

# ELAN

## Technologies

### Inc.



# Replace Leased Line

## CILCO Utilities

### CASE STUDY



- ELAN Designed
- Customer Installed
- MDS 9810 Radios
- MDS P20 Masters
- No Phone Bill

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**ELAN Technologies** offers licensed and unlicensed radio communication systems ideal for the replacement of leased phone lines. The following case study outlines the approach taken when leased phone lines were replaced by radios for the Central Illinois Light Company (CILCO) by ELAN Technologies.

#### Customer & Application

CILCO is a gas and electric utility in Peoria, IL. For their gas distribution remote sites, local flow computers calculate gas flow and transmit to Master sites via leased phone lines, up to 12 remotes per master. Master sites communicate to a SCADA system located in Peoria via 56K digital leased lines. Based on cost and reliability concerns, CILCO considered a radio solution and when faced with the application (hilly terrain, wide coverage (up to 20 mi. between sites) and process critical data) they called ELAN Technologies.

#### Solution

ELAN analyzed the system and suggested options, the primary solution included MDS 9810 Spread Spectrum radios at the remotes and MDS P20's at each Master Site. The MDS 9810's are non-licensed, could be set up by CILCO personnel and accommodate the process data required. The MDS P20's offer a redundant radio platform and scalability and can interface to the 56K digital circuits with a RS232 bridge.

ELAN and CILCO performed a joint pilot study at two remotes and one master with MDS radios; field reliability and cost data confirmed ELAN's recommendation. CILCO contracted with ELAN to design the radio system. ELAN performed path analysis and radio surveys to design the network, determining all data required for CILCO to install the remote sites. Master sites were programmed and installed per the design by ELAN personnel.

#### Results

To date, CILCO has replaced over (50) leased phone circuits. On average, each site has an estimated payback period of one year based on the elimination of the leased phone charges. In addition, CILCO now owns their communication infrastructure and can accommodate system repairs in house.

#### Contact ELAN Technologies

ELAN provides innovative, custom solutions for your application. Call our communication engineers today at 815-463-8105 for your difficult radio applications.

