		400		1300	700			
321.1.1	CZ	Hradec Zapad	CEPS	DE	Etzenricht	TenneT TSO GmbH		380		1295				
321.1.2	CZ	Prestice	CEPS	DE	Etzenricht	TenneT TSO GmbH		380		1569				
322.1.1	CZ	Hradec Vychod	CEPS	DE	Röhrsdorf	50Hertz		380		1386				
322.1.2	CZ	Hradec Vychod	CEPS	DE	Röhrsdorf	50Hertz		380		1386				
331.1.1	HU	Sándorfalva	MAVIR	RS	Subotica 3	EMS		400		1295	1050			
332.1.1	HU	Szeged	MAVIR	RS	Subotica	EMS		110		79 [72]	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	Divaca	ELES		380		1164				
351.2.1	HR	Pehlin	HEP -OPS	SI	Divaca	ELES		220		320				
351.3.1	HR	Buje	HEP -OPS	SI	Koper	ELES		110		76				
351.4.1	HR	Matulji	HEP -OPS	SI	Ilirska Bistrica	ELES		110		53				
352.1.1	HR	Tumbri	HEP -OPS	SI	Krško	ELES		380		1164				
352.1.2	HR	Tumbri	HEP -OPS	SI	Krško	ELES		380		1164				
352.2.1	HR	Zerjavinec	HEP -OPS	SI	Cirkovce	ELES		220		297				
352.3.1	HR	Nedeljanec	HEP -OPS	SI	Formin	ELES		110		101				
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				

*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
[73]	Destroyed line
[74]	Out of operation
[75]	Destroyed line and substation
[76]	Destroyed line
[77]	Destroyed line
[78]	New line 400 kV between RS (EMS) and BA (NOS) Ugljevik - Sremska Mitrovica is operational from EMS side
[79]	Line is destroyed, currently under construction
[80]	Line is destroyed, currently under construction
[81]	DC submarine cable
[82]	Monopol
[83]	Limited by the measuring transformer of current
[84]	Value for 30°C (no data for 35°C)
[85]	Value for 30°C (no data for 35°C)
[86]	Value for 30°C (no data for 35°C)
[87]	Limitation due to current transformer in Kudowa SS
[88]	Value for 30°C (no data for 35°C)
[89]	Limitation due to current part of combined current/voltage transformer in Pogwizdów SS
[90]	Value for 30°C (no data for 35°C)
[91]	Limitation due to current part of combined current/voltage transformer in Pogwizdów SS
[92]	Value for 30°C (no data for 35°C)
[93]	Limitation due to current transformer in Mnisztwo SS
[94]	Value for 30°C (no data for 35°C)
[95]	On Polish side 400 kV line (internal designation between 50Hertz and PSE Operator)
[96]	On Polish side 400 kV line (internal designation between 50Hertz and PSE Operator)
[97]	Value for 30°C (no data for 35°C)
[98]	Submarine cable
[99]	Submarine cable
[100]	Limited by current transformer at Krosno
[101]	Limited by current transformer at Krosno
[102]	Temporary out of operation
[103]	Limeted by HF attenuator at UA side
[104]	Radial operation
[105]	Temporary out of operation
[106]	Value for 30°C (no data for 35°C)
[107]	Submarine cable
[108]	Value for 30°C (no data for 35°C)
[109]	Value for 30°C (no data for 35°C)

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	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
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 [73]	BA	Jajce	NOS BiH	HR	Mraclin	HEP-OPS		220		297				
362.2.1 [74]	BA	Prijedor	NOS BiH	HR	M eduric	HEP-OPS		220		297				
363.1.1	BA	Trebinje	NOS BiH	HR	Dubrovnik	HEP-OPS		220		460				
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 [75]	BA	Ugljevik	NOS BiH	HR	Ernestinovo	HEP-OPS		400		1264				
364.2.1 [76]	BA	Gradæac	NOS BiH	HR	Đakovo	HEP-OPS		220		229				
364.3.1	BA	Tuzla	NOS BiH	HR	Đakovo	HEP-OPS		220		229				
364.4.1 [77]	BA	Bosanski Brod	NOS BiH	HR	Slavonski Brod 2	HEP-OPS		110		115				
364.5.1	BA	Orasje	NOS BiH	HR	Zupanja	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	M E	Podgorica 2	CGES AD		380		1264				
381.2.1	BA	Trebinje	NOS BiH	M E	Perucica	CGES AD		220		276				
381.3.1	BA	Trebinje	NOS BiH	M E	Herceg Novi	CGES AD		110		90				
381.4.1	BA	Bileca	NOS BiH	M E	Vilusi	CGES AD		110		84				
382.1.1	BA	Sarajevo 20	NOS BiH	M E	Piva	CGES AD		220		366				
382.2.1	BA	Goražde	NOS BiH	M E	Pljevlja 1	CGES AD		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 [78]				
384.1.1	ME	Ribarevine	CGES AD	RS	Kosovo B	EMS		380		1264				
384.2.1	ME	Pljevlja 2	CGES AD	RS	Bajina Basta	EMS		220		350				
384.3.1	ME	Pljevlja 2	CGES AD	RS	Pozega	EMS		220		365				
384.4.1	ME	Pljevlja 1	CGES AD	RS	Zamrsten	EMS		110		70				
391.1.1 [79]	MK	Skopje 1	MEPSO	RS	Kosovo A	EMS		220		311				
391.2.1 [80]	MK	Skopje 1	MEPSO	RS	Kosovo A	EMS		220		311				
391.3.1	MK	Skopje 5	MEPSO	RS	Kosovo B	EMS		380		1218				
401.1.1 [81,82]	DE	Herrenwyk	TenneT TSO GmbH	SE	Kruseberg	Baltic Cable AB		400		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		1115	831 [83]			
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				
470.1.1	CZ	Poř íčí	CEPS	PL	Boguszów	EnergiaPro S.A.		110		78 [84]				
470.1.2	CZ	Poř íčí	CEZ Distribuce	PL	Boguszów	EnergiaPro S.A.		110		78 [85]				
471.1.1	CZ	Náchod	CEZ Distribuce	PL	Kudowa	EnergiaPro S.A.		110		123 [86]	57 [87]			
472.1.1	CZ	Darkov	CEZ Distribuce	PL	Pogwizdów	VE Distribution PL S.A.		110		123 [88]	114 [89]			
472.1.2	CZ	Darkov	CEZ Distribuce	PL	Pogwizdów	VE Distribution PL S.A.		110		123 [90]	114 [91]			
473.1.1	CZ	Trinec	CEZ Distribuce	PL	Mnisztwo	ENION Spólka Akcyjna		110		123 [92]	114 [93]			
474.1.1	CZ	Trinec	CEZ Distribuce	PL	Mnisztwo/Ustron	ENION Spólka Akcyjna		110		123 [94]				
501.1.1	DE	Vierraden	50Hertz	PL	Krajnik	PSE Operator S.A.		220		402				
501.1.2	DE	Vierraden	50Hertz	PL	Krajnik	PSE Operator S.A.		220		402				
502.1.1	DE	Hagenwerder	50Hertz	PL	Mikulowa	PSE Operator S.A.		380 [95]		1302				
502.1.2	DE	Hagenwerder	50Hertz	PL	Mikulowa	PSE Operator S.A.		380 [96]		1302				
503.1.1	DE	Neueibau	50Hertz	PL	Turów	EnergiaPro S.A.		110		39 [97]				
601.1.1 [98]	ES	Puerto de la Cruz	REE	MA	Melloussa 1	ONE		380		715				
601.1.2 [99]	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 [100]			
700.1.2	PL	Krosno Iskrzynia	PSE Operator S.A.	SK	Lemešany	SEPS		400		1252	831 [101]			
701.1.1 [102]	PL	Rzeszów	PSE Operator S.A.	UA	Chmielnicka	NPC Ukrenergo		750		2676	2595 [103]			
702.1.1 [104]	PL	Zamość	PSE Operator S.A.	UA	Dobrotvir	NPC Ukrenergo		220		279				
703.1.1 [105]	PL	Bialystok	PSE Operator S.A.	BY	Ros	Grodnoenergo		220		158[106]				
704.1.1 [107]	PL	Słupsk	PSE Operator S.A.	SE	Stärnö	Svenska Kraftnät		450		600				
705.1.1	PL	Wólka Dobrynska	PGE Dystrybucja S.A.	BY	Brest	RUB Brestenergo		110		123 [108]				
705.1.2	PL	Wólka Dobrynska	PGE Dystrybucja S.A.	BY	Brest	RUB Brestenergo		110		123 [109]				

*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
[110]	Limited by the measuring transformer of current
[111]	Limited by the measuring transformer of current
[112]	Out of operation
[113]	Limited by HF attenuator at RO side
[114]	Passive island operation limit
[115]	Passive island operation limit
[116]	Passive island operation limit
[117]	Not in operation
[118]	DC submarine cable
[119]	Used only for import to Finland
[120]	Used only for import to Finland
[121]	Used only for import to Finland
[122]	Used only for import to Finland
[123]	Used only for import to Finland
[124]	DC submarine cable
[125]	Limited by the relay protection circuits
[126]	Limited by the relay protection circuits
[127]	Limited by the current transformers
[128]	Limited by the relay protection circuits
[129]	Limited by the relay protection circuits
[130]	Limited by the relay protection circuits
[131]	Limited by the relay protection circuits
[132]	Limited by the current transformers
[133]	Limited by the relay protection circuits
[134]	Former Klaipeda
[135]	Limited by the high frequency filters
[136]	Former Jurbarkas
[137]	Limited by the high frequency filters

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	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	Györ	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	Mukachevo	NPC Ukrenergo		400		1390	693 [110]			
722.1.1	HU	Kisvárda	MAVIR	UA_W	Mukachevo	NPC Ukrenergo		220		209	305			
722.1.2	HU	Tiszalök	MAVIR	UA_W	Mukachevo	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	1385			
740.1.1	RO	Rosiori	Transelectrica	UA_W	Mukachevo	NPC Ukrenergo		400		1135 [111]			1107	
741.1.1 [112]	RO	Isaccea	Transelectrica	UA_W	PivdennoUkrainska AES	NPC Ukrenergo		750		4064	2100		2595 [113]	
750.1.1	RO	Stânca	Transelectrica	MD	Costesti	Moldenergo		110		119			90 [114]	
751.1.1	RO	Husi	Transelectrica	MD	Cioara	Moldenergo		110		87			65 [115]	
752.1.1	RO	Tutora	Transelectrica	MD	Ungheni	Moldenergo		110		87			76 [116]	
753.1.1	RO	Issaccea	Transelectrica	MD	Vulcanesti	Moldenergo		400		1135			830	
760.1.1 [117]	BG	Maritsa3	ESO	TR	Babaeski	TEIAS		400		1309				
761.1.1	BG	Maritsa3	ESO	TR	Hamitabat	TEIAS		400		1962				
770.1.1	NO	Sildvik	Statnett SF	SE	Tornehamm	VE Eldistribution AB		130		70				
771.1.1	NO	Ofoten	Statnett SF	SE	Ritsem	Svenska Kraftnät		400		880				
772.1.1	NO	Røssåga	Statnett SF	SE	Ajaure	Svenska Kraftnät		220		250				
773.1.1	NO	Nea	Statnett SF	SE	Järpströmmen	Svenska Kraftnät		400		500				
774.1.1	NO	Eidskog	Statnett SF	SE	Charlottenberg	Fortum Distribution		130						
775.1.1	NO	Lutufallet	Statnett SF	SE	Höljes	Fortum Distribution		130						
776.1.1	NO	Hasle	Statnett SF	SE	Borgvik	Svenska Kraftnät		400		1510				
777.1.1	NO	Halden	Statnett SF	SE	Skogssäter	Svenska Kraftnät		400		2000				
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 Oyj	SE	Letsi	Svenska Kraftnät		400						
802.1.1	FI	Keminmaa	Fingrid	SE	Svartbyn	Svenska Kraftnät		400						
803.1.1 [118]	FI	Raumo	Fingrid	SE	Forsmark	Svenska Kraftnät		400		550				
804.1.1	FI	Tingsbacka (Aland)	Kraftnät Åland AB	SE	Senneby	VE Eldistribution AB		110		80				
810.1.1 [119]	FI	Yllikkälä	Fingrid	RU	Viborg	JSC FGC UES		400						
810.1.2 120]	FI	Yllikkälä	Fingrid	RU	Viborg	JSC FGC UES		400						
811.1.1 [121]	FI	Kymi	Fingrid	RU	Viborg	JSC FGC UES		400						
812.1.1 [122]	FI	Nellimö	Inergia Oy	RU	Kaitakoski	JSC FGC UES		110		60				
813.1.1 [123]	FI	Imatra	Fortum Corporation	RU	GES 10	JSC FGC UES		110		100				
820.1.1 [124]	FI	Espoo	Fingrid	EE	Harku	Elering OÜ		150		350				
832.1.1	LV	Valmiera	Augstsprieguma tïkls	EE	Tsirguliina	Elering OÜ		330		350				
833.1.1	LV	Valmiera	Augstsprieguma tïkls	EE	Tartu	Elering OÜ		330		350				
840.1.1	RU	Leningradskaja	JSC FGC UES	EE	Balti	Elering OÜ		330		590				
841.1.1	RU	Kingisepp	JSC FGC UES	EE	Eesti	Elering OÜ		330		393				
842.1.1	RU	Pskov	JSC FGC UES	EE	Taru	Elering OÜ		330		389				
845.1.1	RU	Velikoreckaya	JSC FGC UES	LV	Rezekne	Augstsprieguma tïkls		330		350				
850.1.1	LT	Šiauliai/Telšiai	LITGRID AB	LV	Jelgava (Viskali)	Augstsprieguma tïkls		330		714	572 [125]			
851.1.1	LT	Panevežys	LITGRID AB	LV	Aizkraukle	Augstsprieguma tïkls		330		714	686 [126]			
852.1.1	LT	Klaipeda	LITGRID AB	LV	Grobina	Augstsprieguma tïkls		330		714	572 [127]			
853.1.1	LT	IAE	LITGRID AB	LV	Liksna	Augstsprieguma tïkls		330		830				
854.1.1	LT	Paroveja	LITGRID AB	LV	Nereta	Augstsprieguma tïkls		110		75				
855.1.1	LT	Zarasai	LITGRID AB	LV	Daugavpils	Augstsprieguma tïkls		110		86				
856.1.1	LT	IAE	LITGRID AB	LV	Daugavpils	Augstsprieguma tïkls		110		102				
860.1.1	LT	IAE	LITGRID AB	BY	Polock	Belenergo		330		966	857 [128]			
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 [129]			
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	Didžiasalis	LITGRID AB	BY	Kaziani	Belenergo		110		44	29 [130]			
868.1.1	LT	Pabrade	LITGRID AB	BY	Podolci	Belenergo		110		44	30 [131]			
869.1.1	LT	Kalveliai	LITGRID AB	BY	Asmena	Belenergo		110		63	38 [132]			
870.1.1	LT	Šalcininkai	LITGRID AB	BY	Voronovo	Belenergo		110		86	46 [133]			
871.1.1	LT	Leipalingis	LITGRID AB	BY	Grodno	Belenergo		110		75				
880.1.1	LT	Bitenai [134]	LITGRID AB	RU	Sovetsk	UES-SO-CDA		330		714	572 [135]			
881.1.1	LT	Bitenai [136]	LITGRID AB	RU	Sovetsk	UES-SO-CDA		330		714	572 [137]			
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

AT	**Austria**	APG VKW - Netz AG TIWAG-Netz	Austrian Power Grid AG VKW - Netz AG TIWAG Netz AG (since January 2011 Austrian Power Grid AG)
BA	**Bosnia - Herzegovina**	NOS BiH	Nezavisni operator sustava u Bosni i Hercegovini
BE	**Belgium**	Elia	Elia System Operator SA
BG	**Bulgaria**	ESO	Electroenergien Sistemen Operator EAD
CH	**Switzerland**	swissgrid	swissgrid ag
CZ	**Czech Republic**	CEPS	CEPS, a.s.
DE	**Germany**	Amprion EnBW Transportnetze TenneT TSO GmbH 50Hertz	Amprion GmbH EnBW Transportnetze AG TenneT GmbH 50Hertz Transmission GmbH
DK	**Denmark**	Energinet.dk	Energinet.dk
EE	**Estonia**	Elering OÜ	Elering OÜ (since April 2011 Elering AS)
ES	**Spain**	REE	Red Eléctrica de España S.A.
FI	**Finland**	Fingrid	Fingrid Oyj
FR	**France**	RTE	Réseau de Transport d'Electricité
GB	**Great Britain**	National Grid SONI **(NI)** SSE SP Transmission	The National Grid Company plc System Operation Northern Ireland Ltd Scottish and Southern Energy plc Scottish and Power Transmission plc
GR	**Greece**	HTSO	Hellenic Transmission System Operator S.A.
HR	**Croatia**	HEP-OPS	HEP-Operator prijenosnog sustava d.o.o.
HU	**Hungary**	MAVIR	MAVIR Magyar Villamosenergia-ipari Átviteli Rends- Átviteli Rendszerirányító zerirányító Zártkörűen Működő Részvénytársaság
IE	**Ireland**	EirGrid	EirGrid plc
IT	**Italy**	Terna	Terna - Rete Elettrica Nazionale SpA
LT	**Lithuania**	LITGRID AB	LITGRID AB
LU	**Luxembourg**	Creos Luxembourg	Creos Luxembourg S.A.
LV	**Latvia**	Augstsprieguma tïkls	AS Augstsprieguma tïkls
ME	**Montenegro**	CGES AD	Crnogorski elektroprenosni sistem AD
MK	**FYROM**	MEPSO	Macedonian Transmission System Operator AD
NL	**The Netherlands**	TenneT TSO B.V.	TenneT TSO B.V.
NO	**Norway**	Statnett	Statnett SF
PL	**Poland**	PSE Operator	PSE Operator S.A.
PT	**Portugal**	REN	Rede Eléctrica Nacional, S.A.
RO	**Romania**	Transelectrica	C.N. Transelectrica S.A.
RS	**Serbia**	EMS	JP Elektromreža Srbije
SE	**Sweden**	Svenska Kraftnät	Affärsverket Svenska Kraftnät
SI	**Slovenia**	ELES	Elektro Slovenija d.o.o.
SK	**Slovak Republic**	SEPS	Slovenska elektrizacna prenosova sustava, a.s.
UA_W	**Ukraine West**	NPC Ukrenergo	NPC Ukrenergo
AL	**Albania**	KESH	Albanian Electroenergetic Corporation
BY	**Belarus**	Grodnoenergo	Grodnoenergo
MA	**Morocco**	ONE	Office National de l'Electricité
MD	**Republic of Moldavia**	Moldenergo	Moldenergo
RU	**Russia**	JSC FGC UES	Federal Grid Company
TR	**Republic of Turkey**	TEIAS	Türkiye Elektrik Iletim A.S.
UA	**Ukraine**	NPC Ukrenergo	NPC Ukrenergo

Unavailability of international tie lines - yearly overview 2010

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 (TenneT TSO GmbH)	NL - Meeden (TenneT TSO B.V.)	380	1382	R10	979											979	
13.1.1	DE - Siersdorf (Amprion)	NL - Maasbracht (TenneT TSO B.V.)	380	1645	R1	591				591								
13.1.2	DE - Rommerskirchen (Amprion)	NL - Maasbracht (TenneT TSO B.V.)	380	1698	R2, R7	839				245	594							
15.1.1	DE - Gronau (Amprion)	NL - Hengelo (TenneT TSO B.V.)	380	1645	R1	3390		362				3028						
15.1.2	DE - Gronau (Amprion)	NL - Hengelo (TenneT TSO B.V.)	380	1645	R1	4215						2660	1555					
25.1.1	BE - Van Eyck (Elia)	NL - Maasbracht (TenneT TSO B.V.)	380	1207	R1	930									930			
25.1.2	BE - Van Eyck (Elia)	NL - Maasbracht (TenneT TSO B.V.)	380	1270	R1	1023			1023									
26.2.1	BE - Zandvliet (Elia)	NL - Borssele (TenneT TSO B.V.)	380	1476	R2	577			89	488								
27.1.1	NL - Eemshaven (TenneT TSO B.V.)	NO - Feda (Statnett SF)	450	700	R1,R2,R9	133919	422	38880	43140	37440	14037							
41.1.2	BE - Aubange (Elia)	LU - Belval (SOTEL)	220	358	R4	29952			29952									
51.1.1	BE - Monceau (Elia)	FR - Chooz (RTE)	220	356	R1	4782						4782						
51.2.1	BE - Avelgem (Elia)	FR - Mastaing (RTE)	380	1207	R1,R2	832			12	608						205	7	
51.2.2	BE - Avelgem (Elia)	FR - Avelin (RTE)	380	1367	R1,R2	13272			69		13195						8	
51.3.1	BE - Achene (Elia)	FR - Lonny (RTE)	380	1177	R1	11949			9			8757				3183		
52.1.1	BE - Aubange (Elia)	FR - Moulaine (RTE)	220	381	R1,R2,R3,R4	60808	12105	34261			7619		11	6379		433		
52.2.1	BE - Aubange (Elia)	FR - Mont St Martin (RTE)	220	381	R3,R7	41528							41452				76	
71.1.1	DE - Uchtelfangen (Amprion)	FR - Vigy (RTE)	380	1790	R3,R4	18135			9						18126			
71.1.2	DE - Uchtelfangen (Amprion)	FR - Vigy (RTE)	380	1790	R3,R4	10765			9						10756			
71.2.1	DE - Ensdorf (Amprion)	FR - St-Avold (RTE)	220	261	R1,R4,R9	146392	11997	40320	44580				26700	5336	6223	11236		
72.1.1	DE - Eichstetten (EnBW Transportnetze)	FR - Vogelgrün (RTE)	220	338	R1	4095	3484										611	
72.1.2	DE - Eichstetten (EnBW Transportnetze)	FR - Muhlbach (RTE)	380	1684	R1,R9	732					4						648	80
81.1.1	CH - Bassecourt (swissgrid)	FR - Sierentz (RTE)	380	1186	R1	27023			527			13952	12544					
81.2.1	CH - Laufenburg (swissgrid)	FR - Sierentz (RTE)	380	1167	R1,R2	28959		26312				607	2040					
81.3.1	CH - Bassecourt (swissgrid)	FR - Mambelin (RTE)	380	1046	R1,R2,R9	2138	1086		483									569
82.1.1	CH - Verbois (swissgrid)	FR - Bois-Tollot (RTE)	380	1211	R1	26110									25134	976		
82.1.2	CH - Chamoson (swissgrid)	FR - Bois-Tollot (RTE)	380	1409	R1,R9	18624	5198	474	339	338	3420		7506	1349				
82.2.1	CH - Verbois (swissgrid)	FR - Génissiat (RTE)	220	315	R1	1744							1744					
82.2.2	CH - Verbois (swissgrid)	FR - Génissiat (RTE)	220	315	R1,R6	3312					202		3110					
82.4.1	CH - La Bâtiaz (swissgrid)	FR - Vallorcine (RTE)	220	266	R1	22109											12505	9604
82.5.1	CH - Riddes (swissgrid)	FR - Cornier (RTE)	220	275	R1,R4,R8,R9	60189		1294		2101	1424	3768	5786			18765	27051	
82.6.1	CH - St.-Triphon (swissgrid)	FR - Cornier (RTE)	220	275	R1,R9	2700				2140						560		
91.1.1	FR - Albertville (RTE)	IT - Rondissone (Terna)	380	1244	R1	14925					10953	3972						
91.1.2	FR - Albertville (RTE)	IT - Rondissone (Terna)	380	1244	R1,R8	10588					6216							4372
92.1.1	FR - Trinite Victor (RTE)	IT - Camporosso (Terna)	220	320	R1	5759				4742							1017	
93.1.1	FR - Villarodin (RTE)	IT - Venaus (Terna)	380	1237	R1	60960								44160	16800			
102.1.1	CH - Laufenburg (swissgrid)	DE - Gurtweil (EnBW Transportnetze)	220	469	R1	8342							3329		5013			
102.1.2	CH - Laufenburg (swissgrid)	DE - Gurtweil (EnBW Transportnetze)	220	469	R1	4596							2694		1560	342		
102.2.1	CH - Laufenburg (swissgrid)	DE - Kühmoos (EnBW Transportnetze)	220	410	R1	6228						3349	2879					
102.3.1	CH - Laufenburg (swissgrid)	DE - Kühmoos (EnBW Transportnetze)	220	430	R1,R9	4669						1290	3156			223		
102.3.2	CH - Laufenburg (swissgrid)	DE - Kühmoos (EnBW Transportnetze)	380	1620	R2,R9	948								633		315		
102.4.1	CH - Laufenburg (swissgrid)	DE - Kühmoos (EnBW Transportnetze)	380	1620	R1	9329				1163		3368	4798					
102.4.2	CH - Laufenburg (swissgrid)	DE - Kühmoos (Amprion)	380	1620	R3,R9	32371				6374	25857				140			
102.5.1	CH - Laufenburg (swissgrid)	DE - Tiengen (Amprion)	380	1131	R1,R9	32017	14695	413		16552							357	
103.1.1	CH - Beznau (swissgrid)	DE - Tiengen (Amprion)	380	1158	R2,R9	40884					5828	35056						
103.1.2	CH - Beznau (swissgrid)	DE - Tiengen (Amprion)	220	335	R1,R4,R9	47049				16550	999	29478			22			
105.1.1	CH - Laufenburg (swissgrid)	DE - Trossingen (EnBW Transportnetze)	380	1580	R1	3808				717		3011						80
107.1.1	CH - Laufenburg 220 kV (swissgrid)	DE - Laufenburg 110 kV (ED)	110	200	R1	3352											3352	
111.1.1	AT - Bürs (VIW)	DE - Obermooweiler (EnBW Transportnetze)	380	1369	R1,R9	1000								881		119		
111.1.2	AT - Bürs (VIW)	DE - Obermooweiler (EnBW Transportnetze)	380	1369	R1,R9	851					261			590				
111.2.1	AT - Bürs (VIW)	DE - Herbertingen (Amprion)	220	389	R1,R3,R7,R9	68093			322	351	113	2393	25515	20575	15388		3436	
111.3.1	AT - Bürs (VIW)	DE - Dellmensingen (Amprion)	220	492	R1,R2	95785				556		4350	43465	5664	963	39942	845	
115.5.1	AT - St. Peter (APG)	DE - Altheim (TenneT TSO GmbH)	220	301	R1	188								188				
115.6.1	AT - St. Peter (APG)	DE - Simbach (TenneT TSO GmbH)	220	301	R1	233								233				
115.9.1	AT - St. Peter (APG)	DE - Pirach (TenneT TSO GmbH)	220	518	R1	9176							153	204		2085	6734	
115.10.1	AT - St. Peter (APG)	DE - Pleinting (TenneT TSO GmbH)	220	449	R1	756								63	168		525	
116.1.1	AT - Westtirol (APG)	DE - Leupolz (Amprion)	380	1316	R1,R9	1318						945	277	96				
116.2.1	AT - Westtirol (APG)	DE - Memmingen (Amprion)	220	762	R1,R2	5110							261		4849			
117.1.1	AT - Silz (TIWAG-Netz)	DE - Oberbrunn (TenneT TSO GmbH)	220	793	R1	5327			953	943				1712		553	1166	
117.1.2	AT - Silz (TIWAG-Netz)	DE - Oberbrunn (TenneT TSO GmbH)	220	793	R1	3512		341	221	912			112	582		1123	221	
121.1.1	CH - All'Acqua (swissgrid)	IT - Ponte (Terna)	220	278	R6,R9	1002					143	604	255					
121.2.1	CH - Gorduno (swissgrid)	IT - Mese (Terna)	220	278	R1,R4,R9	15274				310		1204	6686	689		6385		
121.3.1	CH - Soazza (swissgrid)	IT - Bulciago (Terna)	380	1224	R1,R2	4291					3693						598	
121.4.1	CH - Lavorgo (swissgrid)	IT - Musignano (Terna)	380	1204	R1	16415								16415				

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 - yearly overview 2010

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]
123.1.1	CH - Riddes (swissgrid)	IT - Avise (Terna)	220	309	R1,R2,R9	10061		2001	4770		722	1658			910			
123.2.1	CH - Riddes (swissgrid)	IT - Valpelline (Terna)	220	309	R1,R9	23587	791		725		722	1303	3265		16569	212		
123.3.1	CH - Serra (swissgrid)	IT - Pallanzeno (Terna)	220	278	R1,R4,R9	50874			1327			1215	39388	8308		636		
124.1.1	CH - Robbia (swissgrid)	IT - Gorlago (Terna)	380	1340	R9	3158				3103						55		
124.1.2	CH - Robbia (swissgrid)	IT - San Fiorano (Terna)	380	1340	R1	14922								14922				
125.1.1	CH - Mendrisio (swissgrid)	IT - Cagno (Terna)	380	450	R1	5940								3540	2400			
132.1.1	AT - Lienz (APG)	IT - Soverzene (Terna)	220	257	R1,R9	5640							660	4980				
141.1.1	AT - Meiningen (VKW-Netz)	CH - Y-Meiningen (swissgrid)	220	501	R1	1644							1644					
141.2.1	AT - Meiningen (VKW-Netz)	CH - Winkeln (swissgrid)	220	776	R1,R9	9903	14		2047				1655			6187		
142.1.1	AT - Westtirol (APG)	CH - Pradella (swissgrid)	380	1340	R1,R9	2974					922	2001		51				
142.2.1	AT - Westtirol (APG)	CH - Pradella (swissgrid)	380	1340	R1,R9	8828				775	665	5705		73			1610	
151.1.1	ES - Hernani (REE)	FR - Argia (RTE)	380	1136	R2	6213					6213							
151.2.1	ES - Irún (REE)	FR - Errondenia (RTE)	132	56	R1	13320			13320									
151.3.1	ES - Arkale (REE)	FR - Argia (RTE)	220	340	R2,R10	5174				4662			123	389				
151.4.1	ES - Biescas (REE)	FR - PragnÃ´res (RTE)	220	237	R1,R2,R8	18219		1397	528		16283		11					
152.1.1	ES - Benós (REE)	FR - Lac d'Oo (RTE)	110	63	R2,R10	1590	1330		242				18					
153.1.1	ES - Vich (REE)	FR - Baixas (RTE)	380	1105	R4,R8	18									13		5	
161.1.1	DE - Flensburg (TenneT TSO GmbH)	DK - Ensted (Energinet.dk)	220	332	R10	647						525				122		
161.2.1	DE - Flensburg (TenneT TSO GmbH)	DK - Kassø (Energinet.dk)	220	332	R10	5234						499	4735					
161.3.1	DE - Audorf (TenneT TSO GmbH)	DK - Kassø (Energinet.dk)	380	1078	R1,R4	2495					409	2086						
161.4.1	DE - Flensburg UW Nord (TenneT TSO GmbH)	DK - Ensted (Energinet.dk)		150	R4,R8	1500					1500							
171.1.1	AT - Bisamberg (APG)	CZ - Sokolnice (CEPS)	220	250	R1,R9	6490					5870					620		
171.2.1	AT - Bisamberg (APG)	CZ - Sokolnice (CEPS)	220	250	R1,R9	5816					1016	4180				620		
172.1.1	AT - Dürnrohr (APG)	CZ - Slavetice (CEPS)	380	1559	R2	4712								4712				
172.1.2	AT - Dürnrohr (APG)	CZ - Slavetice (CEPS)	380	1559	R2,R9	3672						3247			425			
182.2.1	AT - Kainachtal (APG)	SI - Maribor (ELES)	380	1514	R8	4							4					
191.3.1	DE - Bauler (Amprion)	LU - Flebour (Creos Luxembourg)	220	490	R1	546			546									
191.4.1	DE - Bauler (Amprion)	LU - Roost (Creos Luxembourg)	220	490	R1	990				953						37		
192.1.1	DE - Trier (Amprion)	LU - Heisdorf (Creos Luxembourg)	220	490	R1	493			493									
192.2.1	DE - Quint (Amprion)	LU - Heisdorf (Creos Luxembourg)	220	490	R1,R9	15595			522	5110	6083		1737			2143		
201.1.1	IT - Redipuglia (Terna)	SI - Divača (ELES)	380	1619	R1	43740								43740				
201.2.1	IT - Padriciano (Terna)	SI - Divača (ELES)	220	305	R9	51				51								
205.1.1	IT - Galatina (Terna)	GR - Arachthos (HTSO)	380	500	R1,R8,R10	119552	1313	8	439	24638	44640	28800	638	321	16375		1495	885
221.1.1	GB - Sellindge (National Grid)	FR - Mandarins (RTE)	270	1000	R1,R6	66792				1484	506			990	43992	17780		2040
221.2.1	GB - Sellindge (National Grid)	FR - Mandarins (RTE)	270	1000	R1,R2,R6,R7,R9	54121	470	702	1825	8745	120	16980	131	45	12604	9212	2687	600
222.1.1	GB - Auchencrosh (National Grid)	NI - Ballycronanmore (SONI Ltd)	250	250	R1,R2,R3,R8,R9	126213	9	11	40			16410	9568		30859	44699	24617	
222.2.1	GB - Auchencrosh (National Grid)	NI - Ballycronanmore (SONI Ltd)	250	250	R1,R3,R8,R9	33858	121		49			24120	9568					
231.1.1	ES - Las Conchas (REE)	PT - Lindoso (REN)	132	90	R1	2502	1828							430	244			
232.1.1	ES - Aldeadávila (REE)	PT - Lagoaça 3 (REN)	220	374	R1,R2,R3	40967	381	429	334		6076			12220	18133		3394	
232.2.1	ES - Aldeadávila (REE)	PT - Lagoaça 2 (REN)	220	374	R3,R8	13768					854	1122	507		11045	240		
232.3.1	ES - Saucelle (REE)	PT - Pocinho (REN)	220	346	R1,R3	32221					598				31623			
233.1.1	ES - Cedillo (REE)	PT - Falagueira (REN)	380	1300	R1	2485			1863	622								
234.1.1	ES - Cartelle (REE)	PT - Alto Lindoso (REN)	380	1330	R2	520							81		439			
234.1.2	ES - Cartelle (REE)	PT - Alto Lindoso (REN)	380	1330	R2	593						179			414			
235.1.1	ES - Brovales (REE)	PT - Alqueva (REN)	400	1280	R9	549												549
241.1.1	MK - Dubrovo (MEPSO)	GR - Thessaloniki (HTSO)	400	1300	R1,R10	1103				991				69		43		
242.1.1	MK - Bitola (MEPSO)	GR - Meliti (HTSO)	400	1300	R1	2661				2378								283
261.1.1	RS - Djerdap (EMS)	RO - Portile de Fier (TRANSELECTRICA)	400	1135	R1	5787									4783	1004		
277.1.1	RO - Tântareni (TRANSELECTRICA)	BG - Kozlodui (ESO)	400	1300	R1	52707				26440						25762	505	
277.1.2	RO - Tântareni (TRANSELECTRICA)	BG - Kozlodui (ESO)	400	1300	R1	26755				6797	19649							309
278.1.1	RO - Isaccea (TRANSELECTRICA)	BG - Dobrudja (ESO)	400	1135	R1	75172					1326			12502	23975	26880	6809	3680
291.1.1	AL - Elbassan (KESH)	GR - Kardia (HTSO)		1300	R1	20927			10295						10632			
292.1.1	AL - Bistrica (KESH)	GR - Mourtos (HTSO)		120	R1	783								783				
293.1.1	GR - Didymoticho (HTSO)	TR - Babaeski (TEIAS)	400	185	R1,R2,R10	2631									139	1491	593	408
301.1.1	BG - Blagoevgrad (ESO)	GR - Thessaloniki (HTSO)	400	1300	R1,R6	9373					8862					511	O	
321.1.1	CZ - Hradec Zapad (CEPS)	DE - Etzenricht (TenneT TSO GmbH)	400	1295	R1	9785			271	9050	464							
321.1.2	CZ - Prestice (CEPS)	DE - Etzenricht (TenneT TSO GmbH)	400	1569	R1	9512					4968						4544	
322.1.1	CZ - Hradec Vychod (CEPS)	DE - Röhrsdorf (50Hertz)	400	1386	R1,R9	11644							11202	442				
322.1.2	CZ - Hradec Vychod (CEPS)	DE - Röhrsdorf (50Hertz)	400	1386	R1,R2,R9	12970							12518	452				
351.1.1	HR - Melina (HEP-OPS)	SI - Divaca (ELES)	400	1264	R2,R3,R9	810	521		4			9			276			
351.2.1	HR - Pehlin (HEP-OPS)	SI - Divaca (ELES)	220	366	R6	1456							1456					
351.3.1	HR - Buje (HEP-OPS)	SI - Koper (ELES)	110	89	R8	3			3									
352.2.1	HR - Zerjavinec (HEP-OPS)	SI - Cirkovce (ELES)	220	297	R10	24										24		

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 - yearly overview 2010

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]
391.1.1	MK - Skopje 1 (MEPSO)	RS - Kosovo A (EMS)	220	311	R9	525600	44640	40320	44580	43200	44640	43200	44640	44640	43200	44700	43200	44640
391.2.1	MK - Skopje 1 (MEPSO)	RS - Kosovo A (EMS)	220	311	R9	525600	44640	40320	44580	43200	44640	43200	44640	44640	43200	44700	43200	44640
401.1.1	DE - Herrenwyk (TenneT TSO GmbH)	SE - Kruseberg (Sydkraft/Vattenfall)	400	600	R1,R4,R10	4454					1350	128				478	2378	120
404.1.1	CZ - Nosovice (CEPS)	SK - Varin (SEPS)	400	1205	R1	6246			6246									
410.1.1	CZ - Liskovec (CEPS)	SK - Pov. Bystrica (SEPS)	220	221	R2,R6	27562				1881			14950	10731				
420.1.1	CZ - Sokolnice (CEPS)	SK - Senica (SEPS)	220	213	R1,R2	6830	301									6529		
424.1.1	CZ - Sokolnice (CEPS)	SK - Krizovany (SEPS)	400	1205	R1,R2,R9	34793	1043		66		893	28142	4649					
430.1.1	CZ - Sokolnice (CEPS)	SK - Stupava (SEPS)	400	1363	R2,R7	9106				6768	2191	147						
440.1.1	UA_W - Mukachevo (NPC Ukrenergo)	SK - V.Kapusany (SEPS)	400	1115	R1	12665			6247					6418				
443.1.1	CZ - Albrechtice (CEPS)	PL - Dobrzeń (PSE Operator S.A.)	400	1088	R1	27238						25425		1654		159		
444.1.1	CZ - Nošovice (CEPS)	PL - Wielopole (PSE Operator S.A.)	400	1088	R1	9518						7338	411	1769				
450.1.1	CZ - Liskovec (CEPS)	PL - Kopanina (PSE Operator S.A.)	220	399	R1	8719			4743		519			3457				
460.1.1	CZ - Liskovec (CEPS)	PL - Bujaków (PSE Operator S.A.)	220	399	R1,R2,R9	3570			2470		521	335			244			
501.1.1	DE - Vierraden (50Hertz)	PL - Krajnik (PSE Operator S.A.)	220	402	R1	4037							2370	1667				
501.1.2	DE - Vierraden (50Hertz)	PL - Krajnik (PSE Operator S.A.)	220	402	R1	2797							2797					
502.1.1	DE - Hagenwerder (50Hertz)	PL - Mikulowa (PSE Operator S.A.)	380	1302	R1	27919				1823		13877	12219					
502.1.2	DE - Hagenwerder (50Hertz)	PL - Mikulowa (PSE Operator S.A.)	380	1302	R1	8329				737		113			763	6716		
601.1.1	ES - Puerto de la Cruz (REE)	MA - Melloussa 1 (ONE)	380		R1,R3	4608		1583	69	465	1524	440		527				
601.1.2	ES - Puerto de la Cruz (REE)	MA - Melloussa 2 (ONE)	380		R1,R2	3471				2761	193			517				
700.1.1	PL - Krosno Iskrzynia (PSE Operator S.A.)	SK - Lemešany (SEPS)	400	1252	R1,R6,R10	42265			248				24	61	35219	6713		
700.1.2	PL - Krosno Iskrzynia (PSE Operator S.A.)	SK - Lemešany (SEPS)	400	1252	R1,R2	42399			22	444					35218	6715		
704.1.1	PL - Slupsk (PSE Operator S.A.)	SE - Stärnö (SvK)	450	600	R1	30085				2853	368	18462	1951		6451			
710.1.1	HU - Györ (MAVIR)	SK - Gabcikovo (SEPS)	400	1330	R2	12184	3308							2339	6537			
711.1.1	HU - Göd (MAVIR)	SK - Levice (SEPS)	400	1330	R2	6289				6026			263					
720.1.1	HU - Albertirsa (MAVIR)	UA_W - Zahidno Ukrainska (NPC Ukrenergo)	750	4010	R1	70833			11093	43200	16540							
721.1.1	HU - Sajószöged (MAVIR)	UA_W - Mukachevo (NPC Ukrenergo)	400	1390	R1	16280						2516	962	6482		6320		
722.1.1	HU - Kisvárda (MAVIR)	UA_W - Mukachevo (NPC Ukrenergo)	220	209	R1	19274					1075	5124	7864			385	4826	
722.1.2	HU - Tiszalök (MAVIR)	UA_W - Mukachevo (NPC Ukrenergo)	220	209	R1	13893							7600			6293		
730.1.1	HU - Sandorfalva (MAVIR)	RO - Arad (TRANSELECTRICA)	400	1135	R1	4284					4284							
731.1.1	HU - Békéscsaba (MAVIR)	RO - Nadab (TRANSELECTRICA)	400	1300	R1	6474	520										5954	
740.1.1	RO - Rosiori (TRANSELECTRICA)	UA_W - Mukachevo (NPC Ukrenergo)	400	1135	R1	9998			6480						3518			
803.1.1	FI - Raumo (Fingrid Oyj)	SE - Forsmark (Svenska Kraftnät)	400	550	R1,R3,R9,R10	11165					2250	103	133			7637		1042
832.1.1	LV - Valmiera (AS Augstsprieguma tīkls)	EE - Tsirguliina (Elering AS)	330	350	R1,R9	2400		2040			240				120			
833.1.1	LV - Valmiera (AS Augstsprieguma tīkls)	EE - Tartu (Elering AS)	330		R1	240					240							
840.1.1	EE - Balti (Elering AS)	RU - Leningradskaja (JSC FGC UES)	330		R6,R9	1079	0			60	420			59				540
841.1.1	EE - Eesti (Elering AS)	RU - Kingisepp (JSC FGC UES)	330		R6,R9	238						59			59		120	
842.1.1	EE - Taru (Elering AS)	RU - Pskov (JSC FGC UES)	330		R6	120						120						
845.1.1	LV - Rezekne (AS Augstsprieguma tīkls)	RU - Velikoreckaya (JSC FGC UES)	330		R1,R9	24240				480	7500					16260		
850.1.1	LT - Šiauliai/Telšiai (LITGRID AB)	LV - Jelgave (Augstsprieguma tīkls)	330	714	R1,R9	7052					586	3685	2366				415	
851.1.1	LT - Panevežys (LITGRID AB)	LV - Aizkraukle (Augstsprieguma tīkls)	330	714	R1,R2,R9	35751	171		1954		775		257		6201	19630	6763	
852.1.1	LT - Klaipeda (LITGRID AB)	LV - Grobina (Augstsprieguma tīkls)	330	714	R1,R2	22516					540			294	21682			
853.1.1	LT - IAE (LITGRID AB)	LV - Liksna (Augstsprieguma tīkls)	330	830	R1,R2	36394					7720		9346		5163	14165		
854.1.1	LT - Paroveja (LITGRID AB)	LV - Nereta (Augstsprieguma tīkls)	110	75	R1	354									354			
855.1.1	LT - Zarasai (LITGRID AB)	LV - Daugavpils (Augstsprieguma tīkls)	110	86	R1,R2,R9	12732	4593				174	3282						4683
856.1.1	LT - IAE (LITGRID AB)	LV - Daugavpils (Augstsprieguma tīkls)	110	102	R1,R9	6787			1905		208							4674
860.1.1	LT - IAE (LITGRID AB)	BY - Polock (Belenergo)	330	966	R1,R2	14949			258	2090	1022	5430					2225	3924
861.1.1	LT - IAE (LITGRID AB)	BY - Smorgon (Belenergo)	330	830	R1,R2	27132			6161	3647					12312			5012
862.1.1	LT - IAE (LITGRID AB)	BY - Belorusskaya (Belenergo)	330	1786	R1,R2,R9	56741				13908		20365	11748			10720		
863.1.1	LT - Vilnius (LITGRID AB)	BY - Molodechno (Belenergo)	330	714	R1,R2	60046						42660	12637				4749	
864.1.1	LT - Alytus (LITGRID AB)	BY - Grodno (Belenergo)	330	714	R1	9559				3351					6208			
865.1.1	LT - IAE (LITGRID AB)	BY - Opsa (Belenergo)	110	63	R1,R2	35866		3469	3203		6102		16922				6170	
866.1.1	LT - IAE (LITGRID AB)	BY - Vidzi (Belenergo)	110	63	R1	21408		3470			6420		4594				6924	
867.1.1	LT - Didžiasalis (LITGRID AB)	BY - Kaziani (Belenergo)	110	44	R1	19449								15435	4014			
868.1.1	LT - Pabrad e (LITGRID AB)	BY - Podolci (Belenergo)	110	44	R2,R3,R9	131003		1905					5847			35411	43200	44640
869.1.1	LT - Kalveliai (LITGRID AB)	BY - Asmena (Belenergo)	110	63	R1	21242				1627				3508	15197	910		
870.1.1	LT - Šalcininkai (LITGRID AB)	BY - Voronovo (Belenergo)	110	86	R2	3301									3301			
871.1.1	LT - Leipalingis (LITGRID AB)	BY - Grodno (Belenergo)	110	75	R2	12071						3366		4038	4667			
880.1.1	LT - Klaipeda (LITGRID AB)	RU - Sovetsk (UES-SO-CDA)	330	714	R1,R2,R3	47070						14291	1821	6085		19212		5661
881.1.1	LT - Jurbarkas (LITGRID AB)	RU - Sovetsk (UES-SO-CDA)	330	714	R1,R3,R9	73892				16632	19770	3380		6190	12310	10607		5003
882.1.1	LT - Kruonio HAE (LITGRID AB)	RU - Sovetsk (UES-SO-CDA)	330	714	R1,R9	54985	8797		7273	7166	6645	8410	8507	8187				
883.1.1	LT - Kybartai (LITGRID AB)	RU - Nesterovo (UES-SO-CDA)	110	75	R1,R2	3729		1756				1793		180				
884.1.1	LT - Pagegiai (LITGRID AB)	RU - Sovetsk (UES-SO-CDA)	110	75	R1,R9	9170					3050			2276	3844			
885.1.1	LT - Pagegiai (LITGRID AB)	RU - Sovetsk (UES-SO-CDA)	110	75	R1,R2	10639					4577				6062			

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

European Network of
Transmission System Operators
for Electricity

entsoe

Glossary of statistical terms

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** 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	According to the category of Primary Energy and fuel used for electricity generation, the ENTSO-E statistics considers the following classification in its publications: • Hydro • Nuclear • Fossil fuels • Other Renewable (…of which wind, solar) • Not clearly identifiable In some publications, thermal conventional is also split into lignite, hard coal, gas, oil and mixed fuels and non attributable fuels.
Consumption	See Load and relations to consumption in the following document: https:www.entsoe.eu/fileadmin/user_upload/_library/publications/ce/Load_and_Consumption _Data.pdf
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	the composition of one or more market balance areas under the same technical load frequency control responsibility. Note: In some cases there may be some metering points that belong to a market balance areas that is not a part of the control area. However these do not impact the general definition , for example, a village in one country connected to the grid of another.
Conventional Transmission Capacity	A theoretical value based on parameters standardized within ENTSO-E (Continental Europe) for calculation of the thermal load capacity of each tie line. These are:ambient temperature of + 35ºC, 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	Load on a power system is referred to as the hourly average active power absorbed by all installations connected to the transmission network or to the distribution network. The load is the value at a given moment of the electrical power supplied or absorbed at any point of a system as determined by an instantaneous measurement or by the integration of power during a given period of time. Load can refer to a consumer, an appliance, a group of consumers or appliances or a network. Load is the power consumed by the network including (+) the network losses but excluding (-) the consumption for pumped storage and excluding (-) the consumption of generating auxiliaries. For the power balance, the load of each country, also called reference load, is represented at 11 a.m. on the 3rd Wednesday of each month without regard to the export power. Concerning the calculation method for the 24 load values, the countries use the average values of the 10, 15 or 60 minutes load preceding the hour.
Net Generating Capacity	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: • "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; • for thermal plants "normal conditions" means average external conditions (weather, climate…) and full availability of fuels; • for hydro and wind units, "normal conditions" refer to the usual maximum availability of primary energies, i.e. optimum water or wind conditions. 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.
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.

Glossary of statistical terms

Term	Definition
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 utilization 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.
Non-Identifiable Sources	Not Clearly Identifiable Sources comprise Power Plants or Power Units, which, according to Sources the primary energy used, cannot be categorized.
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 neighboring countries metered in cross-border tie lines in both directions, in the system and out of the system.
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.
Solar Energy	Solar radiation used to generate electricity in photovoltaics or heat engines.

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.
Fossil Fuels	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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