contribute on these two issues by presenting a flexible bond-graph based model for a PV plant and using this model to determine the optimal placement of sensors within the plant.

This paper is organized as follows. Section II will generally introduce PV systems and their characteristics. Section III will introduce bond-graph models for PV systems. Section IV will discuss the problem of optimal sensor placement. Sections V and VI will validate the method through simulations and experiments. Finally, section VII will discuss the results.

Keywords: Faults detection and location, PV generator, Sensor placement, Bond graph, Output power

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