

## Statistical release

# Electricity generated and available for distribution (Preliminary)

September 2011

Embargoed until: 3 November 2011 13:00

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User Information Services Tel: (012) 310 8600 / 4892 /8390 Forthcoming issue:
October 2011

Expected release date:

1 December 2011

Statistics South Africa 1 P4141

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#### **Results for September 2011**

#### Table A – Selected key figures regarding electricity generated and available for distribution

| Actual estimates                            | September 2011<br>1/ | % change between<br>September 2010<br>and<br>September 2011 | % change between July to September 2010 and July to September 2011 | % change between January to September 2010 and January to September 2011 |
|---|----------------------|---|--|--|
| Electricity available for distribution      |                      |   |  |  |
| (Gigawatt-hours)                            | 19 618               | 1,9   | 0,5  | 1,2  |
| Index of the physical volume of electricity |                      |   |  |  |
| production (2005=100)                       | 105,3                | 2,4   | 1,0  | 1,6  |

#### 1/ Preliminary.

| Seasonally adjusted estimates                                     | September 2011 | % change between<br>August and September<br>2011 | % change between<br>April to June 2011<br>and<br>July to September 2011 |
|---|----------------|--|---|
| Electricity available for distribution (Gigawatt-hours)           | 19 551         | -1,0   | -3,5  |
| Index of the physical volume of electricity production (2005=100) | 104,9          | -0,6   | -3,3  |

#### Consumption of electricity

The actual volume of electricity consumed grew by 1,9% (362 Gigawatt-hours) year-on-year in September 2011 (see Tables A, 2 and 9a). Electricity consumption for the third quarter of 2011 rose by 0,5% (294 Gigawatt-hours) compared with the third quarter of 2010 (see Tables A and C). However, seasonally adjusted electricity consumption fell by 3,5% in the third quarter of 2011 compared with the second quarter of 2011 (see Tables A and B).

#### Production of electricity

The actual estimated electricity production rose by 2,4% year-on-year in September 2011 (see Tables A, 5 and 9a). The estimated electricity production for the third quarter of 2011 grew by 1,0% compared with the third quarter of 2010 (see Table A). However, seasonally adjusted electricity production fell by 3,3% in the third quarter of 2011 compared with the second quarter of 2011 (see Table A).

#### Electricity delivered by Eskom to the provinces

Electricity delivered by Eskom to the provinces grew by 1,7% (300 Gigawatt-hours) in September 2011 compared with September 2010. The 1,7% growth was driven by increases in six of the nine provinces, of which the biggest volume increase was reported in Mpumalanga (208 Gigawatt-hours), followed by Gauteng (128 Gigawatt-hours). The total volume of electricity delivered by Eskom to the provinces for the first nine months of 2011 grew by 0,4% (597 Gigawatt-hours) compared with the same period in 2010 (see Table 10).

#### International trade in electricity

The volume of electricity purchased from outside South African borders (imports) fell by 8,8% (-94 Gigawatt-hours) in September 2011 compared with September 2010. For the first nine months of 2011 imports decreased by 6,9% (-656 Gigawatt-hours) year-on-year (see Tables 9a and 9b).

The volume of electricity sold to neighbouring countries (exports) rose by 3,2% (40 Gigawatt-hours) year-on-year in September 2011. For the first nine months of 2011 exports grew by 1,1% year-on-year (114 Gigawatt-hours) (see Tables 9a and 9b).

Table B – Comparison of the seasonally adjusted volume of electricity generated and available for distribution between the third quarter of 2011 and the previous quarter

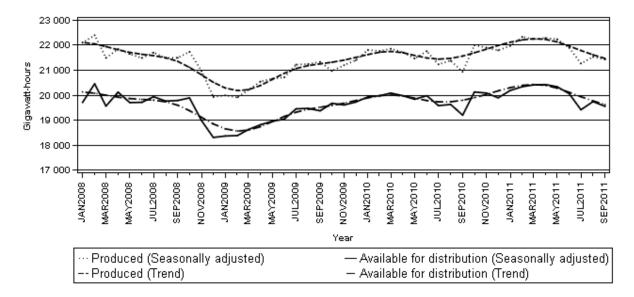
| Gigawatt-hours   | Seasonally<br>adjusted quantity<br>April to June<br>2011 | Seasonally<br>adjusted quantity<br>July to September<br>2011 | % change between<br>April to June 2011<br>and July to<br>September 2011 | Quantity difference<br>between<br>April to June 2011<br>and<br>July to September<br>2011 |
|--|--|--|---|--|
| Electricity produced                                   | 66 428   | 64 228   | -3,3  | -2 200   |
| Electricity available for distribution in South Africa | 60 820   | 58 710   | -3,5  | -2 110   |

Table C - Comparison of actual estimates between the third quarter of 2011 and the third quarter of 2010

| Gigawatt-hours   | Actual volume<br>July to September<br>2010 | July to September |      | Quantity difference<br>between<br>July to September<br>2010 and July to<br>September 2011 |  |
|--|--|-------------------|------|---|--|
| Electricity produced                                   | 66 362                                     | 67 047            | 1,0  | 685   |  |
| Purchased outside South Africa (import) 1/             | 3 294                                      | 3 061             | -7,1 | -233  |  |
| Consumed in power stations and auxiliary systems       | 4 824                                      | 4 877             | 1,1  | 53  |  |
| Sold outside South Africa (export) 2/                  | 3 729                                      | 3 833             | 2,8  | 104   |  |
| Electricity available for distribution in South Africa | 61 103                                     | 61 397            | 0,5  | 294   |  |

<sup>1/</sup> Physical energy flowing into South Africa as measured by the metering systems at the South African borders.

Figure 1 - Electricity produced and available for distribution in South Africa, seasonally adjusted and trend



PJ Lehohla Statistician-General

<sup>2/</sup> Physical energy flowing out of South Africa as measured by the metering systems at the South African borders.

#### **Tables**

Table 1 - Total volume of electricity available for distribution in South Africa: 2006-2011

| Month     |         | Gigawatt-hours |         |         |         |           |  |  |  |  |  |
|-----------|---------|----------------|---------|---------|---------|-----------|--|--|--|--|--|
| Monui     | 2006    | 2007           | 2008    | 2009    | 2010    | 2011      |  |  |  |  |  |
| January   | 18 603  | 19 561         | 19 256  | 17 919  | 19 396  | 19 616    |  |  |  |  |  |
| February  | 17 396  | 18 301         | 18 668  | 16 757  | 18 181  | 18 455    |  |  |  |  |  |
| March     | 18 982  | 20 160         | 19 603  | 18 694  | 20 186  | 20 518    |  |  |  |  |  |
| April     | 18 122  | 18 982         | 19 127  | 17 934  | 19 102  | 19 539    |  |  |  |  |  |
| May       | 20 312  | 20 901         | 20 365  | 19 548  | 20 435  | 20 938    |  |  |  |  |  |
| June      | 20 166  | 21 020         | 20 515  | 19 819  | 20 800  | 20 914    |  |  |  |  |  |
| July      | 20 632  | 21 780         | 21 610  | 21 151  | 21 307  | 21 162    |  |  |  |  |  |
| August    | 20 307  | 21 353         | 20 736  | 20 398  | 20 540  | 20 617    |  |  |  |  |  |
| September | 18 987  | 19 732         | 19 725  | 19 382  | 19 256  | 1/ 19 618 |  |  |  |  |  |
| October   | 19 663  | 20 435         | 20 138  | 19 899  | 20 371  |           |  |  |  |  |  |
| November  | 19 244  | 19 785         | 18 640  | 19 248  | 19 702  |           |  |  |  |  |  |
| December  | 18 909  | 19 160         | 17 541  | 18 850  | 18 996  |           |  |  |  |  |  |
| Year      | 231 323 | 241 170        | 235 924 | 229 599 | 238 272 |           |  |  |  |  |  |

<sup>1/</sup> Preliminary.

Table 2 – Annual percentage change in electricity available for distribution in South Africa: 2006–2011

| Month     | Percentage change 2/ |      |      |       |      |      |  |  |  |  |
|-----------|----------------------|------|------|-------|------|------|--|--|--|--|
| WOITH     | 2006                 | 2007 | 2008 | 2009  | 2010 | 2011 |  |  |  |  |
| January   | 2,5                  | 5,1  | -1,6 | -6,9  | 8,2  | 1,1  |  |  |  |  |
| February  | 1,3                  | 5,2  | 2,0  | -10,2 | 8,5  | 1,5  |  |  |  |  |
| March     | 2,7                  | 6,2  | -2,8 | -4,6  | 8,0  | 1,6  |  |  |  |  |
| April     | -0,1                 | 4,7  | 0,8  | -6,2  | 6,5  | 2,3  |  |  |  |  |
| May       | 5,7                  | 2,9  | -2,6 | -4,0  | 4,5  | 2,5  |  |  |  |  |
| June      | 6,2                  | 4,2  | -2,4 | -3,4  | 4,9  | 0,5  |  |  |  |  |
| July      | 5,0                  | 5,6  | -0,8 | -2,1  | 0,7  | -0,7 |  |  |  |  |
| August    | 5,8                  | 5,2  | 2,9  | -1,6  | 0,7  | 0,4  |  |  |  |  |
| September | 3,3                  | 3,9  | 0,0  | -1,7  | -0,7 | 1,9  |  |  |  |  |
| October   | 2,8                  | 3,9  | -1,5 | -1,2  | 2,4  |      |  |  |  |  |
| November  | 3,9                  | 2,8  | -5,8 | 3,3   | 2,4  |      |  |  |  |  |
| December  | 3,7                  | 1,3  | -8,4 | 7,5   | 0,8  |      |  |  |  |  |
| Year      | 3,6                  | 4,3  | -2,2 | -2,7  | 3,8  |      |  |  |  |  |

<sup>2/</sup> The annual percentage change is the change in the volume of electricity available for distribution of the relevant month of the current year compared with the corresponding month of the previous year expressed as a percentage.

Table 3 – Seasonally adjusted total volume of electricity available for distribution in South Africa: 2006–2011

|           |        | Gigawatt-hours |        |        |        |        |   |  |  |  |  |
|-----------|--------|----------------|--------|--------|--------|--------|---|--|--|--|--|
| Month     | 2006   | 2007           | 2008   | 2009   | 2010   | 2011   | % change between current and previous month |  |  |  |  |
| January   | 18 968 | 19 966         | 19 709 | 18 366 | 19 927 | 20 189 | 1,5   |  |  |  |  |
| February  | 18 933 | 19 958         | 20 454 | 18 384 | 19 979 | 20 341 | 0,8   |  |  |  |  |
| March     | 18 950 | 20 133         | 19 561 | 18 625 | 20 083 | 20 410 | 0,3   |  |  |  |  |
| April     | 19 071 | 19 971         | 20 119 | 18 816 | 19 976 | 20 424 | 0,1   |  |  |  |  |
| May       | 19 568 | 20 160         | 19 704 | 18 955 | 19 836 | 20 337 | -0,4  |  |  |  |  |
| June      | 19 412 | 20 214         | 19 714 | 19 040 | 19 979 | 20 059 | -1,4  |  |  |  |  |
| July      | 19 149 | 20 137         | 19 937 | 19 452 | 19 579 | 19 415 | -3,2  |  |  |  |  |
| August    | 19 370 | 20 344         | 19 763 | 19 469 | 19 630 | 19 744 | 1,7   |  |  |  |  |
| September | 19 154 | 19 841         | 19 787 | 19 374 | 19 200 | 19 551 | -1,0  |  |  |  |  |
| October   | 19 446 | 20 212         | 19 890 | 19 675 | 20 127 | ·      |   |  |  |  |  |
| November  | 19 553 | 20 122         | 18 981 | 19 608 | 20 082 |        |   |  |  |  |  |
| December  | 19 686 | 19 994         | 18 307 | 19 725 | 19 895 |        |   |  |  |  |  |

Table 4 – Indices of the physical volume of electricity production: 2006–2011

| Month     |       | Base: 2005=100 |       |       |       |          |  |  |  |  |  |
|-----------|-------|----------------|-------|-------|-------|----------|--|--|--|--|--|
| WOITH     | 2006  | 2007           | 2008  | 2009  | 2010  | 2011     |  |  |  |  |  |
| January   | 99,8  | 103,9          | 105,3 | 95,0  | 103,4 | 104,0    |  |  |  |  |  |
| February  | 94,0  | 97,2           | 99,7  | 88,5  | 96,5  | 98,9     |  |  |  |  |  |
| March     | 103,3 | 107,8          | 105,6 | 99,3  | 107,4 | 109,2    |  |  |  |  |  |
| April     | 98,0  | 100,9          | 102,0 | 96,1  | 102,0 | 104,8    |  |  |  |  |  |
| May       | 108,1 | 111,9          | 109,6 | 104,5 | 108,5 | 112,2    |  |  |  |  |  |
| June      | 107,3 | 112,5          | 108,8 | 104,8 | 110,1 | 110,8    |  |  |  |  |  |
| July      | 110,8 | 116,6          | 115,1 | 112,8 | 113,0 | 113,2    |  |  |  |  |  |
| August    | 109,1 | 114,1          | 110,3 | 108,8 | 109,4 | 110,0    |  |  |  |  |  |
| September | 101,8 | 105,5          | 104,8 | 104,4 | 102,8 | 1/ 105,3 |  |  |  |  |  |
| October   | 107,2 | 109,1          | 109,4 | 105,6 | 110,8 |          |  |  |  |  |  |
| November  | 103,3 | 106,9          | 101,4 | 102,6 | 105,9 |          |  |  |  |  |  |
| December  | 100,9 | 104,6          | 93,6  | 100,3 | 102,1 |          |  |  |  |  |  |
| Year      | 103,6 | 107,6          | 105,5 | 101,9 | 106,0 |          |  |  |  |  |  |

<sup>1/</sup> Preliminary.

Table 5 - Annual percentage change in indices of the physical volume of electricity production: 2006-2011

| Month     | Percentage change 2/ |      |       |       |      |      |  |  |  |
|-----------|----------------------|------|-------|-------|------|------|--|--|--|
|           | 2006                 | 2007 | 2008  | 2009  | 2010 | 2011 |  |  |  |
| January   | 2,3                  | 4,1  | 1,3   | -9,8  | 8,8  | 0,6  |  |  |  |
| February  | 2,5                  | 3,4  | 2,6   | -11,2 | 9,0  | 2,5  |  |  |  |
| March     | 3,1                  | 4,4  | -2,0  | -6,0  | 8,2  | 1,7  |  |  |  |
| April     | -0,1                 | 3,0  | 1,1   | -5,8  | 6,1  | 2,7  |  |  |  |
| May       | 5,1                  | 3,5  | -2,1  | -4,7  | 3,8  | 3,4  |  |  |  |
| June      | 5,6                  | 4,8  | -3,3  | -3,7  | 5,1  | 0,6  |  |  |  |
| July      | 5,0                  | 5,2  | -1,3  | -2,0  | 0,2  | 0,2  |  |  |  |
| August    | 5,9                  | 4,6  | -3,3  | -1,4  | 0,6  | 0,5  |  |  |  |
| September | 2,7                  | 3,6  | -0,7  | -0,4  | -1,5 | 2,4  |  |  |  |
| October   | 4,6                  | 1,8  | 0,3   | -3,5  | 4,9  |      |  |  |  |
| November  | 3,9                  | 3,5  | -5,1  | 1,2   | 3,2  |      |  |  |  |
| December  | 2,7                  | 3,7  | -10,5 | 7,2   | 1,8  |      |  |  |  |
| Year      | 3,7                  | 3,8  | -2,0  | -3,4  | 4,0  |      |  |  |  |

<sup>2/</sup> The annual percentage change is the change in the index of the physical volume of electricity production of the relevant month of the current year compared with the corresponding month of the previous year expressed as a percentage.

Table 6 - Seasonally adjusted indices of the physical volume of electricity production: 2006-2011

|           |       |       |       | Base: 2005=1 | 00    |       |  |
|-----------|-------|-------|-------|--------------|-------|-------|--|
| Month     | 2006  | 2007  | 2008  | 2009         | 2010  | 2011  | % change<br>between current<br>and previous<br>month |
| January   | 102,3 | 106,6 | 108,2 | 97,9         | 106,8 | 107,6 | 0,8  |
| February  | 102,9 | 106,6 | 109,7 | 97,5         | 106,6 | 109,4 | 1,7  |
| March     | 103,0 | 107,4 | 105,3 | 99,0         | 107,0 | 108,9 | -0,5   |
| April     | 102,8 | 105,9 | 107,0 | 100,6        | 106,3 | 109,2 | 0,3  |
| May       | 104,3 | 108,1 | 106,0 | 101,2        | 105,1 | 108,9 | -0,3   |
| June      | 103,6 | 108,8 | 105,2 | 101,4        | 106,6 | 107,2 | -1,6   |
| July      | 102,7 | 107,8 | 106,3 | 103,9        | 104,0 | 104,2 | -2,8   |
| August    | 104,0 | 108,7 | 105,2 | 104,1        | 104,7 | 105,5 | 1,2  |
| September | 102,7 | 106,2 | 105,3 | 104,5        | 102,5 | 104,9 | -0,6   |
| October   | 104,6 | 106,4 | 106,5 | 102,7        | 107,8 |       |  |
| November  | 104,7 | 108,2 | 102,7 | 103,8        | 107,2 |       |  |
| December  | 105,0 | 109,0 | 97,6  | 104,8        | 106,7 |       |  |

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Table 7 - Total volume of electricity imported: 2006-2011

| Manth     | Gigawatt-hours |        |        |        |        |        |  |  |  |
|-----------|----------------|--------|--------|--------|--------|--------|--|--|--|
| Month     | 2006           | 2007   | 2008   | 2009   | 2010   | 2011   |  |  |  |
| January   | 872            | 1 088  | 638    | 1 102  | 1 122  | 1 088  |  |  |  |
| February  | 646            | 942    | 885    | 999    | 995    | 730    |  |  |  |
| March     | 581            | 973    | 802    | 1 064  | 1 040  | 1 112  |  |  |  |
| April     | 587            | 1 055  | 844    | 906    | 931    | 912    |  |  |  |
| May       | 879            | 900    | 761    | 937    | 1 074  | 907    |  |  |  |
| June      | 881            | 880    | 1 002  | 1 088  | 1 019  | 1 009  |  |  |  |
| July      | 926            | 984    | 1 089  | 1 040  | 1 117  | 979    |  |  |  |
| August    | 930            | 1 045  | 1 076  | 1 072  | 1 109  | 1 108  |  |  |  |
| September | 971            | 1 026  | 1 044  | 920    | 1 068  | 2/ 974 |  |  |  |
| October   | 682            | 1 040  | 645    | 1 115  | 770    |        |  |  |  |
| November  | 862            | 796    | 711    | 940    | 1 018  |        |  |  |  |
| December  | 965            | 619    | 1 075  | 1 112  | 930    |        |  |  |  |
| Year      | 9 782          | 11 348 | 10 572 | 12 295 | 12 193 |        |  |  |  |

<sup>1/</sup> Physical energy flowing into South Africa as measured by the metering systems at the South African borders. 2/ Preliminary.

Table 8 - Total volume of electricity exported: 2006-2011 1/

| Month     | Gigawatt-hours |        |        |        |        |          |  |  |  |
|-----------|----------------|--------|--------|--------|--------|----------|--|--|--|
| WOILLI    | 2006           | 2007   | 2008   | 2009   | 2010   | 2011     |  |  |  |
| January   | 1 056          | 1 134  | 1 280  | 1 096  | 1 217  | 1 133    |  |  |  |
| February  | 1 050          | 1 060  | 1 101  | 979    | 1 128  | 1 069    |  |  |  |
| March     | 1 129          | 1 231  | 1 136  | 1 100  | 1 252  | 1 279    |  |  |  |
| April     | 1 017          | 1 132  | 998    | 1 086  | 1 170  | 1 190    |  |  |  |
| May       | 1 046          | 1 203  | 1 120  | 1 109  | 1 177  | 1 241    |  |  |  |
| June      | 1 102          | 1 256  | 1 162  | 1 175  | 1 132  | 1 174    |  |  |  |
| July      | 1 239          | 1 301  | 1 249  | 1 223  | 1 206  | 1 247    |  |  |  |
| August    | 1 262          | 1 252  | 1 220  | 1 235  | 1 275  | 1 298    |  |  |  |
| September | 1 239          | 1 186  | 1 203  | 1 285  | 1 248  | 2/ 1 288 |  |  |  |
| October   | 1 311          | 1 252  | 1 258  | 1 288  | 1 338  |          |  |  |  |
| November  | 1 186          | 1 256  | 1 252  | 1 213  | 1 316  |          |  |  |  |
| December  | 1 129          | 1 233  | 1 189  | 1 263  | 1 209  |          |  |  |  |
| Year      | 13 766         | 14 496 | 14 168 | 14 052 | 14 668 |          |  |  |  |

<sup>1/</sup> Physical energy flowing out of South Africa as measured by the metering systems at the South African borders. 2/ Preliminary.

Table 9a – Electricity produced and consumed in power stations, purchased and sold outside South Africa and available for distribution in South Africa (monthly figures)

|             |  | Gigawatt-hours |                |                         |   |   |  |  |
|-------------|--|----------------|----------------|-------------------------|---|---|--|--|
|             |  | September 2010 | August<br>2011 | September<br>2011<br>1/ | % change between<br>September 2010<br>and<br>September 2011 | Difference between<br>September 2010<br>and<br>September 2011 |  |  |
| Total - All | Electricity produced                                   | 20 977         | 22 443         | 21 493                  | 2,4   | 516   |  |  |
| producers   | Purchased outside South Africa (import) 2/             | 1 068          | 1 108          | 974                     | -8,8  | -94   |  |  |
|             | Consumed in power stations and auxiliary systems       | 1 541          | 1 635          | 1 561                   | 1,3   | 20  |  |  |
|             | Sold outside South Africa (export) 3/                  | 1 248          | 1 298          | 1 288                   | 3,2   | 40  |  |  |
|             | Electricity available for distribution in South Africa | 19 256         | 20 617         | 19 618                  | 1,9   | 362   |  |  |
| ESKOM       | Electricity produced                                   | 20 133         | 21 496         | 20 579                  | 2,2   | 446   |  |  |
|             | Purchased outside South Africa (import) 2/             | 1 068          | 1 108          | 974                     | -8,8  | -94   |  |  |
|             | Consumed in power stations and auxiliary systems       | 1 473          | 1 567          | 1 495                   | 1,5   | 22  |  |  |
|             | Sold outside South Africa (export) 3/                  | 1 248          | 1 298          | 1 288                   | 3,2   | 40  |  |  |
|             | Electricity available for distribution in South Africa | 18 480         | 19 739         | 18 771                  | 1,6   | 291   |  |  |

<sup>1/</sup> Preliminary

Table 9b – Electricity produced and consumed in power stations, purchased and sold outside South Africa and available for distribution in South Africa (cumulative figures)

|             |  | Gigawatt-hours               |                                    |  |  |  |  |  |
|-------------|--|------------------------------|------------------------------------|--|--|--|--|--|
|             |  | January to<br>September 2010 | January to<br>September 2011<br>1/ | % change between January to September 2010 and January to September 2011 | Difference between January to September 2010 and January to September 2011 |  |  |  |
| Total - All | Electricity produced                                   | 194 514                      | 197 670                            | 1,6  | 3 156  |  |  |  |
| producers   | Purchased outside South<br>Africa (import) 2/          | 9 475                        | 8 819                              | -6,9   | -656   |  |  |  |
|             | Consumed in power stations and auxiliary systems       | 13 978                       | 14 192                             | 1,5  | 214  |  |  |  |
|             | Sold outside South Africa (export) 3/                  | 10 805                       | 10 919                             | 1,1  | 114  |  |  |  |
|             | Electricity available for distribution in South Africa | 179 203                      | 181 377                            | 1,2  | 2 174  |  |  |  |
| ESKOM       | Electricity produced                                   | 188 431                      | 189 598                            | 0,6  | 1 167  |  |  |  |
|             | Purchased outside South<br>Africa (import) 2/          | 9 475                        | 8 819                              | -6,9   | -656   |  |  |  |
|             | Consumed in power stations and auxiliary systems       | 13 409                       | 13 588                             | 1,3  | 179  |  |  |  |
|             | Sold outside South Africa (export) 3/                  | 10 805                       | 10 919                             | 1,1  | 114  |  |  |  |
|             | Electricity available for distribution in South Africa | 173 688                      | 173 912                            | 0,1  | 224  |  |  |  |

<sup>1/</sup> Preliminary.

<sup>2/</sup> Physical energy flowing into South Africa as measured by the metering systems at the South African borders.

<sup>3/</sup> Physical energy flowing out of South Africa as measured by the metering systems at the South African borders.

<sup>2/</sup> Physical energy flowing into South Africa as measured by the metering systems at the South African borders.

<sup>3/</sup> Physical energy flowing out of South Africa as measured by the metering systems at the South African borders.

Table 10 – Total volume of electricity delivered by Eskom to provinces for 2010 and 2011

|      |              | Gigawatt-hours  |                 |                  |               |                   |               |         |                 |         |                          |
|------|--------------|-----------------|-----------------|------------------|---------------|-------------------|---------------|---------|-----------------|---------|--------------------------|
|      | Period       | Western<br>Cape | Eastern<br>Cape | Northern<br>Cape | Free<br>State | KwaZulu-<br>Natal | North<br>West | Gauteng | Mpuma-<br>langa | Limpopo | Total<br>South<br>Africa |
| 2010 | January      | 1 932           | 780             | 404              | 751           | 3 540             | 2 182         | 4 806   | 2 845           | 991     | 18 231                   |
|      | February     | 1 842           | 719             | 383              | 706           | 3 281             | 2 029         | 4 592   | 2 658           | 917     | 17 127                   |
|      | March        | 2 037           | 809             | 405              | 780           | 3 629             | 2 273         | 5 086   | 2 926           | 1 032   | 18 977                   |
|      | April        | 1 873           | 750             | 362              | 735           | 3 432             | 2 100         | 4 959   | 2 813           | 970     | 17 994                   |
|      | May          | 1 931           | 825             | 365              | 788           | 3 550             | 2 241         | 5 468   | 3 080           | 979     | 19 227                   |
|      | June         | 1 946           | 828             | 378              | 813           | 3 559             | 2 159         | 5 836   | 3 011           | 991     | 19 521                   |
|      | July         | 2 013           | 877             | 400              | 824           | 3 684             | 2 204         | 5 978   | 2 948           | 1 062   | 19 990                   |
|      | August       | 1 968           | 827             | 386              | 779           | 3 595             | 2 167         | 5 360   | 2 802           | 1 038   | 18 922                   |
|      | September    | 1 851           | 784             | 383              | 675           | 3 474             | 2 094         | 4 857   | 2 580           | 1 054   | 17 752                   |
|      | October      | 1 911           | 846             | 429              | 724           | 3 577             | 2 276         | 5 009   | 2 907           | 1 088   | 18 767                   |
|      | November     | 1 882           | 820             | 406              | 703           | 3 433             | 2 201         | 4 911   | 2 968           | 1 033   | 18 357                   |
|      | December     | 1 907           | 781             | 418              | 694           | 3 371             | 2 004         | 4 645   | 2 945           | 1 044   | 17 809                   |
|      | Year         | 23 093          | 9 646           | 4 719            | 8 972         | 42 125            | 25 930        | 61 507  | 34 483          | 12 199  | 222 674                  |
|      | Year to date | 17 393          | 7 199           | 3 466            | 6 851         | 31 744            | 19 449        | 46 942  | 25 663          | 9 034   | 167 741                  |
| 2011 | January      | 1 962           | 777             | 408              | 721           | 3 417             | 2 187         | 4 738   | 3 052           | 1 021   | 18 283                   |
|      | February     | 1 881           | 734             | 372              | 665           | 3 256             | 2 044         | 4 394   | 2 808           | 937     | 17 091                   |
|      | March        | 2 031           | 773             | 417              | 774           | 3 631             | 2 292         | 4 955   | 3 017           | 1 063   | 18 953                   |
|      | April        | 1 877           | 726             | 389              | 753           | 3 432             | 2 159         | 5 016   | 2 946           | 992     | 18 290                   |
|      | May          | 1 980           | 811             | 406              | 772           | 3 624             | 2 283         | 5 435   | 3 106           | 1 000   | 19 417                   |
|      | June         | 1 966           | 826             | 417              | 812           | 3 527             | 2 097         | 5 804   | 2 945           | 1 020   | 19 414                   |
|      | July         | 2 014           | 876             | 428              | 814           | 3 639             | 2 086         | 5 971   | 2 852           | 972     | 19 652                   |
|      | August       | 1 985           | 884             | 414              | 783           | 3 574             | 2 029         | 5 727   | 2 830           | 960     | 19 186                   |
|      | September 2/ | 1 752           | 840             | 418              | 688           | 3 381             | 2 172         | 4 985   | 2 788           | 1 028   | 18 052                   |
|      | Year to date | 17 448          | 7 247           | 3 669            | 6 782         | 31 481            | 19 349        | 47 025  | 26 344          | 8 993   | 168 338                  |

<sup>1/</sup> Wholesale energy (Gigawatt-hours) as delivered by Eskom to the various provinces. 2/ Preliminary.

#### **Explanatory Notes**

#### Introduction

Statistics South Africa (Stats SA) conducts a monthly sample survey of the electricity industry covering electricity undertakings and establishments (branches). This statistical release contains information regarding the volume of electricity units generated and available for distribution in South Africa, the volume of units purchased and sold outside South Africa and the volume of units distributed by Eskom by province on a monthly basis. Both actual and seasonally adjusted figures are published.

- This statistical release reflects indices of the physical volume of electricity production on the basis of 2005=100. In accordance with international practice, the indices have to be rebased every five years to a new base year.
- In order to improve timeliness of the publication, some information for the current month may have been estimated due to late submission by respondents. These estimates will be revised in the next statistical release(s) as soon as actual information is available.

## Purpose of the 4 survey

The results of the monthly electricity generated and available for distribution survey are used to compile estimates of the gross domestic product (GDP) and its components, which are used in monitoring the state of the economy and formulation of economic policy.

### Scope of the 5 survey

This survey covers electricity undertakings and establishments conducting activities concerned with the generation or transmission and distribution of electricity. It includes electrical power installations, which, as subsidiary divisions of undertakings, produce electricity for regular use by these undertakings.

#### Classification 6

The 1993 edition of the Standard Industrial Classification of all Economic Activities (SIC), Fifth Edition, Report No. 09-90-02, was used to classify the statistical units in the survey. The SIC is based on the 1990 International Standard Industrial Classification of all Economic Activities (ISIC) with suitable adaptations for local conditions. Each statistical unit is classified to an industry, which reflects the predominant activity of the electricity undertaking or establishment.

#### Response rate 7

The response rate for the survey on electricity generated and available for distribution for September 2011 was 99%.

#### Statistical unit 8

The basic statistical unit for the collection of information is the electricity undertaking or establishment. The electricity undertaking or establishment is the smallest economic unit that functions as a separate entity. Each statistical unit is classified to an industry (see paragraph 5).

#### Survey methodology and design

9

11

All statistical units are stratified by type of economic activity according to the *Standard Industrial Classification of all Economic Activities (SIC)* and measure of size, where measure of size is the volume of electricity generated by the electricity undertaking or establishment. All large undertakings or establishments (size category one cases) are completely enumerated. A sample is drawn from medium and small size undertakings and establishments by systematically selecting undertakings or establishments within each size category. An electricity undertaking or establishment with a total generating capacity of less than 500 kilowatt is excluded from the sample.

The survey is conducted by mail, email and telephone. Information is collected from a sample of 23 electricity undertakings or establishments.

## Monthly production indices

The calculation of the monthly production indices is based on the volume of electricity units produced.

#### Benchmarking 12

The index of physical volume of electricity production should provide an accurate reflection of the trend of activities of the relevant industry. The level of activities, as measured by the monthly electricity generated and available for distribution survey, is based on information received from a sample of electricity undertakings and establishments. These levels are weighted according to the original sample and designed to represent the population of electricity undertakings and establishments. It is necessary to adjust the level of activities as measured by the monthly sample survey to the level of activities as measured periodically by the Census of electricity, gas and steam. This procedure, whereby the latest results of an economic census are used to compile more accurate level estimates for a certain year, is known as benchmarking.

The results of the 1995 Census of electricity, gas and steam served as a benchmark to verify or adjust the level of the monthly physical volume of electricity production indices collected through the monthly sample survey. The level adjustments were done on the volume indices for August of the relevant census year (the 1995 census year covered the period 1 January 1995 to 31 December 1995 and therefore, the benchmarking was done using the index of August 1995 as reference point).

## Seasonal adjustment

14

Seasonally adjusted estimates of all items are generated each month, using the X-11 Seasonal Adjustment Program developed by US Bureau of the Census Economic Research and Analyses Division, 1968. Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences on the series can be more clearly recognized. Seasonal adjustment does not aim to remove irregular or non-seasonal influences, which may be present in any particular month. Influences that are volatile or unsystematic can still make it difficult to interpret the movement of the series even after adjustment for seasonal variations. This means the month-to-month movements of seasonally adjusted estimates may not be reliable indicators of trend behaviour.

#### Trend cycle 15

The trend is the long-term pattern or movement of a time series. The X-11 Seasonal Adjustment Program is used for smoothing seasonally adjusted estimates.

## Related 16 publications

Users may also wish to refer to the following publications which are available from Stats SA:

- Bulletin of Statistics; and
- SA Statistics.

### Rounding-off 17 of figures

Where necessary, the figures in the tables have been rounded off to the nearest digit shown. There may therefore be slight discrepancies between the sums of the constituent items and the totals shown.

#### Glossary

## Consumption of electricity

For purposes of this release the term 'consumption of electricity' is used interchangeably with the term 'electricity available for distribution'.

#### **Electricity undertaking**

An electricity undertaking is an undertaking concerned with the generation or transmission and distribution of electricity, including electrical power installations, which, as subsidiary divisions of undertakings, produce electricity for regular use by these undertakings.

## Index of physical volume of electricity production

A statistical measure of the change in the volume of production of electricity in a given period and the volume of production of electricity in the base period. The base period is 2005. The production in the base period is set at 100.

#### Industry

An industry consists of a group of undertakings or establishments engaged in the same or similar kinds of economic activity. Industries are defined in the 1993 System of National Accounts (1993 SNA) in the same way as in the Standard Industrial Classification of all Economic Activities (SIC), Fifth Edition, Report No. 09-90-02.

#### Unit of electricity

One gigawatt-hour of electricity is equal to one million kilowatt-hours. A kilowatt-hour is the basic unit of electrical energy equal to one kilowatt of power supplied to or taken from an electric circuit steadily for one hour. One kilowatt-hour equals one thousand watt-hours.

## Symbols and abbreviations

GDP Gross domestic product

ISIC International Standard Industrial Classification

SIC Standard Industrial Classification of all Economic Activities

Stats SA Statistics South Africa
\* Revised figures

#### **General information**

Stats SA publishes approximately 300 different statistical releases each year. It is not economically viable to produce them in more than one of South Africa's eleven official languages. Since the releases are used extensively, not only locally but also by international economic and social-scientific communities, Stats SA releases are published in English only.

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#### Advanced release calendar

An advanced release calendar is disseminated on www.statssa.gov.za

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Central Regional Library, Polokwane
Central Reference Library, Nelspruit
Central Reference Collection, Kimberley
Central Reference Library, Mmabatho

Stats SA also provides a subscription service.

#### **Electronic services**

A large range of data is available via on-line services. For more detail about our electronic services, contact Stats SA's user information service at (012) 310 8600.

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#### **Enquiries**

Telephone number: (012) 310 4897 / 336 0142 (technical enquiries)

(012) 310 8600 (user information services) (012) 310 8358 (orders/subscription services)

Fax number: (012) 310 8664 (technical enquiries)

Email: onicama@statssa.gov.za (technical enquiries)

nicolaic@statssa.gov.za (technical enquiries) info@statssa.gov.za (user information services) magdaj@statssa.gov.za (orders/subscription services)

Postal address: Private Bag X44, Pretoria, 0001

Produced by Stats SA