

Since its beginning in 1978, ArcSine has specialized in electrical systems ranging from the preparation of load calculations for obtaining building permits to modifications of a 180,000 horsepower wind tunnel drive system. Our work includes the design of power distribution systems up to 115,000 volts, hydroelectric plants, cogeneration installations, detailed design of electrical and electronic control systems, configuration and programming, and a wide range of lighting design services, from general illumination to enhanced custom lighting. ArcSine provides complete electrical engineering services, from preliminary design through startup and checkout.

ArcSine's electrical design work includes motor control, adjustable speed drives, standby power, substation design, short circuit calculations, design of ground grids, and protective device coordination. Our projects have included skillful integration of new facilities with existing facilities, with special attention to construction sequencing to maintain facility operation.

#### Essentials of ArcSine's Electrical Designs:

- Electrical Application Knowledge
- Cost Estimating and Economic Analysis
- Energy Efficiency Analysis
- Meeting Regulatory Requirements
- Coordination with Electric Utilities

#### ArcSine excels in the following:

- Providing Customer Service
- Exceeding Customer Expectations
- Quality Control
- Meeting Deadlines
- Cost Control

#### Our completed accomplishments include the following:

- Medford, OR – Electrical Master Plan
- Collins Pine, Chester, CA – 10MW Substation and Switchgear for a Sawmill
- Sacramento Regional Wastewater Treatment Plant - Dual Switchgear for an 18,250 HP Influent/Effluent Pump Station
- Portland, OR – 5KV Substation and Power Distribution for a 13,000 HP Pump Station
- NASA Ames Research Center - Substation for a 9,000 HP De-ionized Water Pump Station
- NASA Ames Research Center - Reduced Voltage Starting System for a 7,000 HP Motor Generator
- Santa Rosa Cogeneration Project
- LAVWMA - Switchgear and MCC for 5,400 HP Export Pump Station Using Dual Redundant Utility Services
- Brentwood, CA – Wastewater Treatment Plant, 480V, 4,000 Amp Electrical Service

