

UCTE



March 2002

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

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| Countries | B | D | E | F | GR | I | SLO | HR | YU ⁴ | L | NL | A | P | CH | CZ | H | PL | SK | UCTE ⁵ |
|--|-------------------|--------------------|--------------------|--------|-------------------|--------|-------|------------------|-----------------|------|-------------------|------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|
| Net production in GWh¹ | | | | | | | | | | | | | | | | | | | |
| Hy | 135 | 2113 | 2308 | 5203 | 175 | 2776 | 297 | 431 | 1107 | 78 | 0 | n.a. | 850 | 2250 | 383 | 5 | 416 | 523 | 19050 |
| Tn | 4138 | 13336 | 4207 | 35584 | - | - | 157 | 0 | 0 | 0 | 337 | n.a. | 0 | 2377 | 1248 | 1117 | 0 | 1354 | 63855 |
| Tc | 2630 | 30051 | 10844 | 4626 | 3392 | 19473 | 423 | 515 | 2824 | 75 | 8119 | n.a. | 2668 | 235 | 4770 | 1767 | 12126 | 776 | 105314 |
| Total | 6903 ² | 45500 ² | 17359 ² | 45413 | 3567 ² | 22249 | 877 | 946 ² | 3931 | 153 | 8456 ² | n.a. | 3518 ² | 4862 ² | 6401 ² | 2889 ² | 12542 ² | 2653 ² | 188219 |
| Exchange balance in GWh | | | | | | | | | | | | | | | | | | | |
| Imp. = + | 507 | -158 | 722 | -6958 | 267 | 4610 | -116 | 324 | 237 | 464 | 1382 | n.a. | -21 | 410 | -1007 | 311 | -466 | -308 | 200 |
| Exp. = - | | | | | | | | | | | | | | | | | | | |
| Consumption of pumps in GWh | | | | | | | | | | | | | | | | | | | |
| | 113 | 476 | 466 | 599 | 95 | 869 | 0 | 2 | 115 | 87 | 0 | n.a. | 37 | 120 | 33 | 0 | 195 | 24 | 3231 |
| Consumption in GWh¹ | | | | | | | | | | | | | | | | | | | |
| monthly | | | | | | | | | | | | | | | | | | | |
| | 7297 | 44866 | 17615 | 37856 | 3739 | 25990 | 761 | 1268 | 4053 | 530 | 9838 | n.a. | 3460 | 5152 | 5361 | 3200 | 11881 | 2321 | 185188 |
| Δ ³ [%] | -4,0 | -0,4 | 2,2 | -1,1 | 4,1 | -0,8 | -21,4 | 3,1 | 0,5 | -2,8 | 5,5 | n.a. | -0,8 | -1,4 | -3,1 | 0,0 | -5,1 | -1,1 | -0,6 |
| last 12 months | | | | | | | | | | | | | | | | | | | |
| | 82910 | 496189 | 207626 | 437914 | 46589 | 306535 | 10698 | 14689 | 44758 | 5929 | 108260 | n.a. | 40160 | 58082 | 58467 | 36833 | 133783 | 25845 | 2153841 |
| Δ ³ [%] | -0,5 | 0,3 | 5,4 | 2,8 | 8,0 | 2,4 | -4,3 | 7,7 | 4,6 | 1,3 | 5,8 | n.a. | 4,9 | 2,8 | 2,4 | 2,8 | -1,0 | 1,9 | 2,3 |
| Energy capability factor | | | | | | | | | | | | | | | | | | | |
| | - | 1,34 | - | - | 0,48 | 0,65 | 1,02 | 0,67 | 0,85 | - | - | n.a. | 0,73 | 1,11 | - | - | - | 1,15 | 0,9 |

¹ Percentage as referred to total values in %

| Countries | B | D | E | F | GR ⁶ | I | SLO | HR | YU | L | NL | A | P | CH | CZ | H | PL | SK |
|-------------|-----|----|----|----|-----------------|-----|-----|-----|----|----|-----|------|----|-----|-----|-----|-----|----|
| Production | 100 | 93 | 94 | 97 | 91 | 100 | 95 | 100 | 96 | 98 | 100 | n.a. | 91 | 100 | 100 | 100 | 100 | |
| Consumption | 100 | 93 | 94 | 97 | 91 | 100 | 95 | 100 | 96 | 99 | 100 | n.a. | 91 | 100 | 100 | 100 | 100 | |

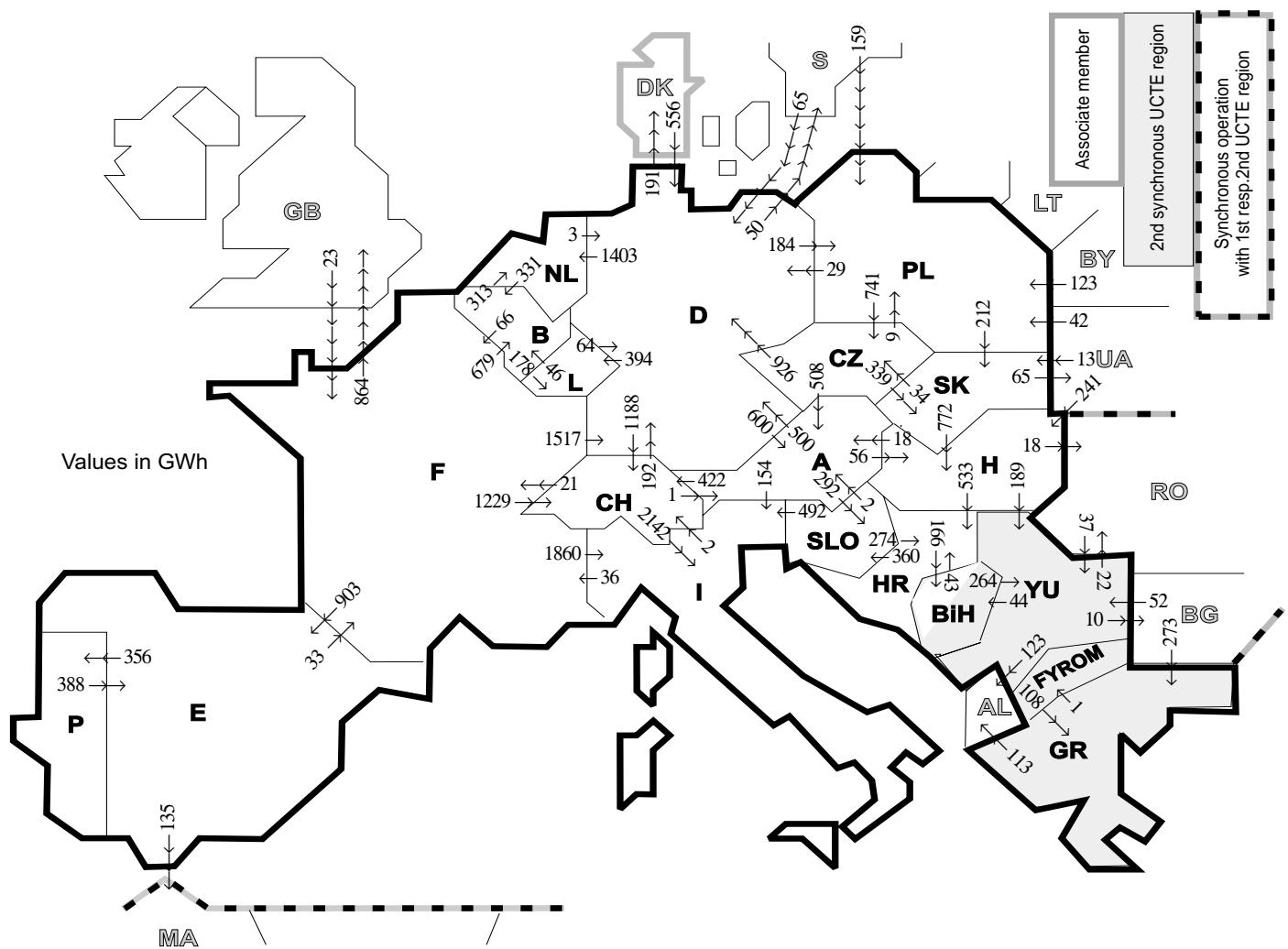
² Including deliveries from industry

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

⁴ YU = FRY + FYROM (Federal Republic of Yugoslavia and Former Yugoslav Republic of Macedonia)

⁵ Without monthly values for Austria

⁶ The representativity of data referring to the whole country including the isolated systems of the Greek island is 91%.
The representativity of data referring to the mainland interconnected system is 98%.



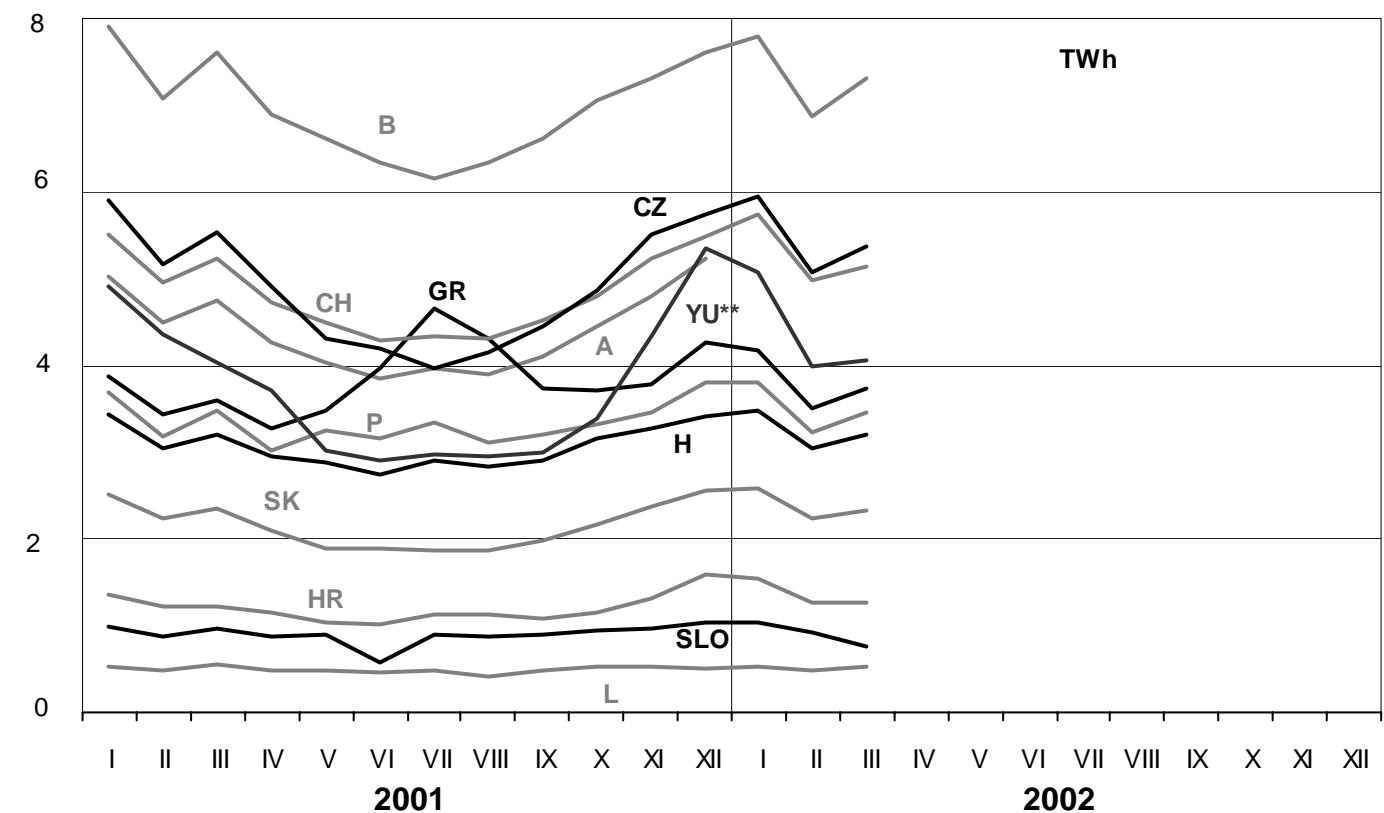
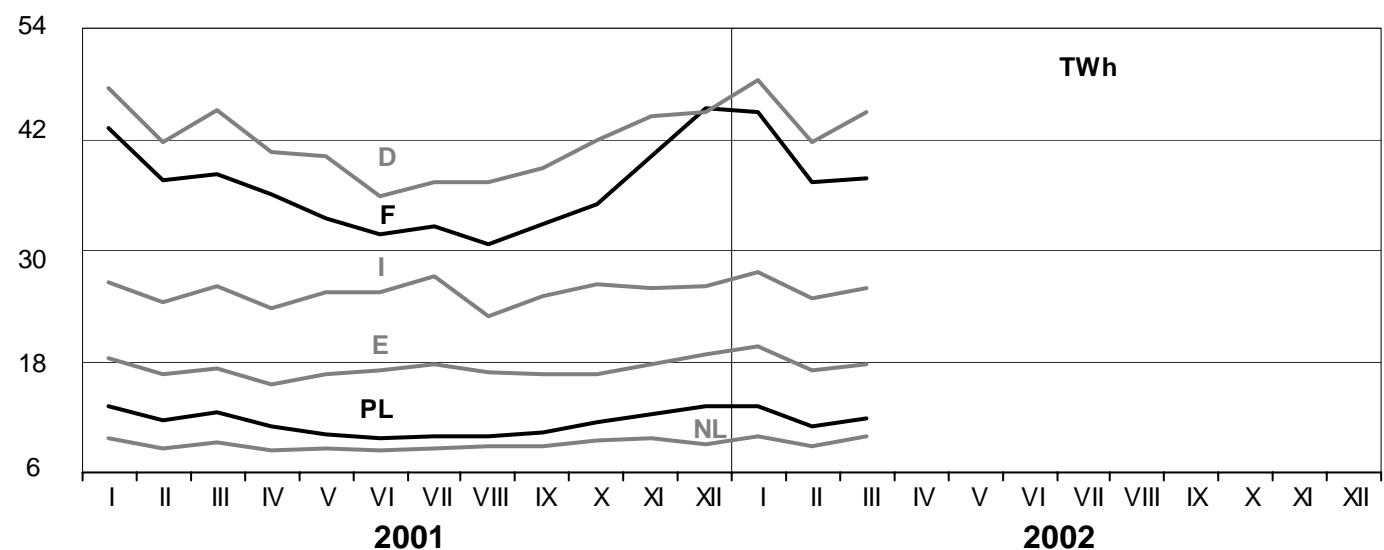
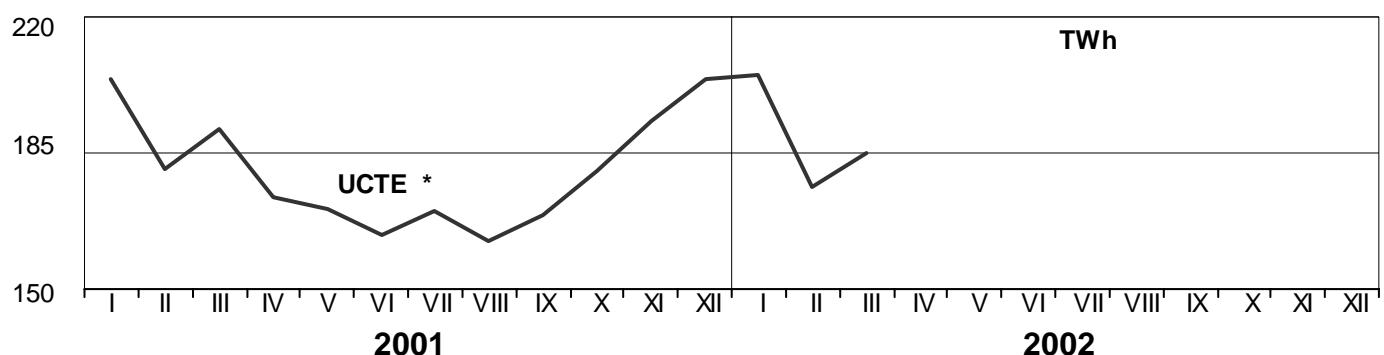
| Exporting countries | Importing countries | | | | | | | | | | | | | | | | | | | Σ Export | |
|---------------------|---------------------|------|------|-----|-----|------|-----|-----|-----|-----|-----|------|------|-----|------|-----|------|-----|-----|------------------|-------|
| | B | D | E | F | GR | I | SLO | HR | BiH | YU | L | NL | A | P | CH | CZ | H | PL | SK | III ¹ | |
| B | - | - | - | - | 66 | - | - | - | - | - | 178 | 313 | - | - | - | - | - | - | - | - | 557 |
| D | - | - | - | - | 0 | - | - | - | - | - | 394 | 1403 | 600 | - | 1188 | 0 | - | 184 | - | - | 4010 |
| E | - | - | - | - | 33 | - | - | - | - | - | - | - | - | 356 | - | - | - | - | - | - | 524 |
| F | 679 | 1517 | 903 | - | - | 1860 | - | - | - | - | - | - | - | - | 1229 | - | - | - | - | - | 7052 |
| GR | - | - | - | - | - | 0 | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | 864 |
| I | - | - | - | - | 36 | 0 | - | 0 | - | - | - | - | - | 0 | - | 2 | - | - | - | - | 114 |
| SLO | - | - | - | - | - | 492 | - | 274 | - | - | - | - | 2 | - | - | - | - | - | - | - | 768 |
| HR | - | - | - | - | - | - | 360 | - | 166 | 0 | - | - | - | - | - | - | 0 | - | - | - | 526 |
| BiH | - | - | - | - | - | - | - | 43 | - | 264 | - | - | - | - | - | - | - | - | - | - | 307 |
| YU | - | - | - | - | - | 108 | - | - | 0 | 44 | - | - | - | - | - | - | 0 | - | - | - | 307 |
| L | 46 | 64 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 110 |
| NL | 331 | 3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 334 |
| A | - | 500 | - | - | - | 154 | 292 | - | - | - | - | - | - | 422 | 0 | 56 | - | - | - | - | 1424 |
| P | - | - | 388 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 388 |
| CH | - | 192 | - | 21 | - | 2142 | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | 2356 |
| CZ | - | 926 | - | - | - | - | - | - | - | - | - | 508 | - | - | - | - | 9 | 339 | - | - | 1782 |
| H | - | - | - | - | - | - | - | 533 | - | 189 | - | - | 18 | - | - | - | - | 0 | 18 | - | 758 |
| PL | - | 29 | - | - | - | - | - | - | - | - | - | - | - | - | 741 | - | - | 212 | 0 | - | 982 |
| SK | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 34 | 772 | 0 | - | 65 | - | 871 |
| III ¹ | - | 621 | 0 | 23 | 273 | - | - | - | - | 89 | - | - | - | - | - | 241 | 324 | 13 | - | - | 1584 |
| Σ Import | 1056 | 3852 | 1291 | 179 | 381 | 4648 | 652 | 850 | 210 | 543 | 572 | 1716 | 1129 | 356 | 2841 | 775 | 1069 | 517 | 564 | 1591 | 24792 |

Sum of physical energy flows between UCTE countries = 21617 GWh

¹ III = Third countries

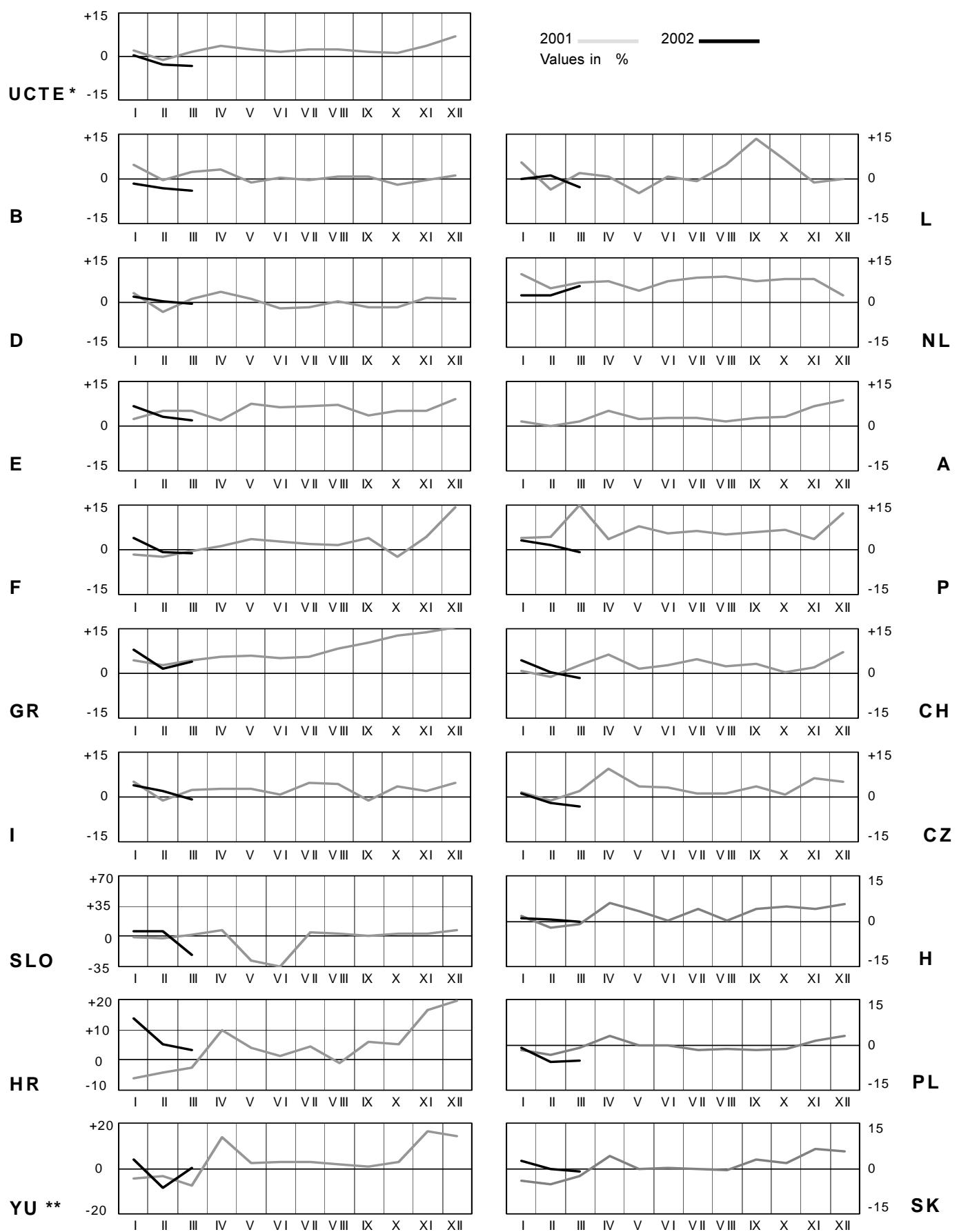
Total physical energy flows = 24792 GWh

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.



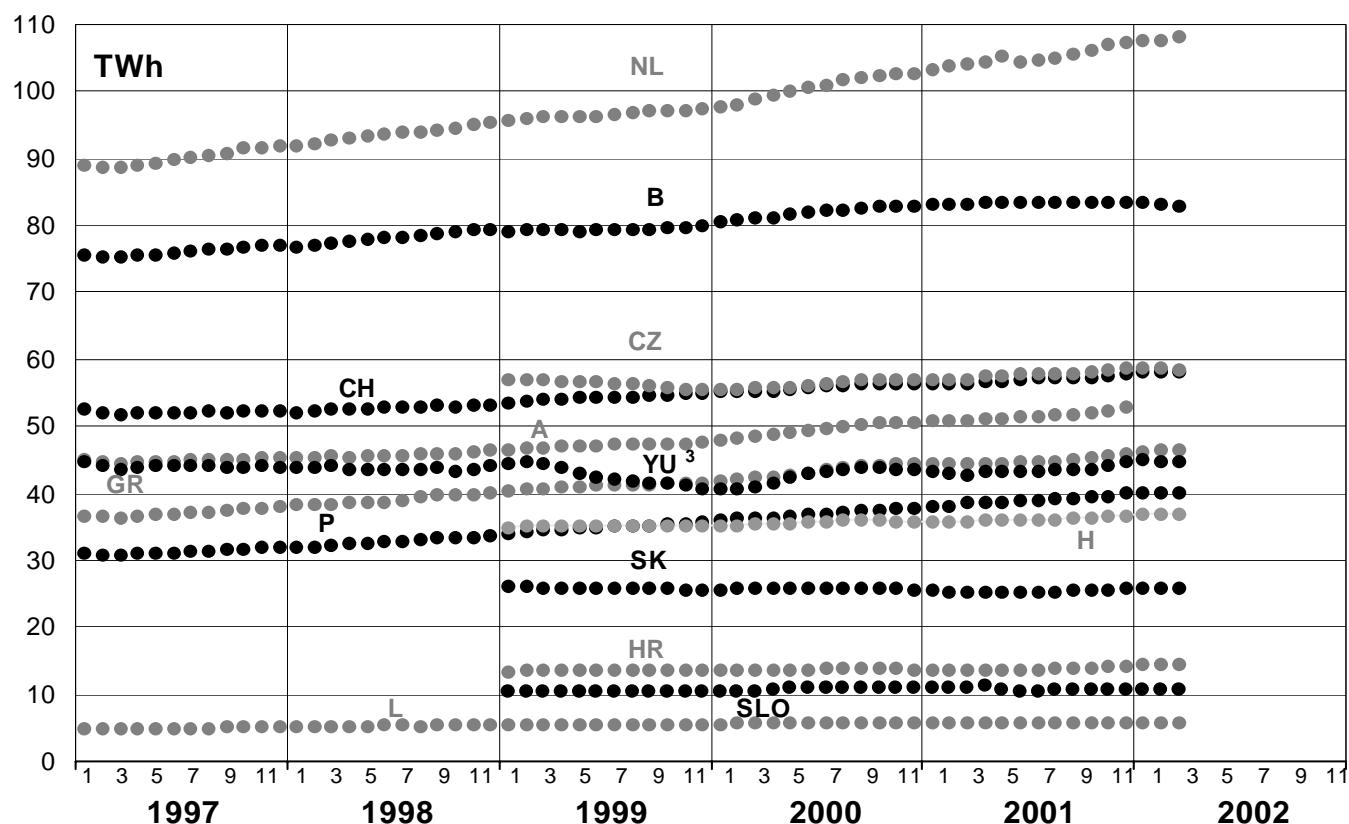
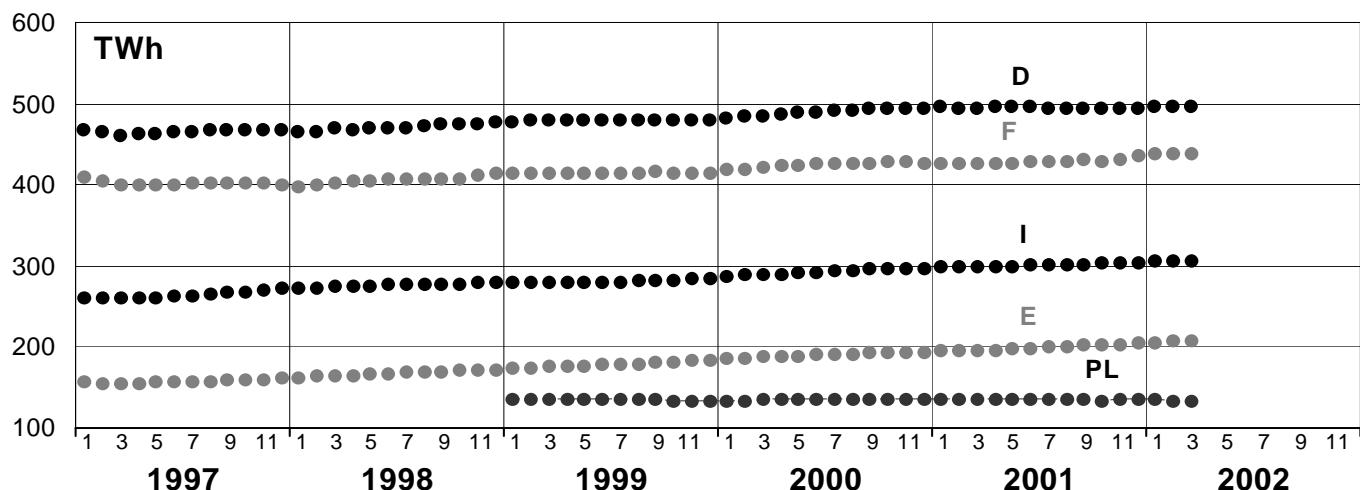
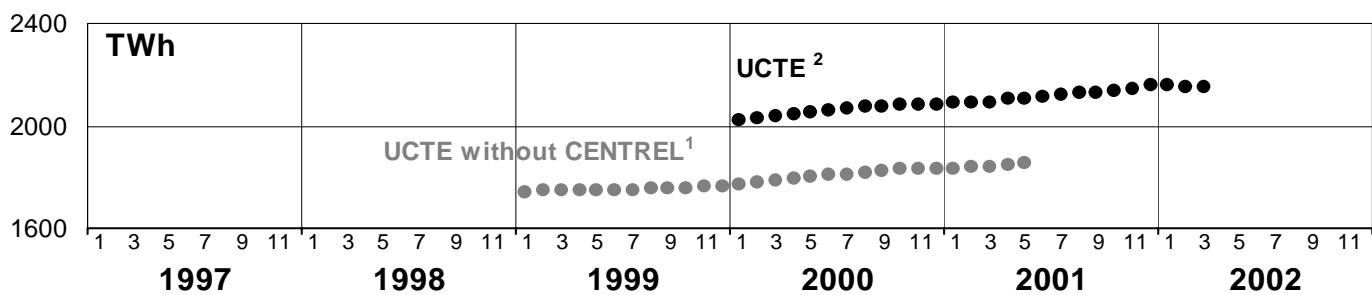
* Without consumption values for Austria in the year 2002

** YU = FRY + FYROM (Federal Republic of Yugoslavia and Former Yugoslav Republic of Macedonia)



* Without consumption values for Austria in the year 2002

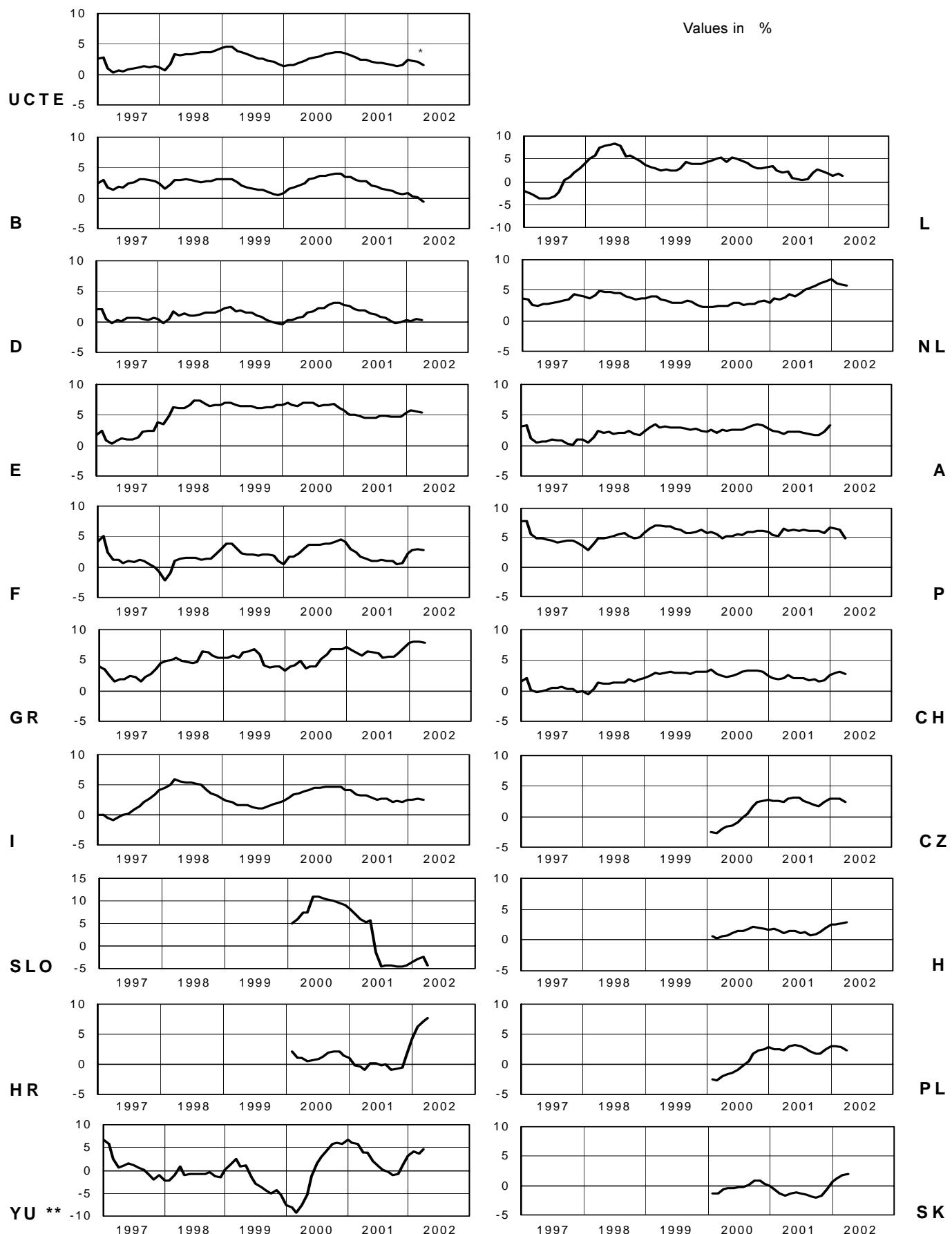
** YU = FRY + FYROM (Federal Republic of Yugoslavia and Former Yugoslav Republic of Macedonia)



¹ CENTREL countries CZ, H, PL, SK member of UCTE from May 2001

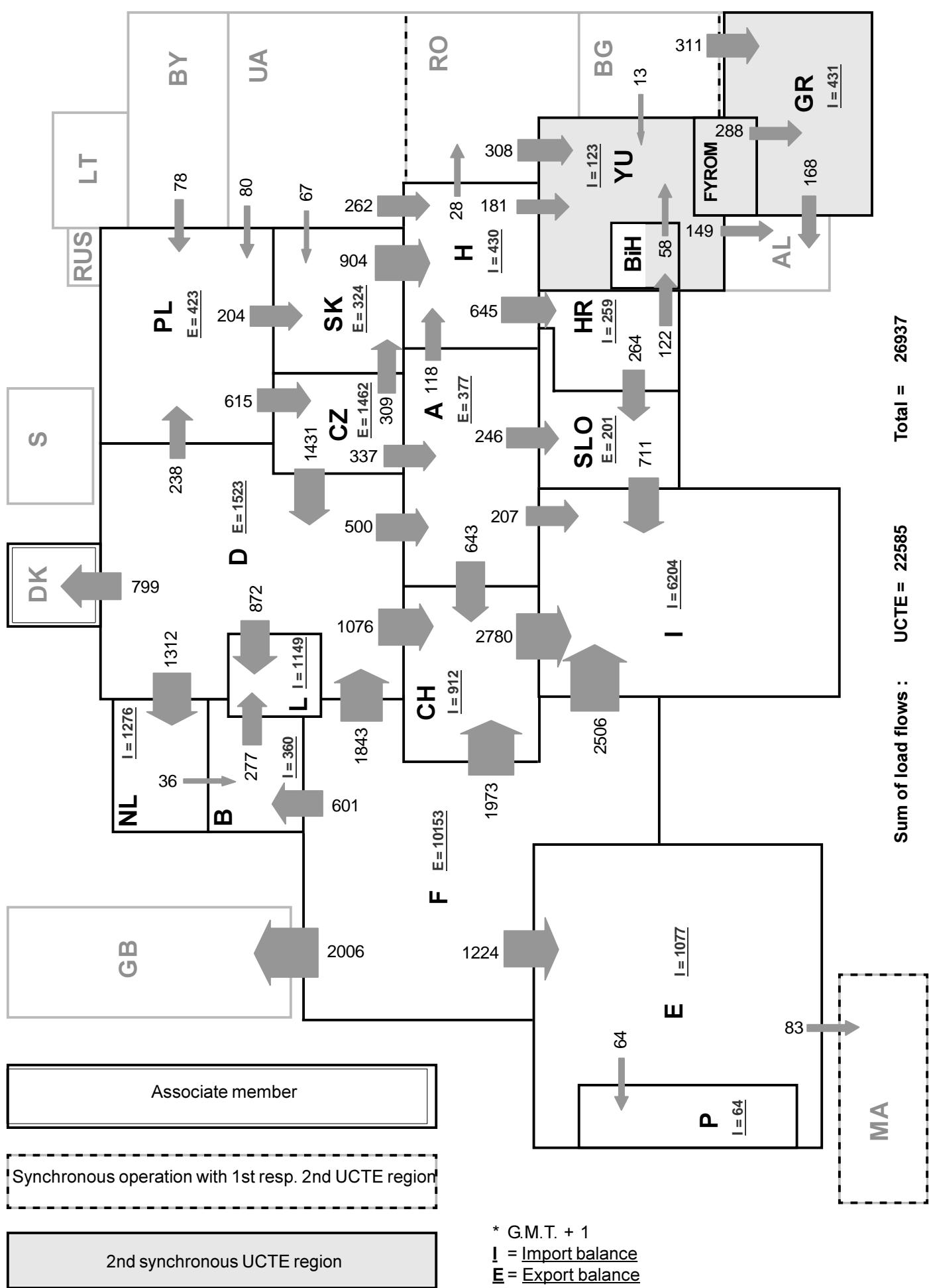
² Without consumption values for Austria in the year 2002

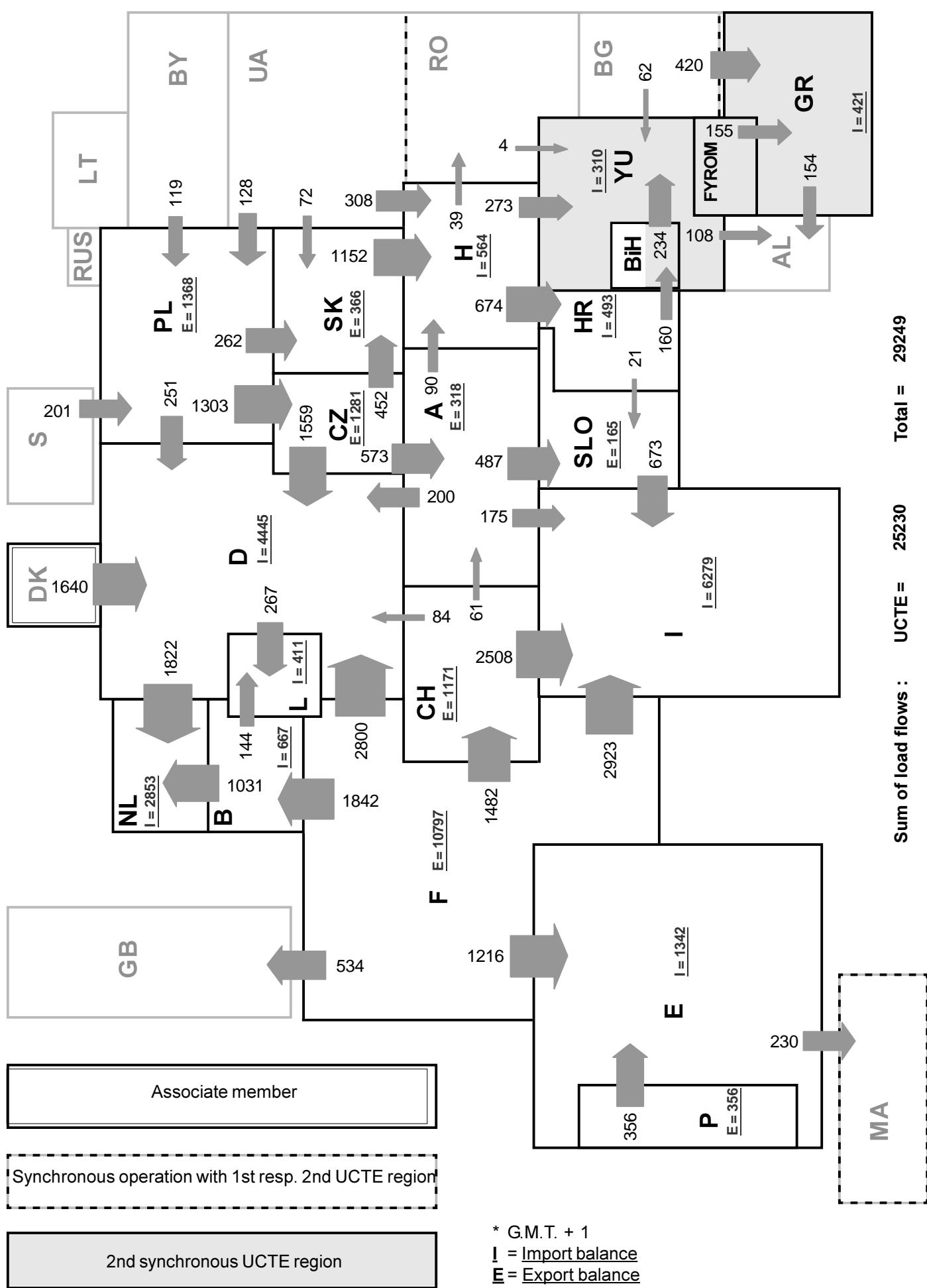
³ YU = FRY + FYROM (Federal Republic of Yugoslavia and Former Yugoslav Republic of Macedonia)

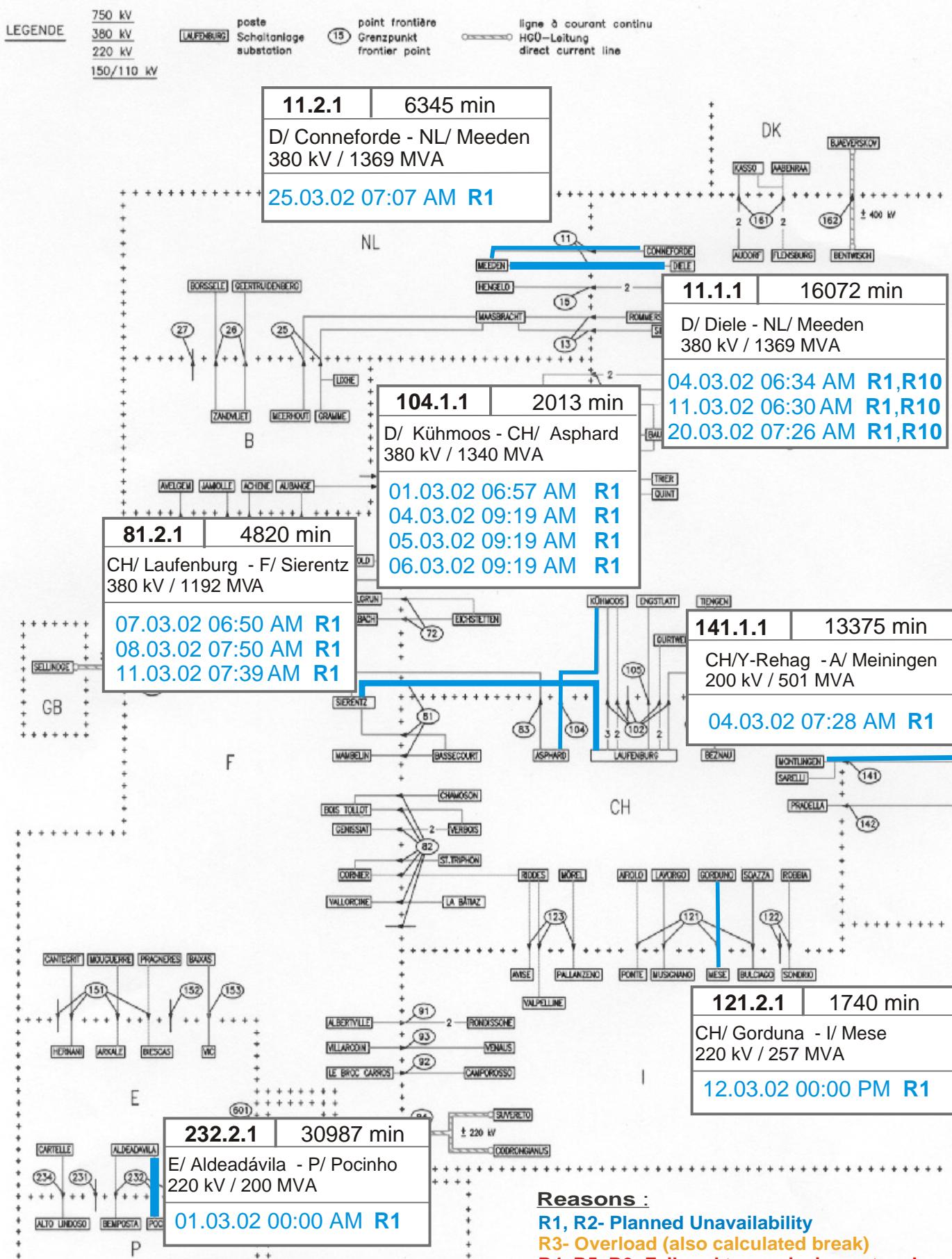


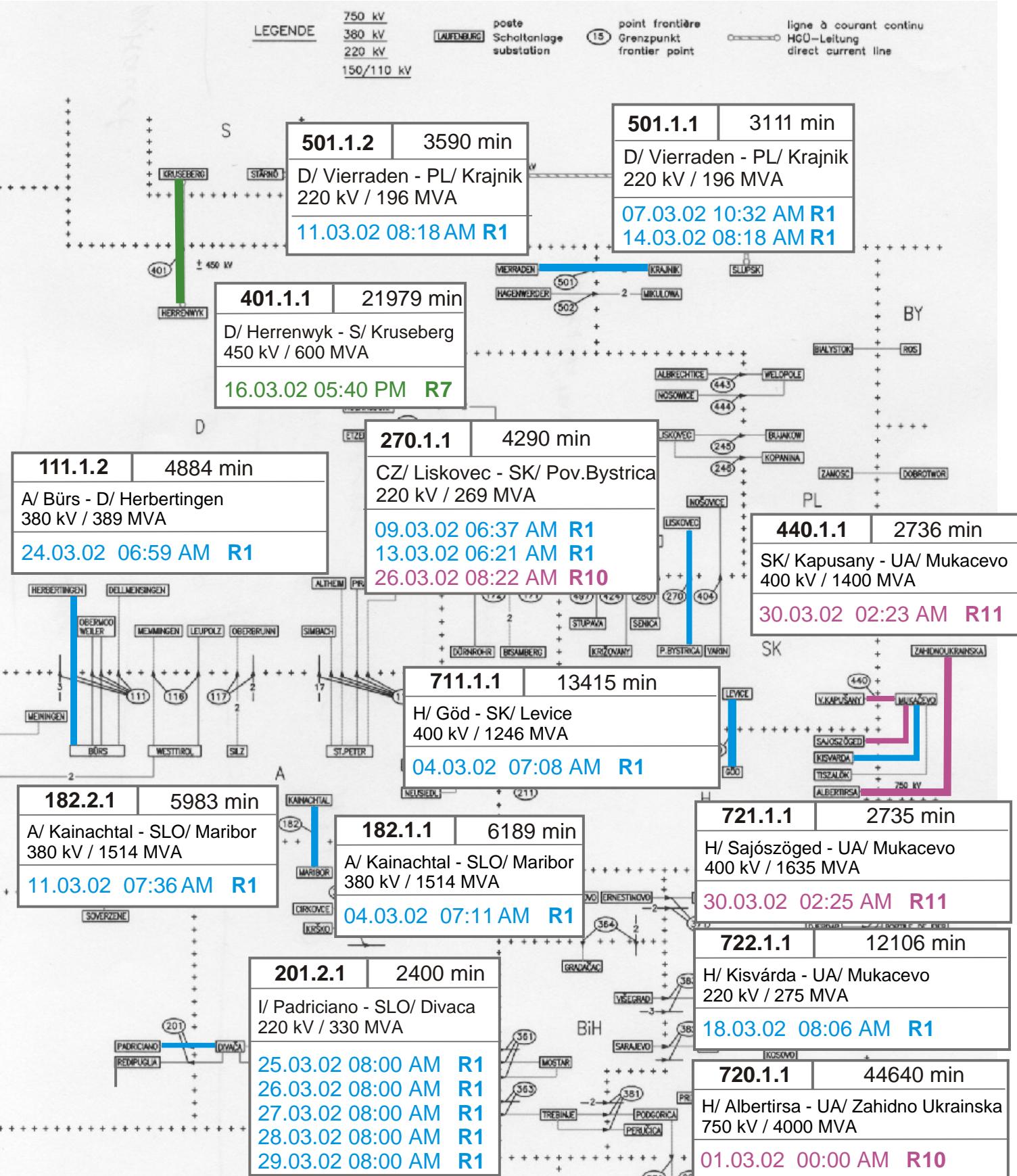
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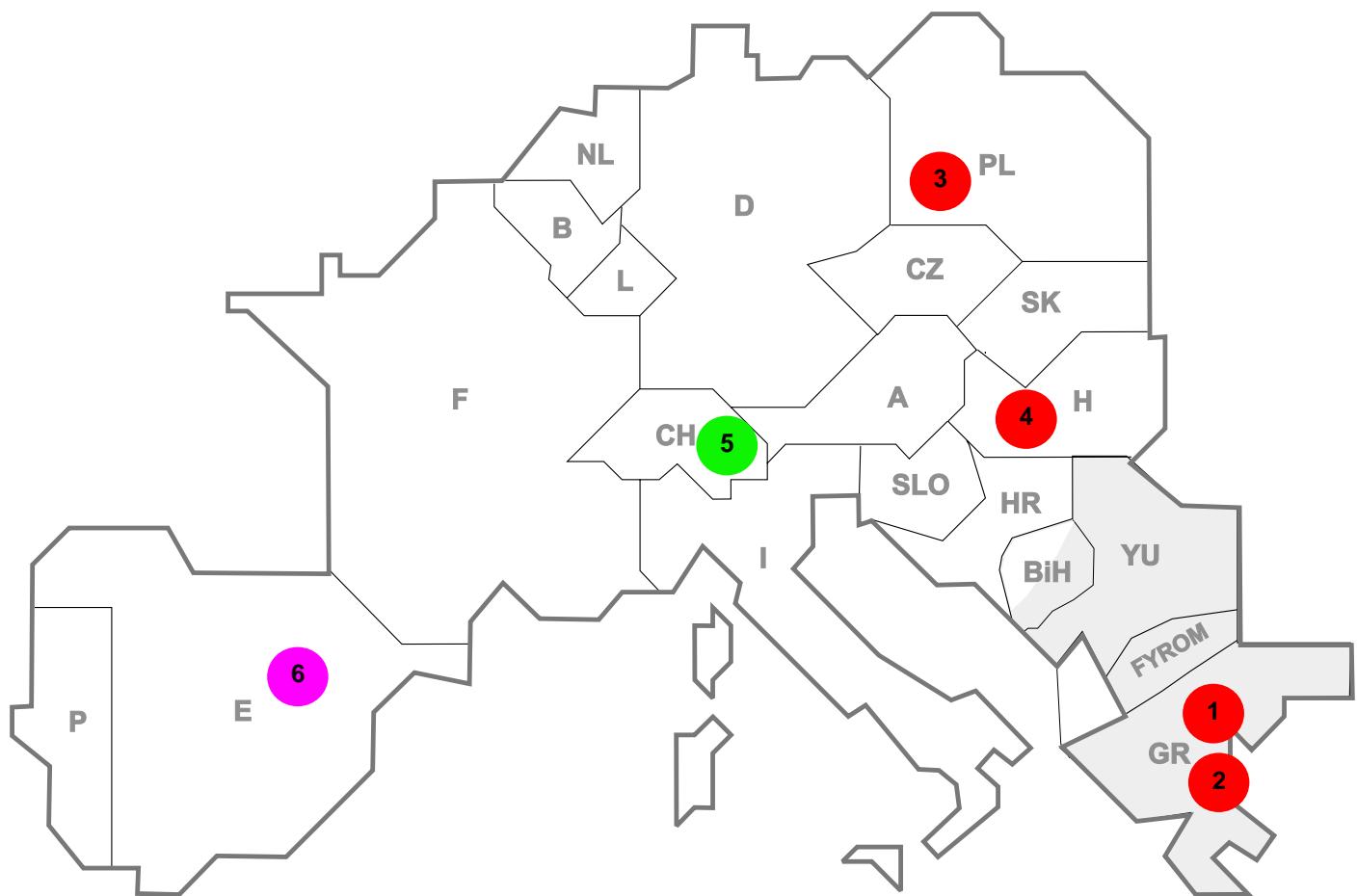
** YU = FRY + FYROM (Federal Republic of Yugoslavia and Former Yugoslav Republic of Macedonia)







**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:

R3 Overload

R4, R5, R6 Failure in the transmission network

R7, R8, R9 External impacts (animals...)

R10, R11 Other reasons

| nbr | Country | Substation | Reason | Energie not supplied [MWh] | Total loss of power [MW] | Restoration time [min] | Equivalent time of interruption ¹ |
|-----|---------|--------------|--------|---------------------------------|-------------------------------|--------------------------|---|
| 1 | GR | Ag.Demetrios | R5 | 900 | 900 | 30 | 10,14 |
| 2 | GR | Ag.Demetrios | R6 | 900 | 900 | 30 | 10,14 |
| 3 | PL | Starno | R6 | 340 | 600 | 102 | 2,36 |
| 4 | H | Sajoszöged | R5 | 150 | 150 | 60 | 2,14 |
| 5 | CH | Laufenburg | R8 | 0 | 44 | 27 | 0,40 |
| 6 | E | Mudarra | R11 | 0 | 53 | 4 | 0,13 |

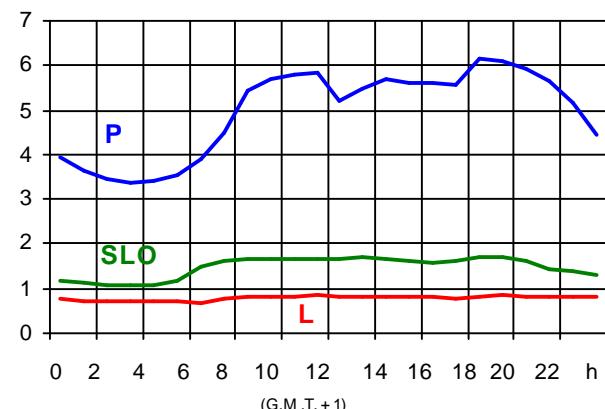
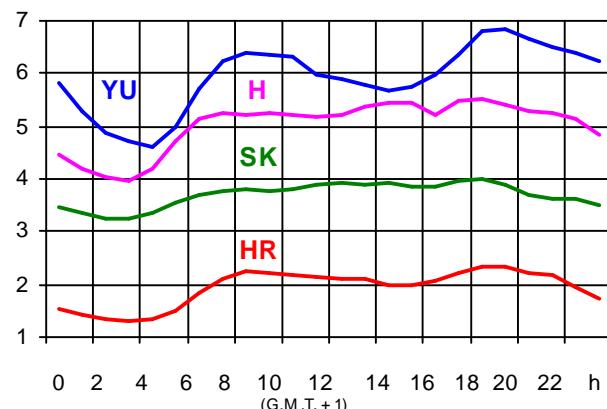
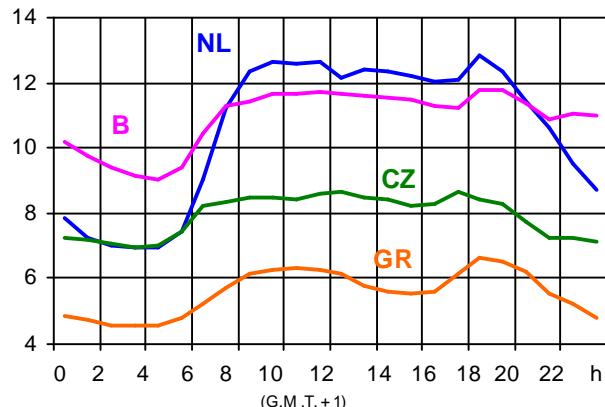
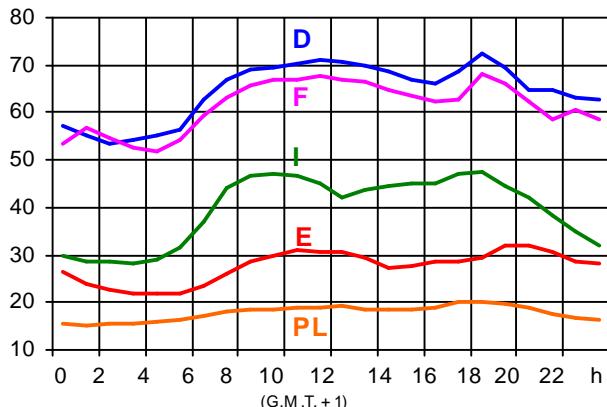
¹ (year [in min] * power loss) / consumption last 12 months

| Control area | Prog_exp | Prog_imp | Prog_exp3 | Prog_imp3 | Prog_exp11 | Prog_imp11 |
|--------------|----------|----------|-----------|-----------|------------|------------|
| B | 401352 | 1105375 | 642 | 1310 | 422 | 1344 |
| D | 2672177 | 2194312 | 2490 | 2660 | 2577 | 6296 |
| E | 211283 | 936902 | 167 | 1200 | 270 | 1539 |
| F | 8296319 | 1427739 | 11688 | 1676 | 11821 | 1178 |
| GR | 6700 | 235973 | 0 | 316 | 0 | 440 |
| I | 38476 | 4633576 | 0 | 6204 | 5 | 6284 |
| SLO | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| HR | 123699 | 447386 | 137 | 362 | 180 | 599 |
| YU | 346547 | 576693 | 635 | 721 | 590 | 888 |
| NL | 500021 | 1890926 | 792 | 2075 | 183 | 3077 |
| A | 817992 | 627213 | 620 | 1302 | 760 | 1961 |
| P | 133010 | 102095 | 0 | 44 | 500 | 158 |
| CH | 2030155 | 2424362 | 2928 | 4033 | 3881 | 2696 |
| CZ | 1616192 | 511386 | 2188 | 661 | 2185 | 714 |
| H | 610062 | 910615 | 584 | 1029 | 919 | 1434 |
| PL | 688253 | 200059 | 593 | 80 | 1571 | 329 |
| SK | 609960 | 297435 | 620 | 270 | 850 | 460 |

- 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.
- Prog_exp: Sum of all positive values of every hour of every border
- Prog_imp: Sum of all negative values of every hour of every border
- Prog_exp3: Sum of all positive values the third Wednesday from 02:00 to 03:00 a.m.
- Prog_imp3: Sum of all negative values the third Wednesday from 02:00 to 03:00 a.m.
- Prog_exp11: Sum of all positive values the third Wednesday from 10:00 to 11:00 a.m.
- Prog_imp11: Sum of all negative values the third Wednesday from 10:00 to 11:00 a.m.
- YU = FRY + FYROM (Federal Republic of Yugoslavia and Former Yugoslav Republic of Macedonia)

**Consumption hourly load curves¹ on
20.02.02**

Values in GW



Peak load on 3rd Wednesday¹

| 20.02.02 | B | D | E | F | GR | I | SLO | HR | YU ⁵ | L | NL | A | P | CH | CZ | H | PL | SK | UCTE ⁷ |
|------------------|-------|-------|-------|-------|------|-------|------|------|-----------------|------|-------|------|------|------|------|------|-------|------|-------------------|
| MW | 12087 | 72500 | 31905 | 68388 | 7279 | 47341 | 1717 | 2323 | 6847 | 855 | 12806 | n.a. | 6168 | n.a. | 8677 | 5536 | 20033 | 4000 | 304590 |
| Δ % ² | -0,8 | 1,0 | 7,2 | 11,2 | 2,8 | 1,5 | 6,1 | 3,0 | -9,6 | -0,5 | 2,4 | n.a. | 7,8 | n.a. | -5,7 | -1,4 | -2,7 | 0,7 | 3,5 |

Power produced in parallel operation³

| 20.02.02 | B | D | E | F | GR | I | SLO | HR | YU ⁵ | L | NL | A | P | CH | CZ | H | PL | SK | Others ⁴ | UCTE ⁷ |
|----------|-------|-------|-------|-------|------|-------|------|------|-----------------|-----|------|------|------|------|-------|------|-------|------|---------------------|-------------------|
| MW | 10905 | 77600 | 30033 | 74278 | 5817 | 40414 | 1806 | 2187 | 5006 | 821 | 9781 | n.a. | 5562 | n.a. | 10869 | 4777 | 20691 | 4360 | 2430 | 304907 |

¹ Percentage as referred to total values in %

| B | D | E | F | GR ⁶ | I | SLO | HR | YU ⁵ | L | NL | A | P | CH | CZ | H | PL | SK |
|-----|----|----|----|-----------------|-----|-----|-----|-----------------|----|----|------|----|-----|-----|-----|-----|-----|
| 100 | 91 | 94 | 97 | 91 | 100 | 95 | 100 | 96 | 99 | 90 | n.a. | 87 | 100 | 100 | 100 | 100 | 100 |

² Variation as compared to corresponding month of the previous year

³ Including autoproduction

⁴ Denmark (Jutland)

⁵ YU = FRY + FYROM (Federal Republic of Yugoslavia and Former Yugoslav Republic of Macedonia)

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

The representativity of data referring to the mainland interconnected system is 98%.

⁷ Without values for Austria and Switzerland

Existing lines with towers for lines with 2 circuits mounted

| | B | B | E | E | DE | I | SLO | HR | SL | 70 | L | R | A | P | CH | CZ | H | PL | GR | DE | |
|---|------|------|------|------|-------|------|-------|------|------|------|------|------|-------|-------|-----|------|-------|------|------|------|------|
| B | 2910 | 2940 | -52- | 3880 | -873 | 2550 | 16435 | 1287 | 3250 | 1568 | 4231 | 3525 | 17288 | 140 | 159 | 6294 | 9525 | 3115 | 7384 | 3891 | 6803 |
| D | 2080 | 4260 | 1028 | 4787 | -4093 | 180 | 4468 | 1249 | 4607 | 4035 | 2116 | 3627 | 6400 | -1571 | 829 | 5122 | 16018 | 3496 | 5016 | 3671 | 4626 |

| | F | I | SLO | HR | JIEL | L | NL | A | P | CH | CZ | H | PL | GR |
|------|-----|---|-----|----|------|-----|-----|-----|-----|-----|-----|---|----|----|
| B | 2/2 | | | | | 2/- | -/4 | | | | | | | |
| D | 2/4 | | | | | 8/- | -/6 | 9/3 | | 5/7 | -/4 | | | |
| E | 2/2 | | | | | | | | 3/2 | | | | | |
| F | 3/3 | | | | | | | | | 5/5 | | | | |
| GR | -/1 | | | | | -/1 | | | | | | | | |
| I | 1/1 | | | | | | | 1/- | 6/2 | | | | | |
| SLO | 2/3 | | | | | | | 1/2 | | | | | | |
| HR | 7/3 | | | | | | | | | | | | | |
| JIEL | | | | | | | | | | | | | | |
| A | | | | | | | | 1/2 | | | | | | |
| CH | | | | | | | | | | | | | | |
| CZ | | | | | | | | | | | | | | |
| H | | | | | | | | | | | | | | |
| PL | | | | | | | | | | | | | | |



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