vermont electric power company

VELCO

To: Vermont System Planning Committee

From: Frank Ettori, Director of NEPOOL/ISO-NE Relations and Power Accounting

Date: April 19, 2017

Re: Update on ISO-New England issues

ISO-NE suspends long-term planning studies

New England's outlook on future reliability-based transmission needs for the region is becoming bearish. On February 24, ISO-New England announced that it is suspending all long-term transmission planning studies. Among the factors leading to this decision are changes to Planning Procedure 3 (PP3) that relax the requirements for second-contingency protection in transmission study guidance. Specifically, mitigation will now be required only for permanent phase-to-ground faults identified in second-contingency testing that impact the NPCC-defined Bulk Power System.

In addition, ISO-NE will now incorporate some form of probabilistic dispatch scenarios. Unlike more conservative deterministic scenarios that ISO-NE used exclusively in the past, probabilistic dispatch scenarios should reduce the stress on the system in the base case model, thus reducing post-contingency issues and consequent need for transmission solutions.

The latest New England solar power forecasts also weigh against the need for transmission build outs. The most recent New England preliminary PV forecast, presented on February 28, reflects a PV value that is 143.4 MW higher than previously forecast. Forecasts for 2017 to 2026 show approximately 2,444 MW of new PV development and an aggregate of 4,362 MW of PV installed by 2026.

The changes to PP3, the incorporation of probabilistic dispatch scenarios in transmission planning efforts and growing PV generation, along with expected flat future load growth should reduce transmission system needs and push the year of need for previously identified system needs beyond three years (which will trigger competitive solutions under Order 1000). These changes drove ISO-NE's decision.

Future capacity costs lowered

The Forward Capacity Auction for 2020-2021 cleared at the lowest price since the capacity floor price was eliminated four years ago. The clearing price was $5.30/kw-month, totaling $2.4B New England-wide. Last year's auction cleared at approximately $3B (2019-2020) and $4B the year before (2018-2019). The sharp increase in capacity cost that followed elimination of the floor price will show up in rates beginning in 2018.

Negative pricing in northwest Vermont

In February, we reported on the negative pricing in northwest Vermont. Since then, Burlington Electric Department, Green Mountain Power, Vermont Electric Cooperative, and VELCO have met with ISO-NE technical staff. That discussion was very informative and provided for a productive information exchange. ISO-NE staff's explanation of the Sheffield-Highgate interface and its technical limitations enabled us to have a better understanding of the situation and its market implications. This knowledge can help bidding strategies among Vermont distribution utilities to maximize Vermont's wind generation.

Generation clustering studies

At the February 3 Participants Committee, members approved an ISO-NE proposal to enable clustering of interconnection study requests and allocation of transmission costs among projects. With a significant backlog of wind generation in the queue for northern Maine, ISO-NE is trying to streamline the study process and make the most effective use of planning studies and transmission investment. The clustering proposal allows multiple queued generation projects to be studied together, instead of sequentially, and thus identify the best transmission solution to resolve the collective transmission need. It also allows for transmission cost allocation arrangements among the interconnecting generators. VELCO supported this ISO-NE initiative as an effective approach for streamlining the study work, lowering collective interconnection study costs, and selecting the correct integrated transmission solution.