ET Summit 2024

Presented by





Adapting to Market Needs:

Updating Measure Packages through CalNEXT



Greg Barker
Technical Director
Energy Solutions





The Evolution of CA's Emerging Technology Program

- Incorporate decarbonization, equity, and grid priorities
- Testing technology transfer pathway through Focused Pilots
- Support incorporation of ET into CA eTRM through measure data collection and measure package development



CalNEXT Measure Packages Updates with Fast Track

- Eliminate ET-to-Program gap
- Fund projects "that can result in immediate benefits to the IOU portfolios...with potential to update existing or underutilized measures"

- Fast Track = Screened
 quickly outside of fixed
 submission schedule
- Fast Track ≠ eTRM
 measure updates in
 under 10 weeks



CalNEXT Measure Packages Updates with Fast Track Where do Measure Package Projects ideas come from?

- California Technical Forum
 - Staff administer the CA eTRM
 - TF members include implementers, evaluators, and technical experts
- Investor-owned utilities and other Program Administrators
 - Engineering Teams tasks with Measure Package oversight
 - EE Program Administrators
- Energy Efficiency Program Implementers



eTRM needs in Residential HPWHs

- At the outset of CalNEXT, CA eTRM did not allow programs to incentivize most Heat Pump Water Heaters (HPWHs) with tank sizes larger than the units being replaced
- "Upsizing" for HPWH was quickly becoming a best-practice, particularly for Gas replacement
- eTRM did not consider 120V WHs, mixing valves, largest tanks, connected control, or load shifting

Relevant Measure Packages

- SWWH025 <u>Heat Pump Water</u> <u>Heater, Residential, Fuel</u> <u>Substitution</u>
- SWWH014 <u>Heat Pump Water</u> <u>Heater, Residential</u>



eTRM-Focused Projects with Residential HPWHs

Residential Water Heater Sizing Measure Package Support

- Upsizing measure offerings added to eTRM
- Quick fix for challenging program eligibility gap
- Led by TRC
- ET22SWE0036 completed in 2022

Residential HPWH Market Study and Measure Gap Analysis

- Comprehensive measure offering suggestions
- Analysis of TECH Clean CA data
- Input for eTRM Updates due 2024
- Led by Energy Solutions
- ET23SWE0035 completed 2023



Residential HPWH Outcomes and Lessons

- 1. CalNEXT ET projects can address deemed measure package gaps quickly
- 2. Quickly evolving technology areas require adaptation across the entire deemed measure ecosystem:
 - Anticipation in planning program cycle savings updates
 - Calculation tools and models may need more frequent and responsive updates
 - Load shapes becoming more important and more specialized
- 3. Coordination with Programs: early and often!



These projects were funded by



For more information contact Greg Barker at gbarker@energy-solution.com

The project reports can be found here and here



What measure package gaps present challenges for your program?

What technologies or replacement scenarios do you want to see in the CA eTRM?

Let CalNEXT know!

Greg Barker

Technical Director

Energy Solutions

gbarker@energy-solution.com

www.calnext.com



