



Intelligent system of reduction of harmonic reactive power compensation and increase of bandwidth of energy grids and energy storage.

Waveform output voltage converter connected to NN grid works as a network frequency inverter for renewable sources or a power source for energy storage and reactive power compensation is a unique solution on nationwide scale.

Under this system, cooperation of multiple dispersed power sources in the form of frequency inverters of constant voltage globally allowed for creation of a virtual power plant.



“Zero Interference Customer System” – output voltage waveform converter, supplying the final recipient as an additional renewable source compensates the harmonic and reactive power of the recipient which influences the following:

- Decrease of industrial loss and thus increase of the energy grid bandwidth,
- Stabilization of sourcing parameters,
- Decrease of reactive power costs and harmonic for industrial recipients,

Frequency inverters waveform systems may collectively work as an equivalent of pumped storage power plants in cooperation with energy warehouses and electric vehicles' batteries. In addition, in case of lack of power sourcing from the grid, the converter, upon disconnecting, switches to islanding as a source of reserve power sourcing.

