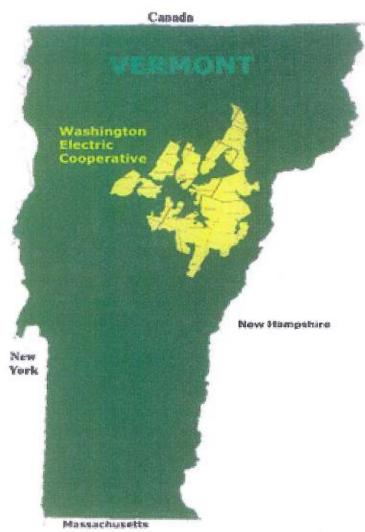
# Senate Natural Resources & Energy Washington Electric Cooperative

April 3, 2018
Patty Richards

#### **About WEC**

- Electric Cooperative Not for Profit
  - Established in 1939
  - Member owned
  - Created by and for those without power
    - investor owned utility would not extend lines to rural landscape
- Size
  - Peak 16 MW (Winter)
    - State of VT ~ 1,000 MW Peak (Summer)
  - 66,000 MWH Retail Sales Annually
    - 1.3% of State Load
  - 10,800 meters/members
  - 41 towns 4 counties Central Vermont (Washington, Orange, Orleans, Caledonia)
    - 17% of Vermont Towns
  - 96% of our members residential
- Board of Directors
  - Nine Directors
  - Set Policy
  - All Members
  - Annual Meetings



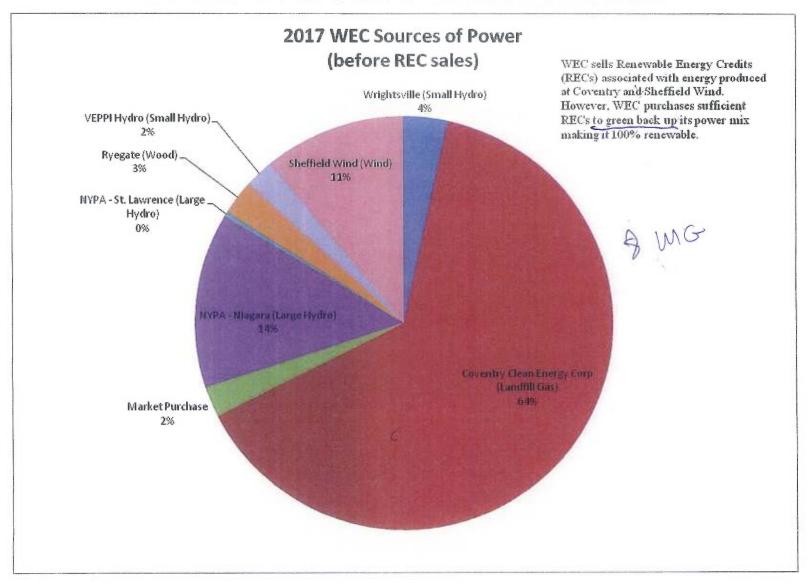
### **About WEC**

- Very rural and little commercial base
  - WEC 8 members per mile
  - GMP is 20 customers per mile
  - BED 87 customers per mile
- WEC largest cost driver is infrastructure (wires, poles, substations, etc)
  - Power Supply Costs ~ 8 cents/kWh
  - All other costs ~ 11 cents/kWh
- Average residential user ~ 500 kWh per month (12% less than statewide avg)

### **About WEC**

- WEC supports renewable power (100% renewable)
- Local Resources and Investments
  - Coventry \$16M
  - Wrightsville \$3.2 M
  - Sheffield Wind \$572K per year
  - Small Vermont IPP's \$380K per year
- Dollars stay in the VT Economy (multiplier effect)
- Early Leader in Net Metering (11% of Peak by 2014)
- Early adopter of Energy Efficiency since 1991
- Tier 3 Act 56 Weatherization Focus

### WEC is 100% Renewable



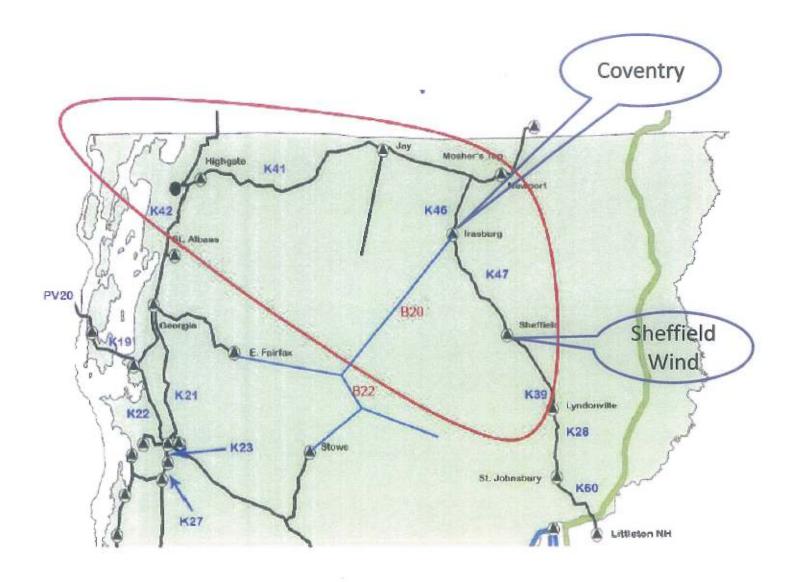
# Sheffield Highgate External Interface (SHEI)

- Grid Bottlenecks
  - Thermal
  - Voltage
- Too much Generation
- Too little Load

4/2/2018

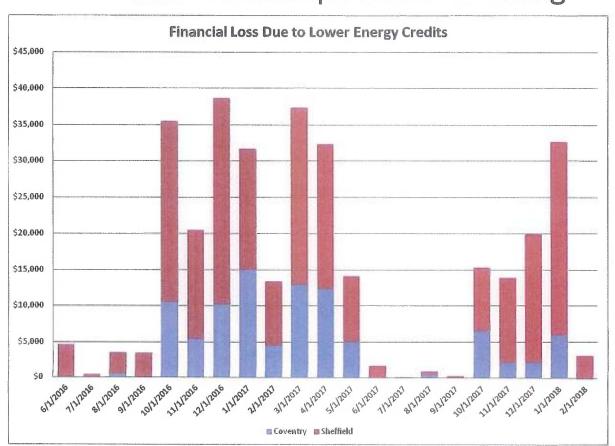
## SHEI Impact to WEC

- 75% of WEC's power portfolio located in SHEI
- Resources constructed well before constraints
- WEC Resources Being Harmed
- New Resources No Impact
  - Coventry Landfill Gas to Energy 8 MW
  - On line 2005
  - Connects at Irasburg Substation to VELCO
    - 64% of WEC's 2017 energy production
  - Sheffield Wind 4 MW out of 40 MW project
  - On line 2011
  - Connects at Sheffield Node to VELCO
    - 11% of WEC's 2017 energy production



## Financial Loss Significant

- 2016 \$106,598 Loss (7 months)
- 2017 \$180,741 Loss (12 moths)
  - = 1.3% Rate Impact and Growing



## What is WEC Doing

- Working with VELCO and other VT Electric Utilities to identify problems and solutions
- Transmission System
  - Working to identify infrastructure changes needed to fix issues
  - Transmission upgrades
  - Identify Cost of Upgrades
  - Who will pay? ===> Vermont rate payers
- Additional generation in SHEI will worsen issues
- Intervening in generation applications for CPGs
   500 kW and greater

#### Comments on S.115

- Two major issues
  - Curtailment
  - Depressed Wholesale Prices
- If new generation can demonstrate no impacts to curtailment or price suppression then we are okay
- Rate Pressure Increasing
- Higher Electric Rates ===> Harder reach to 90% renewable goal

4/2/2018

## Questions & Thank You

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