

# Modeling and Simulation of Distribution System Components in Anticipation of a Smarter Electric Power Grid

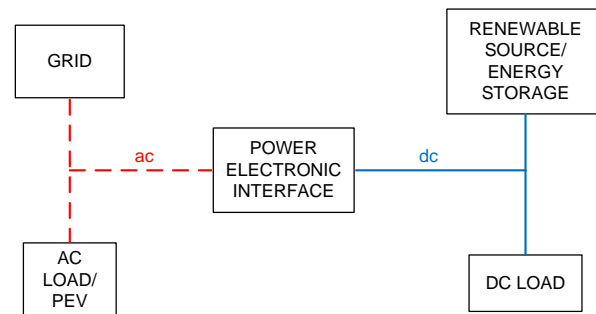
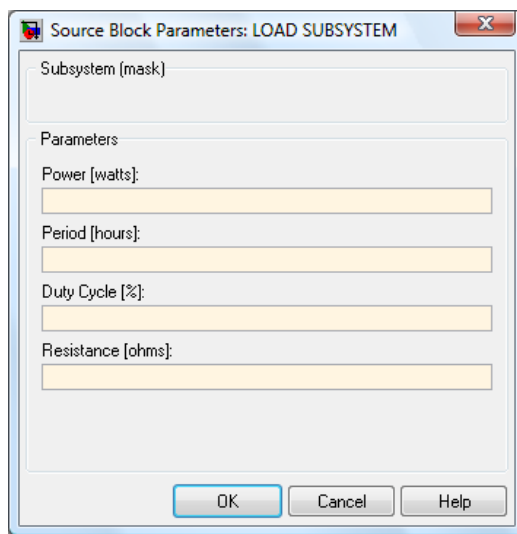
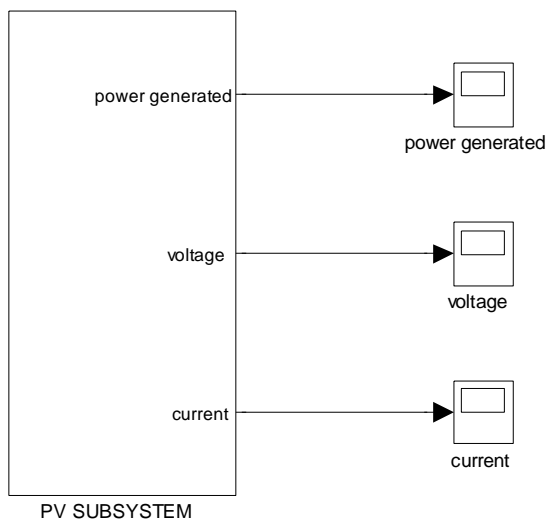
Amir Toliyat

## Purpose:

- To model the behavior, performance, and cost of distribution-level smart grid components
- To provide a basic insight into the energy transfer of such components
- To understand the design and configuration of a smart grid

## Approach:

- Derive dynamic equations (where applicable) of components
- Create modules, or 'blocks' for each component



Potential smart grid architecture

