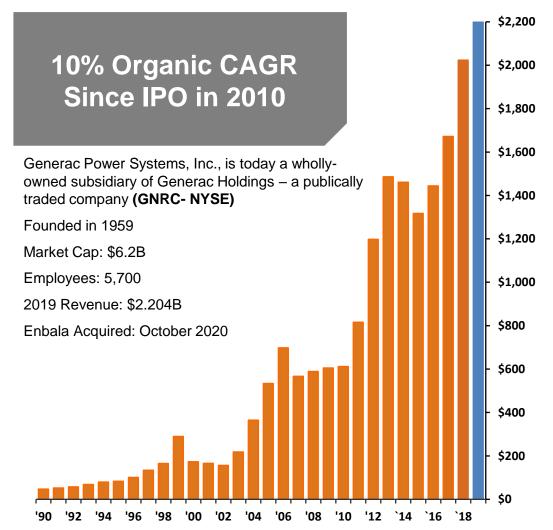


# Enbala Aggregation & Orchestration

Feb 2, 2021

#### **Generac - Accelerating our Clean Energy Transition**

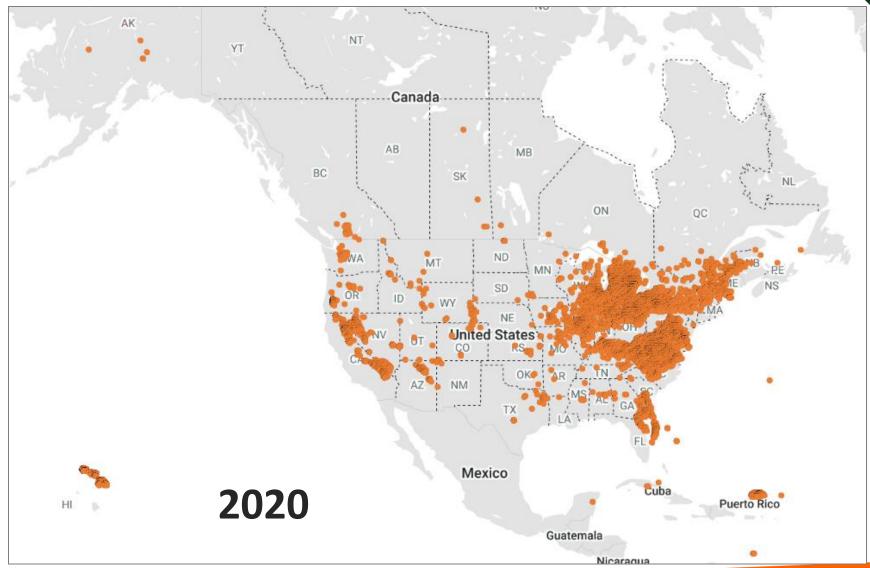




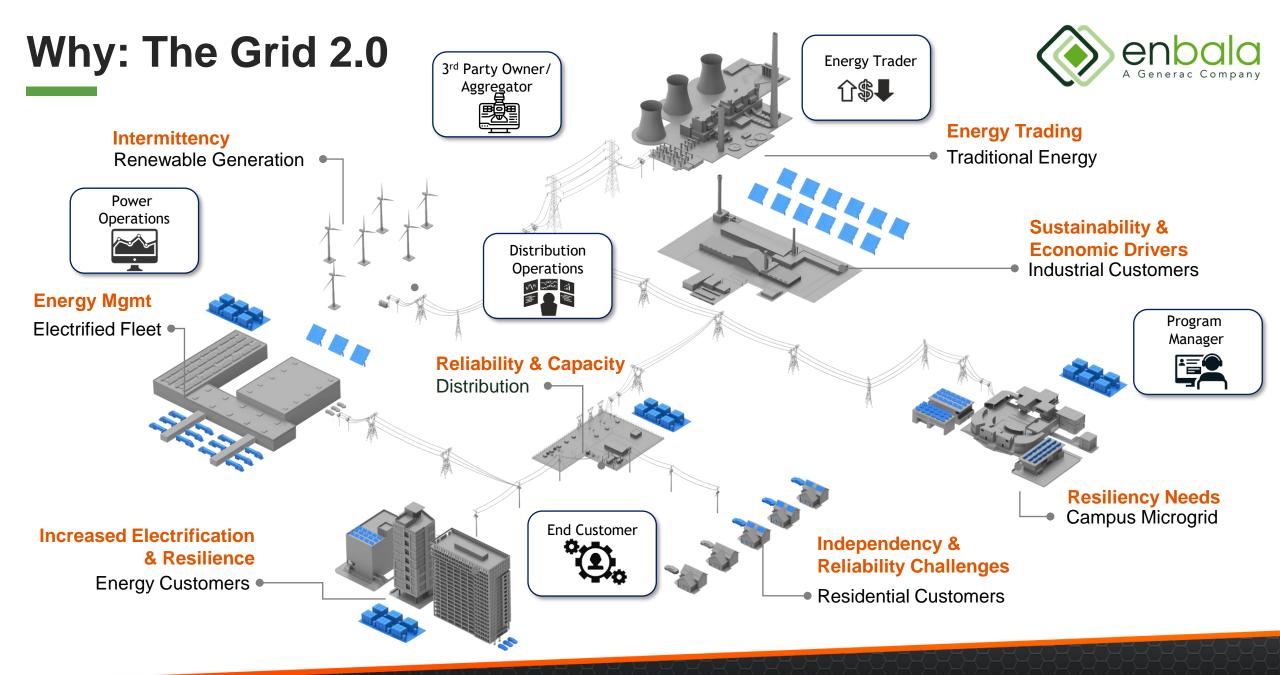


### **Context: DERs are Growing Fast**





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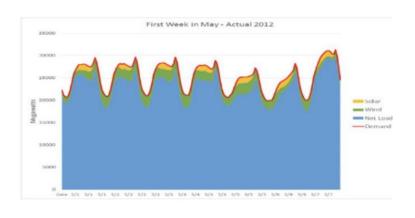


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#### The Why: Manage Complexity & Flexibility

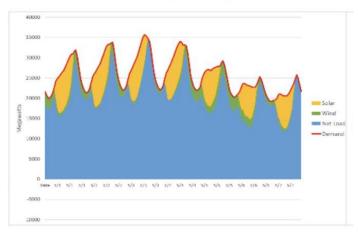


First week of May 2012 (actual)

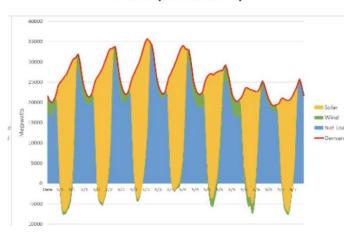


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First week of May 2017 (actual)



First week of May 2030 (modelled)



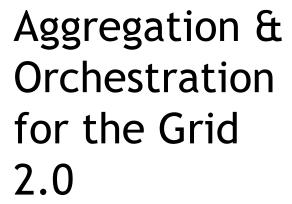
Increasing need for flexibility

5/

#### **Enterprise DERMS Offering**



Distribution Optimization





- DRMS Upgrade
- > Realtime Control
- > Realtime M&V
- Notification & Control

Advanced Wholesale Energy Markets

Virtual

**Power Plants** 

- > Forecasting & Trading
- > Locational & System wide control
- Local & Global Optimization

- > ADMS Integrated
- > Localized Volt-VAR optimization
- > Localized Volt-Watt optimization
- > Optimization for Feeder Loss



#### Where?

































































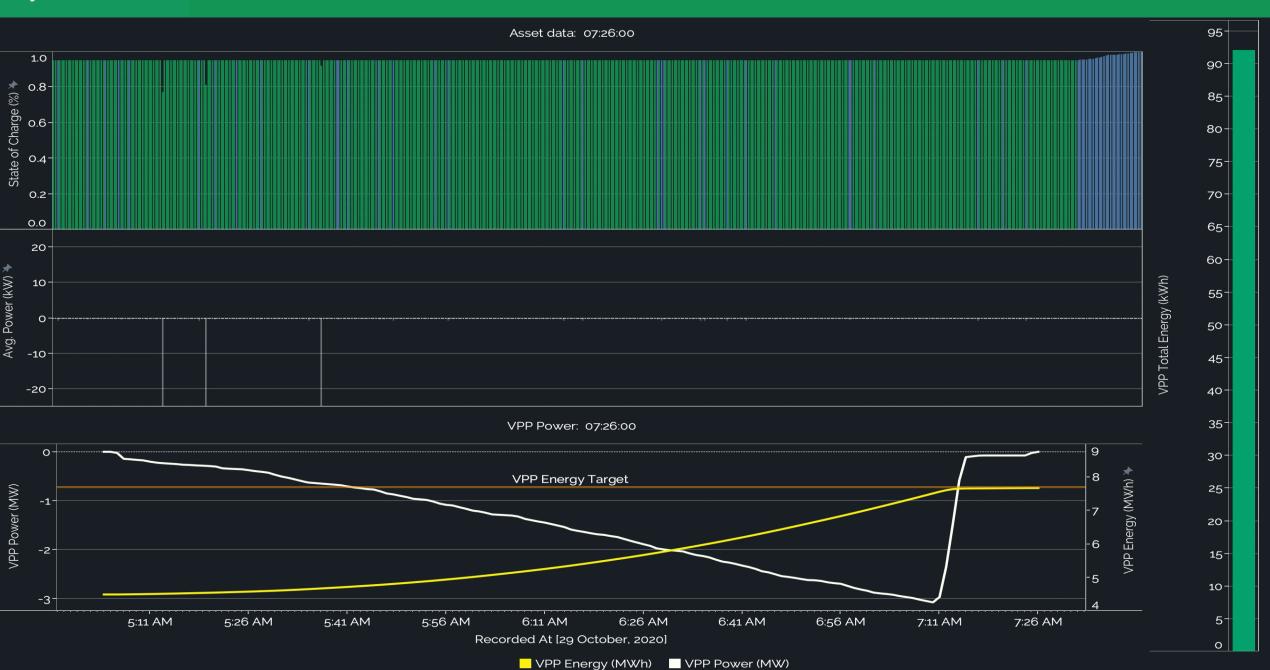
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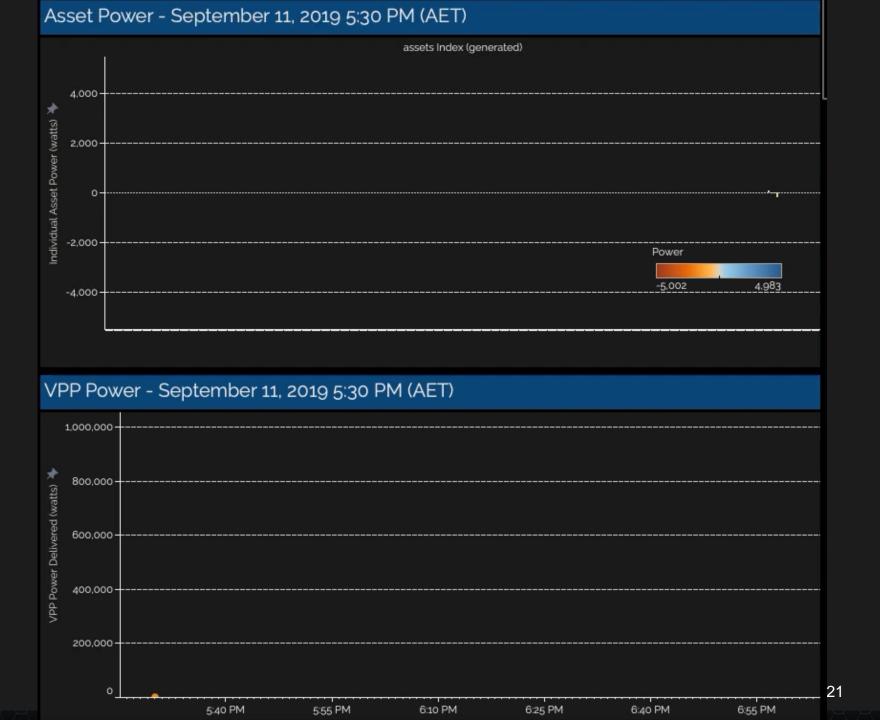




2/4/2021

#### **Event Dispatch Report**





#### What have we learned?



- > Design for Robustness
  - > Asset constraints
  - > Operational constraints
  - > Communications constraints
- > Bring the data to the operations center
  - > Single-pane-of-glass
  - > Align with operational goals & visualizations
- > Flexibility is system interfaces
  - > Forecasting
  - > Topology/Grouping

2/4/2021



## Thank you

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