Condon Wind Voltage Control Project
(Project #: TFY090322)

This project will construct a new 115 kV 4-Breaker Ring Bus at DeMoss Substation. In addition, BPA will install a new 33 MVA 115/69 kV transformer bank and 115 kV breaker along with a grounding bank at Fossil Substation. The existing DeMoss-Fossil transmission line was built as 115kV, but operates at 69kV. This project will enable the existing DeMoss-Fossil to operate at 115kV.

This upgrade is needed to address voltage fluctuations caused by variations in Condon Wind Generation project output that impact the surrounding area. Actual system voltages tend to fluctuate both above and below the normally accepted maximum (72.5 kV) and minimum voltages (69 kV) in BPA's Planning Reliability Criteria. The local utilities impacted by these voltage fluctuations are primarily Wasco Electric Coop and Columbia Basin Electric Coop which are being served by BPA facilities in this area.

This project is expected to be completed by May 31, 2011. The direct capital cost of the project is expected to be $9.4 million and with distributions (loadings, overheads and AFUDC) it is expected to be a total cost of $13.4 million. The primary benefits of this project are reduced voltage fluctuations due to variations in wind generation at Condon and it enables an additional 100 MW of Wind Generation currently in the queue to move forward.