

**Vermont System Planning Committee**  
**Load Forecasting Subcommittee**  
**June 22, 2023**  
**Meeting Minutes**

**Participants:** Eric Fox (Itron), Michael Russon (Itron), Brien Rissman (Itron), Drew Clayson, Brian Hall (VEC), Michael Beaulieu (VEC), Sarah Braese (VPPSA), Philip Picotte (DPS), Bill Powell (WEC), Brian Evans Mungeon (Hyde Park), Andrew Quint (GMP), Jay Pilliod (EVT), Michael Lazorchak (SED), Thomas Lyle (BED), Heather Darcy (VPPSA), Mike Leach (BED), Leigh Seddon (EAN), Marc Allen (VELCO), Hantz Pr sum  (VELCO), Zakia El Omari (VELCO), Khalid Osman (VELCO), Luke Looman (VELCO), Shana Louiselle (VELCO)

**Itron Presentation:** Mr. Fox and Mr. Russo provided an overview of the forecast approach and results of their work to develop the draft long range forecast. The presentation is located here.

1) Preliminary results:

Itron presented its “baseline” and “adjusted” forecasts. Forecast adjustments included for EE program savings, heat pumps, solar, and electric vehicles. Highlights of discussion include:

- Policy case or “expected” case is based on meeting state electric vehicle electrification target, and heat pump unit sales increase to 17,500 units per year by 2029.
  - The winter policy peak projects 1,389 MW by 2033, and 1,569 MW by 2043
  - The summer policy peak 1,195 MW by 2033, and 1,329 MW by 2043
- Business as Usual case looks at lower electric vehicle market penetration and lower heat pump penetration (i.e. 10,500 per year through 2029).
  - The winter BAU peak projects 1,184 MW by 2033, and 1,374 MW by 2043.
  - The summer BAU peak projects 1,084 MW by 2033 and 1,226 by 2043.
- Significant load growth driven by thermal and transportation is expected in either case.
- Heat pump forecast under the policy case will increase from 10,500 units in 2022 to 17,850 units by 2029, adding an additional 180 MW of load by 2033 and 250 MW of load by 2043.
- Heat pump forecast under the BAU case, heat pumps held at 2022 sales level of 10,500 per year, adding an additional 130 MW of load by 2033 and 195 MW by 2043.
- Electric vehicles constituted 6.9% of all new light duty vehicle sales in 2022, higher than the U.S. average of 5.8%.
- Electric vehicle forecast under the policy case are projected to increase to 400,000 by 2043.
- Electric vehicle forecast under the BAU case are projected to increase to 260,000 by 2043.
- Itron added fleet electrification to the model this year, taking data from ISO-New England’s 2023-2032 Transportation Electrification Forecast for Vermont. The study forecasts light duty, medium-duty, school bus and transit bus fleets. The BAU forecast assumes the incremental increases remain at 2032 level through 2043, and the policy

forecast assumes 100% electrification by 2028-2045, depending on fleet electric vehicle type.

- New to this forecast, Itron added three charging profiles (non-fleet home, non-fleet away, and fleet) and assumes that 80% of the non-fleet charging will take place at home, while the remaining 20% of the charging will take place away from the home at either a work place or public charging place.

#### Next steps

- More work to be done to model the extreme weather impacts, which could yield 5% increase.
- VELCO planning will begin to use the data to start the analysis the summer, and may have further data requests or clarification questions for the distribution utilities.
- A draft plan will be available for the VSPC at the January 2024 quarterly meeting, followed by a 60-day review period for comments. The public input period will take place in April and May, and the final plan will be published by July 1, 2024.