



Rebecca Towne, CEO  
February 10, 2021

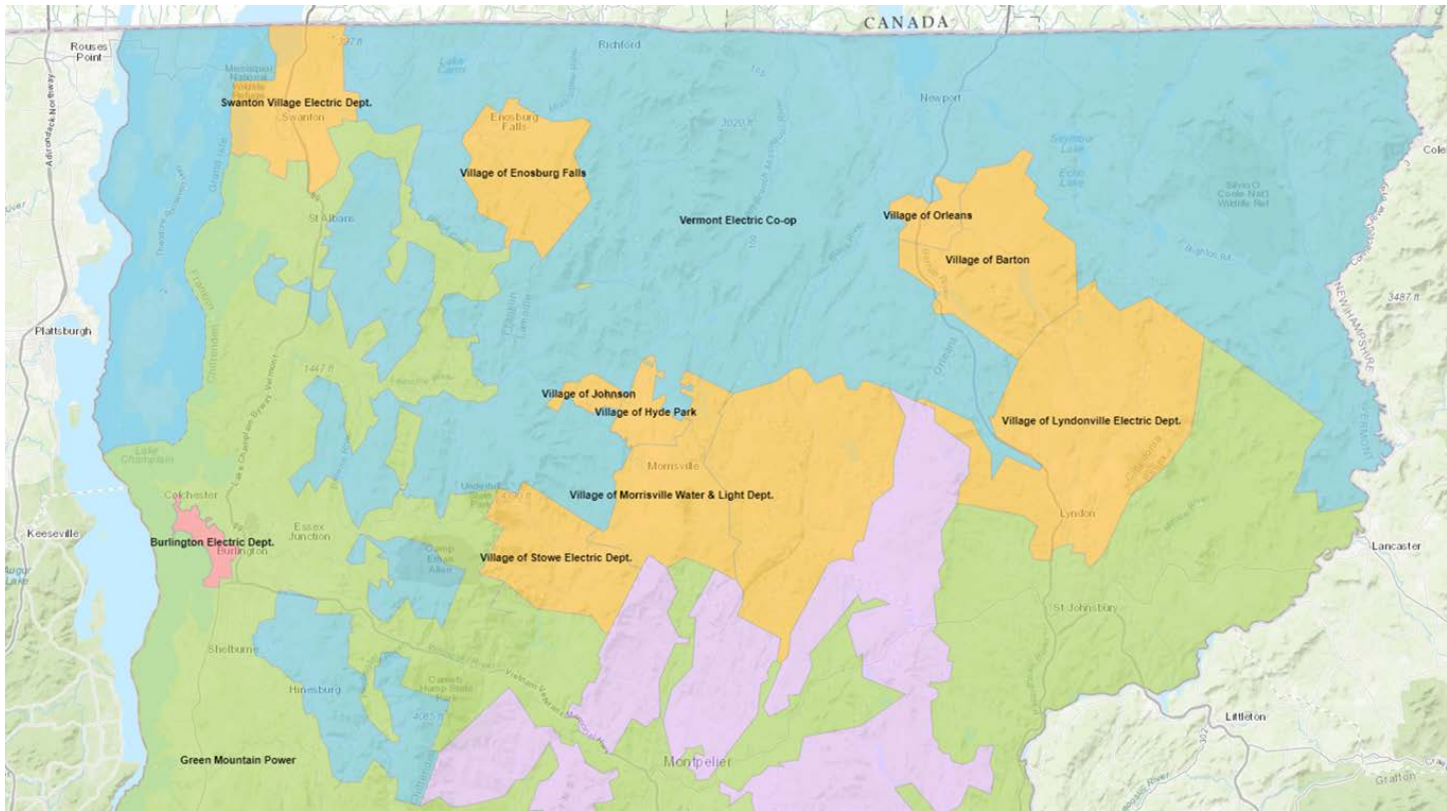
# Energy Transformation Powered by BROADBAND



# VEC and Our Members



- Not-for-profit, member owned Cooperative
- 75 communities served in 8 counties
- 32,800 members (40,630 meters)
- 2,880 miles of line, approx. 15 meters served per mile





# VEC and Our Members



- 1/2 of electric sales are residential
- 40% of residential members are on fixed incomes
- We serve 8 of the top 10 Vermont towns, and 3 of the top 5 counties, with the highest levels of poverty in the state

*The economic well-being of our members is of the utmost priority*



# VEC Broadband Goals



1. Ensure **equitable access to Energy Transformation.**
2. **Leverage VEC's resources** to accelerate and support broadband for our members.
3. **Define VEC's unique role** in broadband deployment, i.e. what would not get done without us?
4. **Represent VEC electric cooperative member's interests: Balance risk** and move forward aligned with VEC's financial and strategic goals.
5. **Collaborate to succeed without redundancy** in our service territory, supporting all who improve rural internet connectivity.
6. **Grasp smart opportunities**, particularly grants, in this evolving broadband world.

# Internet in VEC Service Territory



- **Current Options for Internet (for those who have it)**
  - Comcast – 40% – often overlaps with Consolidated
  - Consolidated (mostly DSL) – 75%
  - Other – 10% – Mansfield Fiber, Kingdom Fiber, Green Mt Access, Franklin Telephone
- **Communication Union Districts in VEC Service Territory**
  - NEK Community Broadband
  - Lamoille FiberNet
  - Northwest Communications Union District
- **VEC Member Survey on Broadband**
  - 62% dissatisfied with service (primarily speed or reliability)
  - 38% of residents without internet would be interested in purchasing high speed internet

	2019	2021 (approx)
VEC Meters	39,330	40,630
Total Underserved/Unserved (<25/3 Mbps)	18,800	15,150
Subset of Unserved (<4 Mbps)	4,870	4,450
RDOF Commitments		5258

# VEC Broadband Feasibility Study



- **Funded by State of Vermont Broadband Feasibility Grant, completed in September, 2020**
- **3 modeled scenarios**
  1. Internet Service (ISP) provider for all service territory
  2. ISP for less competitive and higher need areas of service territory
  3. Build backbone fiber only, partner or lease with another ISP
- **Investment \$89-\$122 M, depending on model**
  - Current VEC electric plant assets are \$134M
- **40% take rate of subscribers (based on survey)**
- **Significant Financial Impact & Risks**
  - Drop equity ratios below 40% for 10+ years, which precludes patronage capital payback to members
  - Drops financial ratios below current loan covenants required for 4+ years
  - Creates risk with current financial rating (S&P A+ stable) which could impact long-term interest rates or increase power supply costs

# Make-Ready Support

- **Easier, faster process**
  - Share pole data
  - Co-design and plan routes to best align work
  - Speed up survey and construction process
- **Make-Ready Work Cost Reduction Tariff**
  - Filed with PUC as proposed adjustment to current attachment tariff
  - Designed to accelerate broadband deployment to *unserved* locations – less than 4/1 Mbps
  - \$2,000 make-ready capital contribution per unserved address
  - Proposing \$3 Million investment over 3 years
  - Open to all broadband make-ready applicants in our service territory
  - Applicant must meet FCC standard (currently 25/3) and serve address within 15 months
  - Value to electric members: equitable access to residential energy services, attachment fees, thriving rural communities



- **Future Utility Communication Needs**

- Reliable, automated grid will need more communications over time
- Future meter communication network, likely transition to fiber
- Broadband bill considerations:
  - Access to state dark fiber assets once broadband needs are met
  - Utility currently owns dark fiber strands for near-future needs and as backup – this backup & future-proof fiber is not considered “unused facilities”

- **Concerns over lease cost within 1 mile of substation**

- Precludes other proactive arrangements such as value-sharing agreements
- Disincentive to utility adding additional fiber beyond our needs – would not cost-justify
- May conflict with competitive, equitable access to dark fiber