

System Protection and Control Sustain Program FY 11 - 13

SPC assets consist of protective relays, control, indication, metering and data recording systems at transmission substations. These assets protect BPA's transmission equipment from damage due to electrical and mechanical faults, ensure transmission system stability and reliability, protect the public and agency employees from hazards of system faults, provide local and remote control and monitoring of transmission equipment, and provide critical operational and disturbance data for billing, scheduling and system performance analysis.

This investment is based on the SPC Sustain Program Asset Management. The strategy is the result of a comprehensive review and assessment of the SPC equipment assets, including age and health demographics and the assessment of risk to the success of BPA's mission, vision, and strategy. Replacements included in this business case focus on the systematic replacement of assets assessed to be in poor or impaired condition. Condition assessment is based on maintainability and obsolescence of SPC assets. Obsolescence, in the context of the SPC asset strategy, is defined as the inability to repair or replace failed equipment in kind due to the loss of equipment manufacturer support and unavailability of OEM spare parts. Equipment obsolescence results in the inability to respond in a timely manner to component failures that threaten system integrity and/or electrical service continuity.

In recent years, the SPC equipment replacement program has suffered from inadequate funding. Projects for replacement of existing equipment (at high risk of failure but not failed) have been classified as discretionary work. Consequently, many of the SPC replacement project requests have not been approved and funded. Efforts to secure capital replacement funds have been focused on failing SPC equipment that could no longer be maintained. The net result has been a network of SPC assets whose overall condition has deteriorated as replacements have not kept pace with obsolescence and wear. The investments in this business case are specifically and systematically directed at SPC assets at greatest risk of failure.