

# Preparing for curtailment



## Who Are CenterPoint Energy's Customers?

### Dual Fuel Customers:

- 2,700 Customers
- Can be curtailed
- Can tolerate an interruption and have the ability to discontinue using natural gas and switch to a back-up fuel
- Do not pay for firm system capacity for agreeing to be curtailed when necessary

### Firm Customers:

- 830,000 customers (commercial and residential)
- Are not curtailed
- Cannot tolerate an interruption in gas service
- CenterPoint Energy purchases interstate pipeline system capacity and gas supply to continuously meet the needs of firm customers.

## What is a Dual Fuel Customer?

- To qualify as a Dual Fuel customer, you must be able to tolerate an interruption and have the ability to discontinue using natural gas and switch to a back-up fuel
- Dual fuel customers do not pay for interstate pipeline system capacity for agreeing to be curtailed when necessary
- CenterPoint Energy contracts with interstate pipeline providers for a certain amount of pipeline capacity and builds peak shaving systems to serve firm customers only. Dual fuel customers do not pay for this capacity.
- When customer demand approaches our contracted pipeline capacity we curtail our dual fuel customers in order to continue to supply gas to our firm customers
- We can serve firm customer demand above our pipeline entitlements using our local peak shaving storage and production



## Did you know?

November 2014, featured the coldest high temperature (10 degrees) for a Thanksgiving Day in the Twin Cities since 1930, when the high was 7.

Source: MN Dept. of Natural Resources

## When Does CenterPoint Energy Curtail?

Customer demand exceeds contracted pipeline capacity

- Pressure problems on the distribution system
- Physical disruption on the distribution system
- Supply limitations

Curtailment generally occurs in the winter but customers should be prepared to curtail year round

## Role of Temperature in Curtailment

- As the temperature drops, demand for natural gas increases
- When customer demand approaches our contracted pipeline capacity we curtail our dual fuel customers in order to continue to supply gas to our firm customers
- We can serve firm customer demand above our pipeline entitlements using our local peak shaving storage and production

Note: A number of other factors, such as wind, cloud cover, and day of the week also affect curtailment.

# Small Volume Dual Fuel (SVDF) Curtailment History

## Days per month

YEAR	NOV	DEC	JAN	FEB	MAR	TOTAL	Temperature % above/below normal
2000/01	0	2	0	0	0	2	11% colder
2001/02	0	0	0	0	0	0	16% warmer
2002/03	0	0	0	0	3	0	1% warmer
2003/04	0	0	3	0	0	3	2% warmer
2004/05	0	0	1	0	0	1	6% warmer
2005/06	0	0	0	1	0	1	8% warmer
2006/07	0	0	0	2	0	2	8% warmer
2007/08	0	0	1	1	0	2	10% colder
2008/09	0	1	2	0	0	3	11% colder
2009/10	0	0	0	0	0	0	2% warmer
2010/11	0	0	0	0	0	0	8% colder
2011/12	0	0	0	0	0	0	25% warmer
2012/13	0	0	0	0	0	0	17% warmer
2013/14	0	1	8	0	2	11	11% colder
2014/15	0	0	2	0	0	2	5% colder
Projected Normal	0	5	6	3	0	10-14	

# Large Volume Dual Fuel (LVDF) Curtailment History

## Days per month

YEAR	NOV	DEC	JAN	FEB	MAR	TOTAL	Temperature % above/below normal
2000/01	0	15	0	1	0	16	11% colder
2001/02	0	0	0	0	0	0	16% warmer
2002/03	0	0	4	4	3	11	1% warmer
2003/04	0	0	6	1	0	7	2% warmer
2004/05	0	3	5	0	0	8	6% warmer
2005/06	0	1	0	1	0	2	8% warmer
2006/07	0	0	0	6	0	6	8% warmer
2007/08	0	0	6	5	0	11	10% colder
2008/09	0	3	4	0	0	7	11% colder
2009/10	0	0	0	0	0	0	2% warmer
2010/11	0	2	2	0	0	4	8% colder
2011/12	0	0	0	0	0	0	25% warmer
2012/13	0	0	1	0	0	1	17% warmer
2013/14	0	3	10	0	2	15	11% colder
2014/15	0	0	2	0	0	2	5% colder
Projected Normal	0	7	10	7	1	15-25	



## 2014-15 Curtailment Learnings

- CenterPoint Energy called several curtailment events during the 2014-15 heating season due to cold weather and pipeline incidents
- There were also operational and pipeline maintenance curtailments throughout the year
- CenterPoint Energy billed \$7,400 in unauthorized gas charges compared to over \$2 million during the 2013-14 season. This \$7,400 includes \$2,400 in gas costs and \$5,000 in penalty charges.
- Unauthorized gas costs are based on the highest cost-of-gas paid by CenterPoint Energy for supplies purchased that day.
- **Key take away: year-round preparedness is essential!**

## General Curtailment Learnings/Issues

### Customers:

- Removed their back-up system and were not able to curtail.

NOTE: MUST consult with CenterPoint Energy for permission to switch to firm (if it is possible)

- Back-up fuel quality issues
- Did not know how to operate their back-up systems
  - Have appropriate people been trained?
- Incorrect curtailment contact person
- Provided incorrect phone number (i.e. work number instead of cell phone for non-business hours)

## **Charges For Not Curtailing**

- Curtailment charges for not curtailing when requested:
  - \$10/Dth plus highest gas cost for first time
  - \$20/Dth plus highest gas cost for all other times
- Tariffs stipulate all unauthorized gas use charges collected from customers. These charges go to pay any penalty fees our suppliers charge us or are returned to the Firm rate payers
- CenterPoint Energy does not profit from these charges!
- High price impacts due to weather and demand
- Typically save 13-16% of gas cost

### **Note:**

- **There is no maximum for the highest cost of gas**
- **The highest cost of gas for that day will likely not be determined until after you have already burned the gas**
- **Daily gas costs affected by back-up fuel price volatility**
- **For example, the highest cost of gas for the 2013-14 heating season was \$54.7285/Dth on 1/28/14**

## **Curtailment Non-Compliance Example**

### **Example:**

A customer who used 6,000 Therms of gas on January 28, 2014, when the gas cost was \$54.7285 / Dth (or \$5.47285 / Therm)

First instance: 6,000 X \$1.0000 / Therm = \$6,000 unauthorized gas charge  
6,000 x \$ 5.47285/ Therm = \$32,837 gas cost  
\$38,837 for that day (the curtailment lasted 3 days)

### Second Curtailment:

6,000 X \$ 2.0000 / Therm = \$12,000 unauthorized gas charge  
6,000 x \$ 5.47285/ Therm = \$32,837 gas cost  
\$44,837 for that day

In Contrast – a LVDF system customer would have been billed:  
6,000 X \$0.48310/ Therm = \$2,899 for the same volume of gas



## Did you know?

The -4 degrees on November 27, 2014 was the coldest temperature so early in a winter season since -4 on November 27, 1997.

Source: MN Dept. of Natural Resources

## Dual Fuel Class Definition

Dual Fuel Customer Class	Volume of Natural Gas Use
Small Volume Dual Fuel – A	Peak day is less than 200 Dth and less than 12,000 Dth/year
Small Volume Dual Fuel – B	Peak day is less than 200 Dth 12,000 or more Dth/year
Large Volume Dual Fuel	200 Dth or greater peak day

If you anticipate large changes in your natural gas usage, contact your Account Manager to ensure CenterPoint Energy can adequately serve you.

# The Curtailment Queue

**Projected Days of Curtailment (approx.)**

**Average Daily Curtailment Temperature (approx.)**

15 – 25 days

10 – 14 days

5 - 9 days

Large Volume Dual Fuel

Small Volume Dual Fuel “B”

Small Volume Dual Fuel “A”

10 to 0 F

+5 to - 5 F

0 to -10 F

## Have a Curtailment Plan

### **Back-Up System To Do's:**

1. Conduct maintenance / operation check
2. Test your system for a 24-hour operation
3. Train the equipment operators
4. Fill your back-up storage tanks
5. Check and maintain good fuel quality
6. Know your back-up fuel use rate
  - Oil: Jan. peak day therms x .72= gallons/day
  - Propane: Jan. peak day therms x 1.1= gallons/day



## Dual Fuel Considerations- Fuel Oil Users

### Maintenance checklist for fuel oil back-up system:

- Increase turnover if possible
- Keep tanks full to reduce presence of air
- Test fuel tanks twice per year for microbial and water presence
- Treat with fuel stabilizer
- Remove water
- Partner with your maintenance company and supplier to review expectations

## Dual Fuel Considerations- Propane Users

### Maintenance check list for propane back-up system:

- Review system for compliance of codes and standards
- Review operator training
- Review system on an ongoing basis for signs of leakage
- Ensure protection of buried pipe and equipment is adequate
- Start and test system making sure all equipment is operating properly
- Additional testing of system at cold- and high-demand times
- Partner with your maintenance company and supplier to review expectations

## Have a Curtailment Plan

# What is CenterPoint Energy doing?

- We use our curtailment contact information provided by our customers prior to the heating season to reach our customers for curtailment. It is critical to have this contact information current.
- When curtailment is in effect, CenterPoint Energy monitors *current* weather conditions and total pipeline volumes along with *expected* weather conditions to determine any necessary adjustments to curtailment.
- We are investigating the possible use of an auto-dial system for contacting customers to curtail.

## Have a Curtailment Plan

### **What you need to do:**

- Be off natural gas within one hour of receiving the curtailment notification
- Have an internal communications plan established
  - Determine correct contact person for during business hours and after business hours
- Have all established contact persons trained to react
- Are employee back-up systems in place?
- Provide contact numbers that will ensure a live person, not voicemail
- Always check your voicemail system. If we cannot reach your contacts, we will leave a message to go on or off natural gas.

Remember: You have **ONE** hour to curtail once the curtailment contact has been reached or a message has been left.



## Did you know?

*"NASA Satellites are clearly showing an El Niño developing. Along with this, warm water is piling up in the Eastern tropical pacific. This warm water is going to change the atmosphere and shift wintertime storm tracks in the jet stream,"* said Ben Cook, NASA Climate Scientist.

What does that mean for us? Less snow. In the past, winters with a moderate to strong El Niño brought us between 35 and 40 inches of snow annually. Our average annual snowfall is 47 inches.

Temperature-wise, we tend to stay right around average.

Source: Kare 11

## Dual Fuel Requirements

### Additional Dual Fuel Requirements:

- Adequate standby systems with recommended alternate fuel storage for 7 to 10 days
- Need 2.5 million Btu/hr connected load
- Provide analog phone line or choose the supplied meter communication option (wireless cell phone technology) for automatic meter reading.

Savings vary by customer class; amount of actual curtailment; load factor (LVI); and back-up fuel type.

- Oil is currently more expensive than propane
- Below are interruptible savings for CNP's average SV-A; SV-B; and LVI Customers:

Consumption (Dth)		Interruptible Service				Firm Service	Interruptible Savings	
Year	Day	Rate	Nat Gas	Propane	Total			
5,400	60	SV-A	\$ 29,000	\$ 1,000	\$ 30,000	\$ 35,000	\$ 5,000	14%
18,000	150	SV-B	\$ 97,000	\$ 4,000	\$ 101,000	\$ 117,000	\$ 16,000	14%
81,000	570	LVI	\$ 373,000	\$ 27,000	\$ 400,000	\$ 456,000	\$ 56,000	12%



## Dual Fuel Considerations

Tangible and intangible costs to consider with Dual Fuel service versus Firm service

- The obligations of owning and operating a back-up system
- Discounted delivery service
- Arranging for and managing the purchase of fuel for the back-up system
- Regular maintenance of the back-up system
- Labor costs associated with having someone on-call to operate the system
- Potential disruption to your operations heating source during peak heating times
- Deadline for requesting Firm service (if available) is September 30th (CenterPoint Energy approval required). Contact your account manager
- Contractual requirement is a 30-day written notice to terminate

## Update Your Contact List

- Packets were mailed the first week of September and are due back to CenterPoint Energy by **September 28<sup>th</sup>**
- Please BE SURE to return your updated Curtailment Contact List ASAP to Gas Measurement  
**Email: MGC-Gas\_Measurement@CenterPointEnergy.com**  
**Fax: 612-399-1422**
- For questions about completing the contact list: Please contact Gas Measurement at: 612-321-5403 or 800-328-9439
- This is **YOUR** responsibility
- If you did not receive a packet, call your Account Manager or 612-321-4330
- **Be sure to return to CenterPoint Energy even if there are no changes**

# CenterPoint Energy Contact Information

<ul style="list-style-type: none"><li>• <b>Gas Leak Emergencies</b></li></ul>	<b>612-372-5050 800-722-9326</b>
<ul style="list-style-type: none"><li>• <b>Curtailement Infoline</b></li></ul>	<b>612-321-4998 800-234-5800 x4998</b>
<ul style="list-style-type: none"><li>• <b>Curtailement website</b></li></ul>	<b>CenterPointEnergy.com/ CurtailementForecast</b>
<ul style="list-style-type: none"><li>• <b>All other services, including:</b><ul style="list-style-type: none"><li>• Adding load</li><li>• Equipment changes</li><li>• Pressure problems</li><li>• Efficiency improvements</li><li>• Any other non-emergency gas issues</li></ul></li></ul>	<b>Call your Account Manager  Or  612-321-4330 800-234-5800 x4330</b>

# Questions?