

The infra structure of NSE Demo Site at Kourtaki – Argos Greece has been obtained from the more than 3 decades activities of RESPECT Engineering on various EC and National Research and Development programs.

It consists of:

- 3 X 2 KWp PV generators
- 1 X 6 KVA Diesel Generator
- 1 X 5 KW – 48 V dc Wind Generator
- 24 X 1200 Ah + 48 X 300 Ah – 2V OPZs Battery cells
- Power Electronic Converters (MPPTs Stand Alone Inverters, Cell- Level Battery protection systems, etc)
- Monitoring Systems
- Networking controllers

This demo site is located in a 5.000 sq meter area with dispersed energy sources, micro net and loads and it was used for testing and evaluation of the components developed by the predecessor companies AltEneR (1985) and RESPECT Engineering (1987), which 7 years ago merged into NSE Ltd (2005).

Now, it also includes two more houses with RES and batteries at a distance of 100 m from NSE facilities, in order to form a micro grid connected to the main grid.

This micro grid is a realistic representation of the real micro grids which are very common in the Greek islands (neighborhoods with energy production from various RES and storage, close to very important sensitive social loads), also capable of feeding surplus energy back to the island grid, used either to support the main generator, reduce the fuel consumption, and flatten the load demand.

