# Microgrids for Enhancing the Grid Resiliency

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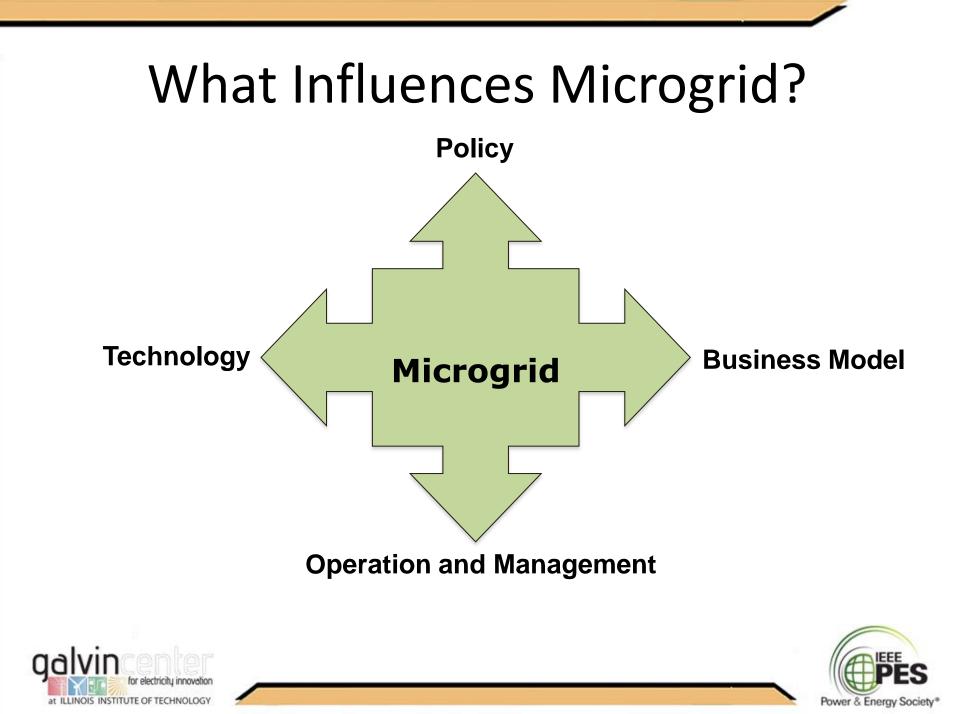


## DOE's Definition of Microgrid

 "A group of <u>interconnected</u> loads and distributed energy resources (DER) with clearly defined electrical boundaries that acts as a <u>single controllable entity</u> with respect to the grid [and can] connect and disconnect from the grid to enable it to operate in both grid connected or <u>island mode</u>."



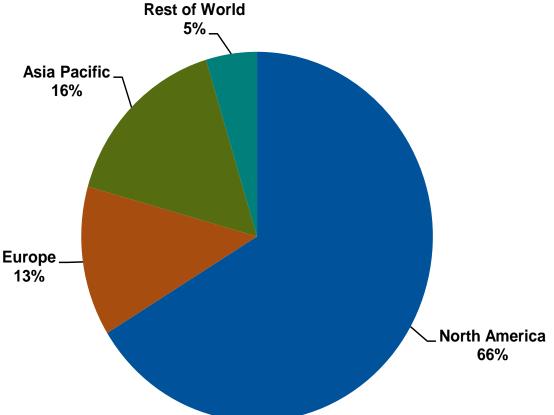




#### Microgrid Deployment Tracker 2Q13

- North America:
   274 projects
  Asia Pacific 16%
  - 2504.9MW
  - Europe:
    - 51 projects
    - 507.75 MW
- Asia Pacific
  - 109 projects
  - 387.2 MW

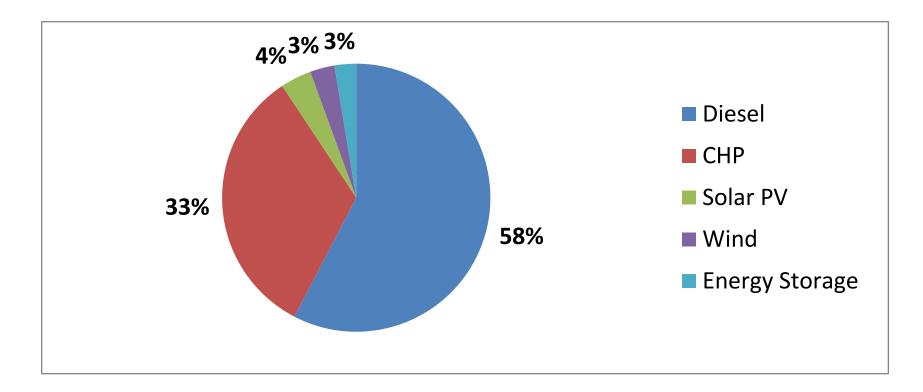
at ILLINOIS INSTITUTE OF TECHNOLOGY



Ref: Navigant Research



## Type of Generation (MW)



Ref: Navigant Research





## Today's Speakers

- Math Bollen: Microgrids and the Utility; a European perspective
- Mark McGranaghan: The Role of Microgrids in the Future Utility Network
- Anuradha Annaswamy: An Analytical Perspective for Evaluating Microgrid Resiliency
- Tom Basso: Analysis, Testing and Conformance: Establishing Microgrids As A Utility's Friend
- Steven Pullins: Citizen Microgrid



