Sheffield-Highgate Export Interface

SHEI

vermont electric power company



OC meeting March 15, 2018

SHEI activities

- Stakeholder outreach efforts
 - PUC workshop on January 11th
 - VSPC meeting on January 24th
 - Senate Finance Committee on February 23rd
 - DUs supporting a bill to pause standard offer projects locating within SHEI
 - Moratorium also discussed as part of the standard offer docket
- Continuation of SHEI Study
 - Utilities completing the cost estimates for the 17 studied options
 - VELCO proposed an evaluation tool for comparing T&D options
 - VELCO proposed a schedule for selecting the preferred T&D solution
 - DUs started discussions on NTAs, timelines and cost allocation
 - VELCO will provide support to the DU team as requested



Line K42 (Highgate-St Albans-Georgia) ratings

- Investigation of ambient based ratings
 - Met with three different vendors of dynamic line rating systems
 - Costs are in the range of \$250,000 plus annual license fees
 - Evaluated the feasibility of static ambient based ratings
 - Conducted a review of line capacity needs based on varying load and generation
 - Target is a rating that accommodates flows at minimum load and all generation except the Swanton GTs
 - Calculated expected daily and monthly line ratings based on historical temperatures
 - Met with ISO-NE to understand how ambient based ratings can be used
 - Dynamic ratings will be difficult to implement
 - An ISO-NE process already exists to utilize static ambient based ratings
 - Concluded that static ambient based ratings will likely be feasible and sufficient to address short term operational issues



Line K42 asset condition concerns

- Initiated a project to address the K42 asset condition concerns
 - Initial review indicates that a significant amount of the structures are 60 years old
 - Will conduct high resolution helicopter inspection
 - Will determine the best way to address asset condition concerns at the lowest cost, while minimizing impacts to local loads and resources
 - Alternatives review to be completed by summer 2018
 - May require line replacement to minimize local impacts
- K42 asset condition project is separate from the SHEI issue
 - May result in a solution that is different from the preferred T&D solution
 - May provide benefits if rebuilt
 - Reduced losses
 - Higher SHEI limits
 - Better ROW utilization



Next Steps

- Collaborate with DUs to select the preferred SHEI solution
 - Complete the cost estimates
 - Complete the decision tool
 - Participate in the ranking of alternatives (schedule dependent on DUs)
- Evaluate the K42 Line
 - Assembling project team
 - Reviewing condition data
 - Developing evaluation tool

