

# Evergreen Engineering

## Arc Flash Partial Project List

Evergreen has provided Power Studies and Arc Flash Hazard Analysis and Mitigation Services for various institutional and industrial clients, including:

**Oregon Department of Corrections (ODOC)** – At numerous ODOC facilities, Evergreen provided arc flash analysis, and label data in compliance with NFPA 70E requirements. These projects involved field data gathering for input to ESA's EasyPower® arc flash analysis software, one-line drawings and updated system documentation.

**Lane Community College (LCC)** – Evergreen provided arc flash hazard analysis and mitigation services to LCC in Eugene, Oregon to incorporate modifications and additions to work previously performed. Evergreen's work at LCC has involved analysis of 21 buildings. The initial phase involved significant field data collection because of inadequate or outdated documentation. The project is currently in the arc flash mitigation phase.

**ATI Wah Chang (Allvac)** – Evergreen provided power system and arc flash hazard analysis and labeling at a metals processing facility in Albany, Oregon. This work included transformers, switch gear, and motor control centers (MCCs) that were nearing the end of their service life and/or had inadequate ratings for the current system configuration. The project included updating and new drawings for their power system, including one-lines and electrical location drawings.

**Weyerhaeuser iLEVEL®** – At two Weyerhaeuser facilities (Junction City and Eugene), Evergreen provided arc flash analysis and label data in compliance with NFPA 70E requirements. This project involved field data gathering for input to ESA's EasyPower arc flash analysis software.

**Flakeboard Company Limited** – Evergreen provided an updated arc flash study to incorporate new electrical equipment installed in Flakeboard's Albany, Oregon mill. Flakeboard had added four new MCCs, which required an updated arc flash analysis to meet NFPA 70E requirements.

**Hampton Lumber Products** – Evergreen provided complete arc flash and short-circuit analysis with recommendations for mitigation at two Hampton lumber mills (Darrington and Willamina) and one reload facility (Portland Reload). We also evaluated system overcurrent protection coordination and provided improvements where possible, as well as issuing labels meeting NFPA 70E guidelines.

**Arclin** – Evergreen provided power system and arc flash hazard analysis and labeling to Arclin in Springfield, Oregon in the process of updating its complete electrical system. This work included transformers, switch gear, and motor control centers (MCCs) and provided information for inclusion in the company's Electrical Safety Program.