Natural Gas Rates, and Regulations impacting the business of SoCalGas

Presented by Gary Lenart & Julia Cortez
1/24/2019
Topics to Cover

• Transportation & Surcharge Rate Changes
• Greenhouse Gas Cap and Trade Allowance Prices
• Components of your Natural Gas Bill
• Status of Natural Gas Prices
• Natural Gas Supply
• Renewable Natural Gas
• Proposed core rate for small electric generation
Effective Transportation & Surcharge Changes for 2019
$/therm

- Core C&I: $0.094
- NonCore C&I: $0.063
- NonCore EG: $0.056
Changes in Transportation Rates & Surcharges

• Costs related to the State’s Greenhouse Gas program, referred to as the “Greenhouse Gas Cap and Trade program” will be included in transportation rates at approximately 4.7 ¢/therm

• Under collected costs from the prior year were authorized in Regulatory Account Update filing (Advice Letter 5368 filed in November 2018).

• Higher funding of Public Purpose Programs was authorized in the Public Purpose Program Surcharge filing (Advice Letter 5374 filed in November, 2018) due to an increase in the Energy Efficiency Incentive Programs and the Low-Income Programs.
Cap and Trade Allowance Prices

GHG Cap and Trade Allowance Settlement Prices

- MTCO2e $/mmbtu
- $/therm

SoCalGas – A Sempra Energy utility

Glad to be of service.
Components of Natural Gas Bill $/therm

- Transport
- Cap and Trade
- Surcharges
- Gas Cost
- Citygate

$1.100
$1.000
$0.900
$0.800
$0.700
$0.600
$0.500
$0.400
$0.300
$0.200
$0.100
$0.000

2018 Core C&I  2019 Core C&I  2018 NonCore C&I  2019 NonCore C&I  2018 NonCore EG  2019 NonCore EG
Status of Natural Gas Prices

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SoCal Border NGI Bidweek $/dth
SoCal Citygate, NGI Bidweek $/dth
SoCal Tariff G-CP $/dth
NYMEX Futures $/dth

updated 01/09/2019

Historical Prices

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NYMEX Futures
Natural Gas Supply
Natural Gas Supply

• Los Angeles/Orange County are at the center of the SoCalGas transmission system.

• Access of supplies through
  • 14 receipt points into the SoCalGas system
  • Includes Local and Off Shore production
  • Includes access to Liquefied Natural Gas (LNG) input Terminal

• 4 storage fields
  • Aliso Canyon at partial operations.
Future Supply Source
Renewable Natural Gas
aka Bio-Methane

• Decomposition of organic waste results in BIOGAS
• BIOGAS is composed primarily of C02 and Methane
• Historically, this has been vented into the atmosphere
• Methane has a greenhouse gas effect over 20x that of C02
• Capturing BIOGAS and removing the C02 results in a pipeline quality gas called BIO-METHANE
  • Chemically the same as regular natural gas
• Burning BIO-METHANE from dairy waste can result in a NEGATIVE greenhouse gas impact
  • Due to eliminating all of the methane that would normally occur
Convert waste from dairies, farms and landfills into biogas using anaerobic digestion. Process the biogas to make it pipeline-ready (biomethane). Put the biomethane into the pipeline for future use.

Future Supply Source
Renewable Natural Gas
aka Bio-Methane

• 2 Bio-Methane producers have interconnected
• 1 more is near completion
• Several more under engineering study
• 3 recently approved as part of a pilot program for dairy cluster
Proposed core rate for small electric generation

- A cost based rate determined by the usage characteristics of small EG customers
  - High usage factor compared to average core C&I customer results in lower effective rate
  - Current tariff only allows core service under the existing core C&I rate which is not based on the costs incurred by a small EG customer

- Allows core gas supplies unlike noncore service
- If approved will be implemented 1/1/2020
- Filed as part of transportation rates in the Triennial cost allocation proceeding application A.18-07-024
Questions?
SoCalGas Transportation Rates

inclusion of Cap and Trade costs and
Annual Regulatory Account Balance Update

$/therm

<table>
<thead>
<tr>
<th>Core Rates Class</th>
<th>11/01/2018 Rates $/therm</th>
<th>1/01/2019 Rates $/therm</th>
<th>Estimated Rate Change</th>
<th>Estimated Rate Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I Tier 1 (First 250 therms/Month)</td>
<td>$0.55413</td>
<td>$0.64088</td>
<td>$0.08674</td>
<td>16%</td>
</tr>
<tr>
<td>C&amp;I Tier 2 (250-4,167 therms/Month)</td>
<td>$0.30219</td>
<td>$0.38190</td>
<td>$0.07971</td>
<td>26%</td>
</tr>
<tr>
<td>C&amp;I Tier 3 (Above 4,167 therms/Month)</td>
<td>$0.13327</td>
<td>$0.20827</td>
<td>$0.07500</td>
<td>56%</td>
</tr>
<tr>
<td>Natural Gas Vehicle</td>
<td>$0.12853</td>
<td>$0.17830</td>
<td>$0.04976</td>
<td>39%</td>
</tr>
<tr>
<td>Gas A/C</td>
<td>$0.13475</td>
<td>$0.20845</td>
<td>$0.07370</td>
<td>55%</td>
</tr>
<tr>
<td>Gas Engine</td>
<td>$0.14080</td>
<td>$0.17720</td>
<td>$0.03640</td>
<td>26%</td>
</tr>
<tr>
<td>Core Average</td>
<td>$0.6064</td>
<td>$0.6893</td>
<td>$0.08291</td>
<td>14%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Core Rate Class</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I-Distribution Tier 1 (0-20,833 therms/month)</td>
<td>$0.16266</td>
<td>$0.22553</td>
<td>$0.06287</td>
<td>39%</td>
</tr>
<tr>
<td>C&amp;I-Distribution Tier 2 (20,834-83,333 therms/month)</td>
<td>$0.10345</td>
<td>$0.16169</td>
<td>$0.05824</td>
<td>56%</td>
</tr>
<tr>
<td>C&amp;I-Distribution Tier 3 (83,334-166,667 therms/month)</td>
<td>$0.06558</td>
<td>$0.12085</td>
<td>$0.05527</td>
<td>84%</td>
</tr>
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<td>C&amp;I-Distribution Tier 4 (Over 166,667 therms/month)</td>
<td>$0.03852</td>
<td>$0.09167</td>
<td>$0.05315</td>
<td>138%</td>
</tr>
<tr>
<td>EG-Distribution Tier 1 (Less than 3 Mil therms per year)</td>
<td>$0.12824</td>
<td>$0.18436</td>
<td>$0.05612</td>
<td>44%</td>
</tr>
<tr>
<td>EG-Distribution Tier 2 (3 Mil therms or more per year)</td>
<td>$0.05646</td>
<td>$0.10762</td>
<td>$0.05116</td>
<td>91%</td>
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</table>
Public Purpose Surcharge
Energy efficiency programs and Low Income Assistance
$/therm

<table>
<thead>
<tr>
<th></th>
<th>2018 PPPS Rates $/therm</th>
<th>2019 PPPS Rates $/therm</th>
<th>PPPS Impact $/therm</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Residential</td>
<td>$0.094</td>
<td>$0.101</td>
<td>$0.007</td>
<td>7%</td>
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<tr>
<td>Core C&amp;I</td>
<td>$0.064</td>
<td>$0.079</td>
<td>$0.015</td>
<td>23%</td>
</tr>
<tr>
<td>Core Gas A/C</td>
<td>$0.097</td>
<td>$0.124</td>
<td>$0.028</td>
<td>29%</td>
</tr>
<tr>
<td>Core Gas Engine</td>
<td>$0.062</td>
<td>$0.076</td>
<td>$0.014</td>
<td>23%</td>
</tr>
<tr>
<td>Core Natural Gas Vehicle</td>
<td>$0.024</td>
<td>$0.025</td>
<td>$0.001</td>
<td>3%</td>
</tr>
<tr>
<td>Non-Core C&amp;I</td>
<td>$0.028</td>
<td>$0.031</td>
<td>$0.002</td>
<td>8%</td>
</tr>
</tbody>
</table>
Future Supply Source
Renewable Natural Gas
aka Bio-Methane

• Federal and State programs are encouraging the use of BIO-METHANE as a transportation fuel (ie NGVs and natural gas buses)
  • Federal Program - Renewable Identification Number & Renewable Fuel Standards (RIN & RFS)
  • State Program – Low Carbon Fuel Standard LCFS

• Fuel suppliers (ie. refineries) are required to reduce the “CARBON INTENSITY” of their products.

• May accomplish by purchasing carbon offsets (ie RIN and LCFS Credits)

• A Renewable Natural Gas producer will create carbon offsets (ie RIN & LCFS credits) when they sell RNG to a transportation end-use