



Wisconsin Public Service

System Modernization Reliability Project

Background: While the electric reliability in its urban and adjacent areas is typically very good, WPS lags behind industry reliability averages overall due to historically lower reliability levels in its heavily forested rural areas in northern Wisconsin. WPS has heard high levels of concern about the number and duration of outages from customers in these heavily forested areas.

Seeking to improve reliability, WPS is proposing a multi-year program to increase electric reliability in areas where customers have experienced significant outages. The reliability plan focuses on improving performance at a reasonable cost. WPS expects to improve its reliability levels significantly.

To achieve these results, WPS proposes to upgrade portions of its overhead electric distribution feeder system as well as convert some areas from overhead to underground. The affected service areas have experienced reliability issues and are at high risk of outages due to weather related events, and are located where the conversion can be done within a reasonable financial threshold. The effort is expected to take 5 years at a projected cost of approximately \$222 million.

WPS has conducted a feeder-by-feeder analysis throughout its service area in determining the project scope. The company weighed the costs and benefits of upgrading its worst performing feeders and determined a price point at which the upgrades make financial sense and will result in the greatest reliability improvement for customers.

In determining which distribution lines to convert, many factors are considered as WPS strives to achieve the best performance in relationship to cost.