## **#KC SONET Phase II Spur Healing**

## **Project Description:**

This project continues building the #KC SONET ring in Oregon by building microwave and SONET radio spurs to locations that were not included on the main fiber optic ring. When complete, all substations and VHF sites in Oregon will be connected to the digital communications backbone, except as noted below. Analog circuits that terminate or pass over the analog backbone system in Oregon will be rerouted over the digital communication system, and both the "T" and "K" analog microwave backbones will be retired. This project is part of an overall program of updating and upgrading BPA's communications system.

In total, seven spur routes of digital radios will be built to connect 15 BPA sites to the #KC SONET ring: Marion, Santiam, Adel, Coyote Hills, Dead Indian Mountain, Sand Springs, Pine Mountain, Grizzly Mountain, ponderosa, Prospect Hill, Shaniko, West Portland, Swan Lake, Goodwin, and Noti. After installation and cutover to the digital system, most analog circuits and analog microwave equipment in Oregon will be retired, including circuits and equipment at these 15 sites and 21 additional sites where digital equipment was installed previously. Several analog hops in the Oregon area were not included in the #KC Phase II upgrade. These include Burns/Harney, Mount Hebo and Bald Peak. The locations not included had newer radios that had not exceeded their life cycle and did not require the increased bandwidth at this time. Other projects have been identified in the telecom plan to upgrade these sites as needed or warranted.

The proposed project's capital cost, including AFUDC and overheads, is estimated to be \$26.1 million. The project is expected to be completed by October 1, 2012.