

Grid-Interactive Behind the Meter Storage

PLMA 2016

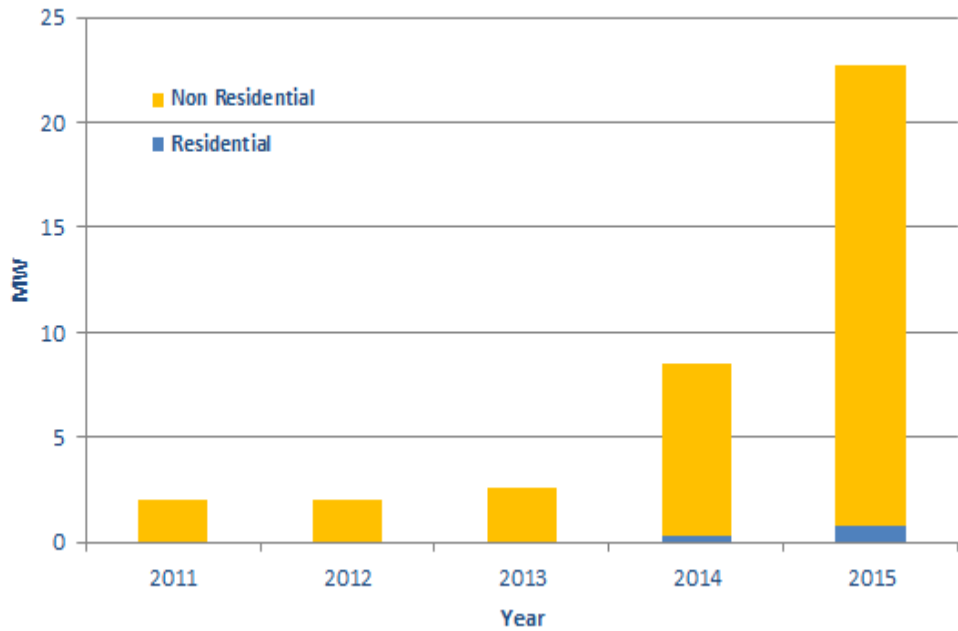




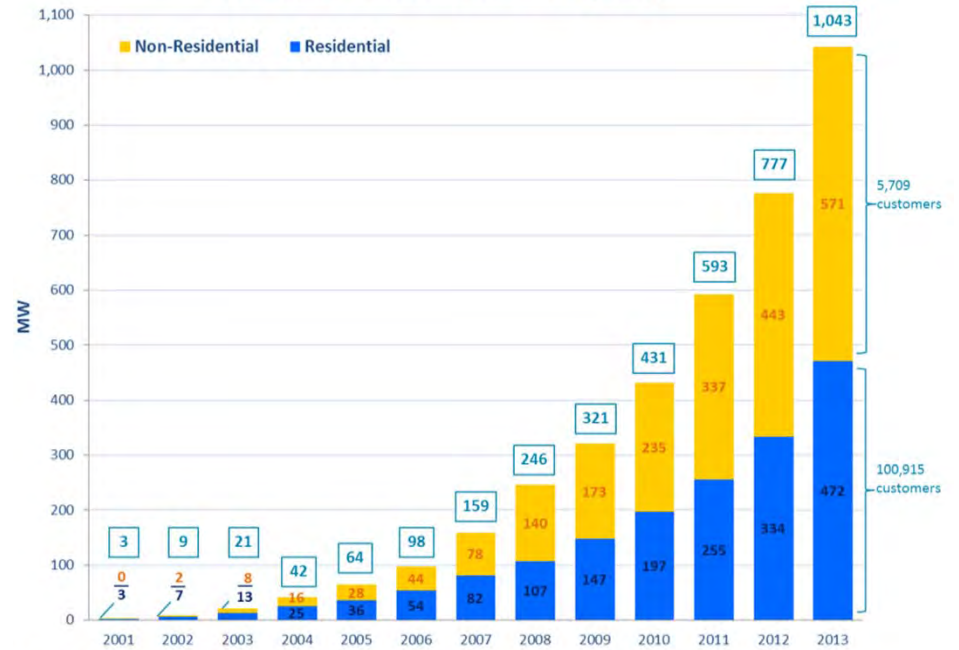
PG&E Has Experienced Strong Distributed PV Growth and Emerging Energy Storage

PG&E has a strong track record on solar, and will continue to enable robust growth of both PV and energy storage

Cumulative Customer-Side Storage Capacity



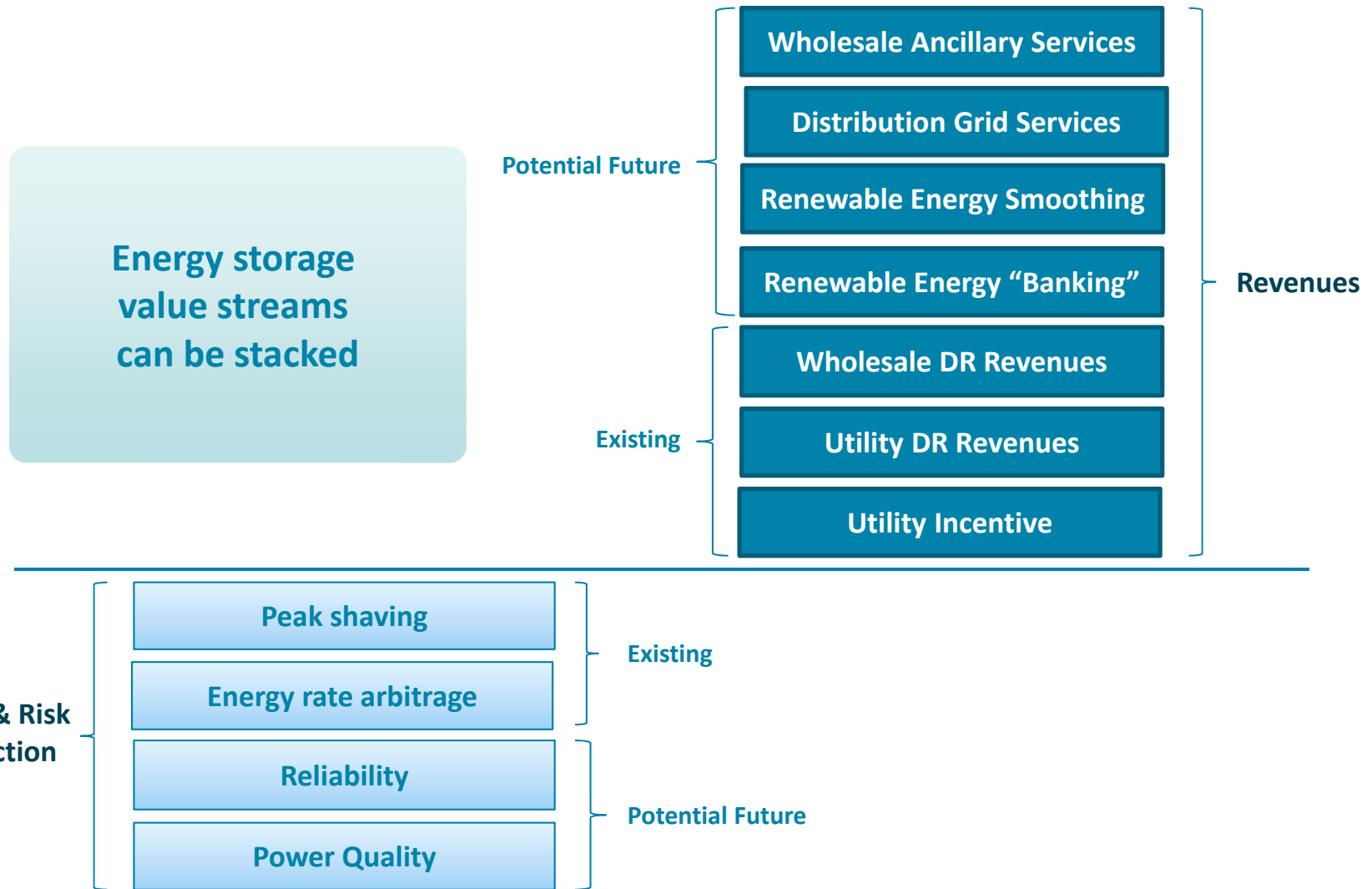
Cumulative Customer-Side PV Capacity*



* Capacity is CEC AC and includes all NEM and non-NEM customer-side PV capacity. Some previous versions of this chart include only NEM capacity, so totals were, on average, 5% lower than above.



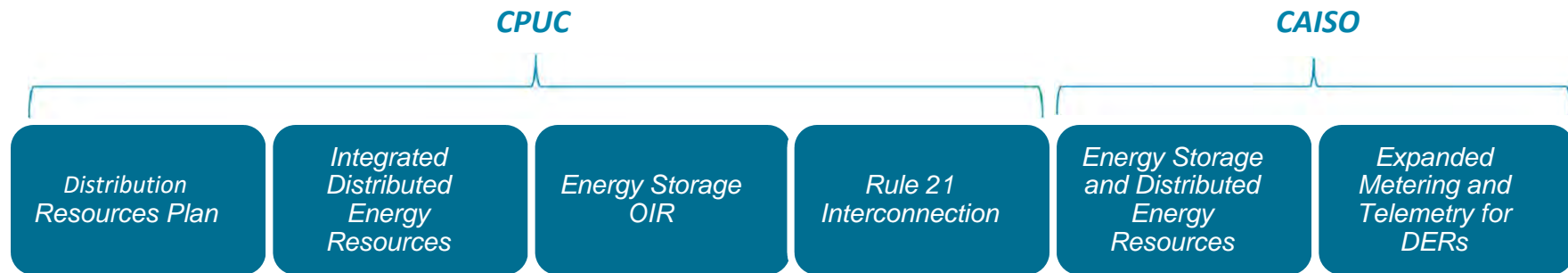
Energy Storage Offers Savings and Potential Future Value Streams to Customers





Key Questions for Emerging Role of Storage

Policies are focusing on the role of storage at the grid edge:



Key Questions

- 1) How can both the value and cost of storage be correctly analyzed in these emerging roles?
- 2) How can different value streams be prioritized and valued?
 - Customer
 - Distribution and Transmission Grid
 - Market
- 3) How can storage help meet customer expectations with value-added products, programs and services?
- 4) How can risks be mitigated?
 - Grid safety and customer safety
 - Reliability concerns
 - Double compensation or shifted costs to non-participating ratepayers