ORDER NO. 11 196

ENTERED JUN 16 2011

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UM 1286

In the Matter of THE PUBLIC UTILITY COMMISSION OF OREGON Investigation into the Purchased Gas Adjustment (PGA) Mechanism used by Oregon's three Local Distribution Companies.	ORDER

DISPOSITION: MODIFIED GUIDELINES ACKNOWLEDGED

On November 21, 2006, the Public Utility Commission of Oregon (Commission) opened this investigation to review and modify, as appropriate, the Purchased Gas Adjustment (PGA) mechanism used by Oregon's three Local Distribution Companies (LDCs) – Northwest Natural Gas Company, dba NW Natural (NW Natural), Avista Corporation, dba Avista Utilities (Avista) and Cascade Natural Gas Corporation (Cascade).

In Order No. 09-248, the Commission acknowledged Natural Gas Portfolio Development Guidelines and the PGA Filing Guidelines to be used in the review of the reasonableness of LDC gas costs and the pass through of these costs to customers. In recommending acknowledgement of the guidelines, the Commission Staff explained that the parties intended the guidelines to be flexible and subject to modifications to reflect changes in gas supply markets, LDC conditions, demand, etc.

In Order No. 10-197, the Commission adopted Staff's recommendation to acknowledge certain modification to those guidelines agreed to by the three LDCs, the Northwest Industrial Gas Users (NWIGU) and Staff.

At the Commission's June 7, 2011, Public Meeting, the parties proposed additional modifications to the Natural Gas Portfolio Development Guidelines and the PGA Filing Guidelines. The proposed modifications are included in Staff's Public Meeting Report, attached as Appendix A. The three LDCs, NWIGU, CUB and Staff all support the modifications.

ORDER NO. 11 196

ORDER

IT IS ORDERED that the modified Natural Gas Portfolio Development Guidelines and the PGA Filing Guidelines, included in Appendix A, and agreed to by Avista Corporation, dba Avista Utilities, Cascade Natural Gas Corporation, Northwest Natural Gas Company, dba NW Natural, the Northwest Industrial Gas Users, the Citizens' Utility Board of Oregon and Staff of the Public Utility Commission of Oregon are acknowledged.

Made, entered, and effective JUN 16 2011.

John Savage	**Susan K. Ackerman**
Commissioner	Commissioner

A party may request rehearing or reconsideration of this order under ORS 756.561. A request for rehearing or reconsideration must be filed with the Commission within 60 days of the date of service of this order. The request must comply with the requirements in OAR 860-001-0720. A copy of the request must also be served on each party to the proceedings as provided in OAR 860-001-0180(2). A party may appeal this order by filing a petition for review with the Court of Appeals in compliance with ORS 183.480 through 183.484.

ITEM NO. CA 5

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: June 7, 2011

REGULAR ____ **CONSENT** X **EFFECTIVE DATE** July 1, 2011

DATE: May 23, 2011

TO: Public Utility Commission

FROM: Ken Zimmerman KRZ

THROUGH: Lee Sparling, Maury Galbraith, and Lori Koho AKL MG LK

SUBJECT: OREGON PUBLIC UTILITY COMMISSION STAFF: (Docket No. UM 1286 (2)) Modifications to Purchased Gas Adjustment (PGA) Filing and Portfolio Guidelines.

STAFF RECOMMENDATION:

I recommend the Commission acknowledge by order the modified Natural Gas Portfolio Development Guidelines and the PGA Filing Guidelines agreed to by Avista Utilities (Avista), Cascade Natural Gas Corporation (Cascade), Northwest Natural Gas Company (NW Natural), Northwest Industrial Gas Users (NWIGU), Citizens Utility Board (CUB), and Staff.

DISCUSSION:

On June 23, 2009, the Commission entered Order 09-248. In this order the Commission acknowledges:

> ...the guidelines identified as the Natural Gas Portfolio Development Guidelines and the PGA Filing Guidelines in Appendix A, and finds them reasonable in their current form and with their current content. The guidelines do not imply or impute any particular rate treatment by the Commission of costs LDCs propose for recovery in their annual PGA filings. LDC adherence to the guidelines would be, however, one factor the Commission would consider in its review and decision regarding the reasonableness of LDC gas costs and the pass through of these costs to customers.

Staff's June 10, 2009, public meeting memorandum, initially requesting the Commission acknowledge these guidelines, states:

> The parties also intend that the guidelines should be flexible so that modifications can be quickly and easily made to reflect changes in gas supply markets, LDC operations, natural gas demand, and other factors. Rigid guidelines are simply not feasible in today's volatile and uncertain utility, regulatory, and market settings. For these reasons, the parties, including Staff, recommend the Commission simply acknowledge these guidelines. Acknowledging rather than approving the guidelines would avoid additional and unnecessary hearings and greater encumbrance of the Commission's time to review and approve changes to the guidelines that reflect well known and documented changes in market conditions, LDC operations and demand, or gas contracting.

Last year, the Commission acknowledged changes to the guidelines by Order 10-197.

Since that Order, several additional concerns have arisen about both the organization and content of the guidelines. After two workshops on February 9, 2011, and April 27, 2011, all the parties agreed to modifications for the guidelines. The proposed modifications to the guidelines agreed to in those workshops are found in Attachments 1 and 2. These modifications are also described below.

1. To resolve Staff's concerns regarding the IRP planning process that feeds into the gas supply/transportation portfolio for the annual PGA, the following is added at the end of III.A. in the "Natural Gas Portfolio Development Guidelines":

   For natural gas utilities, each IRP preparation process and final published IRP will address both planning to meet normal annual expected demand (as defined by the LDC – both base-load and swing) by day and planning to meet annual peak demand by day. The planning will include gas supply and associated transportation along with expected use of storage.

2. The following sentence is added to Section IV.1.a) of the "Natural Gas Portfolio Development Guidelines":

   All presentations regarding natural gas volumes, whether in text documents, or work papers for, or directly related to the annual PGA filing, should ensure that the measurement unit for each such volume statement is clearly stated with or adjacent to the actual volume information.

3. Relating to gas-cost-related deferrals, the following sentences are added as new number 7 under III. Assumptions of the "PGA Filing Guidelines":

   Gas-cost-related deferral balances will be an item for the agenda of each quarterly LDC meeting. For each meeting, the LDC should provide the following at the time of the meeting or at times set out below:
   a) *Summary of the findings of the LDC's review of the current deferral balances and the methods employed for that review.*
   b) *That review should include:*
      i. *The cause(s) for the balance and its level/sign;*
      ii. *The steps taken by and/or proposed by the LDC to control or mitigate the balance going forward, if applicable;*
      iii. *If the parties determine more information is required than is already provided in the LDC's existing quarterly reports, the LDC will provide such information (including work papers) within 30 days after the quarterly meeting where the balances were first discussed.*

4. Relating to all PGA related deferrals, a new number 8 is added to III. Assumptions of the "PGA Filing Guidelines,' reading as follows:

   LDCs may update their annual PGA filings with actual deferrals relating to gas costs or non-gas costs incurred after June 30th but not beyond August 31st as well as include the estimated deferrals for September and October. However, the LDCs must collectively agree on the deferral period and inform the Manager of Natural Gas Rates and Planning prior to making the second (update, approximately October 15th) PGA filing.

5. To facilitate separation of issues by docket, a new number 2, "Separate Filings" is added under III. Assumptions of the "PGA Filing Guidelines," along with a new number 5, "Attachment A" and new number 6, "Tariffs." Also "PGA Amortizations unrelated to gas distribution," number 3 under III. is modified. These are found in Attachment 1 ("PGA Filing Guidelines").

6. To help ensure consistency of data in all reports, a new 8 is added to V. Portfolio and PGA Filing: Supporting Data and Analysis, of the "Natural Gas Portfolio Development Guidelines," reading as follows:

   As part of the PGA filing, final IRP submission, and general rate case filing each LDC will include an attestation that it has verified, to the best of its knowledge, the historical values for (but not limited to) customer number,

sales volumes, etc. are consistent if not totally equivalent among the following:
a) All filings with FERC and the Securities and Exchange Commission (SEC);
b) Results of operations reports submitted to the OPUC;
c) Most current IRP or IRP update;
d) Most recent PGA filing (final); and
e) Most recent general rate review filing.
If the LDC cannot make such an attestation it should explain the variations and why these variations should be allowed.

7. To help ensure consistency in forecasting, IV. Portfolio and the PGA Filing: Information and Work Papers, 1.c) in the "Natural Gas Portfolio Development Guidelines" is modified as follows:

   All forecasts of demand, weather, etc. upon which the gas supply portfolio for the current PGA filing is based should be based on a methodology and data sources that are consistent with the most recently acknowledged IRP or IRP update <u>and most recently concluded general rate review</u> for the utility. If the methodology and/or data sources are not consistent each difference should be identified, explained, and documented as part of the PGA <u>as well as the IRP and general rate review</u> filing<u>s</u> work papers.

Staff has also agreed to support changing the annual date for each LDC to make its sharing election to the same as that of the final annual PGA filing, two weeks prior to the annual PGA Public Meeting (approximately October 15^{th}).

PROPOSED COMMISSION MOTION:

Modified Natural Gas Portfolio Development Guidelines and the PGA Filing Guidelines agreed to by Avista, Cascade, NW Natural, NWIGU, CUB, and Staff, be acknowledged.

PGA FILING GUIDELINES

I. Introduction

These guidelines are not intended to be a static document and should be updated to meet the evolving needs of utility operational, financial, or demand circumstances, as well as changes to natural gas market conditions, contracting, and other market rules.

These guidelines are intended to be applied as drafted until altered by the unanimous agreement of the parties or by the Commission. Any party seeking changes to these guidelines must consult first with all other parties prior to proposing such changes to the Commission.

II. Definitions and Acronyms

1. FOM: First of Month
2. Gas Year: Delivery period running November through October.
3. IRP: Integrated Resource Plan
4. LNG: Liquefied Natural Gas
5. NAESB: North American Energy Standards Board
6. PGA: Purchased Gas Adjustment
7. Spot Purchase: A physical purchase of natural gas for one month or less.
8. WACOG: Weighted Average Cost Of Gas
9. Annual Sales WACOG: the estimated Annual Sales Weighted Average Cost of Gas as defined in the utility's Purchased Gas Cost Adjustment Tariff

III. Assumptions

1. __General Rate Development__:

a) *Deferrals and amortizations*: LDCs should use forecasted therms to develop rate increments associated with deferrals and amortizations.

b) *Calculation and application of revenue sensitive costs*: When revenue sensitive costs are updated, the LDC should send in work papers to support revision. The LDCs should first determine the entire revenue requirement associated with the annual PGA and then apply the revenue sensitive calculation to the total. Allocation of revenue requirement totals into rate increments should be made after that point. Alternatively, the revenue requirement could be allocated to customer classes and then the total for each customer class could be grossed up. The rate increment would be calculated from the grossed up total.

c) *Deferral accounts*: The revenue totals in the PGA Summary Sheet (see Appendix A) should tie directly to deferral account totals. Utility will provide 2 columns consisting of pre- and post-grossed up totals.

d) *Annual Sales WACOG*: The forward price curve used by the utility in its PGA filing for its Annual Sales WACOG should be based on the formula described in Order 08-504, at page 16-17.

2. Separate Filings

a) Gas cost (commodity and transportation); this filing will include the new gas cost estimates, the deferral calculations and the amortization of deferrals.

b) Decoupling (permanent and temporary changes) - only applicable to NWN and Cascade.

c) Intervenor funding and all other nongas cost related amortizations –these will be Advice filings and incorporated into the heading of the filing will be the UM docket No. reference specific to the amortization, as shown below:

Advice No. XX-XX/UG___**

(UM XXXX)

** As is usual, PUC Staff will assign a UG docket number after the filing is made.

d) Deferral Application (new or reauthorization) should be filed in advance of the PGA filing, using the appropriate effective date, and comply with ORS 757.259 and OAR 860-027-0300 and include:

A completed (hard copy and electronic) Summary Sheet (see Appendix B), the location in the PGA filing of the back-up work papers, and an account map that highlights the transfer of dollars from one account to another.

For reauthorizations:

The effective date of deferral

Prior year Order Number approving the deferral;

The amount deferred last year; and,

The amount amortized last year.

For new applications and reauthorizations:

The effective date of deferral;

The interest rate that did or will apply to the accounts; and, An estimate of the upcoming PGA-period deferral and/or amortization

~~2.~~3. **PGA Amortizations unrelated to gas distribution**: With its Spring Earnings filing, the company should provide Staff with a notice of "intent to request amortization effective November 1" for any deferral it intends to amortize in the PGA that requires a separate earnings test. Staff and the utility will confer to determine which deferrals require a separate earnings test; a deferrals related to intervener funding ~~and independent evaluators~~ or certain demand side management expense do not require a separate earnings test. An exception to this will be granted if the LDC could not reasonably have known at the time of the Spring Earnings report it would be requesting amortization effective Nov. 1. The notice should include a completed (hard copy and electronic) Deferral Summary Worksheet. (For example, see Appendix B.) The LDC would be expected to submit an updated summary sheet and other necessary information when filing for amortization.

~~3.~~4. **Calculation of 3% Test**: The calculation for the 3% Test should conform to ORS 757.259(6), (i.e. total proposed amortization times the LDC's gross revenues from the preceding year should not exceed 3%). Gross revenues is defined as all Oregon revenues including Other Revenues that are booked above the line. (First column of the ROO from the preceding year.) Preceding year is defined as preceding calendar year as submitted in the ROO provided for the spring earnings review.) The 3% consists of the total of all amortizations. If the total exceeds 3%, it will be dealt with on a case by case basis as provided by related statutes and regulation. See ORS 757.259(7). The result of the 3 percent test (for all amortizations subject to the test) should be included with the gas cost filing.

5. Attachment A

The Attachment A template is added to the guidelines. The utility should complete the template and include it with the PGA gas cost filing. Attachment A will be added to Staff's public meeting memo related to gas costs. Attachment A should be modified by the utility when necessary to add or remove base rate or nongas cost-related items.

6. Tariffs

On service rate schedules, the utility will reflect Gas Cost related items on separate lines. All non-gas amortizations should be on separate tariffs. These tariffs will reflect the full amount for that item that is in rates, not the annual rate *change* to those items.

The service rate schedules will refer to the applicable adjustment tariffs or, in the alternative, to a summary tariff that uses a matrix or some other simple method that clearly indicates whether a particular service rate schedule is modified by an adjustment schedule.

Each utility will determine whether to create and use a "residual account" adjustment tariff for residual balances unrelated to items such as intervenor funding and other balancing account items that continue from year-to-year. (See Order No. 10-279 modifying the final order 08-263 in UM 1147). If so, the residual tariff sheet's narrative should be modified from year-to-year to generally describe the costs that are currently being amortized on a first in - first out basis

~~4. Deferral Application (new or reauthorization) must be its own filing in compliance with ORS 757.259 and OAR 860-027-0300 and include:~~

~~a) A completed (hard copy and electronic) Summary Sheet (see Appendix B), the location in the PGA filing of the back-up work papers, and an account map that highlights the transfer of dollars from one account to another.~~

~~b) For reauthorizations:~~

~~viii. The effective date of deferral~~

~~ix. Prior year Order Number approving the deferral;~~

~~x. The amount deferred last year; and,~~

~~xi. The amount amortized last year.~~

~~xii. For new applications and reauthorizations:~~

~~xiii. The effective date of deferral;~~

~~xiv. The interest rate that did or will apply to the accounts; and,~~

viii. ~~An estimate of the upcoming PGA-period deferral and/or amortization.~~

7. Gas-cost-related deferral balances will be an item for the agenda of each quarterly LDC meeting. For each meeting, the LDC should provide the following, at the time of the meeting or at times set out below:

a) Summary of the findings of the LDC's review of the current deferral balances and the methods employed for that review.

b) That review should include:

i. The cause(s) for the balance and its level/sign;

~~i.~~ii. The steps taken by and/or proposed by the LDC to control or mitigate the balance going forward, if applicable;

~~ii.~~iii. If the parties determine more information is required than is already provided in the LDC's existing quarterly reports, the LDC will provide such information (including work papers) within 30 days after the quarterly meeting where the balances were first discussed,

~~7.~~8. LDCs may update their annual PGA filings with actual deferrals relating to gas costs or non-gas costs incurred after June 30th but not beyond

August 31st as well as include the estimated deferrals for September and October. However, the LDCs must collectively agree on the deferral period and inform the Manager of Natural Gas Rates and Planning prior to making the second (update, approximately October 15th) PGA filing.

Natural Gas Portfolio Development Guidelines

I. Introduction

To the extent practicable, a natural gas utility (utility) should comply with these guidelines. However, the guidelines are not intended to restrict or hamper utility gas portfolio planning and procurement to the detriment of the utility's sales customers, and a utility is always expected to act in the best interests of its customers. These guidelines are not intended to be a static document and should be updated to meet the evolving needs of utility operational, financial, or demand circumstances, as well as changes to natural gas market conditions, contracting, and other market rules.

These guidelines are intended to be applied as drafted until altered by the unanimous agreement of the parties or by the Commission. Any party seeking changes to these guidelines must consult first with all other parties prior to proposing such changes to the Commission.

II. Definitions and Acronyms

1. Gas Year: Delivery period running November through October.
2. IRP: Integrated Resource Plan
3. LNG: Liquefied Natural Gas
4. PGA: Purchased Gas Adjustment

III. Portfolio Planning Guidelines

A. Portfolio Planning and the IRP

The IRP provides the framework for the portfolio planning process, and the portfolio planning process should build upon the IRP; this nexus includes both forecasting methodology and supply options. The gas supply process should begin with a strategic planning effort to provide a reliable supply and consider how best to balance the issues of price, flexibility, and diversity in the context of the utility's system and its customers' needs. The portfolio planning process should be regularly updated to capture changes in forecast load, available resources, and market conditions. <u>For natural gas utilities, each IRP preparation process and final published IRP will address both planning to meet normal annual expected demand (as defined by the LDC – both base-load and swing) by day and planning to meet annual peak demand -by day. The planning will include gas supply and associated transportation along with expected use of storage.</u>

B. Quarterly Portfolio Planning Meetings

Each utility will meet with Staff quarterly during the year, unless more frequent meetings are requested by a utility or Staff. These meetings will be open to other interested parties, within the limits of confidentiality requirements of certain information and data to be discussed at the meetings. Notice of these meetings will be sent via email to the service lists for each utility's most recent PGA filing. A protective order will be established to address any confidential information to be distributed at the quarterly meetings.

C. Portfolio Planning Process: General

The portfolio planning process should consider the following:

1. Expected monthly average core and peak load based on normal weather conditions. Development of the utility's load forecast should be based on the same methodology that was utilized in the utility's most recently acknowledged IRP or IRP update, while considering any changes to conditions since that time. Any differences in the methodology used to forecast load for gas portfolio development from that used in the IRP process should be identified and explained.
2. All reasonable supply-side and demand-side resources (physical and financial) available to meet each segment of a utility's forecast load.
3. Fundamental analysis.

D. Portfolio Planning: Physical Natural Gas

A physical natural gas portfolio should meet the following objectives:

1. The portfolio should include a sufficient number of nonaffiliated suppliers to ensure diversity of supply sources.
2. The utility's portfolio should include contracts of varying duration.
3. The utility's portfolio should include contracts entered into at various times throughout the gas year.
4. To the extent reasonable and feasible, the utility's portfolio should include contracts that allow the utility to vary its gas take and pricing requirements on a seasonal or monthly basis. Physical arrangements may also cover annual and multi-year periods.
5. The utility should be able to demonstrate that its gas supply portfolio is sufficiently flexible to meet reasonably expected weather, pipeline operations, gas supply shortage, system load reduction events, and market scenarios.
6. A utility should comply with its own minimum standards for creditworthiness and financial stability when evaluating

counterparties in order to minimize the risk of counterparty failure or diminished performance.

E. Portfolio Planning: Financial Natural Gas

If the utility maintains a financial natural gas portfolio, that portfolio should meet the following objectives:

1. The portfolio should include a sufficient number of nonaffiliated counterparties to ensure diversity of counterparties.
2. The portfolio should include financial contracts covering both annual and seasonal periods. Financial arrangements may also cover multi-year periods. A utility should thoroughly evaluate qualitatively and, if possible, quantitatively, the use of multi-year financial arrangements in preparing its portfolio.
3. The portfolio should include financial arrangements for natural gas entered into at various times throughout the gas year.
4. When it is reasonable and feasible, no single financial transaction should cover more than 25% of the total annual volumes for the portfolio. Also, to the extent reasonable and feasible, multiple types of financial arrangements should be considered.
5. A utility's gas supply financial arrangements should be sufficiently flexible to meet reasonably expected weather, pipeline operations, gas supply shortage, system load reduction events, and market scenarios.
6. A utility should comply with its own minimum standards for creditworthiness and financial stability when evaluating counterparties in order to minimize the risk of counterparty failure or diminished performance.

F. Portfolio Planning: Contractual Arrangements

In developing its natural gas supply portfolio, a utility should consider at least the following:

a. A wide range of physical and financial contracts and hedges based on market conditions, the utility's annual, seasonal, and peak demands; varying weather conditions; and other utility-specific conditions;

b. Storage;

c. Demand response programs;

d. Coordinated purchasing with other companies;

e. Natural gas exchange opportunities;

f. Arrangements with third parties already on the utility system that have their own gas supply;

g. Direct purchases from a non-utility LNG facility; and

h. Direct purchases from producers of natural gas.

IV. Portfolio and the PGA Filing: Information and Work Papers

As part of its annual PGA filing the utility should include the following general information and data regarding its natural gas supply portfolio, including related transportation, upon which its PGA filing is based.

1. General Information

a) Definitions of all major terms and acronyms in the data and information provided. This should include definitions used by each LDC for each category of physical natural gas included in the Portfolio and PGA filing, with back-up support and documentation. All presentations regarding natural gas volumes, whether in text documents, or work papers for, or directly related to the annual PGA filing, should ensure that the measurement unit for each such volume statement is clearly stated with or adjacent to the actual volume information.

b) Any significant new regulatory requirements identified by the utility that in the utility's judgment directly impacts the Oregon portfolio design, implementation, or assessment.

c) All forecasts of demand, weather, etc. upon which the gas supply portfolio for the current PGA filing is based should be based on a methodology and data sources that are consistent with the most recently acknowledged IRP or IRP update and most recently concluded general rate review for the utility. If the methodology and/or data sources are not consistent each difference should be identified, explained, and documented as part of the PGA as well as the IRP and general rate review filings work papers.

2. Work papers

Work papers to the PGA should include:

a) **PGA Summary Sheet:** Utilities should provide a PGA Summary Sheet. See Appendix A.

b) **Gas Supply Portfolio and Related Transportation:** Utilities should provide the following work papers related to the gas supply portfolio and related transmission:

1. Summary of portfolio planning process.
2. LDC sales system demand forecasting.
3. Natural gas price forecasts.

4. Physical resources for the portfolio.

5. Financial resources for the portfolio (derivatives instruments and other financial arrangements).

6. Storage resources.

7. Forecasted annual and peak demand used in the current PGA portfolio, with and without programmatic and non-programmatic demand response, with explanation.

8. Forecasted annual and peak demand used in the current PGA portfolio, with and without effects from gas supply incentive mechanisms, with explanation.

9. Summary of portfolio documentation provided.

V. Portfolio and the PGA Filing: Supporting Data and Analysis

As part of its annual PGA filing the LDC should include the following information and data regarding the PGA gas supply portfolio, including related transportation. Historical data requirements will go into effect over a three year period, beginning with the 2009 PGA filing. During the first year the guidelines are in effect, historical data for three years should be provided, adding one additional historical data year for each of the subsequent two years, for a total of five years.

1. Physical Gas Supply

a) For each physical natural gas supply resource that is included in a utility's portfolio (*except spot purchases*) upon which the current PGA is based, the utility should provide the following:

1. Pricing for the resource, including the commodity price and, if relevant, reservation charges.

2. For new transactions and contracts with pricing provisions entered into since the last PGA: competitive bidding process for the resource. This should include number of bidders, bid prices, utility decision criteria in selecting a "winning" bid, and any special pricing or delivery provisions negotiated as part of the bidding process.

3. Brief explanation of each contract's role within the portfolio.

b) For purchases of physical natural gas supply resource *from the spot natural gas market* included in the portfolio at the time of the filing of the current PGA or after that filing, the utility should provide the following:

1. An explanation of the utility's spot purchasing guidelines, the data/information generally reviewed and analyzed in

making spot purchases, and the general process through which such purchases are completed by the utility.

2. Any contract provisions that materially deviate from the standard NAESB contract.

2. **Hedging**

The utility should clearly identify by type, contract, counterparty, and pricing point both the total cost and the cost per volume unit of each financial hedge included in its portfolio.

3. **Load Forecasting**:

a) Customer count and revenue by month and class.

b) Historical (five years) and forecasted (one year ahead) sales system physical peak demand.

c) Historical (five years), and forecasted (one year ahead) sales system physical annual demand.

d) Historical (five years), and forecasted (one year ahead) sales system physical demand for each of following,

1. Annual for each customer class.
2. Annual and monthly baseload.
3. Annual and monthly non-baseload.
4. Annual and monthly for the geographic regions utilized by each LDC in its most recent IRP or IRP update.

4. **Market information:** General historical and forecasted (one year ahead) conditions in the national and regional physical and financial natural gas purchase markets. This should include descriptions of each major supply point from which the LDC physically purchases and the major factors affecting supply, prices, and liquidity at those points.

5. **Data Interpretation**: If not included in the PGA filing please explain the major aspects of the LDC's analysis and interpretation of the data and information described in (1) and (2) above, the most important conclusions resulting from that analysis and interpretation, and the application of these conclusions in the development of the current PGA portfolio.

6. **Credit worthiness standards**: A copy of the Board or officer approved credit worthiness standards in place for the period in which the current gas supply portfolio was developed, along with full documentation for these standards. Also, a copy of the credit worthiness standards actually applied in the purchase of physical gas and entering into financial hedges. If the two are one and the same, please indicate so.

7. **Storage:**

Work papers should include the following information about natural gas storage included in the portfolio upon which that PGA is based.

a) Type of storage (e.g., depleted field, salt dome).

b) Location of each storage facility. Provide GPS coordinates, if possible.

c) Total level of storage in terms of deliverability and capacity held during the gas year.

d) Historical (five years) gas supply delivered to storage, both annual total and by month.

e) Historical (five years) gas supply withdrawn from storage, both annual total and by month.

f) Historical (five years) cost of gas supply injections into and withdrawals from storage, both annual total and by month.

g) An explanation of the methodology utilized by the LDC to price storage injections and withdrawals, as well as the total and average (per unit) cost of storage gas.

h) Copies of all contracts or other agreements and tariffs that control the LDC's use of the storage facilities included in the current portfolio.

i) For LDCs that own and operate storage:

   a. The date and results of the last engineering study for that storage.

   b. A description of any significant changes in physical or operational parameters of the storage facility (including LNG) since the current engineering study was completed.

8. As part of the PGA filing, final IRP submission, and general rate case filing each LDC will include an attestation that it has verified, to the best of its knowledge, the historical values for (but not limited to) customer number, sales volumes, etc. are consistent if not totally equivalent among the following:

a) All filings with FERC and the Securities and Exchange Commission (SEC);
b) Results of operations reports submitted to the OPUC;
c) Most current IRP or IRP update;
d) Most recent PGA filing (final); and
e) Most recent general rate review filing.

If the LDC cannot make such an attestation it should explain the variations and why these variations should be allowed.