

## VSPC Load Forecasting Subcommittee meeting July 13 2016

In attendance:

Bill Powell, WEC  
Rip Kirby, GMP  
Hantz Pr sum , VELCO  
Nathaniel Vandal, Green Peak Solar  
Deena Frankel, VELCO  
Carole Hakstian, VEIC  
John Woodward, PSD  
Mike Leach, BED  
Dave Westman, VEIC  
TJ Poor, VPPSA  
Cyril Brunner, VEC

Off-year for LRTP

Review of last meeting minutes

Group confirmed that the meeting Scheduled for February 24<sup>th</sup> 2016, was cancelled, meaning the last LFC meeting happened on November 3, 2015. Group had not reviewed minutes from this meeting but Deena will send around for comment with draft minutes from today's meeting and make sure they are posted to website. Group recalled that one topic discussed at the November 3<sup>rd</sup> meeting was how to refine the load zone boundaries currently used to allocate efficiency. Rip had agreed to make an effort to differentiate inner and outer rings for metropolitan areas. The group realized that the most recent load zone map that reflects town boundaries had not been posted on the website.

### 2. Briefing on the timing and plan for next Long-Range Transmission Plan forecast

Hantz communicated a need to begin work by Spring 2017 so that the first forecast draft would be available early summer. This would make it possible to get a draft plan to VSPC by the end of 2017 before the 60 day comment period starts in January 2018 (closing in March). A public outreach effort will follow with final publication in July. It was noted that this timing syncs with GMP's IRP forecast needs.

The Board orders in Docket 8550 (Act 56; RES) and the current Board rule 5.100 (Act 99; NM 2.0) have clarified, to some degree, the impacts that policy can be expected to have on load. Hantz is interested in spending time analyzing the impact of Tiers 1 and 2 of the RES and would like to look closely at solar PV and storage but is less concerned about fast growth in EV load.

Dave inquired about the level of resolution in the 2015 load forecast. Hantz and others recapped that Itron employed a hybrid bottom-up/top-down methodology that takes account of end-use efficiencies down to the appliance level (a methodology that they will likely apply again), but that we faced limits to our ability to model the geographical distribution of DG, HPs, EVs (and to some extent EE).

Nathaniel pointed out that growth in NM generation will depend on the version of rule 5.100 that is “finally adopted.” The Board’s June order specifies that any new version of the rule published before January 2017, when Act 99 takes effect, will supersede the existing version. The question of whether larger systems (150kW to 500kW) that are not “preferably sited” will ultimately be allowed is particularly relevant. As the rule currently stands this category development is excluded from the NM program.

Deena inquired whether the NM siting adders in the current rule 5.100 are designed to incentivize development in constrained areas of the grid. It is possible that the requirement to have 50% of the production consumed by a co-located off-taker could be construed as such an incentive but there is no explicit mention in the rule of extending siting adders to projects that alleviate capacity constraints e.g. for development in the “green zones” of GMP solar map.

Group inquired to what extent Act 174 (Regional Energy Planning) may result in information that should be taken into account in LRTP load forecasting. To date, three Regional Planning Commissions have submitted draft energy plans, all currently being reviewed by the Department, which is due to submit a rubric of standards by November 2016 to determine whether regional energy plans are sufficient to earn them “substantial deference” in a 248 proceeding. It is possible that future Department-approved RPC energy plans could provide some sense of the locations where development of DG will not be allowed (as well as where it is more likely). John will keep the group updated on the process.

Nathaniel informed the group that the locational solar mapping effort he began last year is on pause.

Group discussed what the source of data would be for an effort to map all existing DG to specific grid locations. VELCO noted that the Vermont Weather Analytics Center (VWAC) has visibility of every AMI meter of NM customers, at least for GMP [and VEC?]. It was agreed that GIS would not provide the necessary granularity.

TJ stressed that any forecast of locational growth in DG will be highly assumption dependent and cautioned the group not to get bogged down constructing estimates with unknowable margin of error. It was agreed however, that it is important to spend time studying the drivers of PV installation to date and to have a firm grasp of where development has taken place, at what scales, and why. Nathaniel advocated for spending time collecting real-world data on PV generation profiles. Dave asked whether Solar Market Pathways may have relevant information to share with the group. And has contacted David Hill of VEIC. Rip pointed out that absent commensurate growth in storage capacity, growth in PV is likely to be limited, and emphasized that our forecast for storage should be consistent with our forecast for PV.

3. Review of [draft VSPC charter](#) forecast-related tasks
4. Review of [Forecast Subcommittee Charter](#) to identify next tasks/work plan

Group pointed out that the charter appears to call for inputs into forecast being settled by May 2017. This timing should be advanced to avoid the tight schedule of the last LRTP. Hantz suggested February 2017. Group agreed that next meeting should be on October 5 at 9:30AM. This is before the quarterly meeting scheduled for October 20<sup>th</sup>.

It was pointed out that the RES T3 plans are due to the Board from DUs in November 2016 and that the LFC's next meeting could be a good place for DUs to share and workshop their plans in advance of this deadline.

Hantz will correspond with Itron and develop an alternative work plan schedule than that found in the charter.

John will inquire on timing of the availability of state economic outlook (Carr/Kavet).

John will inquire on the timing of the availability of new equipment saturation survey results. [note: I have done so and this should be available before the end of the CY16]

Group agreed that they should walk away from the October 2016 meeting with a list of asks from DUs and Department re: data needed.