



# **Expanding Gas Service: Developments and Considerations**

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# The Demand for Extending Gas Service

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- Low natural gas prices relative to other energy prices, especially for oil and propane
- Other consumer benefits from switching to gas
- For many energy consumers, a quick payback (e.g., 2-3 years) from converting to natural gas
- Potential public benefits in bolstering economic development and a cleaner environment
- Demand centered in New England, New York, outer suburban and rural areas in other regions of the country
- Demand in both unserved and underserved areas

## Practices in States

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- **Commonalities across utilities, but distinct differences even for gas utilities in the same state — examples are:**
  - ❑ **One utility providing “free” pipe extension up to a specified number of feet while another utility charging new customers for the entire footage**
  - ❑ **The method for calculating new customer financial obligations and the repayment period**
  - ❑ **The economic test applied in evaluating proposed line extensions**
  - ❑ **Promotion and marketing strategies for fuel switching**

# Practices in States –

*continued*

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- Utility tariffs commonly specify:
  - ✓ The “free” service and main line extensions that new customers are able to receive
  - ✓ The amounts that they will have to pay for extensions that require “excess” footage or costs
- Most commissions follow the principle that any line extensions should not burden existing customers
- Most commissions support a hybrid pricing mechanism that allocates:
  - ✓ The *economic portion* of new lines to all customers (rolled-in pricing aspect)
  - ✓ The *uneconomic portion* to new customers (incremental pricing aspect)

# Regulatory Issues

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- Rolled-in v incremental pricing
- Effect on existing customers
- Economics of fuel switching
- Economic test for line extensions
- Utility incentives for extending lines
- Utility promotion and marketing
- New-customer contributions
- Cost recovery for a utility
- Building-out ahead of customer commitment
- Subsidization of new customers
- Role of local, regional and state governments

# Model Line-Extension Policy

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- **Conditions for balancing interests of stakeholders**
  - ❖ Financial viability of the utility
  - ❖ Affordability of economical fuel switching to new customers
  - ❖ Minimal negative effect on existing customers
  - ❖ No unfair competitive advantage to any energy source
  - ❖ Overall, balancing of regulatory goals related to fairness, economic efficiency and other outcomes

# Model Line-Extension Policy – *continued*

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- **Regulatory objectives**
  - ✓ Good energy-consumer incentive to fuel switch
  - ✓ Robust utility incentive
  - ✓ Affordable economical line extensions to prospective customers
  - ✓ Fairness to all stakeholders
  - ✓ Compatibility with other governmental objectives (e.g., economic development, clean air)
  - ✓ Optimal line-extension investments

# Model Line-Extension Policy – *continued*

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- **Coping with conflicting objectives**
  - Commissions' intent to make the best decision under uncertainty and conflicting objectives
  - One example is maximizing fuel switching while also minimizing harm to existing customers
  - Another example is giving prospective new customers proper price signals while encouraging all economical fuel switching



# Model Line-Extension Policy – *continued*

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- **The special case of line extensions in unserved areas**

- ❖ Constructing new lines may be unprofitable to the utility or unaffordable to new customers
- ❖ From a lifecycle perspective, new customers may be willing to sufficiently pay the utility through rates and special surcharges to make it profitable for the utility
- ❖ But, Given the expected revenues for the utility and the line cost, the average advanced contribution per customer might come to, say, \$10,000
  - Just like other investments that payoff in the end, consumers may forgo them because of the high initial cost
  - Many households, for example, may decide it cannot afford to withdraw \$10,000 from their savings at this time, or take out a loan of that amount

# Model Line-Extension Policy – *continued*

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- **The special case of line extensions in unserved areas**  
– *continued*
  - ❖ Similar to subsidizing customers for energy efficiency investments, the utility could have existing customers pay some portion of the advanced contributions
    - The utility could argue that fuel switching would be net beneficial but unaffordable to some prospective customers
  - ❖ Why not then increase slightly the rates of existing customers so that prospective customers would switch to natural gas?
    - It may be more appropriate for the government to provide financial assistance to new customers
    - Especially if the line extension contributes to economic development in the rural area, funding with taxpayer money might be the preferred course
    - Instead of charging existing customers a higher rate, the utility should think of creative ways for new customers to pay their advanced contribution in a more accommodating way

# Recommendations for State Utility Commissions

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- Revisit existing gas line extension rules and policies – New York as an example
- Strive to achieve a balance of fairness, reasonableness, economic efficiency and predictability
- Consider a state-wide uniform policy
- Encourage utilities to foster fuel switching through marketing, market facilitation and financial assistance
- Push for governmental assistance when fuel switching to gas has public benefits

# Gas-Line Extension Activities in Eight States

State	Activity
<b>Connecticut</b>	<ul style="list-style-type: none"> <li>▪ Aggressive fuel-switching plan in the state’s draft energy strategy</li> <li>▪ Proposed build-out plan by Northeast Utilities</li> </ul>
<b>Delaware</b>	<ul style="list-style-type: none"> <li>▪ Chesapeake Utility’s hybrid pricing proposal before the Public Service Commission; the utility also proposed other services to facilitate fuel switching</li> <li>▪ Gas-service expansion as part of a recommended state energy strategy</li> </ul>
<b>Maine</b>	<ul style="list-style-type: none"> <li>▪ Intense competition among gas companies to serve new areas</li> <li>▪ High demand for gas in remote and other unserved areas</li> <li>▪ Legislation authorizing issuance of general fund bonds for gas expansions</li> </ul>
<b>Minnesota</b>	<ul style="list-style-type: none"> <li>▪ Back in the early 1990s, the Public Utilities Commission’s investigation of the unique problems in funding new extension lines in remote areas</li> </ul>
<b>Nebraska</b>	<ul style="list-style-type: none"> <li>▪ Establishment of a process to allow communities and gas utilities to advocate before the Public Service Commission for gas-infrastructure development</li> </ul>
<b>New York</b>	<ul style="list-style-type: none"> <li>▪ Public Service Commission-initiated technical conference on policies for expansion of natural gas service</li> <li>▪ Recommendation for fuel switching to natural gas in the Governor’s Energy Highway “Blueprint”</li> </ul>
<b>North Carolina</b>	<ul style="list-style-type: none"> <li>▪ Natural gas bonds for uneconomic line extensions</li> <li>▪ Expansion funds for uneconomic line extensions</li> </ul>
<b>Vermont</b>	<ul style="list-style-type: none"> <li>▪ Ratepayer funding of planning and development activities for future service expansion</li> </ul>

# Line Extension Options to Advance Regulatory Objectives

Regulatory Objective	Option
Good utility incentive	<ul style="list-style-type: none"> <li>▪ Opportunity for utility profit</li> <li>▪ Utility fully recovering prudent costs</li> <li>▪ Regulatory scrutiny of costs</li> <li>▪ Moderate regulatory lag</li> </ul>
Good energy-consumer incentive to fuel switch	<ul style="list-style-type: none"> <li>▪ Proper price signals</li> <li>▪ Adequate information</li> <li>▪ Minimal transaction cost</li> <li>▪ Reasonable upfront cost</li> </ul>
Affordable economical line extensions to prospective customers	<ul style="list-style-type: none"> <li>▪ Spreading out over time new customer share of line extension costs</li> </ul>
Fair to all stakeholders	<ul style="list-style-type: none"> <li>▪ Utility fully recovering prudent costs</li> <li>▪ Protection of existing customers from cost shifting</li> <li>▪ Level playing field for all energy sources</li> <li>▪ Avoidance of excessive costs to new customers</li> </ul>
Compatibility with other governmental objectives (e.g., economic development, cleaner air)	<ul style="list-style-type: none"> <li>▪ Subsidies to new customers with evidence of non-minimal public benefits</li> <li>▪ Combined public and ratepayer funding with demonstration of non-minimal public benefits</li> </ul>
Optimal line-extension investments	<ul style="list-style-type: none"> <li>▪ Balancing of utility profit and risk</li> <li>▪ Private benefits commensurate with incremental cost</li> </ul>

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- Presentation adapted from NRRI paper “**Line Extensions for Natural Gas: Regulatory Considerations.**”