

## Big Picture Thinking. Practical Approach. Sustainable Design.

# **Burnham Park Plaza Condominiums**

#### **Project Highlights and Results**

- Energy and engineering analysis identified opportunity to replace the building's original natural gas fired absorption chillers and hot water boiler
- Replacement of existing chillers and boilers and the installation of a new building automation system saved over \$95,000 in utility costs in first year of operation

### **Project Background**

Owner: Burnham Park Plaza Condominium Association

Location: Chicago, IL

Team/Team Lead: Don McLauchlan, Brian Malone

Elara Role: ME Engineer

Type: Mechanical Systems Upgrade/Energy Retrofit

Construction Cost: \$1,100,000

**Project Overview** 

**Building Type:** Mixed-Use: Condominiums, Retail, Commercial Office

(originally a YMCA hotel)

**Building Attributes:** 21 Stories; 300,000 SF

**Initial Construction:** 1915

MEPFPIT Systems: Boiler & DHW Plant, Chiller Plant, DDC

#### Innovation

- The mixed-use building is split into two sections; a tower and an addition. The addition provides commercial tenant space whereas the tower has condominium units on floors 3 through 21, small commercial offices on the second floor, and retail tenants on the first floor.
- Implemented recommendations included new high-efficiency electric chillers and cooling tower, a new high-efficiency condensing boiler plant for building domestic hot water and space heating and a new direct digital control system.
- The resulting installed systems saved over \$95,000 in actual avoided utility cost in their first year alone.

