

### A) General Information



**Acronym:** VOREGLOC - 20100930- 03

**Title of the User-Project:** Novel distributed network Management  
with dispersed generation: VOLTage REGulation based  
on Local Controllers

**TA Call:** 1st Call of Proposals, 30 September 2010

**Host Research Infrastructure:** IWES

**Starting Date:** November 2011

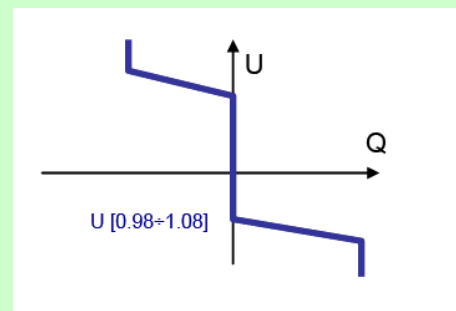
**End Date:** tbd

**Lead User:** Gabriele Monfredini, Politecnico de Milano – Department  
of Energy, Milano, Italy

**Additional Users:** Marco Merlo, Politecnico de Milano – Department of  
Energy, Milano, Italy

### B) Summary of the User-Project

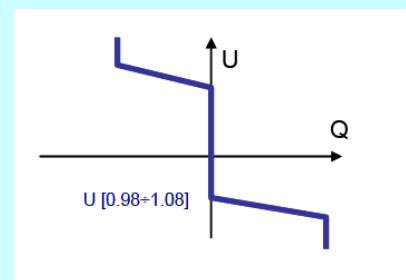
The purpose of this project is to investigate the contribution of PV-inverters with independent reactive power control for voltage regulation in distribution systems by using a pre-defined reactive power control strategy within the power electronic hardware around the nominal voltage range. The actual voltage regulation will be researched for different distribution system characteristics and operating conditions. The findings are likely to become part of future standards of utility-interactive converters.



Proposed regulation control strategy

### C) Main Achievements

Results pending.



Result

### D) Dissemination of the Results

1. Publications pending the outcome of the research.

### E) Use of the Resources

**Nr. of Users involved:**  
**Access Days/Units (IWES):**  
**Stay Days (IWES):**