



# UMS Switch Regime and VPSR Form Appendix Guidance

**This Appendix should be used with the UMS Switch Regime and VPSR Form.**

## Introduction to Switch Regimes and VPSRs

Switch regimes and Variable Power Switch Regimes (VPSR) are 3 digit codes that allow the operating hours for equipment to be determined. This information together with the power information obtained from charge codes allows annual consumption (kWh) to be calculated.

Switch regimes utilise only one dimming level (or none) together with the times that a device will turn on and off. This could be between dusk and dawn, 20:00 to 05:00, or between set lux levels (e.g. 70 and 35). The device's turn on and off times can be activated via a timer or a PECU, where the timer is set to GMT or clock-based (see below). Switch regimes do not adjust for the specific dimming level that the equipment will operate at, as this is provided through a dimmed charge code. A switch regime only provides the burn hours (the time that a device is operating) that apply to full power and dimmed operation.

A VPSR includes up to eight different dimming levels (including 100% power), the turn on and off times and the times that the differing dimming levels will be used at. The dimming levels are provided through a set of charge codes, and with the corresponding burn hours that the device will operate at, a valid dimming combination is formed. The valid dimming combination can also include charge codes that are dedicated to control equipment (90 series charge codes). The VPSR follows the same format as the switch regimes with regards to timers, turn on and off times and activation type. The difference between this and the switch regime is that the VPSR will have multiple times throughout the regime where it will switch between different dimming outputs. A switch regime will only have one dimming level for the whole period.

## Part A of the application form -Switch Regimes

### Question 1

Switch regimes can be 'part night off', 'part night dimming' or 'all night burning'. In part night off the device is operated from its activation threshold after sunset (PECU, timer) up until a set time, at which point the device shuts down. Later in the night/morning the device will start up again until its shutdown threshold before sunrise. These regimes use only full power charge codes. Part night dimming is the situation where a device is not shut off at some point during the night but is in fact dimmed to a desired level. Thus these use dimmed charge codes. Devices that have all night burning do neither of the above but can switch on and off at differing times.

### Question 2

A photo-electronic control unit (PECU) is a light sensitive device, capable of measuring lux levels. Thus a device can be activated by using lux levels. Depending on these specific levels, the number of annual burn hours (hours of operation) for a device will vary. A device can also be activated with a timer. These will turn the device on and off at set times before and after sunrise and sunset. In either case the two methods of activation are either GMT (Greenwich Mean Time) or clock based (question 4). This means that the activation timer is fixed throughout the year (GMT) or changes with British Summer Time (BST); which is clock based.

### Question 3

We need to know what times you require your device to be switched on and off, so that we can calculate the correct burn hours for its operation. These times might coincide with lux levels, so if your device is using a PECU insert N/A. If you are applying for part night off you will need to specify the

times that your device will turn off and on during the night (intermediate times). Equivalently, the same applies to part night dimming but please stipulate that these are dimming hours.

#### Question 4

See question 2, above.

### Part B of the application form -VPSRs

#### Question 1

Each VPSR is associated with a set of UMS charge codes. We will need to know what charge code you have for your device to complete the VPSR process. Your device may well have an accompanying control unit to allow it to switch between multiple dimming levels, and so this will be associated with the VPSR too. Please specify the charge code for this as well.

#### Question 2

See question 2 of part A. Like switch regimes, VPSR are based on all night burn hours with different start/stop criteria. The rest of the VPSR is made up of the times that the device will switch to differing dimming levels, so like the part night dimming regimes but with multiple timings. The two main lux levels that VPSRs follow are 70/35 and 35/18. Alternatively, the regime may be based on a timer; please specify this if so.

#### Question 3

A VPSR can hold up to eight different dimming levels (including 100%). Please specify what dimming levels you would like and the respective times that these levels will be operating at. See below for an example:

| Dimming Level | Dimming Start Time | Dimming End Time |
|---------------|--------------------|------------------|
| 100%          | PECU               | 24:00            |
| 75%           | 24:00              | 02:00            |
| 50%           | 02:00              | 05:00            |
| 75%           | 05:00              | PECU             |

#### Question 4

We need to know whether the regime will be based on Clock or GMT timings.

#### Need more information?

For further information please contact the **BSC Service Desk** at [bscservicedesk@cqi.com](mailto:bscservicedesk@cqi.com) or call **0870 010 6950**.

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