| **DOCKETED** |
|-----------------|---------------------------------|
| **Docket Number:** | 19-SB-100                       |
| **Project Title:** | SB 100 Joint Agency Report: Charting a path to a 100% Clean Energy Future |
| **TN #:** | 229866                           |
| **Document Title:** | Turlock Irrigation District SB 100 Workshop - Central Valley |
| **Description:** | Presentation by Brad Koehn, Turlock Irrigation District |
| **Filer:** | Jann Mitchell                    |
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AGENDA

- Background
- Generation Portfolio
- RPS Compliance
- Our Customers
- SB100 Challenges
  - Reliability
  - Affordability
  - Regulatory Uncertainty
- Summary
Located 90 miles south of Sacramento
Established in 1887
First Irrigation District in CA
Started providing electricity in 1923
- 662 square mile service territory
- 1 of 4 Irrigation Districts to provide retail electric service
- Formed our own Balancing Authority in 2005
TID provides electricity to approx. 100,000 accounts

Majority of service territory is disadvantaged and/or low income

7 out of 11 communities
Diverse portfolio of generation
- wind, solar, biomass, geothermal, large hydro, small hydro, and natural gas
Early Action
- Small Hydro in 1979
- Geothermal in 1986
- TWP in 2009

Future Renewable Procurement
- 100MW in 2024
- 100MW in 2029
SB100 CHALLENGES – RELIABILITY

- Balancing Authority Obligation
  - Match Generation to Load
  - Invested in Generation Assets

- Increasing Load Variability
  - Behind the Meter Solar & Additional Renewables
  - Requires Flexible Generation
Long Term Debt on generation assets
  - Stranded Assets ultimately will have significant rate impacts
  - Analyzing alternative fuel options

Transition to Battery Storage
  - Cost declining, but still very costly at utility scale
SB100 CHALLENGES – UNCERTAINTY

- Definition of Carbon Free
  - 20%-25% of our annual generation is Large Hydro

- Procurement Rules
  - Minimum contract length vs ownership

- 2030-2045 Milestones
  - Path from 60% RPS to 100% Carbon Free
TID has been an early actor in renewable and carbon-free energy.

TID has unique challenges as a small balancing authority serving a highly disadvantaged community.

TID is supportive of California’s emission reduction goals and embraces being able to collaboratively develop mutually beneficial solutions.