Natural Gas Energy Efficiency: Challenges & Solutions

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Agenda

- I. Company Overview & Background
 - A. Peoples Gas
 - B. North Shore Gas
 - C. Franklin Energy
- II. Illinois Energy Efficiency Legislation
- III. Illinois Regulatory Environment
- IV. Illinois Stakeholder Advisory Group
- V. Natural Gas Energy Efficiency Challenges & Opportunities
- **VI.** Natural Gas Energy Efficiency Solutions
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I. The Peoples Gas Light and Coke Company





Business

- Established in 1855 (acquired by WEC Energy Group in 2015).
- Regulated natural gas utility.
- Operates in Illinois (see map on the left).
- 1,302 employees.

Market

- Serves approximately 828,000 residential, commercial, and industrial retail sales and transportation customers in the city of Chicago.
- Natural gas revenues are comprised of 100% retail sales.

Facilities

- Natural gas property includes approximately 4,400 miles of distribution main, 270 miles of transmission main, 11 distribution and transmission gate stations, and approximately 519,000 lateral services.
- Owns and operates a 38.2 billion-cubic-foot underground natural gas storage reservoir (Manlove Field) and a 2.0 billion-cubic-foot liquefied natural gas plant in central Illinois.
- Owns a natural gas pipeline system that runs from Manlove Field (located in central Illinois) to Chicago with 8 major interstate pipeline interconnects.

http://www.peoplesgasdelivery.com/



I. North Shore Gas Company

Business

- Established in 1900 (acquired by WEC Energy Group in 2015).
- Regulated natural gas utility.
- Operates in Illinois (see map on the right).
- 171 employees.

Market

- Serves approximately 159,000 residential, commercial, and industrial retail sales and transportation customers located in 54 communities within the northern suburbs of Chicago.
- Natural gas revenues are comprised of 100% retail sales.

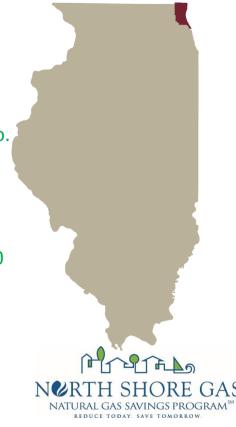
Facilities

• Natural gas property includes approximately 2,400 miles of distribution main, 30 miles of transmission main, 6 distribution and transmission gate stations, and approximately 145,000 lateral services, and a peak-shaving facility that can store the equivalent of approximately 80,000 dekatherms in liquefied petroleum gas.

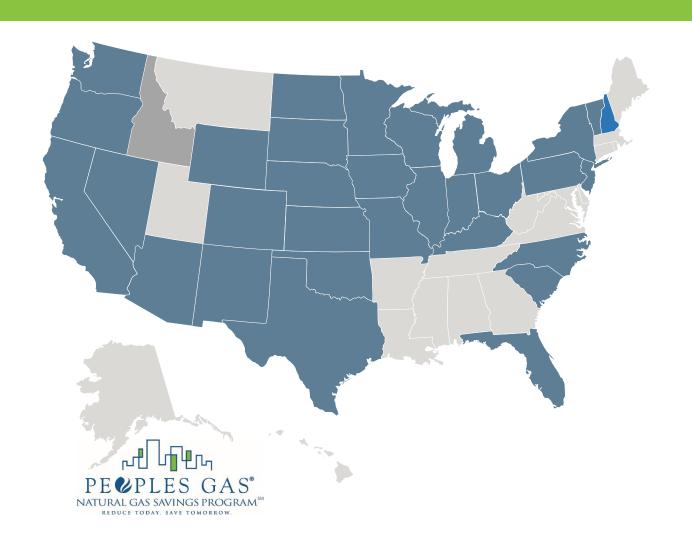


http://www.northshoregasdelivery.com/





I. Franklin Energy Services, LLC



450 employees, 26 offices

Program Experience:

50+ Utility Clients 100 Programs

Key Clients:

Peoples Gas, North Shore Gas, Duke Energy, ComEd, Focus on Energy, Consumers Energy, Arizona Public Service, PECO, We Energies, Wabash Valley, Con Ed, Lansing BW&L, Nicor Gas, MidAmerican, MRES, Minnekota Power



II. Illinois Energy Efficiency Legislation

IL Administrative Code Section 8-104 mandated natural gas utilities implement energy efficiency programs beginning June 1, 2011. The Illinois Department of Commerce & Economic Opportunity (DCEO) administers public sector and low-income programs. As such they are responsible for 20% of the annual EE goal and entitled to 25% of the annual EE budget. EE Program costs are recovered through a separate Rider.

A. Goals:

Net Goals (based on 2009 throughput): Yr 1 - 0.2% and increases at 0.2% per year until capping out at 1.5% per year. $(PGL\ 1.5\% = 21mm\ therms,\ NSG\ 1.5\% = 4.2mm\ therms)$

B. Budget Cap:

Budget is capped: annual program expenditures cannot exceed 2% of annual revenue (PGL = \$25.8mm/yr. & NSG = \$4.4mm/yr. for PY5). 3% of annual EE budget is allocated for EM&V.

C. On-Bill Financing (OBF):

Residential & small business customers must be able to access utility on-bill financing for some measures. Utility cap on outstanding loans is \$2.5mm. This is a rolling cap & defaults can be recovered through the utility bad debt rider. Minimum loan amount is \$500.

D. Exempt / Opt Out

Larger customers can apply to DCEO to opt out if they demonstrate commensurate energy efficiency investments.





III. Illinois Regulatory Environment

A. Plan Development:

Plans must have program offerings (and associated budgets) for all customers except exempt customers, power generation customers & customers served by DCEO's programs. Portfolio must have a TRC > 1.

B. IL Technical Reference Manual (TRM):

Statewide TRM identifies deemed values for various measures. Values are updated annually based on prior year's evaluations. An independent contractor "manages" the TRM with input from the Illinois Stakeholder Advisory Group (SAG). TRM is funded by utility energy efficiency budgets.

B. Plan Filings:

Energy Efficiency Plans required to be filed every 3 years (on 10/1) with the Illinois Commerce Commission (ICC) through a docketed proceeding. Programs commence on 6/1. Program years run from 6/1 - 5/31.

C. Modified Goals:

Modified goals (less than mandated) have been approved by the ICC where justified (i.e. an EE Market Potential Study).

D. Annual ICC Reconciliation Filings:

Utilities required to submit annual Rider reconciliation filing. Actual costs compared to budget, by service class. Variations addressed in Rider billing factors for the following year.

E. Quarterly ICC Filings:

Utilities required to submit quarterly filings to report progress toward goal and budget, by program. Also includes other items of note such as major successes, challenges, concerns, etc.



IV. Illinois Stakeholder Advisory Group

Illinois utilities are required to participate in the Illinois Stakeholder Advisory Group (SAG). The SAG is very active in reviewing utility EE programs & budgets, and provides input on program design, implementation and evaluation. The SAG has no decision making authority. Members have intervened in EE plan filings to promote their interests. The SAG usually meets monthly and "membership" is open to any interested parties.

Primary SAG Participants (in addition to IL IOUs along w/ their implementers & evaluators):

- Illinois Commerce Commission (ICC) staff
- Illinois Attorney General's office
- Illinois Citizens' Utility Board (CUB)
- Environmental Law & Policy Center (ELPC)
- National Resources Defense Council (NRDC)





V. Gas EE Challenges & Opportunities

- A. Annually increasing goals with a fixed budget cap.
- B. Low price of natural gas.
- C. Competition for customer budget dollars with other capital projects.
- D. Stakeholders with differing program input.
- E. Limited Marketing Budgets.
- F. Higher baselines (building codes, equipment standards, etc.).
- **G.** Improved Construction & Retrofit Practices = Less Usage
- H. Cost Effectiveness
- I. Warm winters.
- J. Co-branding of joint programs with electric utility.
- K. Significant Low-Income Population, especially in the PGL Service Territory





VI. Gas EE Solutions - Program Design

- Behavioral
- Midstream
- Preferred Trade Allies
- Targeting Customer Segments (Res and Commercial)/Desk Audits
- Dual Fuel (where possible)





VI. Gas EE Solutions - Drive Demand

- Referrals
- Neighbor Hood Blitzes-Use local media and neighborhood champions
- Preferred Trade Ally Status-Requirements
- Trade Ally Competitions
- Limited time Bonuses/Higher Incentives





VI. Gas EE Solutions - Lower Barriers

Make it easy to participate:

- Online Sign Ups/Scheduling
- Event Sign Ups/Scheduling
- Online Portal for Trades/Customers
- Incentives Paid directly to trade allies
- Online applications with tracking and status updates
- Customer and Trade ally profiles





VI. Gas EE Solutions - Res New Technologies

- Smart Thermostats
- Condensing Gas Water Heaters
- Gas Heat Pump Water Heaters
- Natural Gas Heat Pumps





VI. Gas EE Solutions - Com New Technologies

- Smart Thermostats/Controllers
- Condensing Rooftop Units
- High Efficiency Foodservice Equipment and Water Heating
- Heat Recovery





VII. Q&A







Thank you!

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