

SECTION 285.315

General Information Requirements Applicable for All Utilities Subject to this Part

Utility: The Peoples Gas Light and Coke Company

Subpart (c)

**ATTACHMENTS B AND C ARE
CONFIDENTIAL AND PROPRIETARY AND
PROVIDED UNDER SEPARATE COVER**

The Peoples Gas Light and Coke Company (“Peoples Gas”) used the Peak Day Forecasting Methodology outlined below to determine the calendar 2010 Design Peak Day (“DPD”) of 2,177,265 dth. Attachment A shows the details of this calculation.

The total estimated amount of DPD supply of 2,235,346 dth includes 240,662 dth of customer owned gas that Peoples Gas anticipates Riders SST, LST, and SVT customers will deliver to the citygate on a design day. Calendar 2010 is expected to have an approximately 3% DPD supply reserve margin calculated as $[(2,235,346 - 240,662) \div (2,177,265 - 240,662) - 1]$. Attachment B shows the specific supply sources expected to comprise Peoples Gas’ DPD supply for 2010.

Peak Day Forecasting Methodology

Peoples Gas’ Design Peak Day (DPD) is defined as the sendout expected to occur on a January weekday with a temperature of -20 degrees Fahrenheit (equivalent to 85 degree days). Peoples Gas requires that there be no more than a 2% to 2.5% chance that the actual sendout experienced on such a day could exceed the DPD estimate.

Peoples Gas used the following process to provide the DPD estimate for calendar year 2010:

1. Select Peoples Gas’ actual sendout, temperature, and degree day information for all weekdays, in the months December through February, over the past 3 years (December 2005 through February 2008).
2. Sort all data by temperature, putting the coldest days first.
3. For the group of all weekdays 35 degrees Fahrenheit or colder:
 - a. Count the number of observations (days) in the group.
 - b. Perform an Ordinary Least Squares linear regression of sendout on degree days to provide daily baseload and use-per-degree-day estimates for total sendout, goodness of fit measures, and the standard error of the regression.
 - c. Compute the required confidence level estimate of the DPD for the first forecast year (2009).
4. For future years in the forecast horizon (beyond 2009), adjust the resulting DPD estimate for econometric-based expected load change between the January of the first forecast year (2009) and the January in which the DPD could occur (2010 or later). These expected load changes could be positive or negative.

Factors Supporting the Reserve Margin

Health and Safety Requirements: Peoples Gas has a statutory obligation to provide non-discriminatory safe and reliable service to the public. Moreover, homes, schools, hospitals, and other essential public services are the bulk of Peoples Gas' load and rely on gas service for heat. These customers almost universally lack any short term alternatives to gas service and the consequences of a gas service interruption to these classes of customers during a peak period are dire. If Peoples Gas lost gas supply which resulted in an area outage, the restoration of gas service would take substantial time and resources.

Economic Growth: Peoples Gas structures its peak day supplies based on the economic forecasts for its base case. If the economic conditions actually experienced are more favorable than the forecast, demand could be greater.

Flow Gas Supply Shortfall: When severe weather (freezing temperatures, hurricanes) occurs in production areas, a diminished level of supply could result. In December 1989, substantial losses occurred in offshore production, and in December 1990, weather-related problems in onshore and offshore production areas again resulted in diminished supply. More recently, weather related pipeline transportation constraints and losses of gas supply occurred in January 1994. On the peak day in fiscal 1996 (February 2) four firm gas suppliers failed to deliver a total of 19,232 Dth.

Peaking Supply Shortfall: If storage inventories are severely drawn down or depleted, withdrawal capacity may be less than the planned quantity.

Transmission Shortfall: Pipeline facilities including compressor stations are subject to unplanned capacity limitations due to mechanical problems or force majeure situations, such as Natural Gas Pipeline Company of America's force majeure declaration effective October 1, 2007 through November 1, 2008 that reduced Amarillo pipeline contracted capacity by 16% to 25%.

Upstream Overtake: LDCs near the end of any pipeline's transmission system are susceptible to a deficiency in supply reaching the LDC's city gate if upstream customers overtake their contractual quantities. Many of the delivery points for pipelines are under the direct operational control of the customer and the pipeline may not have the real-time measurement equipment necessary to detect overtake quantities on a current basis. Moreover, unauthorized overtake penalties may be insufficient to deter overtake in time of need. Located at the downstream end of two of its major pipeline suppliers, Peoples Gas has high risk among LDCs on the system with respect to potential pipeline delivery or pressure shortfall due to unauthorized takes by upstream customers.

Hourly Availability of Supply: The reserve margin calculation overstates the actual reserve because all supply sources will not be available during each and every hour of the design peak day. As can be seen from Attachment C, the calendar 2008 peak day load profile on an hourly basis is not a flat curve but rather correlates highly with variations in load demand and temperature swings. From a practical standpoint, there must be a

transition in the hourly rates of production or delivery of supply from the preceding and succeeding gas days, which will have different demands. Accordingly, not all sources will be available at full rates at the beginning and end of the gas day. Moreover, once sources are operated at less than full capability during the course of the gas day their capability to contribute to peak day supply is reduced accordingly (i.e., there is limited, if any, chance to make up the lost supply).

A shortfall in supply can be especially serious in the case of a gas utility because of adverse impacts on public health and safety -- impacts that are more serious than in other utility industries. If a gas utility loses service to an area, it must physically isolate all of the service pipes that are supplied from the affected distribution system. Gas service can then be restored to the distribution system, after which each customer's service must be reactivated and appliance pilots relit. Gaining entrance to customers' premises can be a major problem, especially if an apartment complex or a large area is involved. If an outage occurs during the winter, Peoples Gas' efforts to restore service before injury to persons or property occurs may be futile.

The Peoples Gas Light and Coke Company

Application of Design Day Criteria To Calculate Design Day Requirements (1) (2)

Design Peak Day 2009 and 2010

	Dth
Peak Day Baseload	149,104
Plus	
Peak Day Sendout per Degree Day	<u>22,600.4</u> Dth
Times 85 Degree Days	1,921,031
Equals	
Point Estimate of Design Day	2,070,134
Plus	
Two Standard Errors	114,040
Equals	
Target Design Peak Day for 2009	2,184,175
Normal Weather Monthly Sendout Forecast	
January 2009 in dth	30,931,628
January 2010 in dth	30,833,770
Load Change Factor = (Jan 2010 / Jan 2009)	0.996836
2010 DPD Forecast = 2009 DPD x Load Change Factor	2,177,265

- (1) The design day is assumed to occur on a January weekday with an average temperature of -20°F, resulting in 85 degree days.
- (2) Column may not total due to rounding.