Interoperability between Islands and Smart Concentrator Unit

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Abstract—The paper deals with the problematic of the interoperability island smart renewable sources with smart concentrator unit. These sources are built up on smart regulators and communication module. It is focused mainly on the island localities without direct electrical connection, which should be interconnected with central concentrator unit. The theory contains little bit about regulator algorithm, block diagram of both power regulation and communication part and a few about fundamentals. There is shown how should be smart concentrator unit developed and what is the important for online monitoring of these island systems. Evaluation and measured electrical, communication parameters and results follows the papers.

Keywords—island renewable energy sources, GPRS communication, smart concentrator unit

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