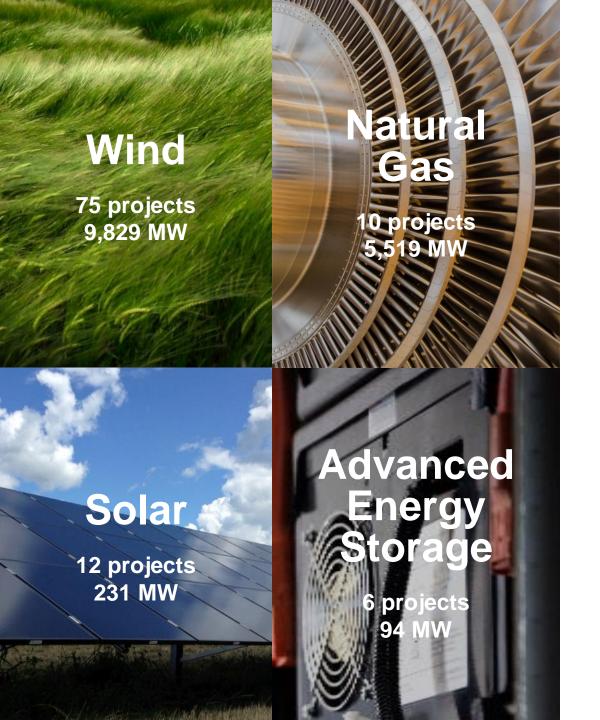
Energy Storage in Capacity Planning & Resource Adequacy

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for the







Broad Expertise

We develop, own and operate large-scale renewable and other clean energy generation and storage facilities in North America, Latin America, Japan and Europe.

^{*} As of May 1, 2017; includes projects that are operating, in construction or contracted. Renewables include wind, solar and storage.

Storage Market Evolution

Balancing & Ancillary Services

- FERC Order 755 & 784
 - Why PJM?
- Solar Integration PR & HI

"Capacity"

- CA Resource Adequacy
- "Capacity Performance"

Reliability & Multiple Services

- Glacier PSE
- BQDMP ConEd



Bellingham Herald - 2016

Barriers to Next Wave

What is "Flexible Capacity"?

- Serving the Peak
- Optimizing the Fleet
 - Ramping
- Incremental & Mobile Installations

Additional FERC Activity

- RM17-8: Interconnection
 - Grand Ridge Energy Center
 - Supply vs. T&D
- RM16-1 & 16-6: Frequency Response & Reactive Power

Technology Advancements

Carts & horses, chickens & eggs



