

Lower Mid-Columbia 230 kV Project

The Lower Mid-Columbia 230 kV project (LMC) is located in Central Washington on the southern stretch of the 230 kV transmission systems within this region. The project involves upgrades to existing assets on the Vantage-Midway 230 kV line including substation work.

In the late spring and summer seasons the main grid 230 kV transmission system in the area experiences high north to south flows. During these seasons, limits may be placed on Priest Rapids Hydro Plant generation to enable river flow operations to meet fish environmental requirements. When the limits are placed on Priest Rapids generation, power transfers shift and power flows approach the continuous rating of the Midway – Vantage No. 1 230 kV line with all lines in service. This in turn requires that limits be placed on power transfers on the 230 kV transmission lines heading south out of the Wanapum/Vantage substation. These restraints may result in reduced generation in the north to prevent system overloads.

The proposed project will increase the transmission capacity between the Vantage/Wanapum substation and Midway substation by about 160 MW to mitigate violations of NERC/WECC planning criteria for known generation patterns and facility limits. Planning studies, with the best available information, show the project will provide sufficient capacity for at least a 10-year period.

The project is scheduled to be complete by May 1, 2011. Project costs are estimated to be \$15 million including overheads and AFUDC.