

## **Green Mountain Power Generation Capital Planning Philosophy**

GMP's Power Generation capital planning is focused on improving the Safety, Regulatory Compliance, Plant Reliability/Operating Efficiency and Production Output of Green Mountain Power's hydro, wind and fuel generation assets, as well as our emerging battery storage assets. The power generation planning process looks at best practices and emerging technologies as a way to achieve these means, whenever possible. Programmatically, the capital projects will generally fall into one or more of these categories:

### **Safety:**

The safety of GMP's employees and the Vermont public is central to our culture and the way we operate. We maintain a constant focus on any aspect of our business activity that may pose a safety risk. Each year, we typically recommend, justify and perform a number of capital projects that remedy a safety risk or prevent one from arising in the first place. These projects can include the replacement of obsolete or deteriorated plant equipment that may no longer comply with current standards or safety codes, or that may have reduced functionality.

### **Regulatory Compliance:**

Improvements and upgrades to our facilities are periodically required to remain in compliance with permits and licenses. An example of compliance-driven expenditures is GMP's Low Impact Hydro Institute (LIHI) certification on several of our hydro facilities. GMP has qualified several additional hydro plants as LIHI certified and will certify additional facilities in the future. In exchange for this certification, these facilities can qualify for additional Renewable Energy Credit ("REC") revenues, which provide an economic benefit to all GMP customers. The generating assets would not be eligible for certification without our constant focus on maintaining compliance requirements at the facilities. This includes, for example, fish passage improvements, bypass flows, and any other requirements that are borne out of State of Vermont water quality requirements, FERC requirements, and PUC rules.

### **Plant Reliability/Operating Efficiency:**

Operating and maintaining the fleet of generation facilities efficiently requires strategic capital investments to maintain plant reliability and reduce the risk of unexpected failures that require emergency repairs. Unexpected plant failures cause the loss of cost effective, clean power but also create unplanned costs. Strategic investment of this type allows GMP to manage a large fleet of hydro, wind, solar and fuel units with a lean staffing model that has been right-sized since the merger of GMP and Central Vermont Public Service ("CVPS"). Reliability projects may include work such as replacing bearings, governors, and control systems that are used to operate and manage the various generation assets. They can also include improvements to significant infrastructure like the condition of dams and spillways.

**Production Output:**

Where feasible, the team identifies opportunities to increase power production at existing generation facilities. In the case of hydro, this can mean replacing a runner with a more efficient unit, installing automated pond level controls to optimize flow conditions, or doing complete turbine/generator replacements. In addition, these projects may include improving the required responsiveness of generation units to ISO New England operating commands such as improved SCADA controls and electrical upgrades for automating the power production facilities. Our philosophy is to have the most available, productive and responsive fleet of generating assets we can operate for the benefit of our customers.