

Lehigh University ESEI Seminar Series

1547 Standards evolution, 1999 to 2015.

**What are the requirements for
interconnecting distributed energy resources
with the grid?**

Presented By:

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Abstract: Deregulation of the electric utility industry, opened the grid to access by any generation resource. Legislative incentives encouraging the interconnection of renewable energy sources encourage wide spread interest in interconnection. The absence of any coordinated effort to standardize interconnection requirements was recognized in the mid-1990s. With encouragement from the DOE, IEEE formed industry working groups to surface the issues and provide an organized response to the concerns of the utility system operators, equipment suppliers and regulators. IEEE Std 1547 is the resulting standard. It became obvious that additional effort was needed. As a result, additional standards, guides, and recommended practices evolved. This discussion presents the IEEE 1547 family of documents, the issues that formed them and the continuing efforts to keep them current with the changing landscape of the national electric grid.

Bio: James M. Daley P.E. DGCP retired after 37 years, with ASCO Power Technologies as Division Engineer and continued working as a consultant. He is a Life Senior member of IEEE and a member of Tau Beta Pi. He has BSEE and MSEM degrees from New Jersey Institute of Technology. He has accumulated over 50 years' experience in the generation, distribution and control of power on the users' side of the meter. He has authored IEEE and SAE Transactions and other papers on the issues surrounding customer owned generation. He holds a number of patents and design innovations in this field.

He is a member of the writing group for the initial 1547 standard. He has held chair and co-chair and writing group positions on the full breadth of the family of documents. He is currently working with IEEE on the development of a standardized interconnection protocol for industry wide adoption.



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