Technical Working Group

Vermont System Planning Committee July 20, 2022





Group Objectives

- Investigate and discuss visibility, communication, and control for DER including load, generation, and storage
- Provide forum for discussion of technical issues
- Build shared terminology and consensus on subject matter
- Develop methodology and analysis as appropriate



CEP recommendations

Grid & Communications Infrastructure Principles, Forums, & Actions (excerpted from 2022 CEP pp. 101-102):

- Grid planning should be increasingly focused on the distribution system, with a goal of grid-edge visibility, communication, and control in order to optimize use of existing grid infrastructure and strategically prepare for a highly inverter-based, variable-generation rich, climate-resilient future.
- The future grid should be DER-friendly, interoperable, aggregation-friendly, and foster compatibility between transmission and distribution.
- Municipalities, regions, emergency management professionals, communications providers, DER developers, transportation planners, and utilities should have forums and mechanisms to plan collaboratively toward an optimized grid.
- Utilities should develop or expand hosting capacity maps for solar and other DERs that will inform locational pricing, DER programs, and land use planning.
- Rule 5.500 should be updated to incorporate: storage, collective impacts and cluster studies; distributed aggregations; smart inverters; interoperability; and DER cybersecurity and should reform to enable frequent updates as technologies and standards evolve.
- Stakeholders should work toward the adoption of open communication standards (between devices and platforms or aggregators as well as between platforms or aggregators and utilities) to advance equitable and scalable flexible load management capabilities."
- Forums: interconnection standards; utility integrated resource, demand resource, and capital plans and pilots; VSPC; state telecommunications planning; Vermont Broadband Board



Key Topics

- Interoperability/communication protocols
- Dispatch optimization
- DER wholesale market participation
- Hosting capacity
- Resilience



Not Topics

- Cost allocation
- DERMS procurement
- Economic dispatch optimization practices



Group Norms

- Membership
 - Co-chaired by Department
 - Designated representative from each VSPC entity
 - Other interested VSPC members and members of public
 - Subject matter experts
- Meetings
 - Monthly meetings
 - Report out at each VSPC quarterly meeting
- Expect 5-10 hours of effort per month per participant outside of meetings

