

Using the standard workload schedule to calculate consumption in a given hour

You can use the standard workload graph (SWG) for single-tariff consumption to find the consumption of an individual consumer in a given hour (C_{hour}) by multiplying the consumption measured or estimated for the calendar month by the hour coefficient in the standard workload graph (SWG) using the following formula:

$$C_{\text{hour}} = S_h \times C_{\text{month}},$$

where

S_h – the hour coefficient for the given hour of the particular day on the SWG;

C_{month} – the amount of electricity sold to the consumer in that month.

With dual-tariff consumption the hourly consumption for each consumer can be found by using the measured or estimated ratio between consumption at the day rate and consumption at the night rate. This is done by adding together the SWG coefficients for the day rate hours to produce a total day rate coefficient and separately adding all the night rate hours to produce a night rate coefficient. The day rate coefficient and night rate coefficient together total one.

Consumption in a given hour at the day rate ($C_{\text{hour-day}}$) is calculated by multiplying the amount of day rate electricity consumed in a calendar month by the SWG coefficient for that hour divided by the day rate coefficient using the formula:

$$C_{\text{hour-day}} = S_h / \sum S_{h\text{-day}} \times C_{\text{month-day}}$$

and night rate consumption in a given hour ($C_{\text{hour-night}}$) is calculated by multiplying the amount of night rate electricity of the calendar month by the SWG coefficient for that hour divided by the night rate coefficient using the formula:

$$C_{\text{hour-night}} = S_h / \sum S_{h\text{-night}} \times C_{\text{month-night}},$$

where

S_h = the coefficient for the given hour of the given day on the SWG;

$\sum S_{h\text{-day}}$ = the day rate coefficient, or the sum of the hour coefficients at day rate (S_h);

$\sum S_{h\text{-night}}$ = the night rate coefficient, or the sum of the hour coefficients at night rates (S_h);

$C_{\text{month-day}}$ = day rate electricity sold to the consumer in a given month;

$C_{\text{month-night}}$ = night rate electricity sold to the consumer in a given month.

Hourly consumption is calculated and presented per kWh and rounded to three decimal places.

When calculating the hourly consumption, a difference might occur between calculations based on hourly and monthly consumption, and according to the calculation and usage principals in the standard consumption schedule, this difference will be allocated to the last hour of the month (or the last hour of either the day-rate or night-rate tariff as appropriate).

The complete calculation and usage principals in the standard consumption schedule for the Elektrilevi OÜ service area is available on the Competition Authority web page <http://www.konkurentsiamet.ee/?id=22558>, under Elektrilevi OÜ (decision no. 7.1-11/14-008, 28.10.2014)