



# Large Load Interconnection Process

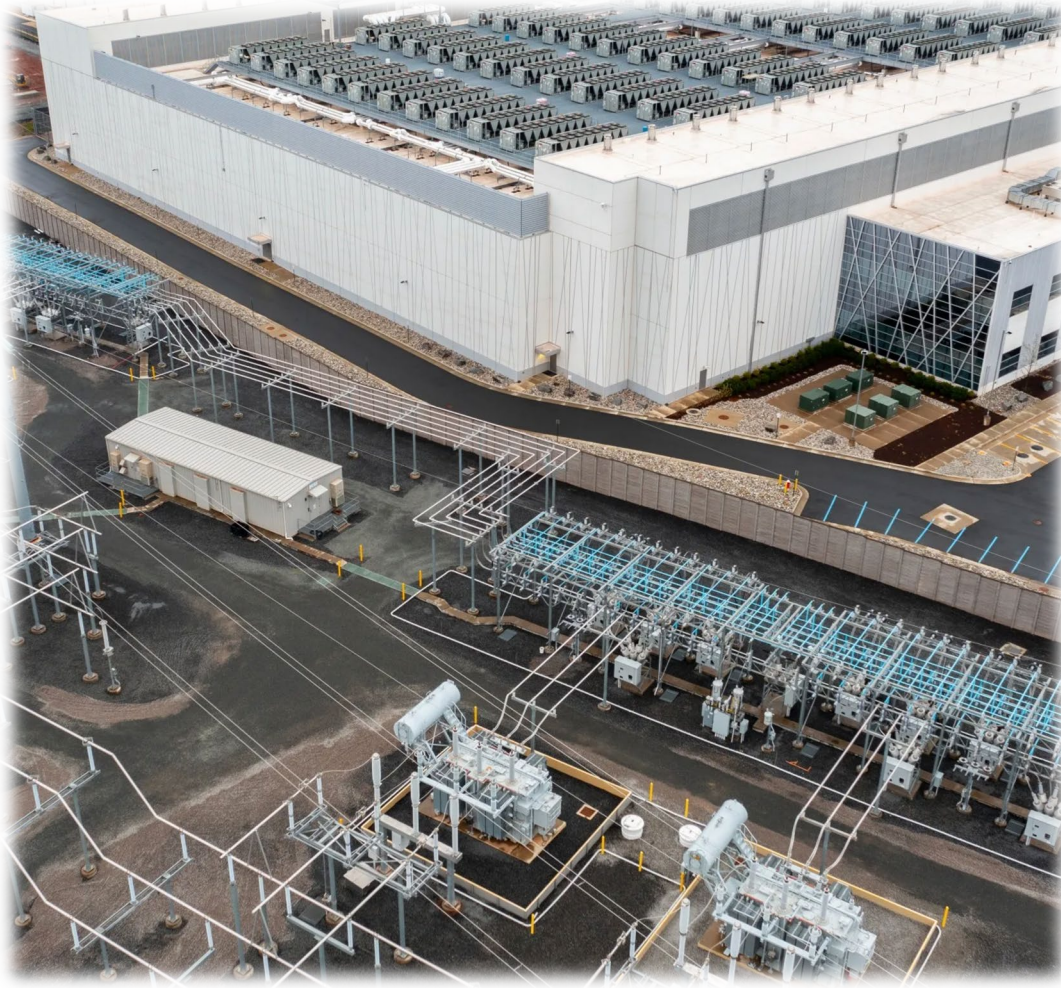
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VSPC Quarterly Meeting

Lucas Looman



# General considerations for large load interconnection in VT



- No “Large Load” definition currently
- Large Loads that require interconnection facilities would be reviewed under Section 248 criteria
- Interconnecting customer pays for system upgrade costs
- Transmission O&M costs paid by entire region
- Process is determined by voltage class and geographic location of point of interconnection

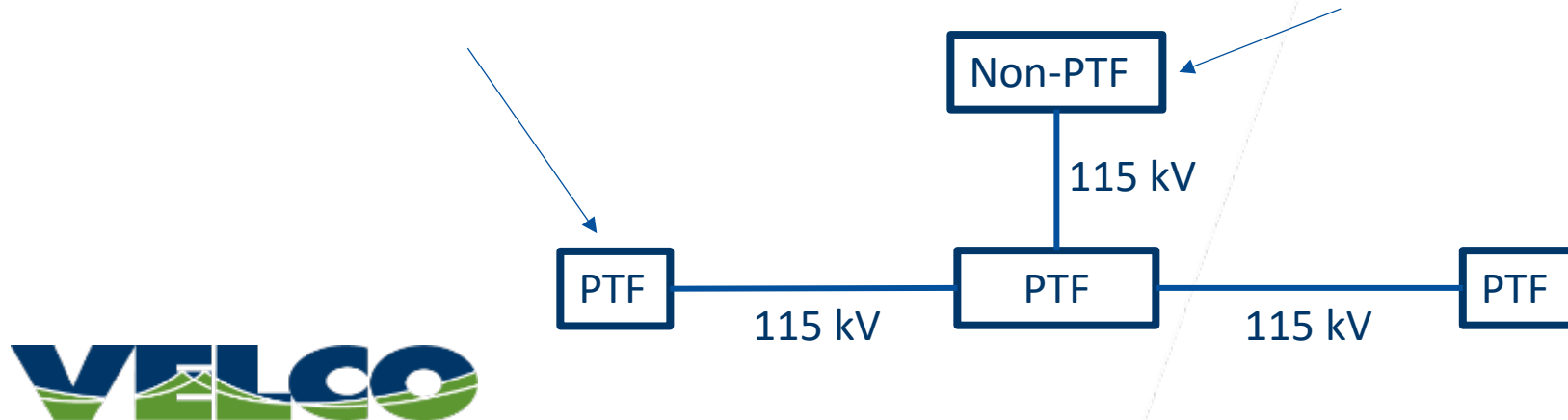
# Interconnection to VELCO's transmission network

## PTF interconnection:

- Regional Network Service interconnection
- System Impact Study completed by ISO-NE, in alignment with ISO-NE requirements
- Requires ISO-NE approval of a Proposed Plan Application

## Non-PTF interconnection

- Local Network Service interconnection
- Schedule 21 customer
- System Impact Study completed by VELCO, in alignment with ISO-NE requirements
- Requires ISO-NE approval of a Proposed Plan Application



# Proposed Plan Application and System Impact Studies

Source: Transmission Plan ISO-NE Technical Guide

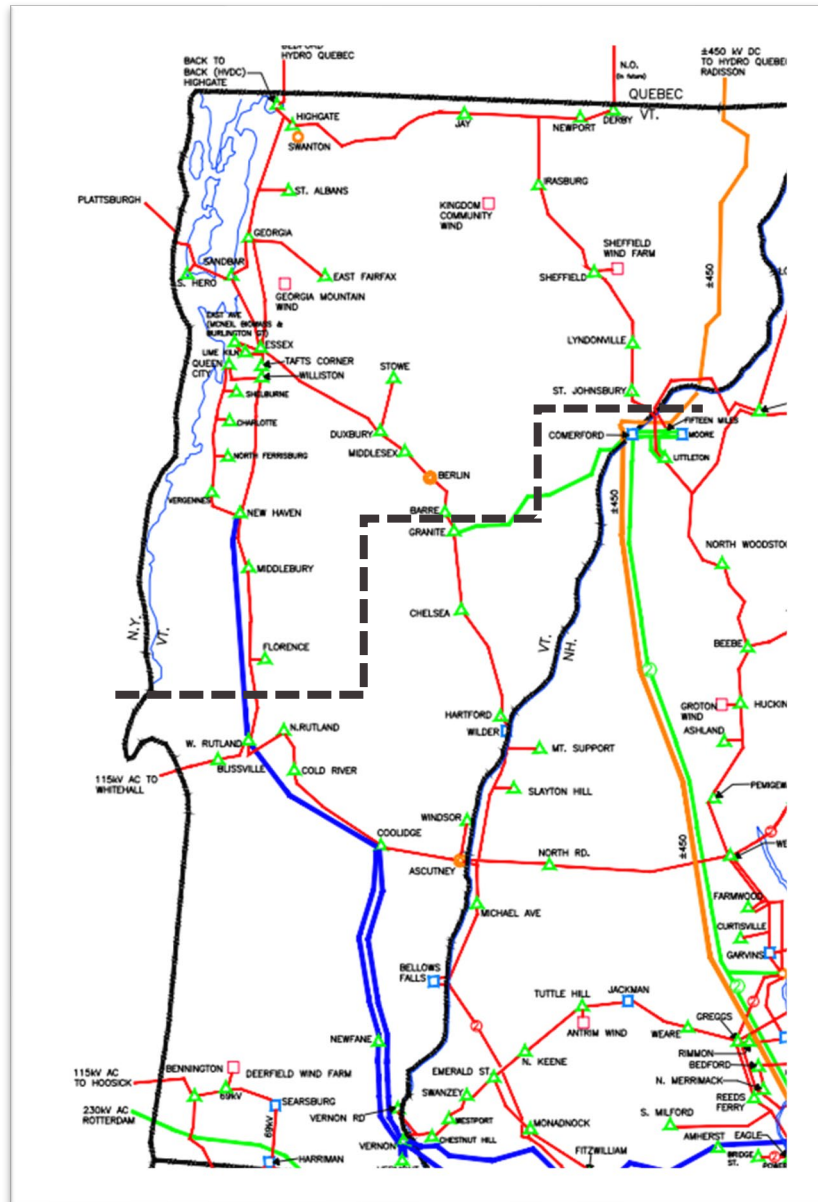
**Proposed Plan Application Study** – Study done to determine if any addition or change to the New England transmission system has a significant adverse effect on stability, reliability, or operating characteristics of the PTF or non-PTF transmission system (See Section I.3.9 of the OATT).

**Note:** This does not need to be an independent study but can be a submission or supplementation of another study such as a System Impact Study or transmission Solutions Study, as long as appropriate system conditions were included in that study.

**System Impact Study (SIS)** – Study done to determine the system upgrades required to interconnect a new or modified generating facility (See Schedule 22, Section 7 and Schedule 23, Section 3.4 of the OATT), to determine the system upgrades required to interconnect an Elective Transmission Upgrade (See Schedule 25, Section 7 of the OATT), or to determine the system upgrades required to provide transmission service pursuant to the OATT. A Feasibility Study is often the first step in the interconnection study process and may be done as part of the System Impact Study or separately.

- System Impact Study identifies needed upgrades to bulk power system
- Proposed Plan Application studies ensure proposed changes do not harm reliability
- Both are subject to NEPOOL's Reliability Committee review and approval

# Optimal location for large load interconnections



- Generation hosting capacity is not the same as large load hosting capacity.
- Results from 2024 VT Long Range Transmission Plan indicate that adding large loads into Northern VT may require new transmission infrastructure that may not be needed for similar loads in Southern VT, subject to SIS/PPA study results.
- Different types of large loads (e.g., data centers vs industrial customers) have varying load profiles, which effect system performance differently, and may result in different interconnection requirements.



# Lucas Looman

Transmission Planning Engineer



802-779-8607



llooman@velco.com