

Green Mountain Power

Transmission and Distribution Lines/Substations Capital Planning Framework

The objective of our Transmission and Distribution (T&D) Lines/Substations capital planning process is to create a roadmap for implementing the most important projects necessary to safely and reliably deliver power to our customers. GMP's sub-transmission system, consisting of transmission lines and substations, is an essential element of our grid infrastructure, connecting VELCO's and National Grid's high voltage transmission system with GMP's distribution system in order to serve GMP customers, as well as delivering energy to interconnect points for several of Vermont's other distribution utilities. GMP's subtransmission and distribution system delivers energy directly to our customers, as well as serving as the interconnect point for the growing number of customer-owned distributed energy resources. The T&D planning process identifies capital projects that deliver value to our customers in any of several ways:

- Safety Improvements
- Reliability & Resiliency Improvements
- Efficiency Improvements
- Capacity Improvements
- Compliance with Regulatory Requirements

Safety Improvements: Projects that eliminate or reduce a potential safety incident to GMP's customers or employees. These projects consist of replacing obsolete or deteriorated plant that may not comply with current standards and codes, or that may have reduced functionality.

Reliability & Resiliency Improvements: Projects that will increase reliability by reducing the number of outages, the duration of outages, and/or the number of customers affected by outages. These projects include projects in our normal construction plan as well as projects that have been constructed under the criteria originally laid out in our climate plan, now incorporated into our overall capital planning. The type of storm-hardened construction, for both overhead lines and for installation of cable in conduit undergrounding, is becoming a part of GMP's business as usual in order to enhance both reliability and resiliency.

Efficiency Improvements: Projects for the cost-effective reduction of system losses. These projects include capacitor placements, line re-conductoring, load balancing, circuit reconfiguration, and voltage conversions.

Capacity Improvements: Projects to upgrade facilities in order to avoid thermal overload of equipment. These projects may be the result of load growth or to provide backup capability (improved reliability) for another substation, circuit, or feeder.

Compliance with Regulatory Requirements: Projects required to achieve regulatory compliance or to meet a contractual/tariff obligation. This might include a project that is the subject of a stipulation between GMP and the Department, Agency of Natural Resources or Agency of Transportation (state/municipal road jobs), and projects required by our joint-use and third-party attachment agreements. These projects, when appropriate are also using storm-hardening construction to receive an added benefit of resilience.