

UCTE



July 2004

Monthly provisional values
union for the co-ordination of transmission of electricity

Table of contents ¹		Page
1	Electricity supply situation of the countries	2
2	Physical energy flows	3
3	Monthly consumption	4
4	Monthly consumption variation	6
5	Consumption of the last 12 months	7
6	Variation of the last 12 months' consumption	8
7	Load flows (night)	9
8	Load flows (day)	10
9	Unavailability of international tie lines (major events)	11
10	Network reliability (major events)	13
11	Scheduled exchanges	14
12	Load on the 3 rd Wednesday	15

¹ Monthly provisional values from the UCTE database as of 19 October 2004

1

Electricity supply situation of the countries

July 2004

Countries	Net production in GWh ¹				Exchange balance in GWh	Pump in GWh	Consumption in GWh ¹			
	Hy	Tn	Tc	Total			monthly	Δ ³ [%]	last 12 months	Δ ³ [%]
B	127	4004	2529	6660 ²	-85	153	6422	-0,5	85878	1,1
D	1991	11810	24950	38751 ²	1778	777	39752	0,3	509381	0,6
E	2463	5506	13290	21259 ²	-239	404	20616	3,3	229416	5,0
F	4791	32408	2506	39705	-4597	582	34526	-1,8	466970	3,4
GR ⁴	490	0	4205	4695 ²	502	60	5137	-3,8	50129	-1,5
I	5374	0	20974	26348	3539	846	29041	-2,4	319299	0,8
SLO	422	472	344	1238	-171	0	1067	4,6	12544	2,5
HR	462	0	558	1020 ²	279	30	1269	3,0	15791	4,6
BiH	273	0	572	845	-50	0	795	-5,2	12727	n.a.
FYROM	128	0	302	430 ²	2	0	432	4,1	6228	n.a.
SCG	834	0	1850	2684	68	38	2714	4,7	39610	n.a.
L	69	0	256	325	295	86	534	4,9	6236	2,6
NL	0	333	7345	7678 ²	1140	0	8818	1,0	110046	0,4
A	3889	0	1202	5091	-409	369	4313	9,3	54494	5,9
P	480	0	2786	3266 ²	664	74	3856	4,3	44638	5,4
CH	4003	2212	235	6450 ²	-1458	363	4629	4,4	60803	3,1
CZ	159	2302	3341	5802 ²	-1529	51	4222	1,2	60878	2,0
H	16	953	1449	2418 ²	662	0	3080	-0,6	38257	0,7
PL ⁵	258	0	10334	10592 ²	-541	193	9858	-5,1	134139	-2,7
SK	367	1119	606	2092 ²	-129	5	1958	1,1	26492	0,6
RO	1187	480	2482	4149 ²	-108	0	4041	1,2	49799	n.a.
BG	284	1175	1527	2986 ²	-432	17	2537	0,5	35668	n.a.
UCTE	28067	62774	103643	194484²	-819	4048	189617	-0,04	2369423	-0,2
West UA ⁶	7	0	559	566 ²	-265	0	301	11,1	4317	n.a.

¹ Percentage as referred to total values in %

Countries	B	D	E	F	GR ⁴	I	SLO	HR	BiH	FY ROM	SCG	L	NL	A	P	CH	CZ	H	PL	SK	RO	BG	West UA ⁶
Production	99	94	94	100	99	100	95	100	99	100	96	98	100	84	93	100	100	100	100	100	100	100	100
Consumption	99	94	94	100	99	100	95	100	99	100	96	99	100	90	93	100	100	100	100	100	100	100	100

² Including deliveries from industry

³ Variation as compared to corresponding period of the previous year and representativity 100%

⁴ The representativity of data referring to the interconnected system is 99%
The representativity of data referring to the whole country including the isolated systems of Greek island is 91%

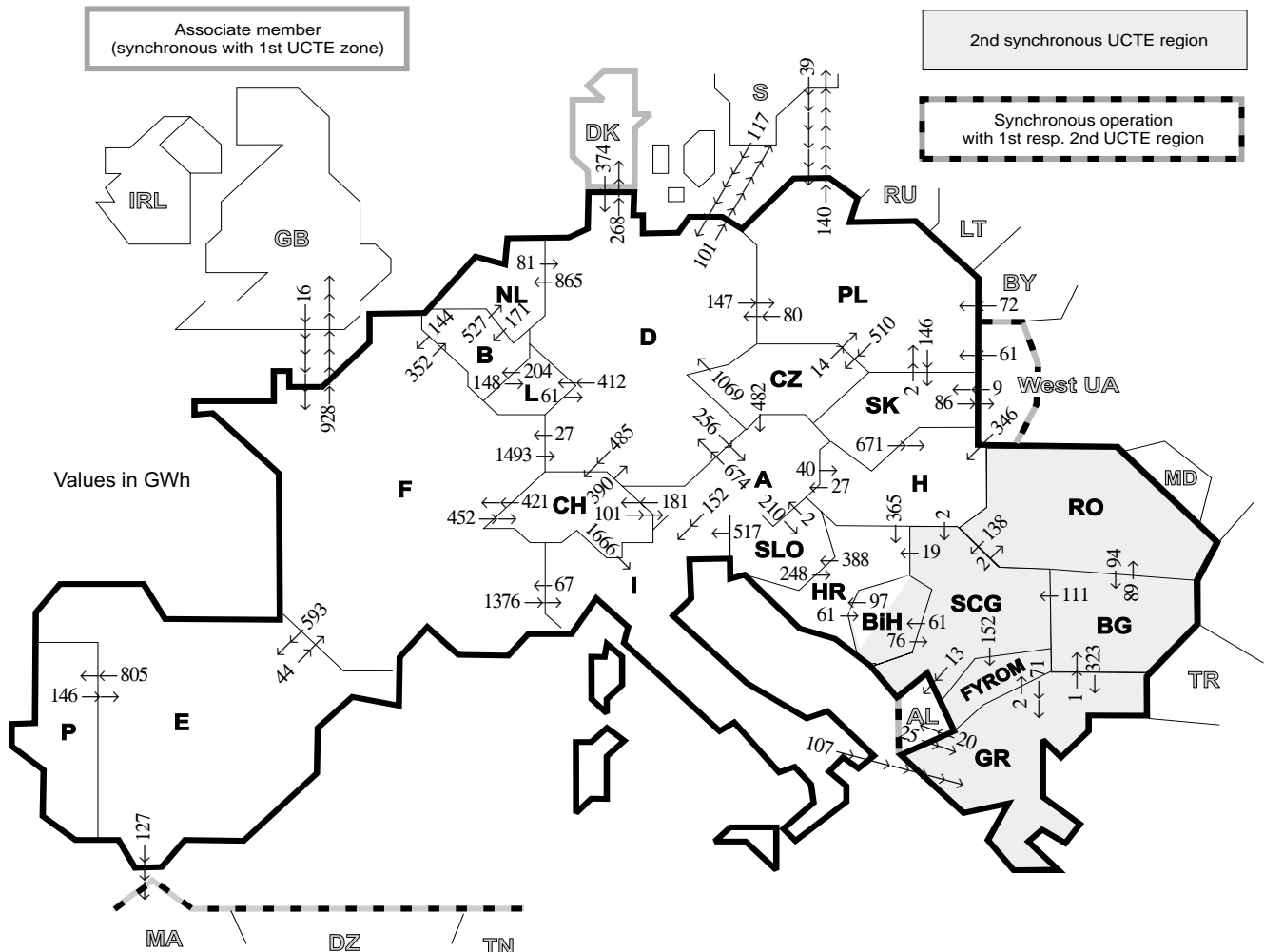
⁵ Values for 2003 are gross values, values for 2004 are net values.

⁶ West UA represents the so-called Burshtyn Island synchronously interconnected with UCTE

2

Physical energy flows

July 2004



Exporting countries	Importing countries																				Σ Export					
	B	D	E	F	GR	I	SLO	HR	BiH	FY-ROM	SCG	L	NL	A	P	CH	CZ	H	PL	SK		RO	BG	III ¹	DK ²	West UA ³
B	-	-	-	144	-	-	-	-	-	-	-	148	527	-	-	-	-	-	-	-	-	-	-	-	-	819
D	-	-	-	27	-	-	-	-	-	-	-	412	865	256	485	0	147	-	-	-	-	-	369	268	-	2561
E	-	-	-	44	-	-	-	-	-	-	-	-	-	-	805	-	-	-	-	-	-	-	-	-	-	976
F	352	1493	593	-	-	1376	-	-	-	-	-	-	-	-	-	452	-	-	-	-	-	-	-	-	-	5194
GR	-	-	-	-	-	0	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	1	20	-	23
I	-	-	-	67	107	0	-	-	-	-	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	174
SLO	-	-	-	-	-	517	-	248	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	767
HR	-	-	-	-	-	-	388	61	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	449
BiH	-	-	-	-	-	-	97	-	-	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	173
FYROM	-	-	-	-	71	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	71
SCG	-	-	-	-	-	-	19	61	152	-	-	-	-	-	-	-	0	-	-	-	-	2	0	13	-	247
L	204	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	265
NL	171	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	252
A	-	674	-	-	-	152	210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1257
P	-	-	146	-	-	-	-	-	-	-	-	-	-	-	181	0	40	-	-	-	-	-	-	-	-	146
CH	-	390	-	421	-	1666	-	-	-	-	-	101	-	-	-	-	-	-	-	-	-	-	-	-	-	2578
CZ	-	1069	-	-	-	-	-	-	-	-	-	482	-	-	-	-	-	14	0	-	-	-	-	-	-	1565
H	-	-	-	-	-	-	365	-	-	-	2	-	-	-	-	-	-	-	-	-	0	0	-	0	0	394
PL	-	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	0	-	876
SK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	510	-	-	146	-	-	140	-	0	876
RO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	671	2	-	-	-	-	86	86	759
BG	-	-	-	-	323	-	-	-	-	-	138	-	-	-	-	-	-	-	-	-	-	94	0	-	0	232
III ¹	-	491	0	16	25	-	-	-	-	0	111	-	-	-	-	-	-	-	-	-	89	0	-	-	-	523
DK ²	-	374	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	374
West UA ³	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	416
Σ Import	727	4339	739	719	526	3711	598	729	122	154	327	560	1392	868	805	1118	510	1057	335	155	91	95	1683	268	86	21360

Sum of physical energy flows between UCTE countries = 18618 GWh Total physical energy flows = 21360 GWh

¹ III = Third countries: Albania, Belarus, Denmark, Great Britain, Morocco, Republic of Moldavia, Sweden, Republic of Turkey and West Ukraina

² Denmark (Jutland)

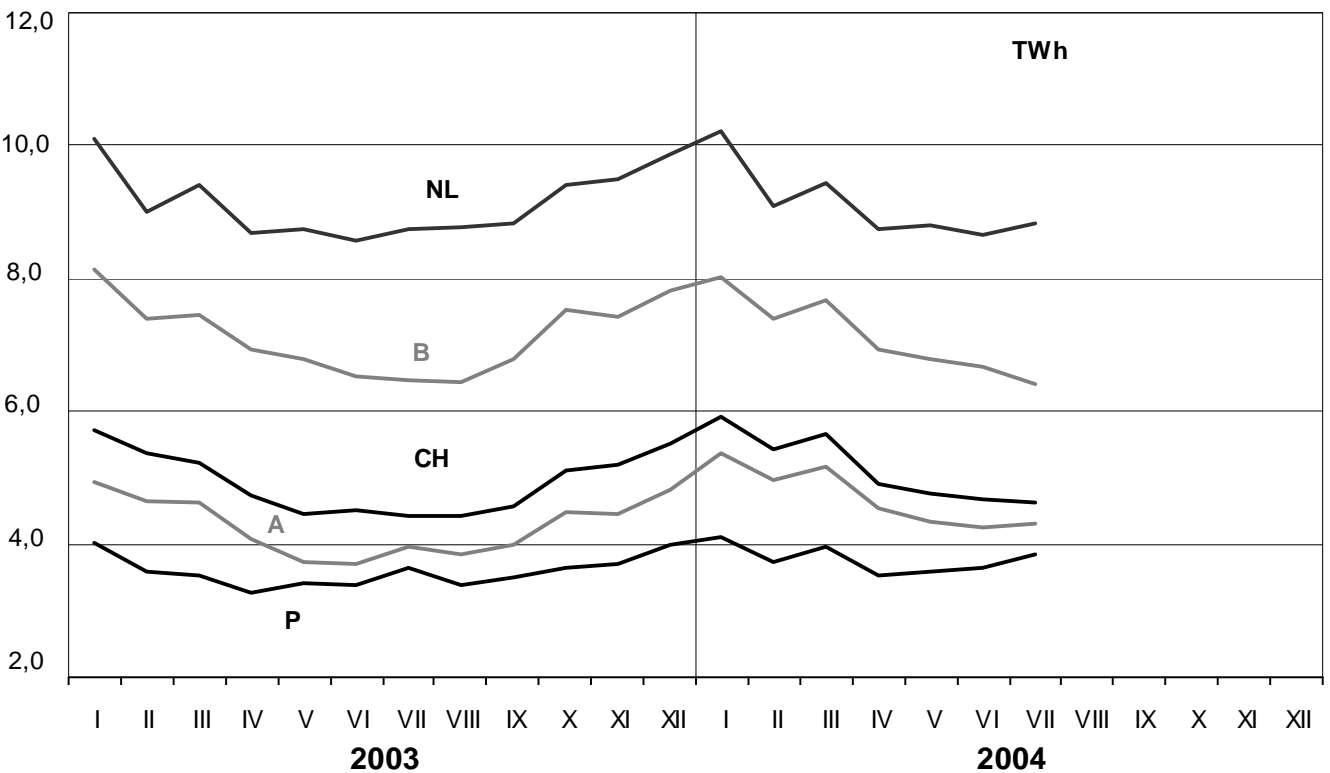
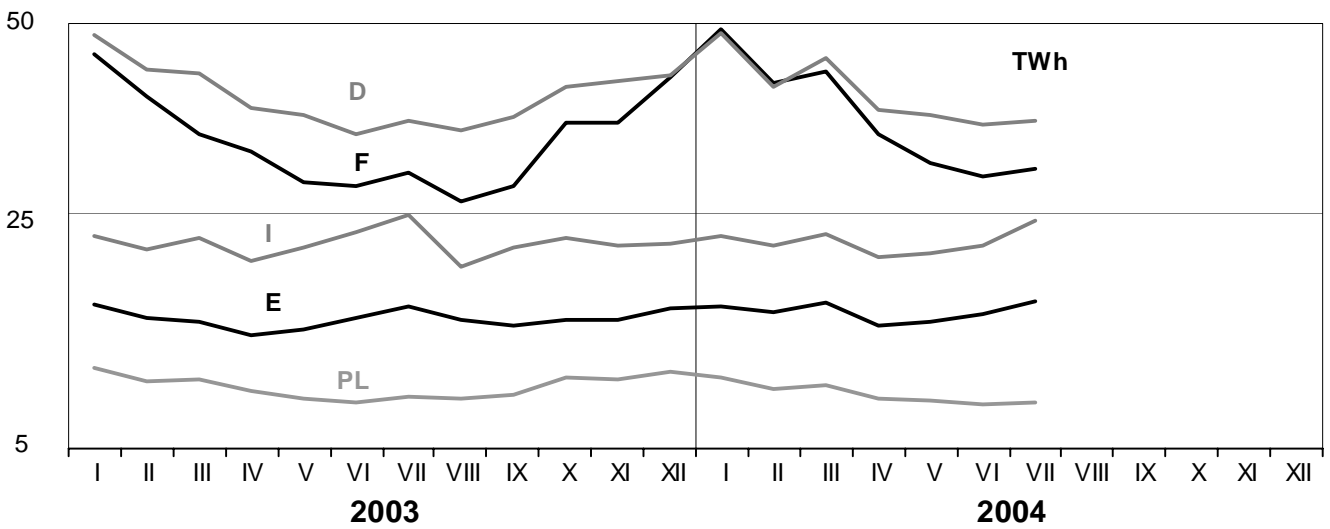
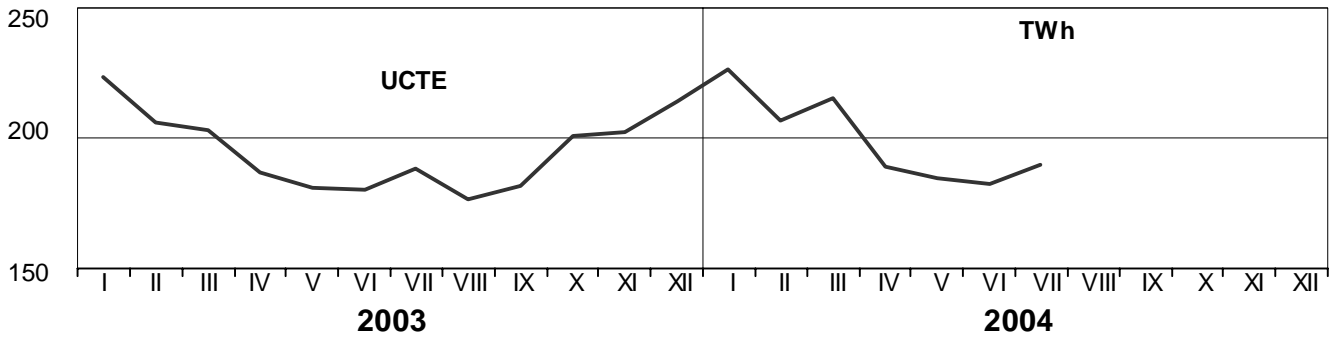
³ West UA represents the so-called Burshtyn Island synchronously interconnected with UCTE

These physical energy flows were measured on the cross-frontier transmission lines (≥ 110 kV) listed in table 9 of the Statistical Yearbook. These values may differ from the official statistics and the exchange balances in chapter 1.

3

Monthly consumption

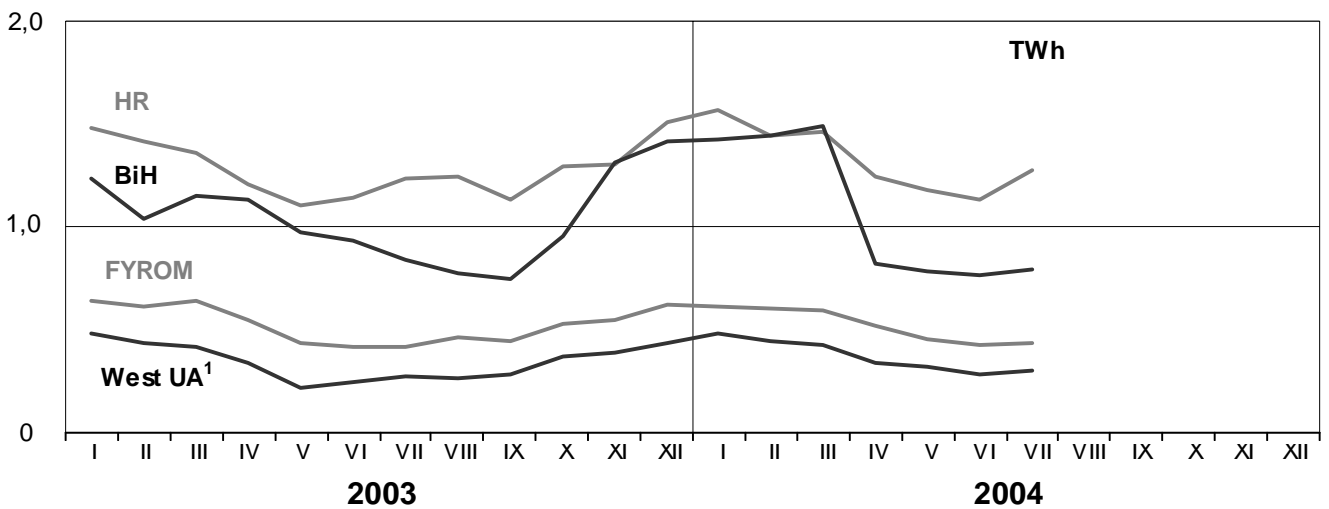
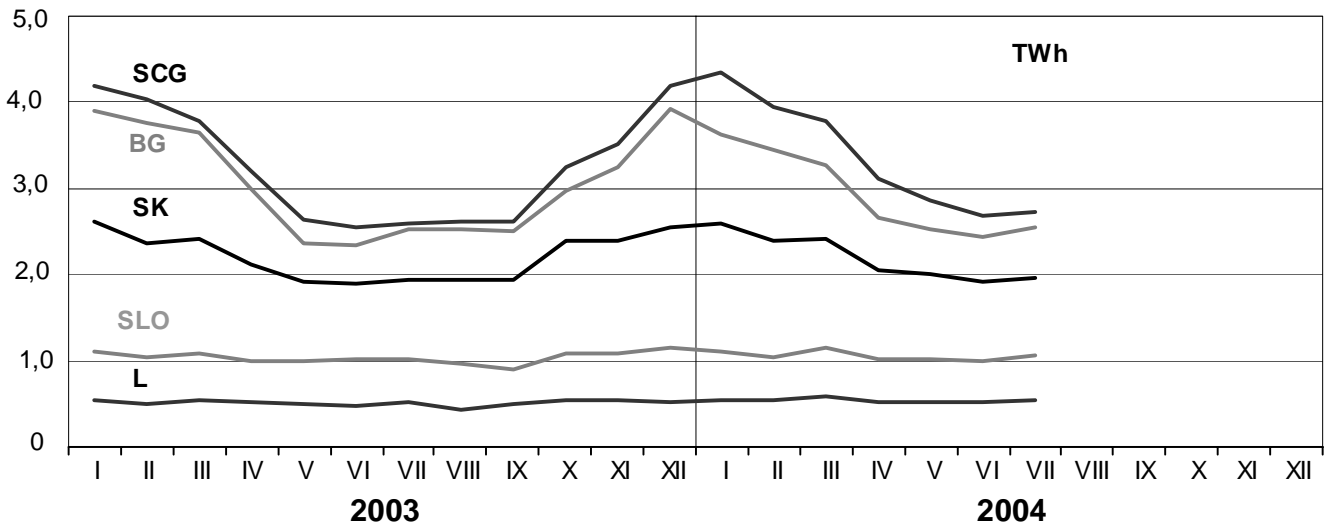
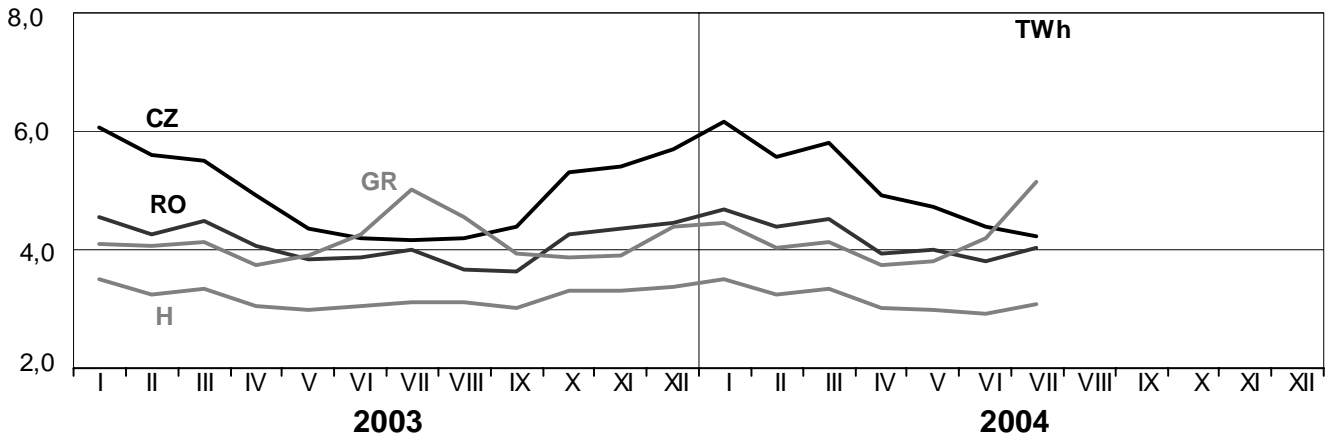
July 2004



3

Monthly consumption

July 2004

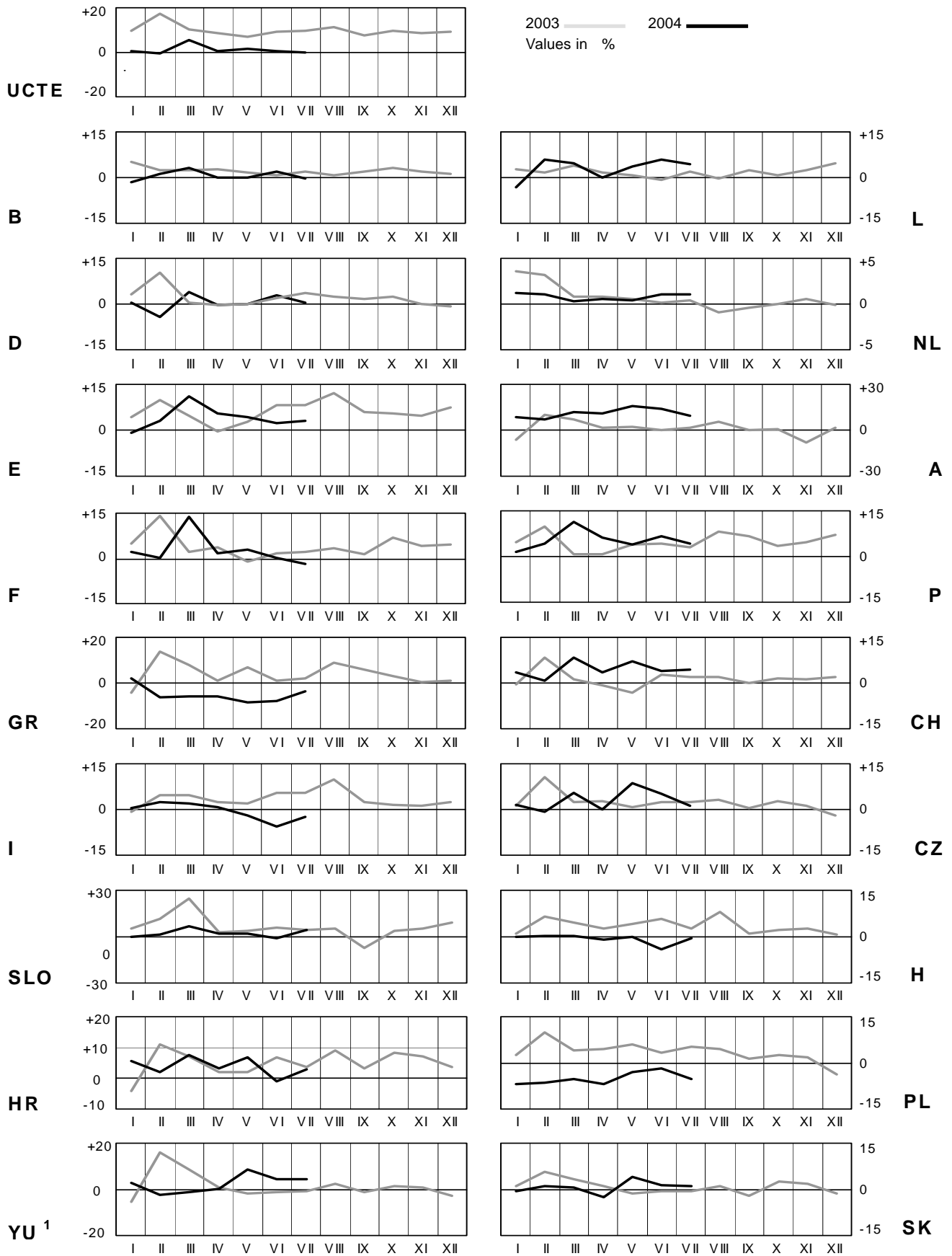


¹ West UA represents the so-called Burshtyn Island synchronously interconnected with UCTE

4

Monthly consumption variation

July 2004

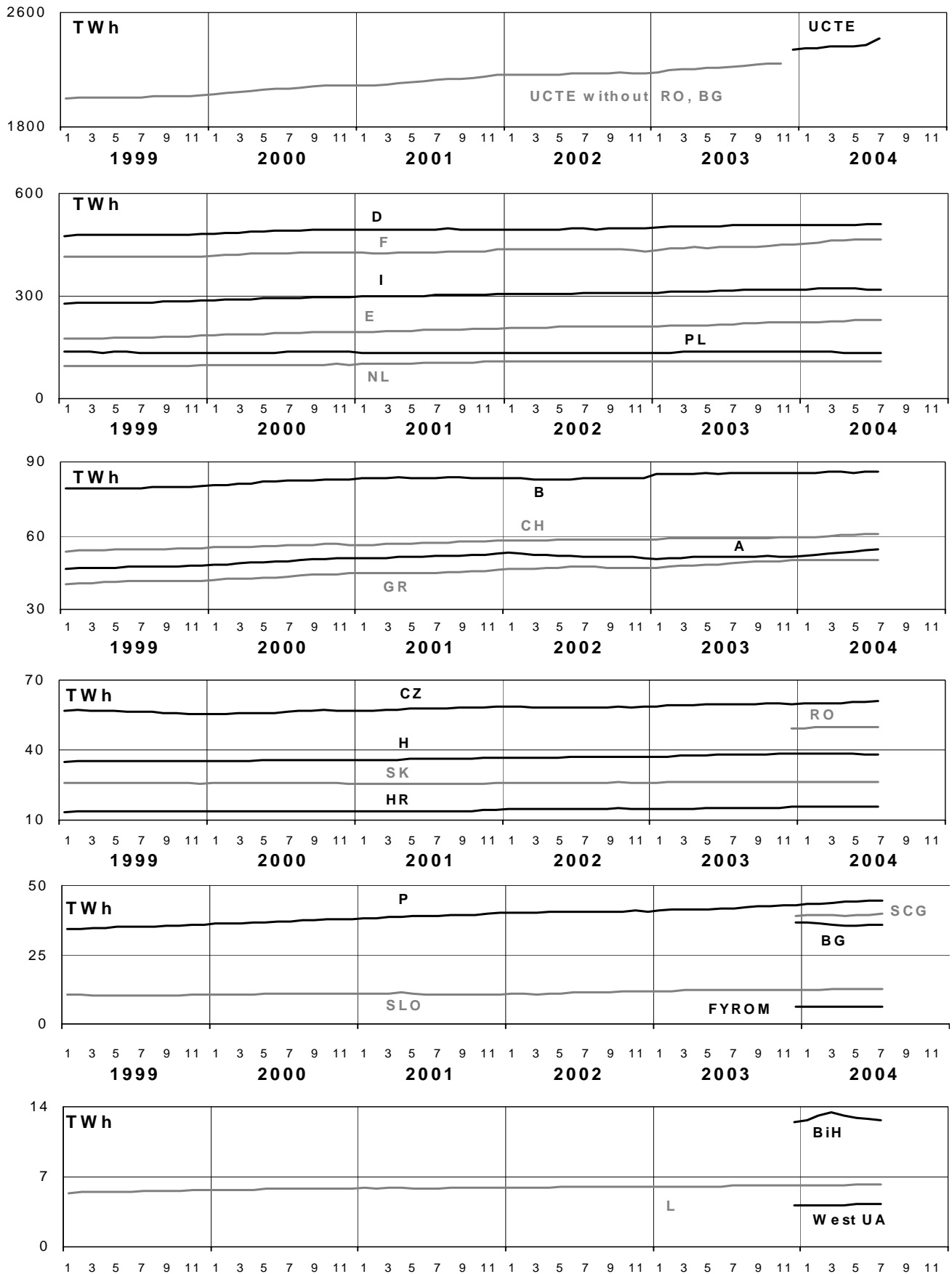


¹YU = FRY + FYROM (Federal Republic of Yugoslavia and former Yugoslav Republic of Macedonia)

5

Consumption of the last 12 months

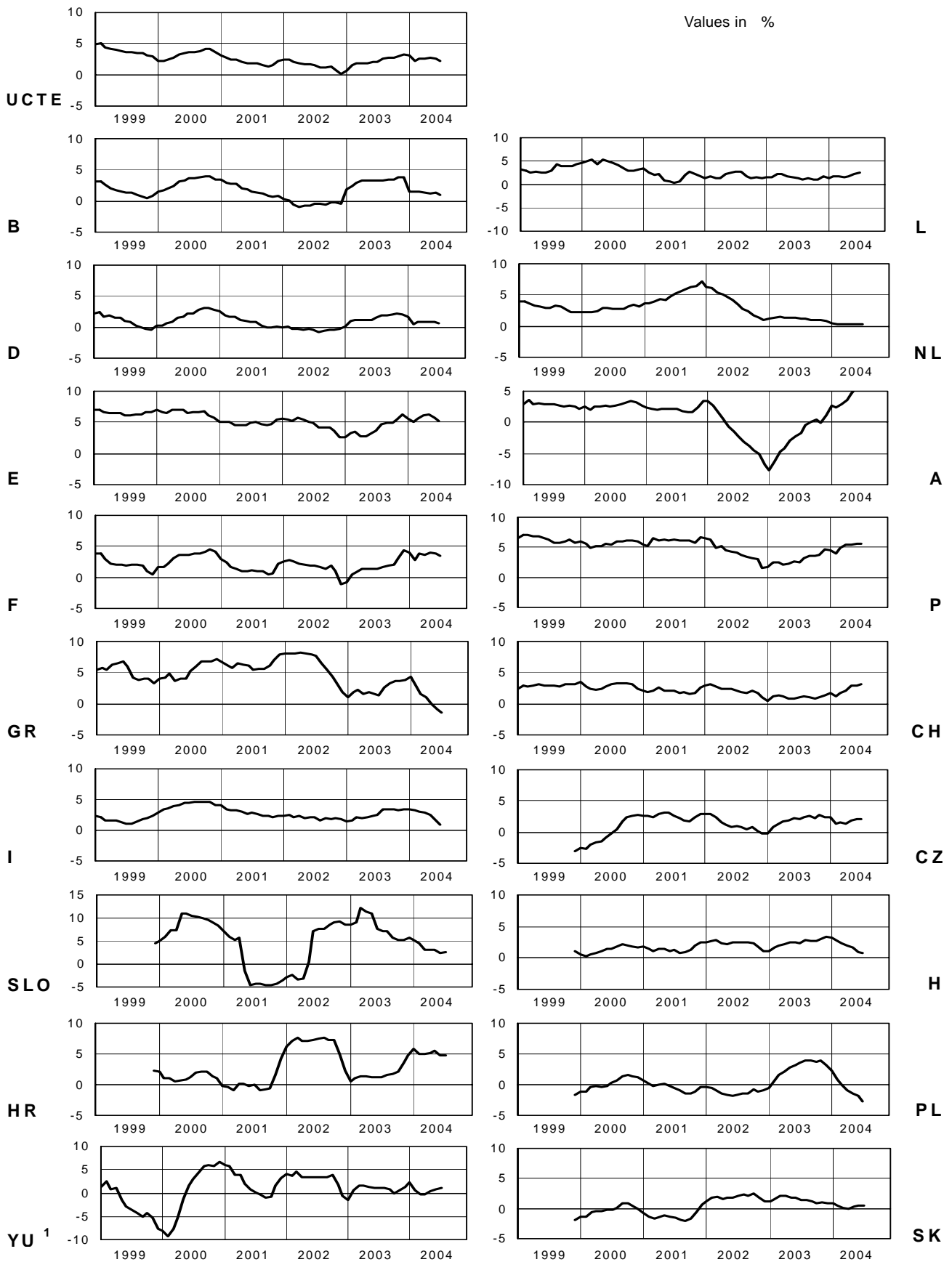
July 2004



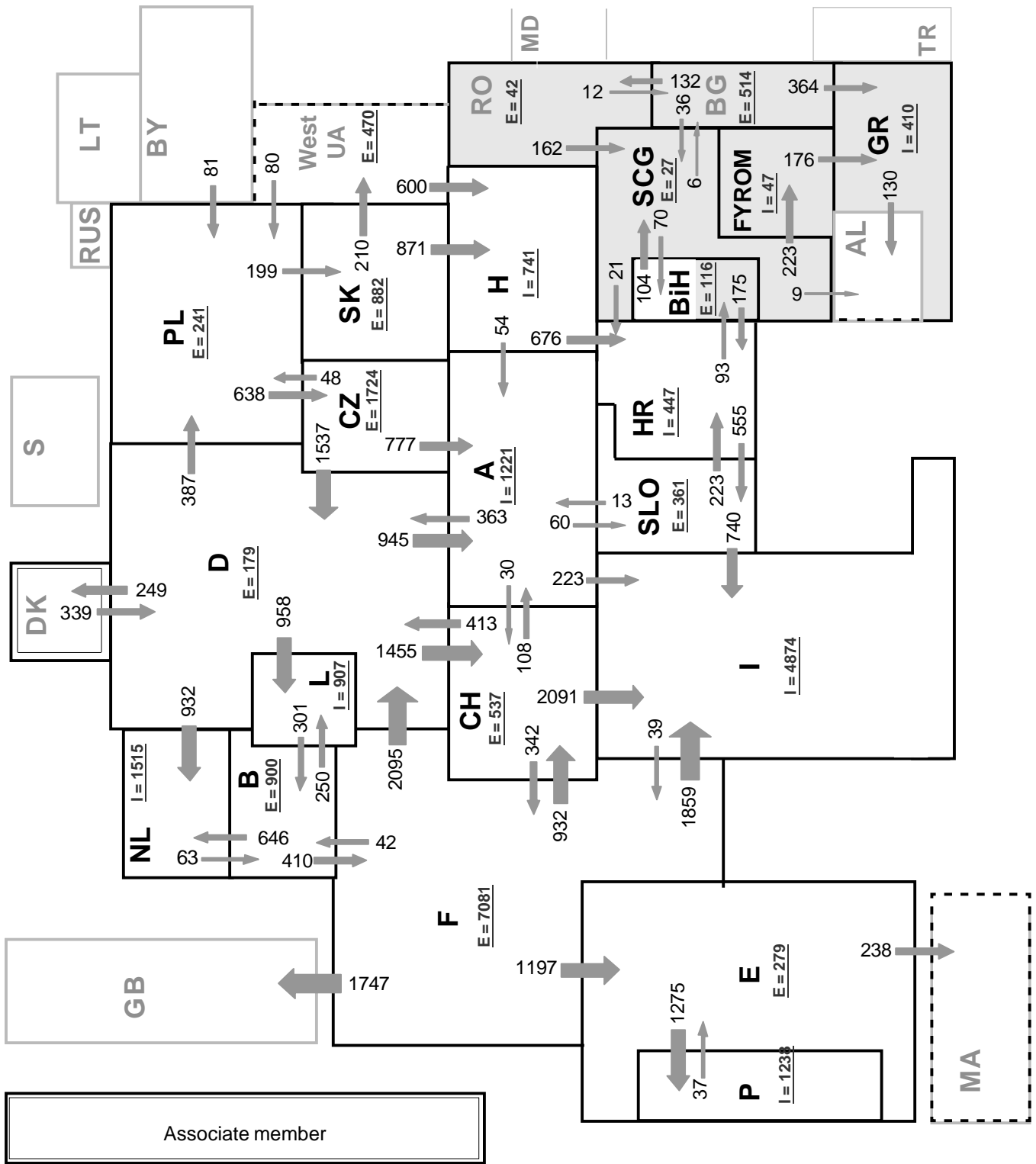
6

Variation of the last 12 months' consumption

July 2004



¹ YU = FRY + FYROM (Federal Republic of Yugoslavia and former Yugoslav Republic of Macedonia)



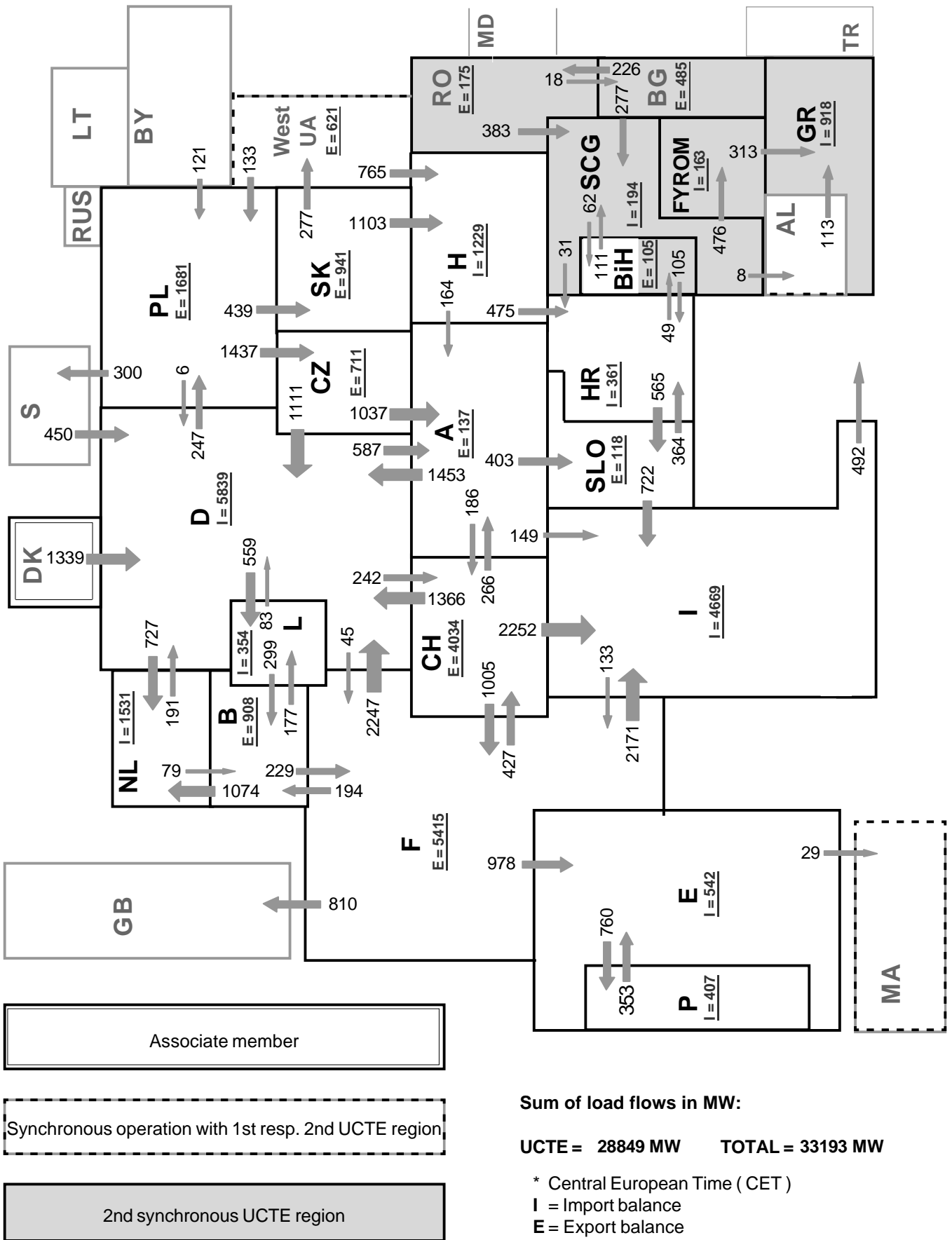
Sum of load flows in MW:

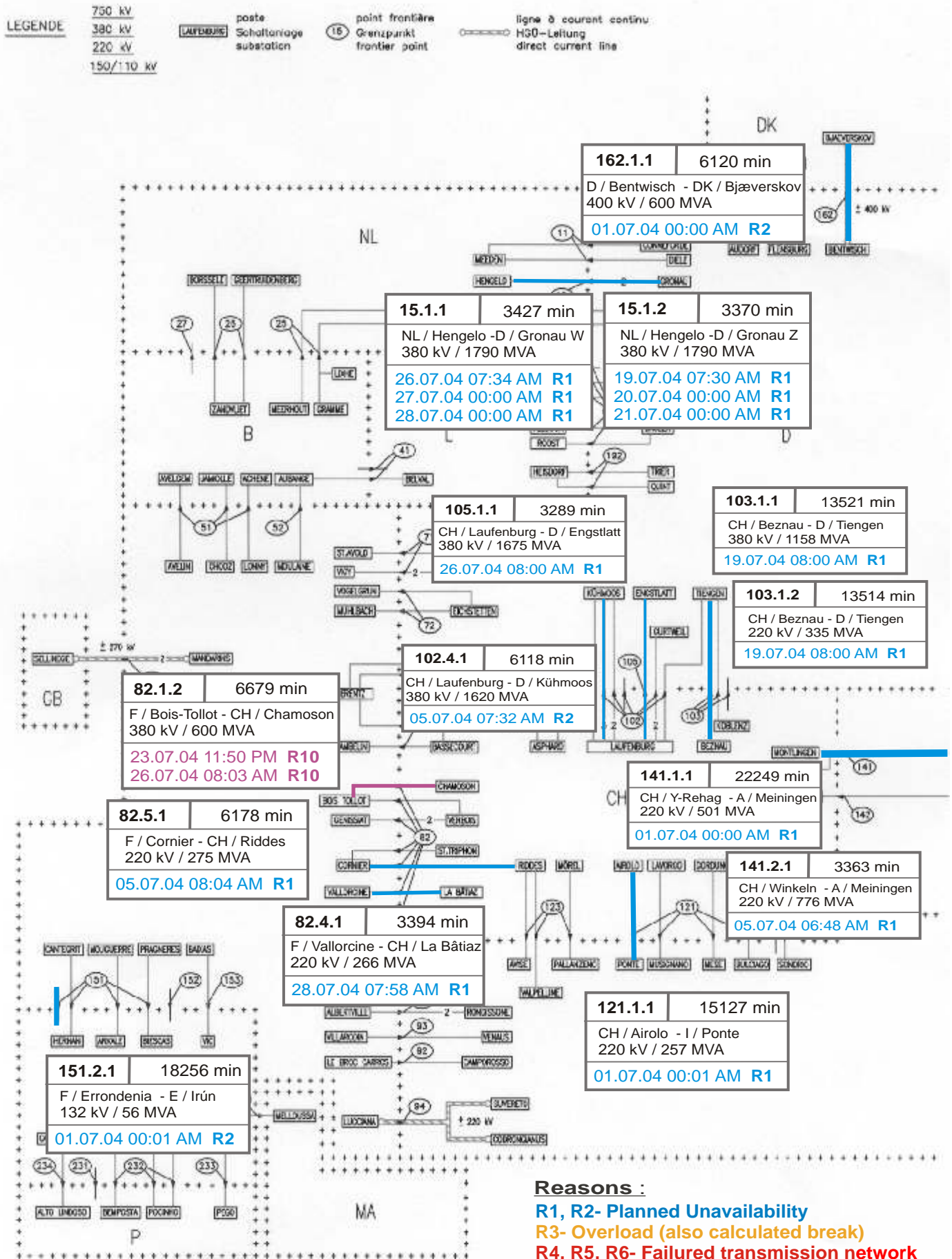
UCTE = 25358MW Total = 29041MW

* Central European Time (CET)

I = Import balance

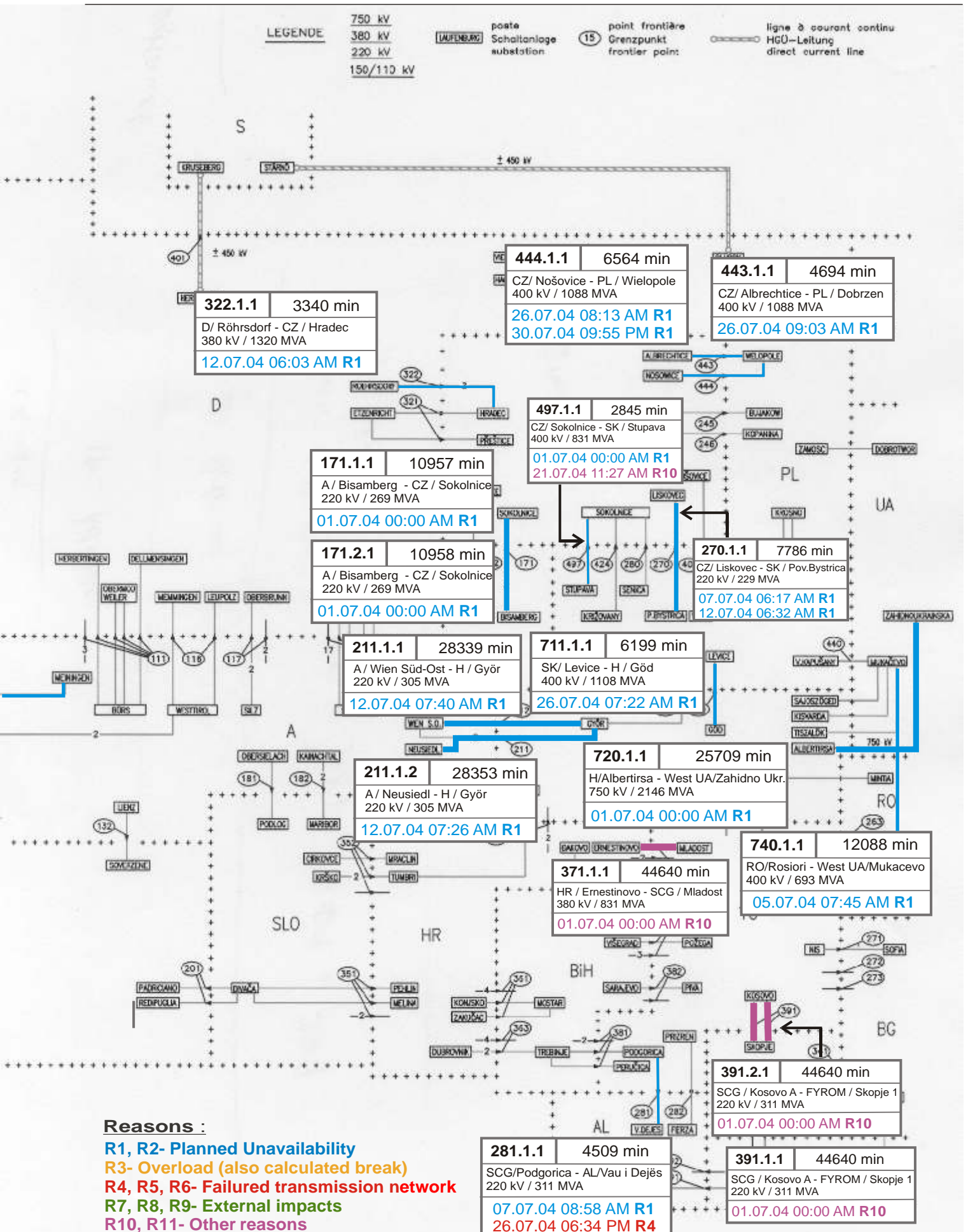
E = Export balance





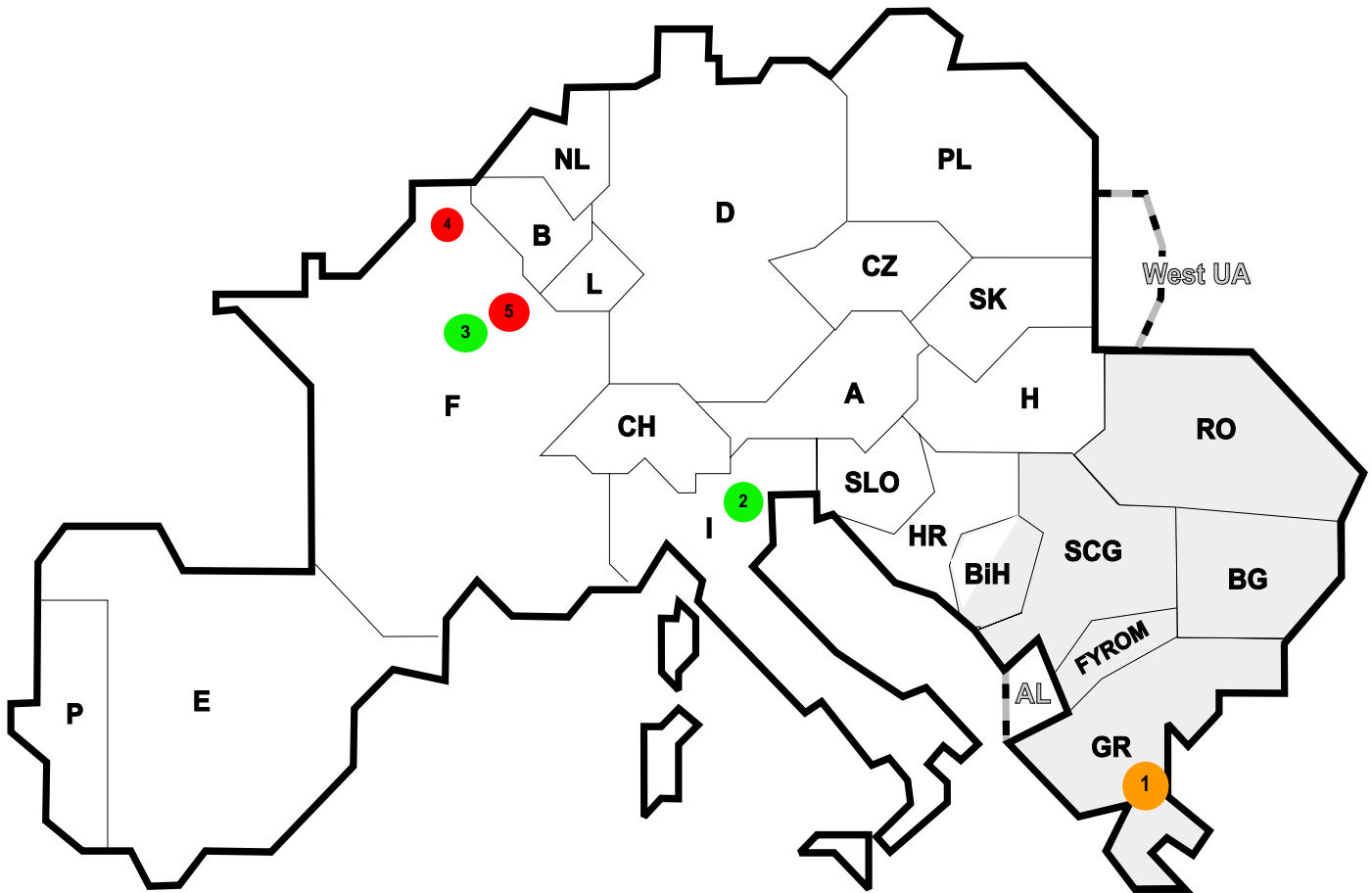
Reasons :

- R1, R2- Planned Unavailability
- R3- Overload (also calculated break)
- R4, R5, R6- Failed transmission network
- R7, R8, R9- External impacts
- R10, R11- Other reasons



Reasons :

- R1, R2- Planned Unavailability
- R3- Overload (also calculated break)
- R4, R5, R6- Failed transmission network
- R7, R8, R9- External impacts
- R10, R11- Other reasons



Reasons:

R4 Overload (also calculated brake)

R5 False operation

R6 Failure in protection device or other element

R7 Outside impacts (animals, fire, avalanches,...)

R8 Very exceptional conditions (weather, natural disaster,...)

R9 Other reasons

R10 Unknown reasons

Nbr	Country	Substation	Reason	Energy not supplied [MWh]	Total loss of power [MW]	Restoration time [min]	Equivalent time of interruption ¹
1	GR	Substations in the south of Greece	R4	13500	4500	180	141,41
2	I	Fratta	R7	150	415	22	0,25
3	F	Pusy	R8	34	11	188	0,04
4	F	Brode	R6	22	2	676	0,02
5	F	Champs-Regnaud	R5	2	12	9	0,00

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

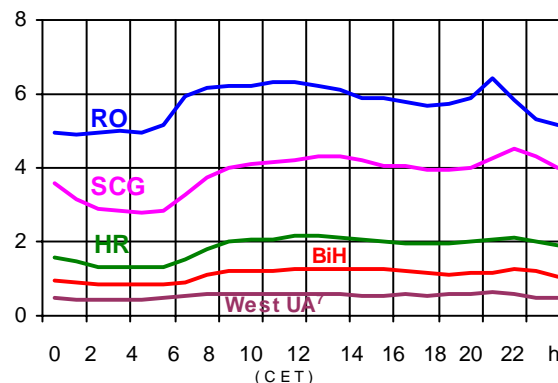
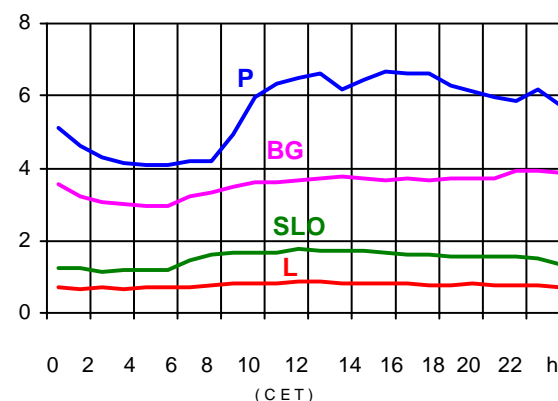
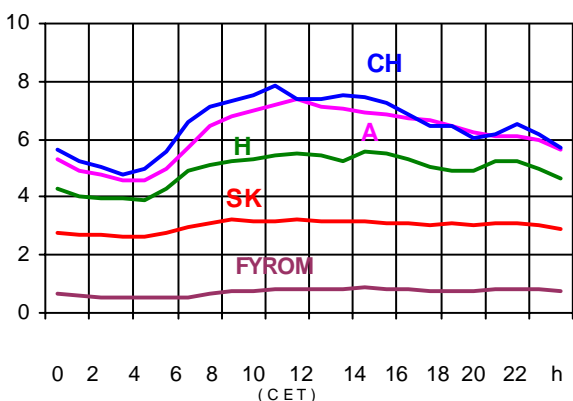
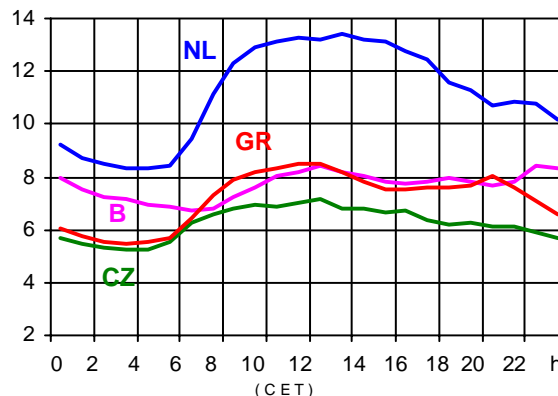
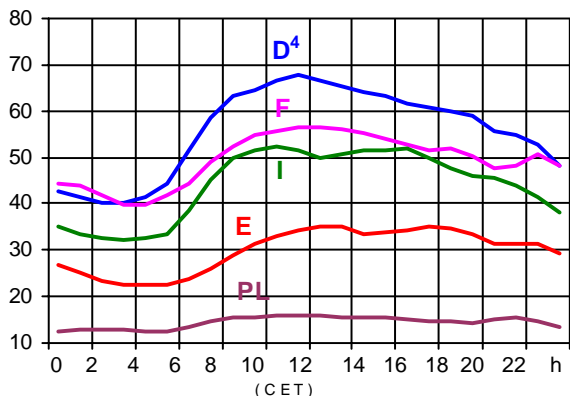
Control area	Export Programs	Import Programs	Export Programs at 03:00	Import Programs at 03:00	Export Programs at 11:00	Import Programs at 11:00
B	576450	429117	955	8	1047	124
D	2122124	3804203	2720	3760	2699	6879
E	998723	744675	1470	1200	1117	1682
F	7155810	2691345	10467	3493	9748	4378
GR	750	500692	0	419	0	827
I	172988	3712052	39	4909	625	5295
SLO	581192	409016	867	508	684	542
HR	230433	515277	259	386	266	314
BiH	160627	104889	206	70	181	100
FYROM	7500	92300	209	256	297	452
SCG	423158	492925	570	474	619	810
NL	610933	1749072	680	2332	1172	2689
A	400594	543046	739	333	872	730
P	69083	732687	0	1250	696	1098
CH	3042275	1583840	2410	1883	6243	2211
CZ	2049457	508523	2934	552	2871	1132
H	184127	847551	321	1067	223	1450
PL	755505	203681	596	355	1855	150
SK	564455	381999	705	389	850	855
RO	513360	324496	690	468	690	518
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
West UA ¹	264236	0	378	0	494	0

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

¹ West UA represents the so-called Burshtyn Island synchronously interconnected with UCTE

Consumption hourly load curves ' on 21.07.04

Values in GW



	Peak load MW	Δ % ²	Load representativity ¹ %	Parallel power ³ MW
B	8416	-18,2	100	9039
D	67800	0,7	91	73000
E	35326	10,7	94	35326
F	56407	-2,8	100	61428
GR ⁶	8507	-5,0	99	7432
I	52356	1,0	100	46194
SLO	1745	1,2	95	1799
HR	2177	9,5	100	2039
BIH	1281	3,4	99	1343
FYROM	847	4,7	100	626
SCG	4508	3,3	96	3945
L	862	4,4	99	818
NL	13405	6,9	90	11619
A	7388	3,6	82	7526
P	6643	8,7	93	5540
CH	7849	0,9	100	12228
CZ	7121	1,3	100	9123
H	5543	4,7	100	4345
PL	15841	-3,6	100	17253
SK	3197	0,2	100	3196
RO	6439	7,1	100	6331
BG	3937	0,3	100	4136
UCTE	313872	0,8		324286
DK ⁵				1375
West UA ⁷	613	12,3	100	1078

¹ Percentage as referred to total values in %

² Variation as compared to corresponding month of the previous year

³ Power produced in parallel operation (including autoproduction)

⁴ Values estimated on the basis of the vertical load. The vertical load is the total amount of the power flows out of the transmission network into distribution and large consumer networks.

⁵ Denmark (Jutland)

⁶ The representativity of data referring to the interconnected system is 99%. The representativity of data referring to the whole country including the isolated systems of the Greek island is 91%

⁷ West UA represents the so-called Burshtyn Island synchronously with the UCTE



Contact

Boulevard Saint-Michel, 15
B-1040 Brussels - Belgium
Tel +3227416940 - Fax +3227416949

info@ucte.org
www.ucte.org