Wood Lines Sustain Program FY14-15

This investment is a continuation of the Wood Pole Sustain Program. This perpetual program will continue with the current asset lifecycle strategy, utilizing the life extension strategy to address danger and priority pole structure replacements scattered throughout BPA’s wood lines, and utilizing the systematic replacement strategy to rebuild lines that have reached the end of their service life.

BPA’s wood pole transmission lines are aging assets that make up approximately one third of the transmission grid. Based on the 2007 Aging Overhead Asset Report, 6% of the significant 230kV lines were rated as poor, primarily due to wood poles that had reached the end of their service life. The 115kV and 69kV wood pole lines were rated as having impaired overall asset health due to the wood poles requiring replacement. Over 40% of BPA’s wood pole transmission lines exceed 50 years of age, and over 12% exceed 60 years of age. In general, these lines are original vintage and contain a variety of obsolete components, including insulators, conductors, guy systems, and structure types. The typical life expectancy of a wood pole is approximately 60 years.

The current sustain program is an Asset Lifecycle Strategy, which combines life extension and systematic replacement of the worst performing and highest consequence of failure lines assets. The life extension portion of the strategy consists primarily of the priority pole replacement work. The systematic replacement portion of the program involves rebuilding approximately 100 miles of wood pole transmission lines per year. The lines to be rebuilt are selected based on their overall health condition, performance (outage history) and criticality. Typically, these lines have degraded to a point that significant unplanned outages have been experienced despite repetitive planned outages for addressing maintenance issues.