

ENERGY PROJECT CASE STUDY

CONSOLIDATE METERS TO PRIMARY SERVICE

Financials

- ◆ **Total Turnkey Installed Cost: \$63,000**
- ◆ **Annual Energy Cost Savings: \$97,260**
- ◆ **Simple Capital Payback: .65 years**
- ◆ **Project IRR: 154%**

Description of Facility

Metal plating facility

- ◆ Plate coatings on to various products
- ◆ Multiple plating and dipping baths
- ◆ Utilizes primarily a batch process for plating



System Description

- ◆ Facility had multiple secondary electric utility meters that each supplied portions of the facility
- ◆ The secondary meters were on different utility rates
- ◆ Most of the meters has the associated demand charge for its rate
- ◆ The demands are uncontrolled and dependent upon the plating process

System Opportunities/Issues

- ◆ The multiple meters were all incurring their own demand charges
- ◆ The demands in the various areas of the plant were not coincidental with each other
- ◆ The overall demand for the facility was not as high as the sum of the demands of the individual meters
- ◆ Some of the rates were more attractive than others if the meters could be consolidated

Project Description

- ◆ Installed a new primary metered service to supply all of the facility off from one meter
- ◆ Primary meter was installed in utility primary supply
- ◆ Utility lines and equipment after the new primary meter were purchased from the utility
- ◆ Some additional primary lines were installed to supply a city pump that was located after the new meter

Project Benefits

- ◆ New primary electric service
- ◆ Reduced facility demand charge
- ◆ Moved all facility load onto more attractive electric rate
- ◆ Reduced overall facility electric cost