

LUC Lake Shore Campus Steam Plant Decentralization & Hot Water Conversion

Project Highlights and Results

- Approximately \$966,000 in estimated annual cost savings.
- Additional savings gained from avoided replacement of underground steam piping.
- Three combined boiler plants constructed under budget
- Approximately \$240,000 in incentive funding obtained from Peoples Gas through Elara's efforts.
- Less than 4-year project payback.

Project Background

Owner:	Loyola University Chicago (LUC)
Location:	Chicago, IL (Lake Shore Campus)
Team/Team Lead:	Don McLauchlan, Brian Malone, Matt Swanson
Elara Role:	ME + Controls
Type:	Energy/Infrastructure Upgrade
Construction Cost:	\$3.45MM

Project Overview

Building Type:	Higher Education Campus
Building Attributes:	Multiple Buildings
Initial Construction:	2005
MEFPFIT Systems:	Condensing Boiler Plants, DDC

Innovation

- After a 4-inch condensate line failure was repaired for nearly \$30,000 and substantial inconvenience to University operations, Elara identified innovative opportunity to decommission the existing central steam plant in its entirety and replace it with decentralized hot water boiler plants capable of greater operating efficiency and reliability.
- The project included the construction of boiler plants to serve individual new or renovated buildings or building groups and were thus designed as part of ongoing projects.
- The implementation project was a comprehensive and complex 2-year redesign that replaced a nearly 50+ year old steam plant with multiple high efficiency boiler plants.

