

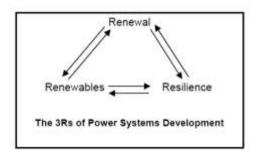


IEA ENARD-Annex II: an International Activity in Electricity Networks R&D and selected Austrian Activities in DG Integration

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Within the paper the IEA Implementing Agreement ENARD (Electricity Networks Analysis, Research and Development) and in detail Annex II, "DG System Integration in Distribution Networks), will be presented. Furthermore some selected Austrian activities in the DG system integration will be highlighted.

ENARD is a new International Energy Agency (IEA) Implementing Agreement which provides a forum for information exchange, research, analysis and collaborative research and development across a range of electricity transmission and distribution (T&D) network issues. Its vision is to facilitate the uptake of new operating procedures, architectures, methodologies and technologies in electricity T&D networks, such as to enhance their overall performance in relation to the developing challenges of network renewal, renewables integration and network resilience.



Annex II, "DG System Integration", to be operated by Arsenal Research (Austria) will aim to develop and exchange information and knowledge in relation to all aspects of Distributed Generation (DG) system integration and, specifically, to promote the possibilities for the implementation of active distribution networks. One of the key outcomes from Annex II will be the development of an authoritative set of guidelines for distribution network operators and political decision makers on how to manage the transition from today's passive distribution networks to the active networks of tomorrow.

One example for R&D in DG system integration is the Austrian Project "DG DemoNet-Concept with a focus on the transition toward active distribution networks. Therefore the main objectives of this "DG DemoNet – Concept" project are:

- to select parts of networks in Austria for practical realisation of demonstration networks with a high penetration of DG and
- to analyse the possibilities for implementing different model systems for network operation within these medium voltage network parts, and project the technical, organisational and economical realisation.

It will be investigated how active operation of distribution networks can be realised as model for future electricity networks based on innovative solutions.