

Granite State Electric Company d/b/a Liberty Utilities
Integrated Resource Plan
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investigate the use of single phase reclosing devices to provide mitigation against transient faults as well as limited the number of customers impacted for permanent faults.

Replacement of mainline bare conductor with spacer cable has proved highly beneficial.

Spacer cable is an overhead primary distribution system consisting of covered conductors held in a close triangular configuration by spacers that are supported by a messenger and attached to a bracket on a pole. Spacer cable installations are recommended in heavily treed areas to mitigate the potential for outages caused by incidental contact of tree limbs to the primary conductors. In some instances, it may be possible to use tree wire on crossarms as a lower cost alternative to spacer cable. Other reliability initiatives include improving reliability in distribution system areas that have historically underperformed the system average and installation or upgrade of the SCADA system to improve response time to outages.

## 4.6 Capital Investment Plans

System capacity, performance, and reliability improvement capital projects are identified as a result of one-off studies and the annual capacity planning process. The adopted solutions are cashflowed by year and entered into the five-year capital investment plan along with other capital initiatives such as new business, public requirements, response to damage and failure, and other mandatory category projects. The five-year plan is then optimized according to project need, risk management, and availability of resources. Multi-year projects, once initiated, are typically progressed to completion with their system solutions incorporated into current and future studies. The annual budget of capital projects greater than \$100,000 is filed annually with the NHPUC as part of the E-22 filing.