

VSPC Generation Constraint Meeting

May 21, 2019 | 9:30am-12:30pm | Green Mountain Power Montpelier Office

Participants: Steve Fitzhugh (NED), Ed McNamara (DPS), Melissa Bailey (VPPSA), Kim Jones (GMP), Rip Kirby (DPS), Mike Wickenden (Residential rep), Steve Litkovitz (GMP), Jeff Forward (commercial rep), Josh Castonguay (GMP), Tim Duggan (Residential alt), Dave Westman (VEIC), Jay Pilliod (VEIC), Derek Moretz (Encore), Lou Cecere (VELCO), Shana Louiselle (VELCO)

By Phone: Bill Powell (WEC), Dan Kopin (Utility Services), Hantz Pr sum  (VELCO)

Meeting Minutes:

The subcommittee discussed and revised the draft charter. An updated version of the charter will be circulated to subcommittee members. A summary of the discussion is below.

- There are various costs, and various types of costs (cost to private sector, societal cost, cost/impact to grid, others) associated with generation constraints
- Difficult to quantify all the costs of generation constraints
- Lack of clarity around term “unlock” (e.g. Implementing a solution to unlock a generation constrained area)
- Use terminology like “Minimize generation constrained areas to the degree economically feasible)
- Distinction between generators > 5 MW (dispatchable by ISO) and generators < 5 MW (not dispatchable by ISO)
- Solar is still not dispatchable, all other generator types are (including settlement-only hydro)
- Focus on distribution generation constraints rather than transmission generation constraints
- Identify solutions and their benefits so that others have the information, rather than trying to quantify costs
- Suggestion and discussion to identify potential cost categories and bearers of those costs
- Removed references to cost from charter

GMP presented a summary of the Vergennes area. As GMP does not currently allow connection of any new generation in this area (except for rooftop solar), it is effectively a generation constraint.

- One 14 MVA transformer serving three distribution feeders with over 2,500 customers
- Backfeed on transformer has reached 8.415 MW
- Nameplate capacity of installed solar on all three feeders exceeds the rating of the transformer
- No amount of minimum load or losses due to distance from the substation are included in the calculation
- Other areas of the distribution network could experience Transmission Ground Fault Overvoltage (TGFOV)
- For substations affected by TGFOV, GMP requires that there is a ratio of 2 between minimum load and generation (ratio of 1.5 is there is a plan in place to rectify the TFGOV)
- If ratio would be exceeded, new generation is not allowed to connect (including rooftop solar)
- Solar ramp rate is restricted to allow voltage regulators to adequately maintain voltage

Next steps:

- VELCO/GMP to create generic solar duration curve (i.e. output of typical solar installation for each hour of the hour, sorted by output)
- GMP to provide time series load data for Vergennes area separated into: solar PV, electric vehicles, heat pumps, batteries, and other DERs, if possible
- EVT to provide time series energy efficiency data for Vergennes area, if possible
- GMP to develop proposal to adjust methodology for determining whether an area is generation constrained

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