

IMEON ENERGY releases software improving solar battery's lifetime by up to 50%

The oldest French nuclear power plant located in Fessenheim has been disconnected from the electricity grid at night the 29th of June. The French government announced closure of 12 more reactors in the coming years, complying with the demand reflected in the recent elections, very successful for the environmentalists: the demand for clean and affordable energy. For many years now IMEON ENERGY, French manufacturer of solar hybrid inverters, prepares ingenious solutions aiming to bring down the costs of kWh produced by solar power plants, making them budget-friendly and efficient sources of electricity. The most recent innovation extending the lifespan of the solar batteries by up to 50% is here.

Battery management based on time of the year

The "Seasonal Cut-Off" application developed for OS. ONE operating system running on IMEON solar inverters allows installers and users to configure the solar battery's Depth Of Discharge (DOD) settings for each month of the year separately. Why would it matter?



Let's start with the basics. The Depth of Discharge (DOD) setting allows to define a maximum volume of energy to be taken from the battery before it needs to be fully charged again. The

availability of solar energy which could be used for re-charge is not uniform throughout the year. In northern hemisphere, any solar photovoltaic array will perform better during June and July and will be underperforming during the winter months. At the same time, during winter, the demand for electricity produced by the PV array tends to increase, since it might be used for heating or since the residents of the household choose to stay indoors more often. As a result, during winter, the solar inverter may require several days to recharge a battery which would otherwise be recharged during one day in summer. Making sure that the battery is regularly fully charged throughout the year requires therefore different Depth Of Discharge settings, depending on the season.



Such management of the Depth Of Discharge has a substantial impact on the lifetime of the battery. The amount of charge-discharge cycles the battery can support without the loss of capacity strictly depends on the DOD setting: the less the battery is discharged, the longer it will last. Reducing the DOD settings in function of the season will therefore not only assure that the storage is regularly fully recharged, it will also prolong its service time! This unique feature is now available free of charge for users of IMEON solar inverters and it allows to prolong the service time of the energy storage by up to 50%. This remarkable achievement drives down the cost of each kWh produced by the solar installation, since properly managed batteries rarely require replacement. The "Seasonal Cut-Off" application is yet another addition to the catalogue of applications already available on the OS. ONE platform, integrated in IMEON solar inverters.

About IMEON ENERGY

IMEON ENERGY is the only French manufacturer of solar hybrid inverters. In addition to power electronics, IMEON ENERGY's teams develop software solutions aiming to maximize the efficiency of solar systems using storage, in order to make energy autonomy accessible to the largest number of consumers.