

Integrated DER Planning

Presented at OMS 2018 Forecasting Workshop Des Moines 5/22/2018
Obadiah Bartholomy

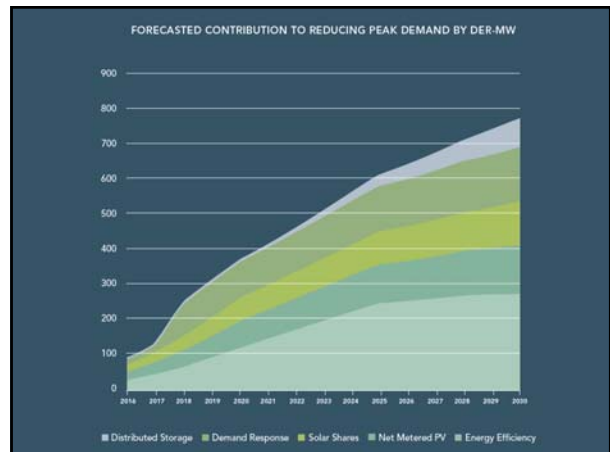
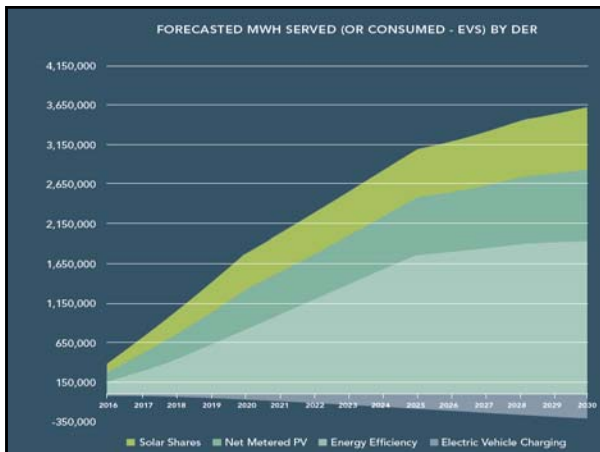
Powering forward. Together.

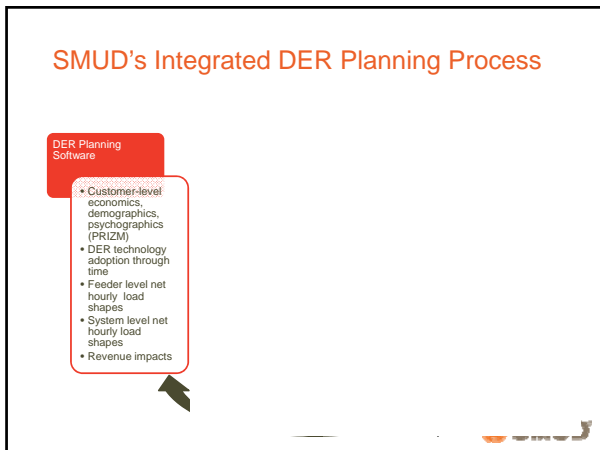
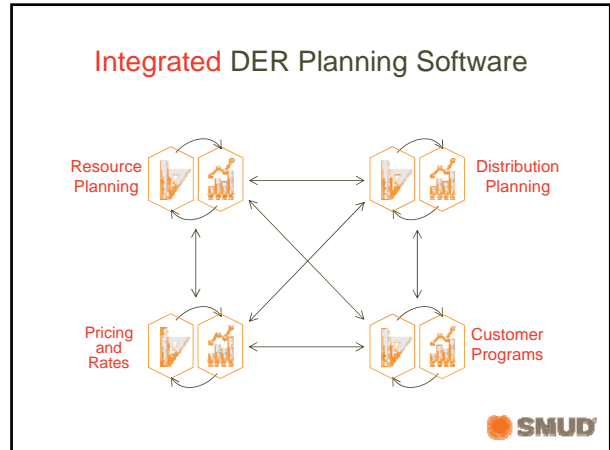
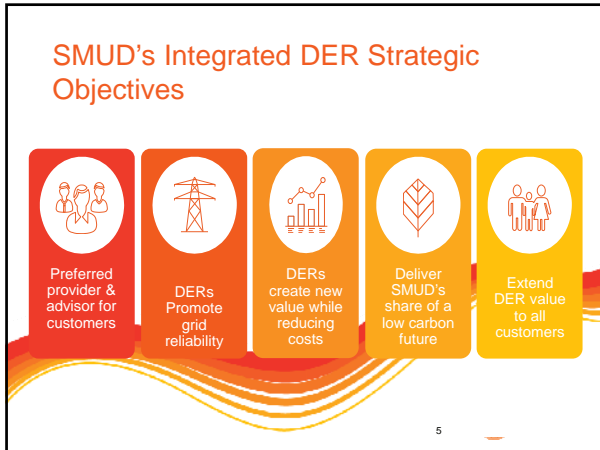
Current SMUD DER Statistics

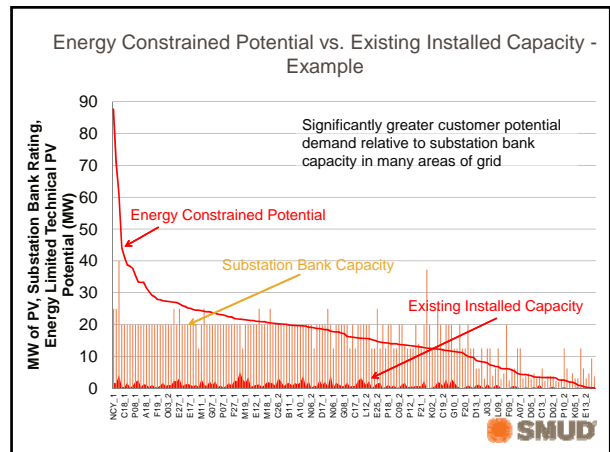
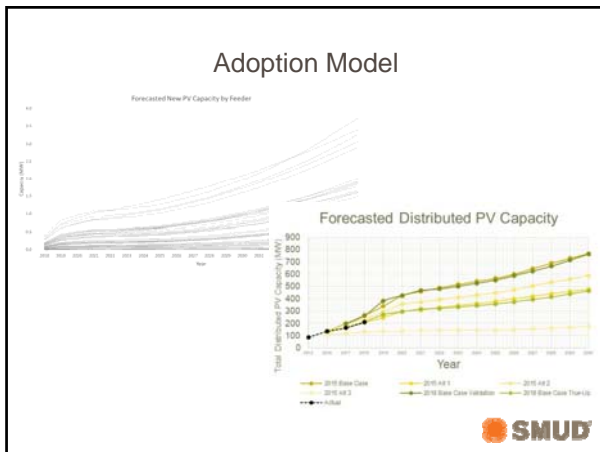
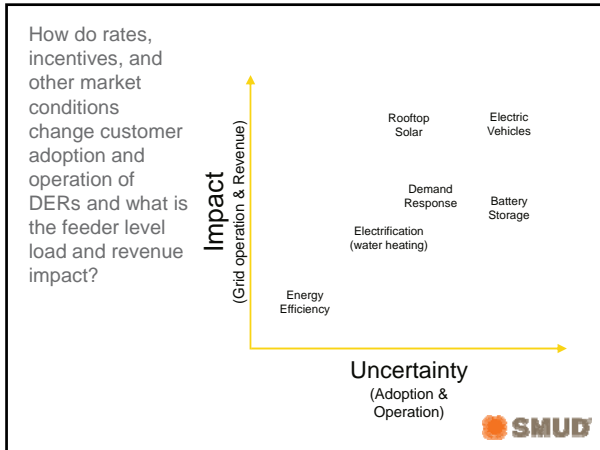
- Residential PV installs –
 - 91 MW
 - Over 20,000 PV systems
 - 5 kW average system capacity
 - Current 2020 forecast 158 MW
- Commercial PV installs –
 - 74 MW
 - 450+ total systems
 - 5 kW to 3 MW system capacity
 - Current 2020 forecast 178 MW
- Residential battery storage
 - Approx. 100 installs to date, mostly for residential with PV

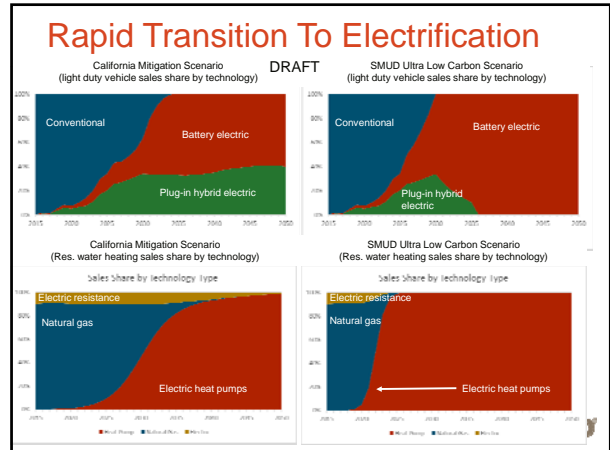
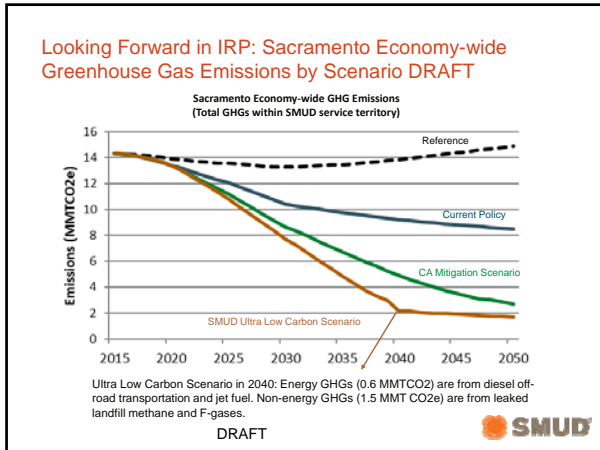
- EVs
 - Current number approx. 7,000
 - Current 2020 forecast approx. 16,000
- DR
 - Current capacity approx. 80 MW
 - 2022 target 200-300 MW
- EE target
 - 150 GWh per year

- Customer investment in DERs greater than SMUD investment in large renewables
- Potential for stranded capital assets
- Public policy push to expand investment in DER technologies
- Decline in utility revenue, increasing fixed cost shifts
- Leveraging DERs to provide grid benefits









SMUD's vision is a grid with outstanding reliability, power quality, safety and security that supports a competitive and vibrant DER market in a low-carbon future. This will continue SMUD's role as a trusted energy advisor and establish us as the preferred provider of DER services.

Thank You!

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