

Draft MINUTES—VSPC Geotargeting Subcommittee
June 19, 2018 | 9:30 a.m. –12:30 p.m. | GMP Montpelier

PRESENT: Melissa Bailey (VPPSA), Mike Beaulieu (VEC), Deena Frankel (VELCO), Kim Jones (GMP), Steve Litkovitz (GMP), Ed McNamara (DPS), Bill Powell (WEC), Hantz Pr sum  (VELCO), Nathaniel Vandal (supply resources), David Westman (VEIC).

ELECTION OF CHAIR: Hantz moved, Dave Westman seconded the election of Ed McNamara as subcommittee chair. The motion was approved without objection.

REVIEW OF DISTRIBUTION UTILITY PROJECTS

GMP project review. Steve Litkovitz and Kim Jones reviewed the GMP spreadsheet, which is posted on the VSPC website at

<https://www.vermontspc.com/library/document/download/6289/GMP%20Geotargeting%20Areas%202018.xlsx> Steve pointed out that participants originally brought only growth-related projects for review, but now for transparency GMP brings all projects. They have found it is helpful to get input from the subcommittee across all projects.

This year’s spreadsheet is separated into “New and Updated” projects and “Previously Reviewed” projects, the latter in a number of categories. In total, 60 to 70 projects are listed with some degree of detail on each.

GMP has identified no load growth-related projects except Hinesburg, which is already the subject of a reliability plan. Those that are identified as load growth under the Previously Reviewed tab would only be needed IF load materializes. The group discussed the following specifics:

- Milton: GMP used to think of this as a three-substation area. Shifting from thinking in terms of the old CVPS and GMP electrical areas provides the opportunity to think of this as a four-substation area. Rethinking distribution design and feeder balancing provides greater system flexibility and the opportunity to back up the industrial customer in this area.
- GMP was asked to what extent they look at proposed projects, such as the planned 2MW battery planned for the Milton area in this planning. Steve responded that they don’t have the experience to count on batteries yet. The first experience will be with Pantown and it will take several years of experience to know how the battery projects will behave.
- GMP was asked whether the fault current issues associated with batteries have been addressed. GMP does not know yet and is studying what others are doing for protection systems on microgrids, but no solution yet.
- Asked about the history with Milton, GMP thought they would have a load growth need there, but the four-substation view provides a solution through redefining the issue.
- St Albans: A reliability plan was developed for this area. The load never materialized.
- Brattleboro: only other monitoring area (Newfane to Vernon Road). Load has been declining, with increasing solar so this area is probably no longer a concern. Even if you add the solar back in, the area is nowhere near the all-time peak. The area seems to have lost about one third of its highest load level.
- Chittenden: Airport substation has so much impact that until it is determined whether to proceed, nothing else can really be decided.

- GMP was asked whether it is re-examining its stated policy that it can accommodate small-scale DG, despite the fact that some subs don't have the ability to host further DG. Response: They are evaluating the policy.
- GMP expects to file for a CPG for Airport substation this summer. The project will provide many benefits to different components of the system.
- GMP was asked whether it expected any projects in the SHEI area. Response: The Johnson to Lowell line is the only issue in the area, which involves replacement of old poles.
- GMP was asked, when the utilities identify a SHEI solution, will it show up in this area. Response: The VSPC process looks at projects needed to serve load, not to export power. Theoretically problems caused by added generation would be addressed by solutions paid for by developer.
- The group discussed the question of whether SHEI solutions should come to VSPC. Observations:
 - It would be helpful to bring any project to VSPC for information and transparency.
 - There is no requirement, but for transparency and good planning, the VSPC provides a good vehicle. The Department of Public Service strongly encourages the discussion at VSPC concerning whether it would be useful to start identifying generation-constrained areas at the VSPC where all stakeholders are engaged. Consideration of solutions would be better informed by discussion where all the stakeholders are at the table.
 - To make this meaningful may require looking at the screening frameworks.
 - VSPC has struggled with the fact that the clear focus of the MOU is load growth, but it is helpful to have a place to talk. Stakeholders appreciate the transparency of the VSPC and would value the same level of transparency regarding the issues related to export constraints.
 - The question of whether a load growth related project has gone through the VSPC is a screen in the regulatory process. The same requirement isn't in place for constraint solution.
 - Curtailment issues could be brought into the VSPC based on an informal agreement without changing the MOU.
 - While there may be consensus that the VSPC would be a good forum, there is push-back on giving VSPC a formal decision making role. VSPC could be assigned further tasks in the future by the PUC.
 - Who are the right people in the room for this discussion? Steve suggest fleshing out a proposal that can be shared with leaders in each organization/company.
- GMP noted that added "year of budget" in the spreadsheet is meant to reflect when a given project is to be budgeted.
- Taftsville to Windsor: This was identified as part of VELCO CT River Valley Project. It was agreed in that project that GMP would apply for the related subtransmission separately. This project is the last remaining component. The line is over 50 years old, and the poles need to be addressed. Once they are being replaced, it would be a lost opportunity not to change the conductor, which has termal issue during certain contingencies. Equal scope criteria (used by GMP) allows 110% loading, but this line is at 124% in the ISO-NE/VELCO study.
- Johnson to Lowell: This is a placeholder without certainty of the real date. The line is sixty years old.
- Tower Line to Sand Road: These are lattice towers parallel to VELCO. Some structures go back to 1930s or 1940s. Aging infrastructure needs to be replaced.

- Hinesburg: load has declined and the area is now winter peaking. GMP continues to monitor closely. This is a very long circuit. GMP is considering the potential for a Tier III project, but sees problems with fault current so far from the sub. They are looking at DVAR device to address motor start and flicker. Still considering battery but there are challenges with location. A joint substation with VEC is still a possibility, but VEC has moved the date out.
- Danby: This upgrade will eliminate a radial and provide feeder backup to Wallingford. It will require acquisition of new right of way.

Vermont Electric Cooperative project review: Mike Beaulieu reviewed the spreadsheet provided in advance to the group and posted at:

https://www.vermontspc.com/library/document/download/6290/GT_Screening_VEC_2018.xlsx

Mike stated that VEC is developing a large list of projects through a system-wide, comprehensive analysis. The group discussed the following specifics:

- VEC was asked about Fairfax, where the issue seems to be load growth related with an immediate year of need (2019). VEC response: sugaring is what pushes the capacity of the substation and is very short term, 3-4 weeks a year, 24 hours a day. Tier III is electrifying some of these projects. Substation is two long single-phase circuits. Future capacity, load balancing, would be more possible with increased capacity of substation and 3-phase circuits.
- Belvidere: Substation rebuild would allow much better management of load in the area, but the challenge will be locating a new sub. VEC will have to find land at the current (small) site or nearby. This could screen in. It might be worth discussing whether there is an alternative. The group was curious about why VEC screened it out. Load growth is being caused by a lot of additional sugaring in the region. Paradoxically, this is in the SHEI where we want to build load, but in this case we're trying to figure out how to reduce load growth. As we evaluate, should also be evaluating in relation to the SHEI/curtailment issues. Sugaring peaks are post-sundown in late winter months so hydro and wind are running. Promotion of sugaring for the economy is in the interest of VT economy, but very challenging in terms of load shape. Follow-up on Belvidere will be a clarification by email exchange, with a conference call if needed.
- No questions on the remaining projects.

Vermont Public Power Supply Authority for its municipal members: Melissa Bailey gave the report.

- Enosburg has a project for sugaring and asset condition, but it screens out on cost.
- Morrisville is doing a substation upgrade for reliability. Installing a 7.5 transformer at this substation, allowing for back-up.

Washington Electric Cooperative: Bill Powell gave WEC's report. He stated that their construction work plan is pending before DPS. All projects are asset management driven; none due to load growth.

Next steps: Obtain clarification from VEC. Staff to draft and circulate annual VSPC geographic targeting recommendation letter (to PUC) before October VSPC meeting so the letter can be approved at that meeting.