Assets covered by the AC Substations Program include over 30,000 pieces of equipment on the BPA transmission system. The equipment is comprised of power circuit breakers, circuit switchers, disconnects, instrument transformers, surge arresters, DC control batteries, battery chargers, station service transformers, station service cabling, power transformers, reactors, fuses, shunt capacitors, substation bus and structures. The primary purpose of this equipment is to interconnect with public and private electric distribution utilities as well as to integrate generation and transfer bulk of power out of the BPA balancing authority.

In May 2011, BPA participated in a benchmarking study conducted by First Quartile Consulting. Overall, when compared to other utility systems, BPA’s substation assets are on average older than most and capital replacement rates and expenditures lower. Overall, substation equipment has been replaced at a much slower rate than it is aging.

An asset strategy for AC Substation Sustain program was developed which focuses on replacement of equipment that is in poor condition and poses significant risk to reliable operation of the transmission system. This investment program implements that strategy for the period specified.