



Interconnection of Renewable Energy in Vermont

Mary Jo Krolewski, Utilities Analyst Vermont Public Service Board

August 14, 2013





Regulatory Review Process

- Before issuing a certificate of public good, Vermont Public Service Board must find that the facility:
 - Will not interfere with the orderly development of the region (due consideration of local planning bodies)
 - Is required to meet present or future demand for service
 - Will not adversely affect system stability and reliability
 - Will result in an economic benefit to the state and its residents
 - Will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment, and public health and safety
 - Is consistent with company's integrated resource plan
 - Complies with the State Energy Office Electric Plan
 - Does not impact "Outstanding Resource Waters"
 - Can be served economically by existing or planned transmission facilities without undue adverse impact on utilities or customers





Regulatory Review Process

- Applicant submits sufficient evidence to demonstrate compliance with criteria
 - Public hearing and Site Visit
 - Evidentiary hearing
- Dockets may include a settlement or a fully litigated case
 - Ratepayer advocate and environmental agencies typically automatic party to any case
 - Intervenors may include environmental, industrial, and public interest groups





Simplified review process in Vermont

- Facilities "of limited size and scope"
 - Interested parties provided notice and opportunity for comment
 - No need for public or evidentiary hearing
- Facilities with a capacity of 2.2 MW or less
 - Certain criteria are waived
- Facilities with a capacity of 150 kW or less
 - Simplified application and review process





Interconnection Requirements

- All generators smaller than 5 MW follow Board requirements
 - Board Rule 5.500, includes Institute of Electrical and Electronics Engineer standards
 - Fast Track procedures
- May require Feasibility Study/System Impact Study
- Interconnection Agreement





Interconnection Requirements

- All generators larger than 5 MW follow ISO-NE requirements
 - Schedule 23 for large generators (> 20 MW)
 - Schedule 22 for small generators
- Requires Feasibility Study/System Impact Study
- Interconnection Agreement





Interconnection Concerns for Renewables

- Costs dependent on location
- Need for additional reserves
- Scheduling and curtailment
- Impact on traditional generators
 - Operational cycling may decrease plant life
 - Economic decreased revenues





More Information

- Vermont Statutes Title 30: Public Service
 - http://www.leg.state.vt.us/statutesMain.cfm
- Board Rules on Interconnection
 - http://psb.vermont.gov/statutesrulesandguidelines/ currentrules
- ISO-NE Procedures on Interconnection
 - http://www.isone.com/genrtion_resrcs/nwgen_inter/lg_gen/index.html
 - http://www.isone.com/genrtion_resrcs/nwgen_inter/smgen_20/index.html