Rate Design For Gas Utilities

Carl R. Peterson, Ph. D.

UIS Center for Business and Regulation
and
Concentric Energy Advisors Inc.

December 1, 2023
Delivered Remotely
Incentives v. Cost Recovery

**Economists**: View world through lens of **incentives**
- Decentralized decisions
- Price is a **signaling device**
- Result: People make good decisions, and the result is best for everyone

**Engineers**: View world through lens of **problem solving**
- Concerned about making the best decision about deploying resources to meet the objectives of the investment
- Price is a **cost recovery mechanism**
- Result: Planners make good decisions, and the result is best for everyone
Why Does Pricing Matter?
Principles

Scarcity

Choice has a Cost (Opportunity Cost)

Not all Costs Matter (Sunk Cost)

Comparing the Margins

Equilibrium: People Respond to Incentives
How does consumer benefit from fall in price?

For initial 100 units consumer pays $2 less per unit for a benefit of $200.

For the extra 4 units the consumer pays $32.

The consumer lowers expenditure by $168. That underestimates the true value to the consumer.

The true benefit is area $A + B = $204.

The total benefit from consuming 104 is $A + B + C = Consumer surplus.
# Own-Price Elasticity of Demand for Electricity and Natural Gas

<table>
<thead>
<tr>
<th></th>
<th>Electricity</th>
<th>Natural Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>National Residential</td>
<td>National Residential</td>
</tr>
<tr>
<td>Short-run</td>
<td>-0.24</td>
<td>-0.12</td>
</tr>
<tr>
<td>Long-run</td>
<td>-0.32</td>
<td>-0.36</td>
</tr>
<tr>
<td></td>
<td>Commercial</td>
<td></td>
</tr>
<tr>
<td>Short-run</td>
<td>-0.21</td>
<td></td>
</tr>
<tr>
<td>Long-run</td>
<td>-0.97</td>
<td></td>
</tr>
</tbody>
</table>

Estimates use data from 1977-2004

(1) "Regional Differences in the Price Elasticity of Demand for Energy," RAND Corporation, 2005 Prepared for NREL p. 18
(2) Id. p. 21
(3) Id. P. 24

Long run Commercial and industrial number are as much as twice the residential numbers
Why is price elasticity important?

\[ \varepsilon_d = \frac{\% \Delta Q_d}{\% \Delta P} \]

**Revenue and demand elasticity are related**

Total Revenue = P*Q
When price changes there a **price effect** and a **quantity effect** on total revenue

If demand is **inelastic** (i.e., \( \% \Delta Q_d < \% \Delta P \)) the **price effect** is **stronger** than the **quantity effect** and total revenue increases (decreases) when price increases (decreases). **Price and total revenue move in the same direction**.

If demand is **elastic** (i.e., \( \% \Delta Q_d > \% \Delta P \)) the **quantity effect** is **stronger** than the **price effect** and total revenue decreases (increases) when price increases (decreases). **Price and total revenue move in the opposite direction**.

Forecasting billing determinants
Creating decoupling plans
Understanding customer fuel-switching capabilities
Composite goods (energy efficiency implications)
Option 1: Price at Marginal Cost
Total Profit = \( (P_{MC} - ATC_{QMC}) \times Q_{MC} < 0 \)
Firm makes losses but \( Q_{MC} = Q_{PC} \) (no consumer surplus loss)

Option 2: Price at Average Cost
Total Profit = \( (P_{AC} - ATC_{QAC}) \times Q_{AC} = 0 \)
Firm makes no profit but \( Q_{AC} < Q_{PC} \) (consumer surplus loss)
Early Principles of Ratemaking

Price discrimination should be the norm: Railroads

The public interest is best served when the rates are so apportioned as to encourage the largest practicable exchange of products between different sections of our country and with foreign countries; and this can only be done by making value an important consideration, and by placing upon the higher classes of freight some share of the burden that on a relatively equal apportionment, if service alone were considered, would fall upon those of less value. With this method of arranging tariff’s little fault is found, and perhaps none at all by persons who consider the subject from the stand-point of public interest. (Interstate Commerce Commission, Annual Report, 1887, p. 36)

Price discrimination should be minimized: Public Utilities

Free from “Unjust” Discrimination
Rate Classes Based on Difference in Service
Rates Based on Class Cost of Service
Rates Should Recover Costs Including Return

Investigation of Commonwealth Edison Company, Report to Committee on Gas, Oil and Electric Light, Chicago City Council 1913
Why Marginal Cost?

Equilibrium occurs where quantity supplied equals quantity demanded. At this point the marginal cost of the last unit produced (measured by the supply curve) is just equal to the marginal benefit (measured by the demand curve).

Society can do no better reallocating the resources to produce this last unit. This is called allocative efficiency.

Marginal Cost = \frac{\Delta Total Cost}{\Delta Output}

P = MC = MinATC; the product cannot be produced at a lower cost. This is called productive efficiency. If more of the good were produced the economy would need to sacrifice some other good to do so.
Bridge is built with a set of fixed assets

Charging a price greater than zero underuses the assets

What if charging price of zero causes congestion?

Set price equal to congestion costs (short-run marginal cost)
The bridge is built to accommodate expected 20,000 crossings when the toll is zero.
What is wrong with SRMC?

SRMC changes with usage or congestion (i.e., demand)

Volatile prices might cause customers to over or under invest
The administrative cost of calculating and disseminating prices is too high
What if SRMC does not cover cost of construction?

Set priced based on LRMC

Isn’t this the same as SRMC? Only under restrictive conditions

Capacity is continuous both increasing and decreasing
Investment is optimal or adjusts quickly to changing demands
Not likely for a gas utility

LRMC Sends Constant Long-term Price Signals
LRMC takes into Account Capital Costs
LRMC is most Common Approach
Traditional Rate Design
Revenue Requirement

Cost of Service

Rate Design Objectives

Other Factors

Final Prices

Revenue Recovery

Price Signals

Efficiency

Equity

Capital Expenses

OPEX + Interest + Taxes

Return on Capital

Operational Data

Economic Analysis

Judgment

Rate Shock

Social Concerns

Policy Concerns

Other Factors

Equity

Efficiency

Price Signals

Revenue Recovery
What is the Role of the Public Utility Price?

**Capital Attraction**
- Utilities should be willing to provide the level of service necessary to serve all comers
- Applies to rate structure and the rate levels

**Efficiency-Incentive**
- Prices in a competitive market provide incentives for firms to produce more efficiently to maximize profits
- If regulation is a substitute for competition, regulated prices should provide incentives for effective production

**Demand Rationing**
- Consumers also need price signals to make decisions about consumption.

**Income Distribution**
- Prices also serve as both a method of transferring cash from consumers to producers and as a method of transferring cash between consumers.
Regulatory Objectives for Rates*

Low-income and medical baseline customers should have access to enough electricity to ensure basic needs (such as health and comfort) are met at an affordable cost;

Rates should be based on marginal cost;

Rates should be based on cost-causation principles;

Rates should encourage conservation and energy efficiency;

Rates should encourage reduction of both coincident and non-coincident peak demand;

Rates should be stable and understandable and provide customer choice;

Rates should generally avoid cross-subsidies, unless the cross-subsidies appropriately support explicit state policy goals;

Incentives should be explicit and transparent;

Rates should encourage economically efficient decision-making;

Transitions to new rate structures should emphasize customer education and outreach that enhances customer understanding and acceptance of new rates, and minimizes and appropriately considers the bill impacts associated with such transitions.

*ALJ Ruling in CPUC R.12-06-013 “Order Instituting Rulemaking on the Commission’s Own Motion to Conduct a Comprehensive Examination of Investor Owned Electric Utilities’ Residential Rate Structures, the Transition to Time Varying and Dynamic Rates, and Other Statutory Obligations.”
Factors Affecting Rate Design Choices

**Economic**
- Cost of service
- Value of service
- Competitor prices
- Price differences and discrimination
- Availability of gas supply and capacity
- Return and revenue stability

**Regulatory Factors**
- Precedent
- Intervenor interests

**Historical Factors**
- Rate perspective
- Rate continuity

**Social and Political Factors**
- Customer reaction and acceptance
- Public relations aspects
- Economic conditions of service territory
- Social obligations to particular customer groups
- Political attention and involvement
Pricing Strategies

Volumetric rates make up most rate structures at retail level (unlike at wholesale level)

Pricing strategies have largely focused on recovery of reasonable costs. This has led to:
- Trackers and riders
- Decoupling
- Formula ratemaking

Recognition of price as a signal is relatively new:
- MC-based pricing in 1970s
- Interruptible capacity pricing
- Economic Development and bypass rates
- Pricing for DER – Value of resources
- Demand charges and SFV
- Energy Efficiency
- Renewable standards
- Low-emissions credits
- Non-wires and non-pipe solutions
Introduction to Rate Design

Rate design covers both the structure of rates.

Traditionally rates were used (almost) solely to recover revenue, but today rates are also used to send signals, but what signals?

What does it cost to serve the customer?

How do we encourage “good” behavior?

Should we consider externalities?
Terms Used in Rate Design

Billing determinants
Factors used to compute a customer’s bill (e.g., number of customers, usages, demand, power factor, etc.)

Base Rates
rates that are set in the tariff until allowed to increase by a decision of the regulatory body

Riders
Mechanisms used to track certain costs (e.g., gas costs)
Economist Approach to Pricing

Define the value of a transaction
consumer surplus and producer surplus (i.e., profit).

Competitive markets maximize consumer surplus

Optimal pricing asks the question
Price such that, subject to the break-even constraint, surplus is maximized

Two things to remember
Total surplus = consumer surplus plus producer surplus. The economics does not differentiate between the two.
Surplus (always) increases if the quantity sold increases
Price Discrimination

Price

Quantity

Demand

ATC=P₂

MC

P₁

A

B

C

D

Q₁

Q₂

Qₚ₇
Is that how regulators look at it?

Does not matter who gets the surplus if it is as large as possible

Most regulators charged with balancing the interests of consumers and utilities

Surplus increases if quantity increases

Many regulators charged with promoting lower sales due to climate change concerns

Pricing in practice does not seem to fit pricing in theory
Methods of Charging Customers

Customer or base charge: $/customer

Demand (highest level of measured consumption): $/therm

Vol: $/usage

Energy-only Rates
- Flat Rates
- Blocked Rates

Demand and Energy Rates
- Customer, Demand, and Energy rates (Hopkinson)
- Hours-of-Use rates (Wright)

Time-Differentiated Rates
- Seasonal Rates
- Time-of-Use Rates (more on the electric side)
## Pricing Illustration

### Residential Class - Full Cost Rate

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Costs</td>
<td>$33,212,000</td>
</tr>
<tr>
<td>Demand Costs</td>
<td>$18,233,000</td>
</tr>
<tr>
<td>Energy Costs</td>
<td>$-</td>
</tr>
<tr>
<td>Sales</td>
<td>$206,858,022</td>
</tr>
<tr>
<td>Customers</td>
<td>179,951</td>
</tr>
<tr>
<td>Customer Charge</td>
<td>$15.38</td>
</tr>
<tr>
<td>Volume Charge</td>
<td>$0.0881</td>
</tr>
<tr>
<td>Total Cost</td>
<td>$51,445,000</td>
</tr>
<tr>
<td>Customer Charge</td>
<td>$33,212,000</td>
</tr>
<tr>
<td>Per Therm</td>
<td>$18,233,000</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$51,445,000</td>
</tr>
</tbody>
</table>

### Residential Class - Customer Charge Capped at $10

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Costs</td>
<td>$33,212,000</td>
</tr>
<tr>
<td>Demand Costs</td>
<td>$18,233,000</td>
</tr>
<tr>
<td>Energy Costs</td>
<td>$-</td>
</tr>
<tr>
<td>Sales</td>
<td>$206,858,022</td>
</tr>
<tr>
<td>Customers</td>
<td>179,951</td>
</tr>
<tr>
<td>Customer Charge</td>
<td>$10.00</td>
</tr>
<tr>
<td>Volume Charge</td>
<td>$0.1443</td>
</tr>
<tr>
<td>Total Cost</td>
<td>$51,445,000</td>
</tr>
<tr>
<td>Customer Charge</td>
<td>$21,594,120</td>
</tr>
<tr>
<td>Per Therm</td>
<td>$29,850,880</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$51,445,000</td>
</tr>
</tbody>
</table>

### Residential Class - Multi Block (Customer Charge Capped at $10)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Costs</td>
<td>$33,212,000</td>
</tr>
<tr>
<td>Demand Costs</td>
<td>$18,233,000</td>
</tr>
<tr>
<td>Energy Costs</td>
<td>$-</td>
</tr>
<tr>
<td>Sales</td>
<td>$206,858,022</td>
</tr>
<tr>
<td>Customers</td>
<td>179,951</td>
</tr>
<tr>
<td>Customer Charge</td>
<td>$10.00</td>
</tr>
<tr>
<td>Volume Charge</td>
<td>$0.1444</td>
</tr>
<tr>
<td>0-50 Therms</td>
<td>$41,371,604</td>
</tr>
<tr>
<td>Over 50 Therms</td>
<td>$165,486,418</td>
</tr>
<tr>
<td>Total Cost</td>
<td>$51,445,000</td>
</tr>
<tr>
<td>Customer Charge</td>
<td>$21,594,120</td>
</tr>
<tr>
<td>0-50 Therms</td>
<td>$15,264,480</td>
</tr>
<tr>
<td>Over 50 Therms</td>
<td>$14,586,400</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$51,445,000</td>
</tr>
</tbody>
</table>
Types of Utility Tariffs

Flat rates
Declining Tariffs
Inverted Black Tariffs
Hopkinson (Two-part) Tariffs
Time of Use (Seasonal)
Modern pricing (more unbundling, more granular costing)
Advantages and Disadvantages of Flat Tariffs

**Advantages**
- Easy to bill.
- Easy for customers to understand.
- Requires simple metering technology.

**Disadvantages**
- Fails to capture differences in demand.
- Fails to capture difference in time-of-use.
- Requires that customers must be homogeneous.
Declining Tariffs

The declining tariff has two blocks with a reduced charge for the second block. These tariffs are employed when the marginal cost to serve a customer is less than the average revenue requirement of the tariff.
Example

Using Marginal Cost to set Tail Block

- Cents per Therm
  - Typical consumption = 43 therms
  - First Block up to 30 therms
  - Second Block Over 30 Therms

- Thems

- Number of therms consumed in first block * price of first block = Allocated Revenue requirement minus marginal cost revenue

- Marginal Cost Revenue = MC * number of therms consumed over 30
Advantages and Disadvantages of Declining Block Rates

**Advantages**
- Simple for the utility to bill.
- Simple for the utility to meter.
- Fairly simple for customers to understand.
- Appropriate when the average revenue requirement exceeds the marginal cost to supply customers.

**Disadvantages**
- Fails to capture differences in demand.
- Fails to capture difference in time-of-use.
- Requires that customer classes be homogeneous.
- Not appropriate unless average revenue requirement is less than marginal costs.
- Can shift costs to smaller users.
Increasing Block Tariffs

The Increasing Block Tariff is the opposite of the Declining Block Tariff – the last block of usage is billed at a higher charge.

This type of rate design is appropriate when the average revenue requirement is less than the marginal cost to serve customers.
Increasing Block Tariffs – Advantages and Disadvantages

**Advantages**

- Simple for the utility to bill.
- Simple for the utility to meter.
- Fairly simple for customers to understand.
- Appropriate when the average revenue requirement is less than the marginal cost to supply customers.

**Disadvantages**

- Fails to capture differences in demand.
- Fails to capture difference in time-of-use.
- Requires that customers must be homogeneous.
- Not appropriate unless average revenue requirement is greater than marginal costs.
- Can shift costs to larger users.
Advantages and Disadvantages of Hopkinson Tariffs

**Advantages**
- Captures the differences in load factor form customer to customer.
- Is generally understood by larger customers.
- Provides explicit price signal to customers for both energy and capacity.

**Disadvantages**
- Requires more costly meters. The metering investment must be balanced with the benefits of implementing the tariff.
- Requires more effort to bill.
Modern Rate Design
Electric and gas markets have been evolving over the last 20-30 years

New pricing issues have led to new types of pricing:

- Competitive Rates
- Consolidation of rates
- Unbundling
- Peaking rates
- Line extension
Questions to Consider

Suppose a gas company is selling delivery service at an average cost, but its competitor (e.g., an interstate pipeline) is selling at marginal cost.

How does this affect the decision to price delivery service? (Hint: suppose a customer can switch service between the two competitors.)

How would you evaluate a proposal from a company with multiple subdivisions to consolidate its rates into one system-wide rate?

Why would a utility unbundle rates?
Questions to Consider

What is a line extension rate?

Regulator will typically include a set number of feet of line extension in rates (e.g., 100 feet)

What is the problem?

Suppose a customer is 125 feet from the nearest main at $15 a foot that would entail a loss of margin to extend beyond the 100 feet

Run a simple financial calculation (is it worth extending the line?)

Include future gas sales growth

What about competition (electric, oil, etc.)?

What about climate change?
Pricing Issues with AMI

End of 2022 about 72% of electric meters were smart meters (EIA, October 20, 2023)

EIA does not publish gas AMI data, but number is significantly lower though many major utilities have or will soon have AMI

Can new services be provided?
Who should provide the communications network?
How can that network be priced?
Does this fit into smart grid, smart cities?
Pricing Issues with AMI: Joint Production

MC_{JP}: Cost of Joint Production  
MC_{WR}: Cost of Hooking up Water Meter to Gas AMI mesh network  
D1: Demand for gas meter reading  
D2: Demand for water metering reading
Demand Response

Incentive-based
Price-based
Use in non-pipes solutions
Current and Future Issues

We want to promote efficiency and good resource management but at the same time maintain and promote affordability.

Fracking: Promotes lower cost gas but may run afoul of environmental goals.

Electricity generation: competitive markets promote better pricing but gas is often marginal fuel --- how does it get to markets where it is needed? (gas v. electric transmission)

Exporting: creates opportunities for US citizens but may have cost and environmental issues (LNG facilities)
Current and Future Issues

Climate change: Gas can be part of solution v. coal but is it really a transition fuel?

Does lower usage make gas utilities less attractive to investors and more costly to consumers (at least for delivery)

Need to maintain and expand current facilities
   Transport and storage constraints (NE, CA, etc.)
   While average prices are generally low very high prices can occur behind bottlenecks

Does this suggest another restructuring (Utility 3.0?)
   Biogas potential, competitive storage, more information to consumers
   Electrification (space heating, water heating)
      ...residential...[electric space heating applications]...are approaching cost parity with incumbent natural gas technologies in moderate to warm climates, but in cold climates, incumbent gas technologies...exhibit...[cost advantage]” NREL “Electrification Futures Study,” 2017 (with caveats re: high regional gas prices)

Gas demand management
   Better pricing with AMI metering
   Can DR save the day in transport tight regions?
Summary of pricing discussion

Pricing is not always about the economics: social, political, and other factors influence decisions.

History matters: the best tax is an old tax (is this still true?)

Economic conditions in service territory – rate impact studies important

New technologies may make some/most of this discussion less relevant in the future (e.g., AMI)
Post-Test Year Ratemaking

Rates change after the rate case

Addresses costs that are:
- Large
- Volatile
- Out of management control

Also may address:
- Inability to fairly predict usage
- Policy issues
- Lower regulatory costs
Natural Gas
Bad Debt Tracker

Source: American Gas Association December 2016
Natural Gas
Pension Trackers

Source: American Gas Association December 2016
Natural Gas and Electric
Accelerated Infrastructure Trackers

Source: EEI 2013
Natural Gas
Energy Efficiency Trackers

Source: American Gas Association December 2016
Revenue Decoupling

**Use Per Customer Basis**

\[(RCUC - AUC) \times \text{Rate} \times \text{RCC (or ACC)} / \text{Billing Units}, \text{ where:}\]

- **RCUC** = Rate Case Use Per Customer
- **AUC** = Actual Use Per Customer
- **Rate** = Distribution Rate
- **RCC** = Rate Case Customers
- **ACC** = Actual Customers

**Margin Per Customer Basis**

\[(RCMC - AMC) \times \text{RCC (or ACC)} / \text{Billing Units}, \text{ where:}\]

- **RCMC** = Rate Case Margin Per Customer
- **AMC** = Actual Margin Per Customer
- **RCC** = Rate Case Customers
- **ACC** = Actual Customers
Decoupling
Natural Gas
Thank You

Carl Peterson

Center for Business and Regulation | University of Illinois Springfield
One University Plaza MS UHB 4093 | Springfield, IL 62703 USA
Tel: +1 312.287.0127 | cpeter8@uis.edu

Concentric Energy Advisors, Inc.
Chicago, IL USA
Tel: +1 312-287-0127 | cpeterson@ceadvisors.com
Appendix

Bonbright Principles
...utility rates, like other prices, are designed to perform multiple functions as instruments of economic control. To a high degree, these functions can be performed in harmony; necessarily so, indeed, since they are partly complementary. But the harmony is far from complete, for the most efficient performance for any one function would require the acceptance of a system of rates not also best designed to perform any of the others. In consequence, one of the most frustrating problems of rate theory and of practical rate making is that of suggesting and applying principles of workable compromise [p. 386]
### Bonbright Principles

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The related, “practical” attributes of simplicity, understandability, public acceptability, and feasibility of application.</td>
<td>The related, “practical” attributes of simplicity, certainty, convenience of payment, economy in collection, understandability, public acceptability, and feasibility of application.</td>
</tr>
<tr>
<td>Freedom from controversies as to proper interpretation.</td>
<td>Freedom from controversies as to proper interpretation.</td>
</tr>
<tr>
<td>Effectiveness in yielding total revenue requirements under the fair-return standard.</td>
<td>Effectiveness in yielding total revenue requirements under the fair-return standard without any socially undesirable expansion of the rate base or socially undesirable level of product quality and safety.</td>
</tr>
</tbody>
</table>
## Bonbright Principles

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue stability from year to year.</td>
<td>Revenue stability from year to year with a minimum of unexpected changes seriously adverse to utility companies.</td>
</tr>
<tr>
<td>Stability of the rates themselves, with minimum of unexpected changes seriously adverse to existing customers. (Compare &quot;The best tax is an old tax.&quot;)</td>
<td>Stability of the rates themselves, with a minimum of unexpected changes seriously adverse to ratepayers and with a sense of historical continuity. (Compare &quot;The best tax is an old tax.&quot;)</td>
</tr>
<tr>
<td>Fairness of the specific rates in the apportionment of total costs of service among the different customers.</td>
<td>Fairness of the specific rates in the apportionment of total costs of service among the different ratepayers so as to avoid arbitrariness and capriciousness and to attain equity in three dimensions: (1) horizontal (i.e., equals treated equally); (2) vertical (i.e., unequals treated unequally); and (3) anonymous (i.e., no ratepayer's demands can be diverted away uneconomically from an incumbent by a potential entrant).</td>
</tr>
</tbody>
</table>
# Bonbright Principles

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidance of “undue discrimination” in rate relationships.</td>
<td>Avoidance of “undue discrimination” in rate relationships so as to be, if possible, compensatory (i.e., subsidy free with no intercustomer burdens).</td>
</tr>
<tr>
<td>Efficiency of the rate classes and rate blocks in discouraging wasteful use of service while promoting all justified types and amounts of use:</td>
<td>Static efficiency of the rate classes and rate blocks in discouraging wasteful use of service while promoting all justified types and amounts of use:</td>
</tr>
<tr>
<td>(a) in the control of the total amounts of service supplied by the company;</td>
<td>(a) in the control of the total amounts of service supplied by the company;</td>
</tr>
<tr>
<td>(b) in the control of the relative uses of alternative types of service (on-peak versus off-peak electricity, Pullman travel versus coach travel, single-party telephone service versus service from a multi-party line, etc.)</td>
<td>(b) in the control of the relative uses of alternative types of service (on-peak versus off-peak service or higher quality versus lower quality service).</td>
</tr>
</tbody>
</table>