Generation Constraint Subcommittee – Storage Working Group
Meeting Notes
8/10/2020

Attendees: Anne Margolis, Graham Turk Derek Moretz, Nathaniel Vandal, Morgan Casella, Bill Powell, Dan Kopin, JJ Vandette, Shawn Enterline, Lou Cecere, Marc Allen, Shana Louiselle

The PSD provided a brief summary of the GCS goals and opened a high-level discussion on characterizing the hypothetical value of solving a generation constraint with storage solutions. The working group will focus on the capabilities of storage and analyze how they would apply to generation-constrained areas like Vergennes.

The group discussed several issues including:

- Balancing the costs of implementation versus other load management efforts, and the importance of understanding the value streams of the battery that are being given up to alleviate the constraint (e.g. capacity, RNS, etc).
- A full storage solution may be cost prohibitive, and it would be valuable to understand the partial solution. Do we analyze a hypothetical storage solution to optimize for relief/partial relief of a generation constraint (and assume monetizable value streams will be utilized when the battery is available) or optimize for monetizable value streams and assess the "loss" when the storage is utilized during some number of hours to address a generation constraint?
- Need to understand the specific windows of time when constraints show up
- What are the relevant units for measuring the constraint & the value of a measure (MW, MWh, $/MW, $/MWh), and is the primary focus a thermal constraint? (Need understanding across work groups)
- Need to understand the capabilities of different storage types and applicability to different types of constraints (focus here on dedicated storage facilities and leave aggregated virtual storage to the load management work group)
- IT/OT costs & other practical considerations
- Emissions as a metric (make use of TAG characterizations)
- Goal is not to solve for the Vergennes constraint per se but to use Vergennes as a case study to document the process for arriving at a hypothetical value for solving that constraint and discuss ways to extrapolate that value to any constraint

Action items:

- Graham Turk – identify specific windows of time of Vergennes generation constraint/potential sacrifice of other values; will GMP's raw data be available to share?
- Nathaniel Vandal, Morgan Casella, JJ Vandette – identify storage technology capabilities (standalone facility) & use cases (including equivalencies for thermal storage)
- Dan Kopin – outline of possible deliverables

Next meeting is scheduled on August 28, 12:30 – 2pm.