

Willamette Valley and Lost Creek GDACS

The Portland District of USACE has nine hydropower projects in the Willamette Valley and Rogue River Basin which utilize industrial SCADA systems with Allen Bradley hardware and a windows operating system. These existing SCADA systems have evolved to their current state in an incremental fashion. Project and control needs were met as they arose and changes were implemented over time as funding permitted. While operation has been adequate for project command and control needs, recent advances in technology as well as refinements in design and operation policies and procedures make it advisable to incorporate Generic Data Acquisition and Control Systems (GDACS) control improvements and enhancements. Further, Department of Defense (DoD) requirements for cyber security certification make it necessary to pursue this investment in the proposed timeframe.

These SCADA systems will be upgraded to a GDACS system which will simplify maintenance and operations of these assets. Installation of GDACS architecture will meet DoD certification requirements, provide a standard architecture throughout all Willamette Valley and Rogue projects, provide for incremental improvements as technology is updated and significantly reduce the effort required to maintain SCADA equipment and functionality. Additionally, the installation of GDACS systems will enable the Portland District to derive the benefits from the GDACS system utilized throughout the FCRPS.