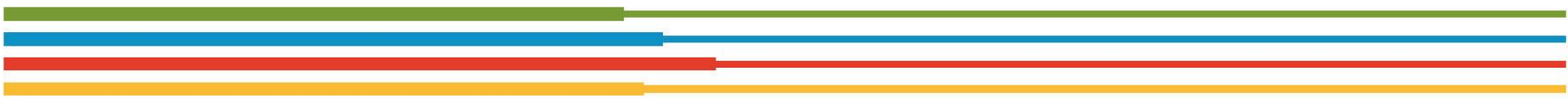


Grid Modernization



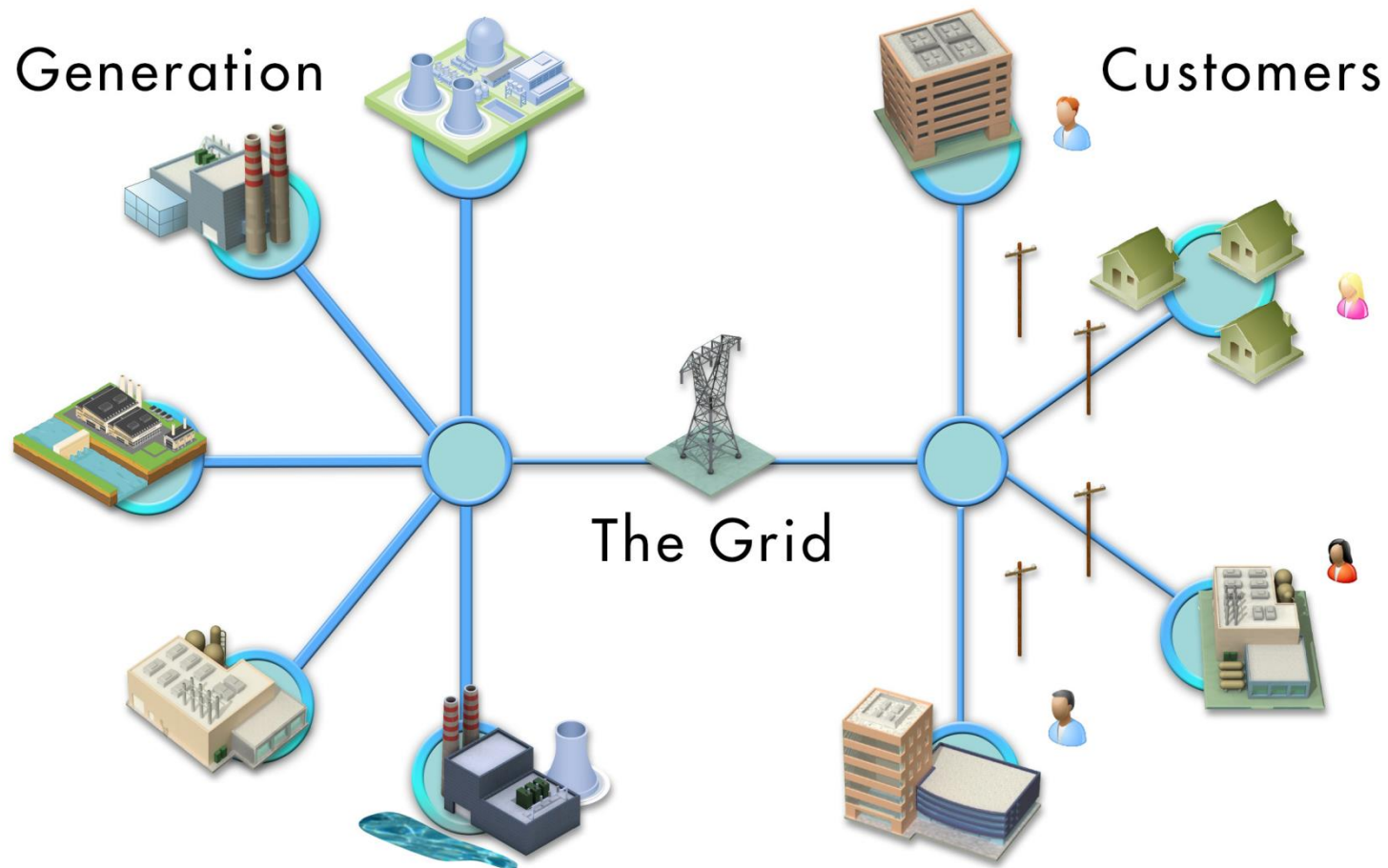
Peter Zschokke
AESP-NEEC 14th Annual Conference
November 13, 2014



The 20th Century Grid

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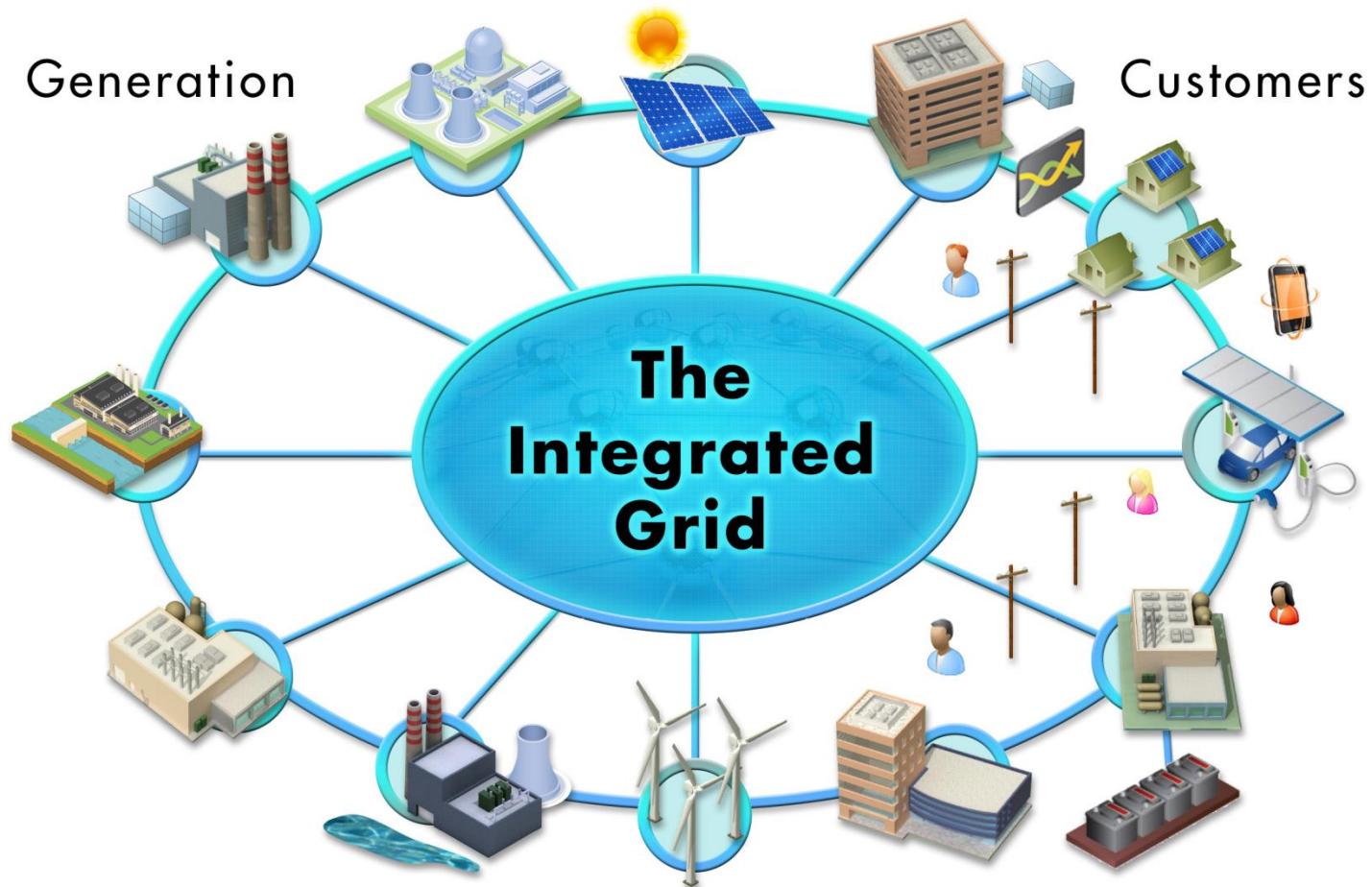
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To Be Constructed 21st Century Grid

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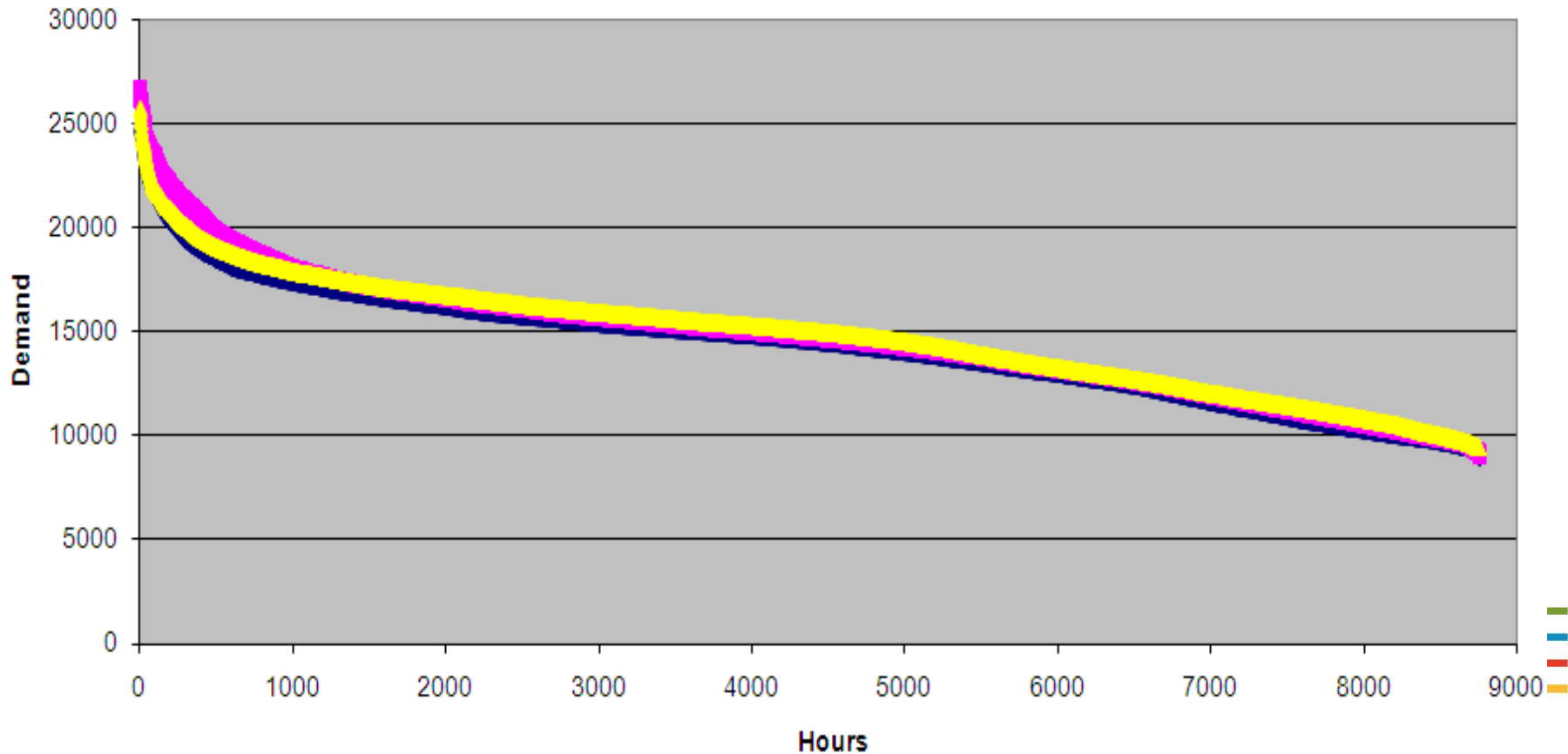
New England Load Duration Curves: Hourly Load Plotted Highest to Lowest

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Load Duration Curves

◆ DEMAND 2009 ■ DEMAND 2010 ▲ DEMAND 2008

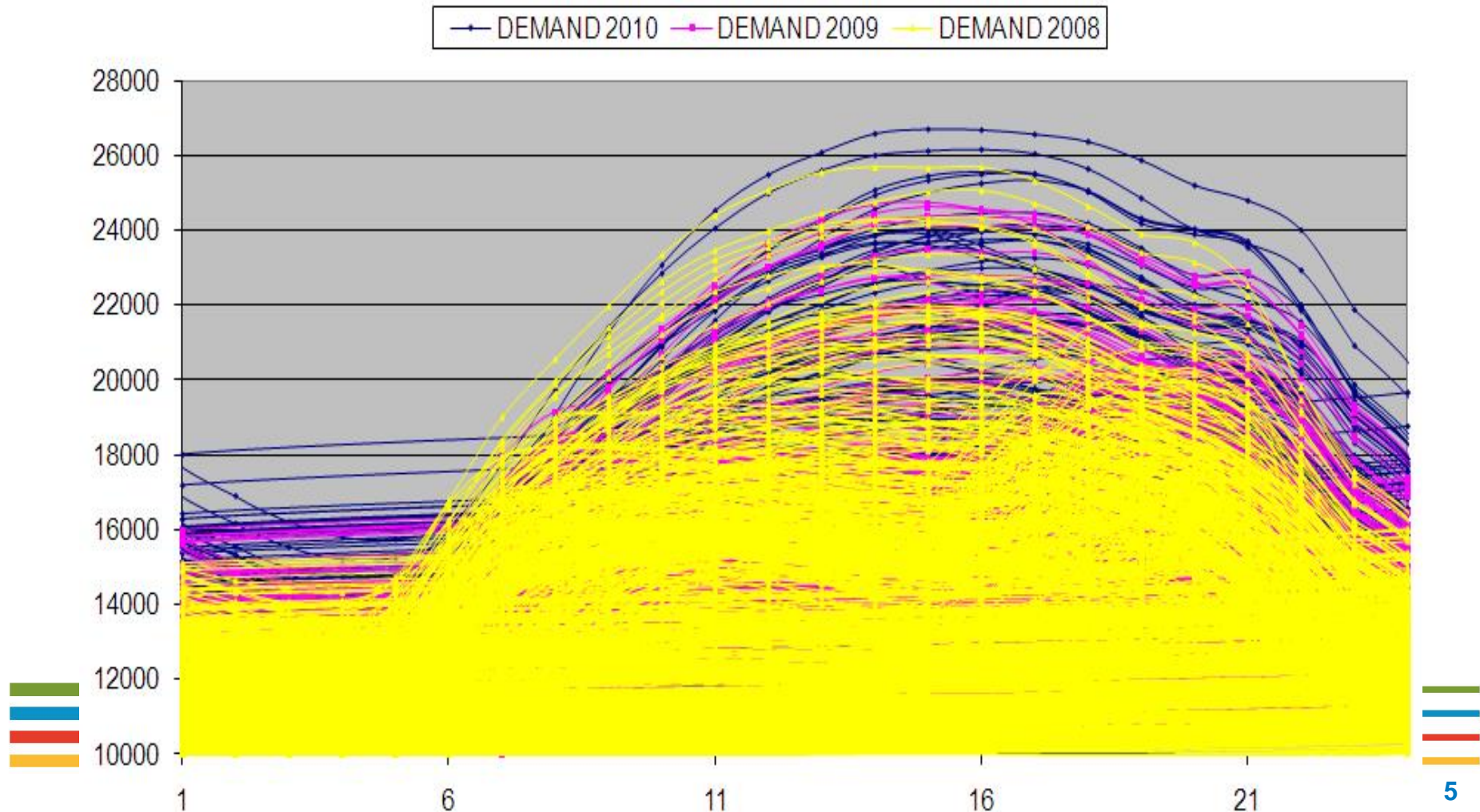


New England Daily Load Curves: What do they tell you?

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ISO-NE Hourly Loads 2008-10



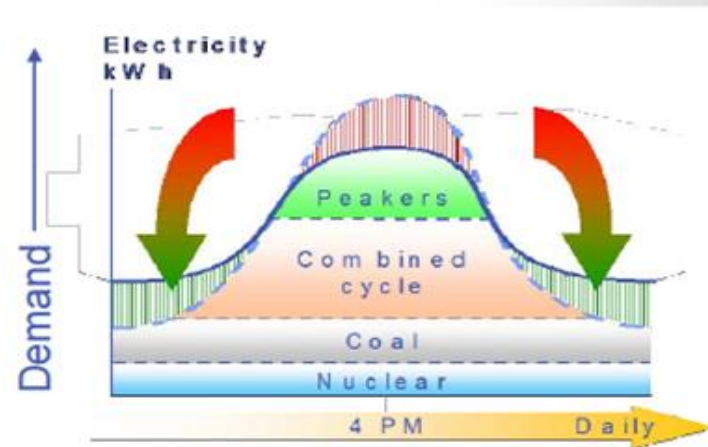
The Smart, Integrated Grid Potential

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Smart Grid Benefits

- Increased reliability
- Increased demand response participation
- Increased utilization of generation capacity
- Increased integration of customer-sited generation: storage, fuel cells, CHP, solar, etc.
- Overall increase in power grid efficiency and cost effectiveness



A Successful Grid Mod Plan

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- ✔ Responds to evolving customer needs and expectations
- ✔ Creates a more resilient electric grid
- ✔ Enables integration of DER into electric grid operation for greater efficiency
- ✔ Promotes greater use of efficiency and renewable generation by customers
- ✔ Treats DG as a customer and potential supplier, not an interconnection
- ✔ Enhances workforce capabilities to deliver the integrated electric grid