National Grid
Neighborhood Expansion Program
Long Island NY

Jim Madsen – Manager, Customer Connections
Neighborhood Expansion Program

- Overview of Long Island Market
- Historic Approach to Gas Expansion
- Regulatory Change
- Neighborhood Expansion Program
- Lessons Learned
- Successes
<table>
<thead>
<tr>
<th></th>
<th>Number of Prospects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Heat</td>
<td>466,000</td>
</tr>
<tr>
<td>Gas in Home</td>
<td>84,000</td>
</tr>
<tr>
<td>Does not have Gas</td>
<td>417,000</td>
</tr>
<tr>
<td>Distance</td>
<td>Number of Prospects</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>On Main</td>
<td>85,000</td>
</tr>
<tr>
<td>Within 100 feet</td>
<td>23,000</td>
</tr>
<tr>
<td>100 feet – 1,000 feet</td>
<td>153,000</td>
</tr>
<tr>
<td>Greater than 1,000 feet</td>
<td>156,000</td>
</tr>
</tbody>
</table>
Historic approach to extending gas facilities:

- For Heating Customers
  - up to 100’ of gas main and 100’ of gas service for each gas heating customer

- For Non-Heating Customers
  - up to 100’ of combined gas main and service for non heat gas uses such as cooking, drying and fireplaces.

- For footages in excess of these allotments
  - A Customer Contribution is required.

- Gas Expansion Usually happens one customer at a time
Main extension projects in neighborhoods are complex:

- Create increased costs to customers
- Rarely progress because customer timelines vary
- Upfront applications required to meet entitlement are seldom reached
The path to Neighborhood Expansion

NATURAL GAS VS. OIL PRICES (WINTER MONTHS)

- Oil Prices
- Gas Prices
The Path to Neighborhood Expansion

- Significant Increase in Interest from prospects far from existing gas mains
- Cost estimates of $10k - $100k to extend gas to single home
- Increased complaints to Regulators and Elected Officials
- Collaboration with Regulators
- State economic, environmental and regulatory policy supports expanding access to gas service and utility recovery for new capital.
What is Neighborhood Expansion?

- Proactively identify projects in high density areas
- Approve with less than the required applications upfront and with no customer contribution
- Selected projects must:
  - Have high density of customers… 7 customers per 500’ of main
  - Have 60% of required customers signed upfront
  - Normal construction routes w/o significant challenges
Neighborhood Extension Targeting Approach

- Methodology
  - Spatial analysis was performed to determine projects in an optimal fashion given set of constraints
  - Projects ranked according to:
    - Density of customers per foot of main
    - Higher likelihood of conversion determined by statistical analysis
    - Financial Considerations
    - Engineering and supply considerations

- Program Build Up
  - Year 1 – 25,000’ main
  - Year 2 – 75,000’ main
  - Year 3 - 125,000’ main
Goals of Pilot

■ Pilot Goal
  ■ Extend ~500’ to ~1000’ of main to neighborhoods with highest potential customers
  ■ Demonstrate that entitlement based expansion can be achieved if main is run prospectively in areas selected through density/propensity modeling
  ■ Prove that effective conversion rates can be achieved through continuous customer education/sales follow through
Initial Approach

- Identified 500 projects from 500’ – 1,000’ of main
- Multiple direct mail
- Higher response rates (6% vs. typical 2%)
- Generating a lot of interest but 78% are on projects that are not likely to reach required threshold
- Actual time from customer providing preliminary interest to receipt of a signed application is longer than anticipated.
- Experiencing historical barriers: first cost, new equipment, etc. and now a real noticeable drop in oil prices.
Neighborhood Expansion – Lessons Learned

Revised Approach

- Identified 100 projects from 10,000’ – 50,000’ of main
- Pursue 5 -10 projects/year
- Single point of contact
- Seek out community and governmental support
- Conduct neighborhood Meetings
- Direct mail, door hangers, lawn signs, cooperative advertising with plumbers
- 1 – 2 Successful projects/year
  - Does not result in enough main footage to meet program goals
Current Approach

- Hybrid Proactive and Reactive Projects
- Pursue 5 -10 large projects/year
- Supplement with Reactive Projects
- Embrace Enthusiastic Residents
- Partner with community on outreach efforts
  - Leverage elected officials, community associations and social media
Neighborhood Expansion Program
Successes

- Dix Hills - 10,000’
- East Hills - 80,000
- Hampton Bays - 10,000’
- East Islip - 14,000’
- Stony Brook - 33,000
- 275 small projects – 105k’ main
East Hills-National Grid plan converts homes from oil to gas

February 3, 2016 By Christine Chung  christine.chung@newsday.com

East Hills is getting its own villagewide gas program, and National Grid has begun laying more than 60,000 feet of gas main. Crews were working on Cardinal and Wren drives on Wednesday, Feb. 3, 2016, in East Hills. (Credit: Howard Schnapp)

East Hills is looking to clear the air, one gas line at a time, with a new villagewide natural gas program that is a partnership with National Grid.

Over the coming months, 74,000 feet of gas main will be installed and the village will be “100 percent saturated,” National Grid officials said. The program was launched last month and is the first of its kind on Long Island, village and utility officials said.

The conversion from home heating oil has environmental and financial impacts.

Switching to gas is the equivalent of taking 15,000 cars off the road annually, village attorney William Burton said. Residents who convert can expect to cut their home heating bills in half, a savings of thousands of dollars annually, village trustee Manny Zuckerman said. He added that about half of the village’s 2,287 homes made the switch before the National Grid partnership began. Under the new program, the village’s remaining 1,000 households are eligible.