#### Issues

As winter approaches, Pacific Gas and Electric Company reminds customers that now is the time to prepare for the cold weather season.

It is important to understand that weather conditions can impact deliveries to noncore end-use customers. Under *Local Curtailments*, deliveries to noncore end-use customers may be curtailed if demand is forecast to exceed the capacity on a local transmission or distribution system. Under *Involuntary Diversions*, gas scheduled for delivery to noncore end-use customers may be diverted if projected supply is insufficient to meet demand of the core market.

Getting Ready for Winter will assist gas suppliers and noncore end-use customers in preparing for and understanding the potential impacts of Local Curtailments or Involuntary Diversions on the PG&E pipeline system. This document suggests action plans that will help suppliers and end-use customers avoid noncompliance charges or the potential interruption of gas supply should PG&E determine that implementation of Local Curtailments, Involuntary Diversions or both are necessary.

For the most current information regarding system conditions and flow orders, please refer to PG&E's California Gas Transmission Pipe Ranger Web site <a href="https://www.pge.com/pipeline.">www.pge.com/pipeline.</a>

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## **Glossary**

Operational Flow Order	An Operational Flow Order (OFO) is used to protect the operational integrity of the pipeline. PG&E may issue and implement a System-Wide or Customer-Specific OFO in the event of high or low pipeline inventory. A simultaneous High and Low OFO may be called under certain pipeline inventory conditions. The OFO requires shippers to take action to balance their supply with their customers' usage on a daily basis within a specified tolerance band.
Emergency Flow Order	An Emergency Flow Order (EFO) is used when actual or forecast supply and/or capacity shortages threaten deliveries to end-use customers. During an EFO, end-use customers' usage must be less than or equal to supply.
Involuntary Diversion	An Involuntary Diversion is used to resolve supply shortage problems. An Involuntary Diversion is called when total system supply is insufficient to meet demand, and deliveries to core customers are threatened. Gas may be diverted from noncore customers and redirected to core customers. An Involuntary Diversion is implemented in conjunction with an EFO.
Local Curtailment	Local Curtailments are used to resolve capacity constraint issues in localized sections of PG&E's pipeline system. A Local Curtailment may be implemented when local system temperatures are expected to drop below Cold Winter Day temperatures. Local noncore customers may be required to curtail gas usage to ensure local core demands are met.
Cold Winter Day	Cold Winter Day (CWD) is a design day criteria used to ensure reliable gas service for core and noncore customers. Gas systems are designed to meet all expected core and noncore demand during a CWD. The CWD design temperature is defined as the coldest temperature that may be exceeded one in every two years, on average. The system weighted mean temperature for CWD is about 37 degrees Fahrenheit; however, a specific local CWD design temperature is used for local areas.
Abnormal Peak Day	An Abnormal Peak Day is a design day criteria used to ensure reliable gas service to core customers. Gas systems are designed to meet all expected core demand during an APD, with noncore demand assumed fully curtailed. The APD design temperature is defined as the coldest temperature that may be exceeded one in every 90 years, on average. The system weighted mean temperature for APD is about 28 degrees Fahrenheit; however, a specific local APD design temperature is used for local areas.

## **Operational Flow Order (OFO)**

Issue	PG&E may declare an OFO in order to protect the integrity of the pipeline system by managing system supply. An OFO is issued when pipeline inventory is forecast to be outside set pipeline inventory limits. These inventory limits can be found on the Pipe Ranger website's Pipeline Status page, under <a href="System Inventory Status">System Inventory Status</a> .  If inventory is forecast to be outside pipeline inventory limits, PG&E may choose not to call an OFO if inventory is forecast to recover the day following the inventory limit violation.  The recent and forecast pipeline inventory levels are posted on the Pipe Ranger Web site's <a href="Pipeline Status page">Pipeline Status page</a> .		
Pacific Gas and Electric Company Actions	Implement an OFO. Announce a specific stage, tolerance band and noncompliance charge.  Make every effort to call an OFO as early as possible the day prior to the OFO day.  Gas Rule 14 allows an OFO with noncompliance charges to be called up until 6:00 p.m., PT, the day prior to the gas day.		
OFO Stages	Tolerance Band   Noncompliance Charge		
Gas Supplier Actions for Compliance	Balance supply and usage on a daily basis.     Daily balance must be within specified OFO tolerance band or noncompliance charges apply.		

Method to Determine Noncompliance Charges	<ul> <li>Noncore customers with Automated Meter Reading (AMR): noncompliance charges are based on actual daily metered use for the specified date.</li> <li>Noncore customers without AMR: noncompliance charges are based on Average Daily Quantity (ADQ) from the customer's Natural Gas Service Agreement (NGSA), or actual daily usage, whichever results in a lesser noncompliance charge.</li> <li>Core Procurement Groups: noncompliance charges are based on the Determined Usage forecast (same day forecast) on the day of the OFO. If this forecast is not available by 7:15 a.m., PT, the most recent forecast will be used.</li> <li>For California Production Balancing Agreement (CPBA) holders, noncompliance charges are based on the difference between scheduled volumes and actual daily production.</li> <li>Please see OFO/EFO Noncompliance Charges, available from the Pipe Ranger Library's CGT Business Facts and FAQs, for complete details and examples.</li> </ul>
Notification Method	<ul> <li>INSIDE<i>tracc</i> is the primary method of notification for all customers. Contact your PG&amp;E representative for this service. Other methods of notification are secondary.</li> <li>Noncore end-use customers who do not have INSIDE<i>tracc</i> and are not in an NBAA may rely primarily on e-mail notification.</li> <li>E-mail and the Pipe Ranger Web site are methods of notification available to all customers.</li> <li>OFO text messaging is the method PG&amp;E uses to alert all subscribed customers with OFO/EFO information. Customers may subscribe to this service on Pipe Ranger's Subscription Services Index page.</li> </ul>
Notes	<ul> <li>Noncompliance charges are not imposed for the first day if notice is given after 6:00 p.m., PT, the day prior to the OFO event.</li> <li>Pipe Ranger's OFO/EFO Archive provides a history of all OFOs.</li> </ul>

## **Emergency Flow Order (EFO)**

Issue	PG&E may issue an EFO if deliveries to end-use customers are threatened due to supply and/or capacity shortages. An EFO normally follows a low inventory OFO, but may be invoked without a prior OFO occurrence.			
Pacific Gas and Electric Company Actions	<ul> <li>Implement an EFO with as much notice as practicable under circumstances.</li> <li>Make every effort to call an EFO by 7:30 a.m., PT, the day prior to the EFO day.</li> <li>An EFO can be called anytime, depending upon circumstances.</li> </ul>			
Gas Supplier Actions for Compliance	Balance supply and usage on a daily basis. Usage must be less than or equal to supply. The tolerance band is 0% during an EFO.			
Method to Determine Noncompliance Charges	<ul> <li>Noncore customers with Automated Meter Reading (AMR): noncompliance charges are based on daily metered usage for the specified date.</li> <li>Noncore customers without AMR: noncompliance charges are based on Average Daily Quantity (ADQ) from the customer's Natural Gas Service Agreement (NGSA) contract, or actual daily metered usage, whichever results in a lesser charge.</li> <li>Core Procurement Groups: EFO noncompliance charges will initially be calculated based upon the determined usage (same-day) forecast. However, if the end of flow day core demand (day-after) forecast would result in a lower EFO noncompliance charge, the day-after forecast will be used instead of the same-day forecast.</li> <li>CPBA holders: noncompliance charges are based on scheduled nominations and actual daily production deliveries.</li> <li>Please see OFO/EFO Noncompliance Charges, available from the Pipe Ranger Library's CGT Business Facts and FAQs, for complete details and examples.</li> </ul>			
Noncompliance Charge	(\$50 + DCI*)/Dth     *The Daily Citygate Index (DCI) is the PG&E Daily Citygate Index Price as published in <i>Gas Daily</i> , rounded up to the next whole dollar.			
Notification Method	<ul> <li>INSIDE<i>tracc</i> is the primary method of notification for all customers. Contact your PG&amp;E representative for this service. Other methods of notification are secondary.</li> <li>Noncore end-use customers who do not have INSIDE<i>tracc</i> and are not in an NBAA may rely primarily on e-mail notification.</li> <li>E-mail and the Pipe Ranger Web site notification methods are available to all customers.</li> <li>EFO text messaging is the method PG&amp;E uses to alert all subscribed customers with OFO/EFO information. Customers may subscribe to this service on Pipe Ranger's Subscription Services Index page.</li> </ul>			

### **Involuntary Diversion**

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Involuntary Diversions may occur when supply destined for the core market is insufficient to meet forecast core demand. When deliveries to core customers are threatened, PG&E may divert noncore gas supplies to core customers in order to meet the forecast core demand. An Emergency Flow Order (EFO) is also in effect during Involuntary Diversions.

Gas Rule 14 defines provisions for Involuntary Diversions.

#### Core Procurement Group Actions

If conditions are such that supply is insufficient to meet core demand, it may become necessary for PG&E to implement Involuntary Diversions. To avoid the need for PG&E to divert noncore supply, Core Transport Agents and PG&E's Core Procurement Group, on behalf of their core customers, should first attempt to secure and deliver additional supply sufficient to meet forecast core demand.

Core Transport Agents and PG&E's Core Procurement Group can use the following sources based on availability:

- Their firm backbone transmission capacity.
- As-available backbone transmission capacity on the system at any receipt point.
- Gas supply or backbone transmission capacity made available from noncore end-use customers or backbone transmission system customers pursuant to voluntary supply diversion arrangements.
- Their storage withdrawal capacity.

#### Which Noncore Gas Supplies Will Be Diverted

If Involuntary Diversions are necessary in order to meet forecast core demand, PG&E will determine the volume of noncore gas supply that must be diverted from backbone transmission system gas supplies. Supply destined to the core market will not be diverted. Noncore gas supplies will be diverted in the following order:

- As-available supplies will be diverted first. Supply scheduled under as-available backbone transmission service will be diverted in order of increasing transmission contract price. Volumes transported under the same price will be diverted on a pro rata basis.
- Second, supply scheduled to on-system noncore end-use customers under firm backbone transmission service will be diverted on a pro rata basis. Off-system supply scheduled under firm backbone transmission service is not subject to diversion.
- Deliveries scheduled to on-system noncore end-use customers from on-system storage will be treated as the highest priority firm backbone transmission service and will be diverted on a pro rata basis after all other firm backbone transmission service has been diverted.

#### How Compliance with an Involuntary Diversion Is Determined

During Involuntary Diversions, customers whose usage exceeds their post-diverted supply will be assessed noncompliance charges. Compliance will be based on the following:

- Noncore end-use customers with Automated Meter Reading (AMR): actual daily metered usage and post-diverted supply.
- Noncore end-use customers without AMR: actual daily metered usage and post diverted supply.
- Noncore Balancing Aggregation Agreement (NBAA) agents: aggregated actual daily metered usage and aggregated post-diverted supply.
- Core Procurement Groups: latest available core load forecast prior to the time the event is called and original supply before Involuntary Diversions.

#### Noncompliance Charges During an Involuntary Diversion

Total noncompliance charges during Involuntary Diversions are (\$100 + DCI\*)/Dth. This includes the following components:

- EFO noncompliance charge of (\$50 + DCI\*)/Dth
- Diversion usage charge of \$50/Dth
   \*DCI is The Daily Citygate Index (DCI) is the PG&E Daily Citygate Index Price as published in Gas Daily, rounded up to the next whole dollar.

## Diversion Credits

Backbone transmission customers whose supply is diverted during Involuntary Diversions receive the following compensation:

- As-available backbone transmission customers: a credit based on the current market price of the diverted supply on the day of the diversion. Please refer to <u>Gas</u> <u>Rule 14</u> for the calculations used to determine the market price.
- Firm backbone transmission customers: a credit of \$50/Dth.

#### Pacific Gas and Electric Company Actions During an Involuntary Diversion

When Involuntary Diversions are called, PG&E will notify gas suppliers via the same channels used for OFO notification. PG&E will take the following actions:

- PG&E will notify gas suppliers that an Involuntary Diversion is in effect.
- Once processing of nominations is complete and scheduled deliveries with interconnecting pipelines are finalized, PG&E will determine which backbone transmission supplies will be diverted. Diverted quantities may be modified after each nomination cycle's schedule process.
- Upon completion of the schedule process and the diversion process of each nomination cycle, PG&E will make the following reports available through INSIDEtracc:
  - Customer Nominations / PG&E Scheduled Volumes (110 Report)
  - Diversion Event Summary (902 Report)

#### Pacific Gas and Electric Company Actions During an Involuntary Diversion (continued)

Final diverted quantities will be provided in the 110 and 902 reports after the final schedule process for the Involuntary Diversion gas day. After the Involuntary Diversion has ended, PG&E will determine the charges incurred by the Core Transport Agents and PG&E's Core Procurement Group for supplies diverted from backbone transmission service customers. PG&E will then calculate the credits to be applied to the backbone transmission bills for suppliers whose gas was diverted. These charges and credits will be included in the suppliers' next CGT Detail of Bill.

# How Suppliers Can Prepare for an Involuntary Diversion

It is crucial that suppliers understand their role during Involuntary Diversions. The following information and suggestions may be helpful in preparing for these events:

- Discuss with noncore end-use customers the potential that their supply may be diverted depending on the type of transmission service under which the supply is flowing.
- Be familiar with the usage needs of each individual noncore end-use customer within the NBAA.
- PG&E is not required to inform individual noncore end-use customers within the NBAA that their supply has been diverted. PG&E may contact noncore customers, providing them with post-diverted supply, and monitor use to ensure system integrity.
- Prepare an Involuntary Diversion notification plan for each customer within the NBAA. Include a 24-hour customer contact/alternate contact list designating which employee within your company will perform notifications. Include the method of notification to be used, such as phone or e-mail.
- Plan in advance which customers should reduce usage in order to maintain a balance between total usage and total post-diverted supply under the NBAA.
- Be prepared to notify NBAA customers of when, what time and for what duration to reduce usage. Keep in mind that post-diverted supply volumes will apply to the meter readings beginning at 12:00 midnight, PT, on the day of the Involuntary Diversion notification.
- When assigning nomination destination rankings, keep in mind that any gas remaining after the diversion process is completed will be reallocated based on destination rankings.
- Discuss each noncore end-use customer's ability to reduce usage during Involuntary Diversions and consider potential diversion credits and/or noncompliance charges as part of those discussions.
- In order to minimize the risk of service interruptions, nominate to each end-use customer.

## **Local Curtailment**

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Issue	PG&E may find it necessary to implement Local Curtailments if demand is projected to exceed the capacity on a local gas transmission or distribution system. During periods of unusually cold weather, local noncore end-use customers may be required to curtail gas usage in order to ensure that local core demand is met. Local Curtailments may also be implemented when a pipeline has been damaged and supply deliveries are threatened, or when ongoing pipeline safety work or pressure reductions have constrained pipeline capacity. Local Curtailments are intended to reduce physical demand on the affected pipeline system. Unless Involuntary Diversions are in effect at the same time, a customer's supply will not be diverted.		
Design Requirements	PG&E's local transmission and distribution pipeline systems have been designed to meet the following design criteria:  Cold Winter Day (CWD) Abnormal Peak Day (APD)		
Curtailment Stages	<ul> <li>Stage 1: Temperatures between CWD and near a Midpoint temperature halfway between an APD and a CWD.</li> <li>Stage 2: Temperatures near a Midpoint temperature and near an APD.</li> <li>Stage 3: Temperatures at or colder than APD or if local area operational problems occur.</li> </ul>		
Curtailment Criteria	PG&E determines which noncore customers are asked to curtail usage during Local Curtailments based on the following criteria:  The local transmission or distribution systems affected. These systems are segmented into local gas curtailment zones. Volume of noncore gas usage allowed. Severity of the conditions. Need for additional load reduction or curtailment in additional zones.		
Noncompliance Charge	The local curtailment noncompliance charge for each decatherm of usage in excess of the designated maximum allowed usage shall equal \$50.00 plus the Daily Citygate Index (\$50 + DCI*).  *The Daily Citygate Index is the PG&E Daily Citygate Index Price as published in Gas Daily, rounded up to the next whole dollar.		

#### Noncore End-Use Customers and Local Curtailment

Customers who choose noncore service must sign a Natural Gas Service Agreement with PG&E. Noncore end-use customers may be required to decrease or fully curtail their gas usage. To be prepared for possible curtailments, noncore end-use customers should review and understand the following:

- PG&E's local transmission and distribution systems are designed to meet the needs
  of core customers during APD conditions; therefore, noncore end-use customers
  may be required to fully curtail if temperatures drop to APD design criteria.
- Only noncore end-use customers who are connected to, or downstream of, the constrained local transmission or distribution system will be subject to that Local Curtailment.
- PG&E will notify affected noncore end-use customers with specific instructions on how much gas they are allowed to use.
- PG&E will provide timely information to curtailed customers regarding the curtailment status.
- Noncompliance during Local Curtailments may result in PG&E discontinuing service at the noncore end-use customer's meter while the curtailments are in effect.

# Suppliers and Local Curtailment

While Local Curtailments are directed at noncore end-use customers, suppliers are also affected, particularly regarding balancing. In consideration of the supplier role during Local Curtailments, the following information may be helpful:

- PG&E will announce Local Curtailments to suppliers via the Pipe Ranger Web site.
- PG&E will provide individual suppliers with the names of their noncore end-use customers affected by Local Curtailments as well as how much gas the targeted customers are allowed to use.
- If a supplier continues to schedule gas for delivery to a curtailed noncore end-use customer during Local Curtailments, the supply will still be credited to the noncore end-use customer, even though the customer has curtailed usage.
- PG&E encourages suppliers and curtailed noncore end-use customers to be in communication before, during, and after Local Curtailments so that suppliers shall be aware that the volume of gas supply is sufficient for the allowed burn.
- Because the potential exists for a supplier's noncore end-use customers to be out of compliance with Local Curtailments, suppliers should be aware of their noncore end-use customers' usage, and any circumstance that might create an imbalance between usage and supply during Local Curtailments.
- <u>Schedule G-BAL</u> provisions govern monthly balancing during Local Curtailments unless an OFO, EFO, or Involuntary Diversion is specifically called for that day, at which time <u>Gas Rule 14</u> balancing provisions also apply.
- PG&E does not divert gas supplies from noncore end-use customers due to Local Curtailments. However, if Involuntary Diversions are in effect during Local Curtailments, noncore end-use gas supplies may be subject to diversion to core customers.

## **Preparing for a Local Curtailment**

Communication Between Supplier and End-use Customer	As stated in Schedule G-BAL, all customers must endeavor to ensure that daily gas deliveries match daily gas usage. Communication between end-use customers and their suppliers is essential to keep the gas supply and usage in balance. It is advantageous to establish a protocol in advance outlining the actions you should take in the event a Local Curtailment is implemented. For example, if your end-use facility is required to curtail usage during an event, you should notify your supplier immediately. Your supplier can take steps to adjust supply to match the reduced load, if necessary.
Questions	If you have additional questions regarding preparation for the winter season, please call your PG&E CGT representative.