

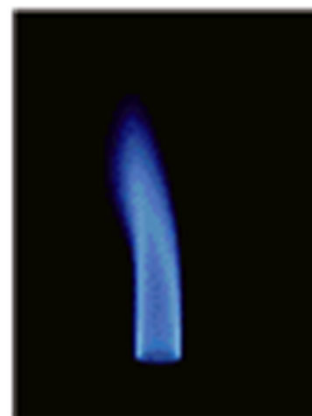


## Track: Natural Gas Basics Unit 6: Gas Utility Revenue Streams & Customer Programs

Eric Burgis, Energy Solutions Center

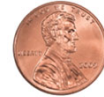
### Presentation Outline

- Overview
- Cost of Service & Monthly Meter Charges
- Decoupled Revenue Streams
- Common Utility Billing & Payment Assistance Programs
- Weather Normalization Clauses and Other Adjustments
- Other Sources of Revenue



### Overview

- By law natural gas utilities don't make a penny of profit on the commodity price of natural gas
- What they pay for the gas they buy from the supplier is what they charge for the gas they supply to the customer
- In today's high energy price environment, the commodity portion of the monthly natural gas bill is now about 70 percent of the total monthly bill



### Monthly Fees

- Utilities charge their customers monthly delivery and service fees that reflect their cost to deliver natural gas by pipeline to those customers; including:
  - The salaries they pay their employees plus
  - A reasonable return on investment that they pay their shareholders – which are approved by state government regulatory authorities – better known as public utility commissions



## Natural Gas Charges

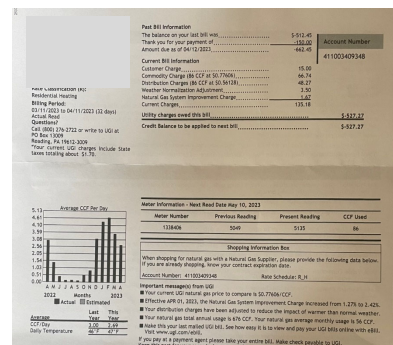
- Typically there are three charges for natural gas on a customer bill
  - Gas Cost Recovery
  - Distribution Charge
  - Customer Charge

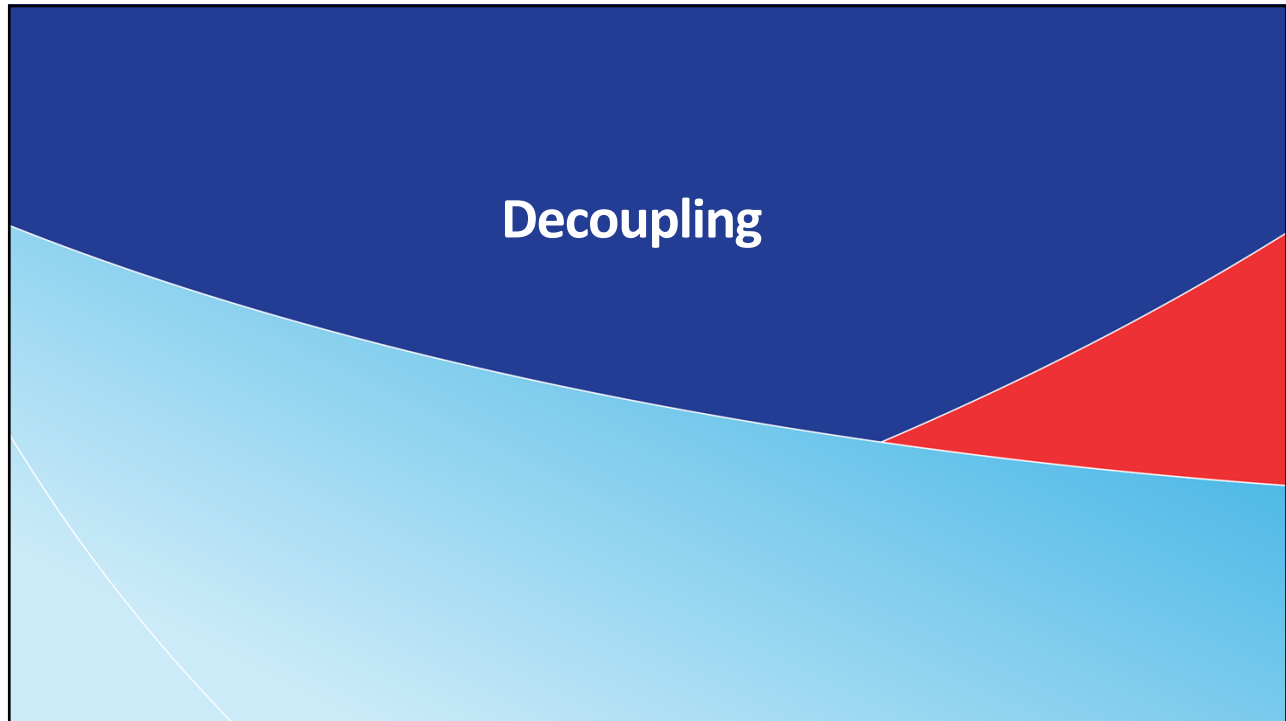
### Natural Gas Charges

- **Gas Cost Recovery** covers the cost of the natural gas per Mcf
  - This charge may change each month to reflect market conditions
  - Utilities do not make any profit on the natural gas, so it charges customers only what it pays for the gas
- **Distribution Charge** includes recovery of operations and maintenance expenses (i.e. maintaining pipelines, new pipelines, storage well reliability, etc.)
  - The monthly charge, which varies by rate class, is on a cost per Mcf for most customers

### Natural Gas Charges

- **Customer Charge** includes recovery of customer-related activities (i.e. meter costs, customer accounting, customer billing, etc.)
  - This is typically a fixed charge in dollars per month



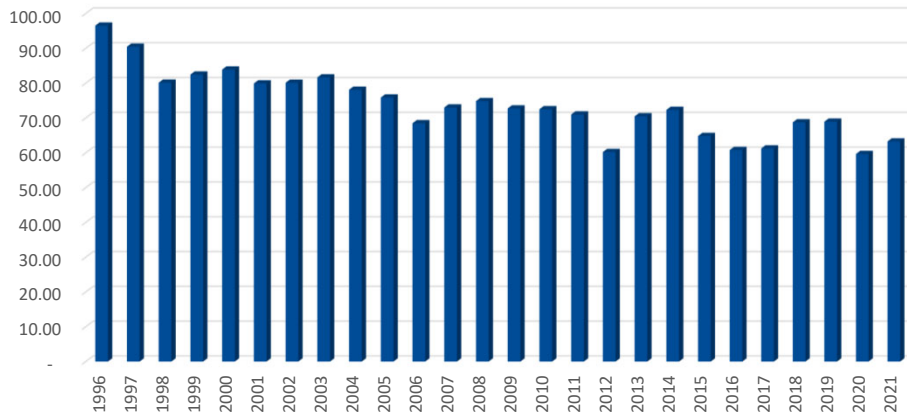


## Decoupling

- While the number of gas users continues to grow year after year, the actual volume of gas being consumed continues to shrink due in part to improvements in equipment efficiency, and in part due to more efficient use of energy by homes and businesses
- Natural gas utilities rely on the distribution of certain volumes of natural gas to earn a fair return
- As throughput volumes are lower today than a decade or so ago, gas utilities find themselves in an awkward financial position

## Historical Gas Usage

Average Use per Residential Customer (MCF/Year)



Source: AGA data

© Energy Solutions Center Inc. – All Rights Reserved

11

Source: [www.aga.org/Newsroom/factsheets/Documents/Energy%20Efficiency%20Utilities%20\(Feb%202013\).pdf](http://www.aga.org/Newsroom/factsheets/Documents/Energy%20Efficiency%20Utilities%20(Feb%202013).pdf)

## Decoupling

- This type of system makes utilities adverse to conservation and efficiency measures because their implementation ultimately cuts into profits by decreasing sales and therefore revenues
- “Decoupling” removes the pressures placed on utilities to sell as much energy as possible by eliminating the relationship between revenues and sales volume
- A decoupled gas utility will earn their specified return regardless of gas throughput



© Energy Solutions Center Inc. – All Rights Reserved

12

## Decoupling

- Under decoupling policies, a state regulatory commission determines the revenue requirement for a given utility based on a “test year” using traditional regulatory methods; but in a departure from traditional regulation the utility is then allowed to collect that revenue regardless of actual sales volume
- “Decoupling” is a U.S. terminology, but note that Canadian utilities have been doing something similar for well over a decade



© Energy Solutions Center Inc. – All Rights Reserved

13

## Decoupling

- Once a natural gas company is decoupled, it will earn its fair return regardless of throughput which is affected by energy efficiency and other factors
- Since the utility no longer requires certain volumes of gas sales to earn a return, it is now free to promote energy conservation
- Strong conservation programs begin to take the place of sales and growth of load



© Energy Solutions Center Inc. – All Rights Reserved

14

## Common Utility Billing & Payment Assistance Programs

### Payment Assistance Plans

- Direct Pay
- Budget Billing
- Gift Certificates
- Payment Agreements
- Bill Due Date Extensions (Winter Protection)
- Weatherization
- Community Programs



### Direct Pay Programs

- Customers can pay the utility bill automatically from their checking or savings account
- No checks to write, no envelopes or stamps to buy
- It helps customers establish/maintain a good credit rating
- Requires customer sign up
- Typically funds are transferred on the billing due date improving utility cash flow



© Energy Solutions Center Inc. – All Rights Reserved

17

### Uses an Automated Clearing House

- Automated Clearing House (ACH) is an electronic network for financial transactions
- ACH is a computer-based clearing and settlement facility that processes electronic transactions between participating depository institutions
- ACH processes large volumes of credit and debit transactions in batches
- ACH credit transfers include direct deposit, payroll and vendor payments



© Energy Solutions Center Inc. – All Rights Reserved

18

### Typical ACH Form for Sign Up

**Automatic Pay Plan Authorization for Utility Bills** Date \_\_\_\_\_

I/we authorize \_\_\_\_\_ and the financial institution named on the attached voided check to initiate debit entries (deductions) to the account shown on the voided check.

**Please print legibly.**

Financial Institution Name \_\_\_\_\_  
 Bank Routing Number \_\_\_\_\_ Account Number \_\_\_\_\_

**ATTACH A VOIDED CHECK.**

I/we understand that this authorization will continue in force unless discontinued by my/our written request. Please continue to pay your bill until the following message appears on your bill ACH DO NOT PAY. If at any time I/we decide to change banks or discontinue this payment service, I/we will notify \_\_\_\_\_ in writing 30 days prior to any change. \_\_\_\_\_ requires that a new Authorization Form be filled out in the case of a change in banks and /or bank accounts.

|   |  |
|---|--|
| Signature _____<br>Full Name _____<br>Address _____<br>Date _____<br>Daytime Telephone Number _____ | (Optional – For Joint Account)<br>Signature _____<br>Full Name _____ |
|---|--|

### Budget Billing Programs

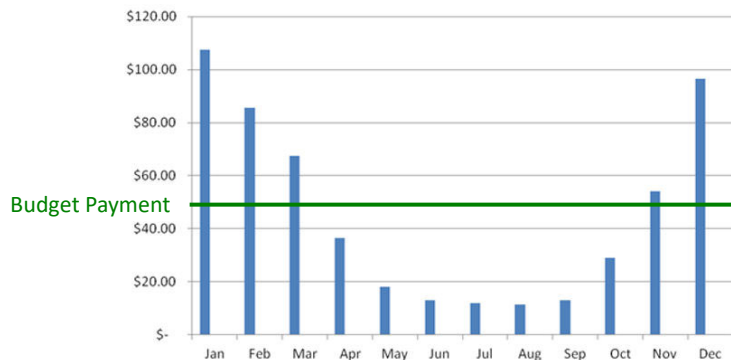
- Budget Billing programs allow qualifying customers the ability to pay the same amount each month for utility services
- The program makes it easy for customers since they know how much their utility bill will be every month



This Photo by Unknown Author is licensed under CC BY-NC

### Typical Gas Billing

- Annual cost \$550.00 with various monthly payment amounts versus \$45.83 per month



### Establishing an Amount

- When a customer starts the Budget Billing program their bill amount to be paid will be the same every month for 12 months
- Amount is calculated/based on the most recent 12 months of consumption
- The billing amount could change if there is a huge difference in current consumption versus the consumption their bill was based on
- After a year on the program the bill amount will be recalculated based on the most recent 12 months of consumption

### Budget Billing Accounts

- At the end of the 12 months there will be an amount that is either owed by the customer or an amount that is a credit to the customer, that amount is called the “settle-up” amount
- In order to go on a Budget Billing Plan the account typically must be paid up to date
- Continued participation requires that payments be made on or before the due date each month
- Provides utility consistent cash flow during lower energy use months



© Energy Solutions Center Inc. – All Rights Reserved

23

### Gift Certificates

- A popular way to help family members, friends and neighbors is by giving a gift certificate purchased from the utility
- Gift certificates can be in any amount and the recipient can use it to apply directly to their billing account
- There are no service fees and the certificates never expire



© Energy Solutions Center Inc. – All Rights Reserved

24

### Program Options

- Programs can utilize certificates
- Some programs attach a processing fee for each gift certificate purchased



### Payment Agreements

- Low-Income Home Energy Assistance Program (LIHEAP) -Utility Bill Payment Assistance
- Billing Due Date Extensions

## Low-Income Home Energy Assistance Program (LIHEAP)

- The LIHEAP program can consist of 2 components:
  - 1) Energy Assistance (EA): Eligible participants receive a onetime payment from the state which is applied to their primary heating source vendor account
    - EA payment amounts vary and are based on the type of primary heating source, household income, and the number of persons in the household
    - No disconnect notice is needed for eligible participants to receive EA benefits
  - 2) Emergency Crisis Intervention Program (ECIP):
    - Eligible participants receive payments from the state which is applied to either their primary or secondary heating source vendor account
    - A disconnect notice is required to receive ECIP payments



© Energy Solutions Center Inc. – All Rights Reserved

27

## Bill Due Date Extensions (Winter Protection)

- Customers with a past due bill, in any amount, who cannot pay their past due balance owed, have the following options:
- Have their service turned off and remain off until their past due amount is paid in full
- Enter into an extension/payment agreement with the Utility Billing Department



© Energy Solutions Center Inc. – All Rights Reserved

28

## Bill Due Date Extensions (Winter Protection)

- An extension / payment agreement needs to be completed by the account holder(s) with past due accounts no matter the size of the dollar amount owed
- Typically, fifty percent (50%) payment is expected at the time the agreement is initiated
- A multi-day payment plan, with payment dates and amounts, will be identified on the extension/payment agreement form with payoff date identified
- At the end of the extension/payment agreement, payment "in full" is due



© Energy Solutions Center Inc. – All Rights Reserved

29

## Arrears Forgiveness Programs

- Varies by utility – options for eligibility may include:
  - Must be enrolled in LIHEAP Program
  - Have made three bill payments within the last 12 months
  - Arrears no less than \$240 and no more than \$750
  - Receive, completed application
  - Once enrolled; cannot miss three consecutive months of payment
  - Arrears placed on hold
  - Utility applies 1/24th of the original withheld amount credit to the account each time the customer pays the monthly bill in full and on time
  - 36 month program



© Energy Solutions Center Inc. – All Rights Reserved

30

## Reconnection Fee Waivers

- Customer may be eligible for one reconnection fee waiver a year
- Credit is equal to the amount of the reconnection fee assessed at the time of turn on



## Weatherization Programs



### Weatherization

- Weatherization Assistance Programs
  - A federal program, administered by the local utilities
  - Provides weatherization services to income-eligible customers
  - These services may involve installation of air-sealing and thermal envelope measures, such as caulking around windows and doors, adding insulation to attics, walls, ceilings, foundations, and cleaning, testing, and repairs to refrigerators and heating and cooling equipment
- The program began in 1976, DOE has helped improve the lives of than 7 million families by reducing their energy bills
- Nationally, as many as 20–30 million U.S. families are eligible for weatherization services



© Energy Solutions Center Inc. – All Rights Reserved

33

### Eligibility for Weatherization Assistance

- The primary factors affecting eligibility is income – each state sets its income requirements within DOE guidelines
- Services are provided by the states, and each state has slightly different criteria
- Under DOE guidelines, customers are automatically eligible if they receive Supplemental Security Income or Aid to Families with Dependent Children
- In other cases, states give preference to:
  - People over 60 years of age
  - Families with one or more members with a disability
  - Families with children (in most states)



© Energy Solutions Center Inc. – All Rights Reserved

34

## How the Program Works

- The first step in the process is for your local weatherization agency to carry out an energy audit
- Includes an analysis of energy bills, a blower-door (pressurized) test, and inspection of all energy equipment for health and safety
- Finally, the auditor provides a recommended list of the most cost-effective energy conservation measures for the home



© Energy Solutions Center Inc. – All Rights Reserved

35

## How the Program Works (*continued*)

- All work performed is energy-related, and does not include new roofing, siding, or similar structural improvements
- The average expenditure is \$6,500 per home
- Weatherization workers typically complete their work in a day or two
- Customers must sign off on a final inspection



© Energy Solutions Center Inc. – All Rights Reserved

36

## Community Assistance Agencies

- The Community Action Agency (CAA) network is funded by federal government dollars
- While the government funding goes directly to the state governments, they are required to forward 90 percent of the funds they receive to the local agencies and organizations so that the assistance programs can be funded
- All together, CAAs serve almost 15 million low and moderate income people yearly in 96 percent of the nation's counties, and they provide them with help for bills and other expenses



© Energy Solutions Center Inc. – All Rights Reserved

37

## Managing Energy Use and Energy Waste

- On-line self energy audits
  - Links to customer billing history and local weather data for accuracy
  - Provides energy efficiency recommendations and cost/benefit analysis on energy efficient measures
- Programmable Thermostats
  - Utilities offer these energy-saving devices to improve homes energy efficiency



© Energy Solutions Center Inc. – All Rights Reserved

38



### What are Utility Maintenance Plans?

- These plans cover the maintenance and repair of a home's natural gas lines for a set monthly fee
- Other plans may cover inspections of heating and cooling systems, and repairs to certain appliances
- With reassuring names such as "Comfort Guard," "Pipeline Protection," and "Home Essentials," the plans are marketed as low-cost insurance against maintenance problems

### How Much do Plans Cost?

- Basic repair plans may seem deceptively cheap because they range from \$3 to \$7 per month
- Other plans covering maintenance and repair of heating and cooling systems have monthly fees as high as \$30



© Energy Solutions Center Inc. – All Rights Reserved

41

### Appliance Warranty Programs

- An appliance protection plan is like an extended appliance warranty
- Provides year-round protection for many of your customers gas and electric appliances, plus heating, cooling and hot water
- Affordable plans provide coverage for many gas and electric appliances including:
  - Furnace
  - Water heater (tank-type)
  - Refrigerator
  - Range/oven/cooktop
  - Clothes washer and dryer
  - Central air conditioning
  - Dishwasher
  - Microwave, and
  - Stand-alone freezer



© Energy Solutions Center Inc. – All Rights Reserved

42

### Appliance Warranty Programs

- No additional charges for covered labor and parts
- No trip charges, service fees or deductibles
- On-call customer service available 24 hours a day, 365 days a year – even holidays!
- Reliable, quality service by screened, highly skilled technicians dispatched from service centers near you
- Convenient monthly payments (available to qualified customers)
- Peace of mind knowing that everything will be taken care of for you



© Energy Solutions Center Inc. – All Rights Reserved

43

### Plumbing Warranty Programs

- A plumbing protection plan is like a warranty for your plumbing
- It automatically covers much of the household plumbing when it needs repair
- Covers the toilets, faucets, garbage disposal, water lines and more
- Sump pump coverage also available (optional).
- No additional charge for covered labor and parts



© Energy Solutions Center Inc. – All Rights Reserved

44

## Plumbing Warranty Programs

- No service call charges, diagnostic fees or after-hours surcharges
- On-call customer service available 24 hours a day, 365 days a year
- Convenient monthly payments (available to qualified customers only)
- Peace of mind knowing that everything will be taken care of for you – quickly and professionally



© Energy Solutions Center Inc. – All Rights Reserved

45



Competition

## Competition

- In most economic sectors, businesses live in fear of competing businesses coming in and providing customers with a better value proposition
- They must be vigilant, cut costs, and innovate to stay competitive
- But utilities do not fear competition in a typical way



© Energy Solutions Center Inc. – All Rights Reserved

47

## Competition

- End-use customers like natural gas and must purchase it from the utility
- Profits are guaranteed so long as they can justify their rates to a PUC
- All they need to do to increase profits is to build more stuff — more mainlines, distribution lines & facilities



© Energy Solutions Center Inc. – All Rights Reserved

48



# Thank You

Consider taking the on-line test while  
course material is fresh in your mind



**ENERGY  
SOLUTIONS  
CENTER**

400 North Capitol Street, 4th Floor

Washington, DC 20001

[escenter.org](http://escenter.org)