August 2004

Monthly provisional values

union for the co-ordination of transmission of electricity
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1 Monthly provisional values from the UCTE database as of 22 November 2004
## Electricity supply situation of the countries

### August 2004

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<th>Exchange balance</th>
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<sup>1</sup> Percentage as refered to total values in %

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

<sup>3</sup> Variation as compared to corresponding period of the previous year and representativity 100%

<sup>4</sup> The representivity of data referring to the interconnected system is 99%

<sup>5</sup> The representivity of data referring to the whole country including the isolated systems of Greek island is 91%

<sup>6</sup> Values for 2003 are gross values, values for 2004 are net values.

<sup>6</sup> 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.

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### Physical energy flows

| Importing countries | B | D | E | F | GR | I | SLO | HR | BiH | FY-ROM | SCG | L | NL | A | P | CH | CZ | H | PL | SK | RO | BG | DK West | I | West UA |
|---------------------|---|---|---|---|----|---|-----|----|-----|--------|-----|---|----|---|---|----|----|---|---|---|---|------|   |         |
| B                   |  - | 78 |   |   | 98 | 586 |   |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   |      |   |         |
| D                   |  - | 6  |   |   | 385 | 927 | 328 | 671 | 185 | 304   | 272 |   |   |   |   |    |    |   |   |   |   |   | 3078  |   |         |
| E                   | 66 | 466| 373|   | 753 | 655 |   |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 939   |   |         |
| F                   | 856| 1672| 366| 1162|    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 5607  |   |         |
| GR                  | 88 | 82 | 0  | 2  | 3  |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 35    |   |         |
| I                   | 228| 233| 18 | 5  |    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 479   |   |         |
| SLO                 |   | 304| 91 | 0  |    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 395   |   |         |
| HR                  |   | 118| 47 |    |    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 165   |   |         |
| BiH                 |   | 58 |    |    |    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 58    |   |         |
| FY-ROM              |   | 11 | 15 | 143|    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 190   |   |         |
| SCG                 |   | 115| 124| 145|    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 275   |   |         |
| L                   | 215| 60 |    |    |    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 383   |   |         |
| NL                  | 156| 197|    |    |    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 895   |   |         |
| A                   | 427| 112| 145| 177| 0  | 34  |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 115   |   |         |
| P                   | 115| 234| 1150|    |    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 1832  |   |         |
| CH                  | 389| 150|    |    |    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 895   |   |         |
| CZ                  | 1027|    |    |    |    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 115   |   |         |
| H                   | 341| 1  | 65 |    | 95 | 551 | 96 | 291 | 0  | 467   |    |   |   |   |   |    |    |   |   |   |   |   | 427   |   |         |
| PL                  | 36 | 65 |    |    |    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 58    |   |         |
| SK                  | 38 | 142|    |    |    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 973   |   |         |
| RO                  | 65 | 171| 171| 103 | 109| 580| 0  | 616 |   | 226   |    |   |   |   |   |    |    |   |   |   |   |   | 780   |   |         |
| BG                  | 363| 0  | 142|    |    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 226   |   |         |
| DK West             | 167|    |    |    |    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 391   |   |         |
| I                   | 65 | 7  | 12 |    |    |    |    |    |    |        |     |   |    |   |   |    |    |   |   |   |   |   | 109   |   |         |
| West UA1            | 1257| 4040| 483| 749| 515| 2652| 451| 703| 168| 146| 361| 483| 1512| 1125| 753| 1568| 589| 1067| 292| 680| 173| 55| 639| 1741| 109| 21475 |

Sum of physical energy flows between UCTE countries = 18612 GWh

Total physical energy flows = 21475 GWh

1 Third countries: Albania, Belarus, Denmark East, Great Britain, Morocco, Norway, Republic of Moldavia, Sweden, Republic of Turkey and West Ukraine

2 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

August 2004

UCTE August 2004

TWh

I II III IV V VI VII VIII IX X XI XII

2003 2004

I II III IV V VI VII VIII IX X XI XII

2003 2004

TWh

D

F

I

E

PL

2003 2004

I II III IV V VI VII VIII IX X XI XII

2003 2004

TWh

NL

B

CH

A

P

UCTE August 2004
Monthly consumption

1 West UA represents the so-called Burshtyn Island synchronously interconnected with UCTE
4 Monthly consumption variation

UCTE

B

D

E

F

GR

I

SLO

HR

YU

2003 2004
Values in %

I II III IV V V I V II V III IX X X I X II

I II III IV V V I V II V III IX X X I X II

I II III IV V V I V II V III IX X X I X II

I II III IV V V I V II V III IX X X I X II

I II III IV V V I V II V III IX X X I X II

I II III IV V V I V II V III IX X X I X II

I II III IV V V I V II V III IX X X I X II

I II III IV V V I V II V III IX X X I X II

I II III IV V V I V II V III IX X X I X II

I II III IV V V I V II V III IX X X I X II

I II III IV V V I V II V III IX X X I X II

I II III IV V V I V II V III IX X X I X II

I II III IV V V I V II V III IX X X I X II

I II III IV V V I V II V III IX X X I X II

I II III IV V V I V II V III IX X X I X II

1 YU = FRY + FYROM (Federal Republic of Yugoslavia and former Yugoslav Republic of Macedonia)
Variation of the last 12 months’ consumption

Values in %

1 YU = FRY + FYROM (Federal Republic of Yugoslavia and former Yugoslav Republic of Macedonia)
Load flows (day) on 18.08.04 at 11:00* in MW

Associate member

Synchronous operation with 1st resp. 2nd UCTE region

2nd synchronous UCTE region

Sum of load flows in MW:

UCTE = 26840MW
Total = 29413MW

* Central European Time (CET)
** Denmark East
I = Import balance
E = Export balance
Unavailability of international tie lines
( major events with sum over 2500 minutes )

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
Unavailability of international tie lines
(major events with sum over 2500 minutes)

August 2004

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
### Network reliability (major events) August 2004

**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

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

**August 2004**

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<th>Import Programs</th>
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- 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
Load on the 3rd Wednesday
August 2004

Consumption hourly load curves on 18.08.04

<table>
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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. 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%
6. West UA represents the so-called Burshtyn Island synchronously with the UCTE

Values in GW