

**STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

Docket No. DG 21-130

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty  
Winter 2021/2022 Cost of Gas and Summer 2022 Cost of Gas

**SUPPLEMENTAL DIRECT TESTIMONY  
OF  
DEBORAH M. GILBERTSON**

May 20, 2022



THIS PAGE INTENTIONALLY LEFT BLANK

1   **Q.   Please state your name, position, and business address.**

2   A.   My name is Deborah M. Gilbertson. I am Senior Manager, Energy Procurement for  
3       Liberty Utilities Service Corp. (“LUSC”), which provides services to Liberty Utilities  
4       (EnergyNorth Natural Gas) Corp. (“Liberty” or “the Company”). My business address is  
5       15 Buttrick Road, Londonderry, New Hampshire.

6   **Q.   Have you previously submitted testimony in this proceeding?**

7   A.   Yes. I submitted testimony as part of the Company’s September 1, 2021, initial filing in  
8       this docket. My educational background, professional background, and qualifications are  
9       contained in that prior testimony.

10   **Q.   What is the purpose of your supplemental testimony in this proceeding?**

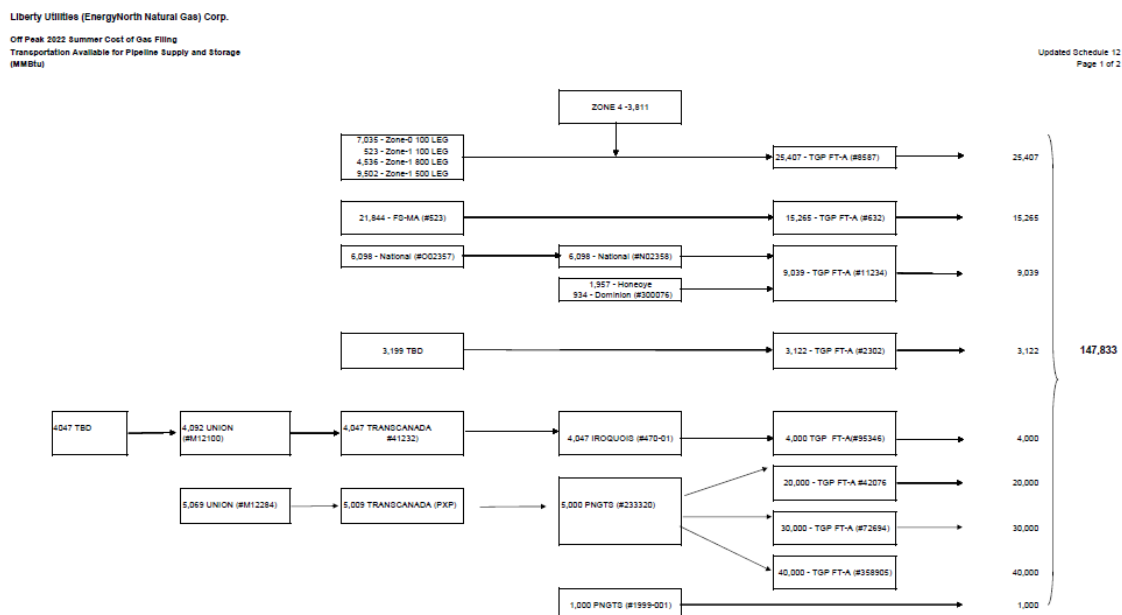
11   A.   The purpose of this supplemental testimony is to support the request for an amended  
12       summer cost of gas rate beginning June 1, 2022, and to explain the market conditions  
13       which are necessitating the need for such a rate increase as well as the mitigation strategy  
14       the Company employs to decrease costs and stabilize pricing in a volatile market.

15   **Q.   Please describe the firm transportation contract portfolio that the Company now**  
16       **holds.**

17   A.   The following “firm transportation” contracts provide the Company the right to transport  
18       certain quantities of gas per day in return for demand charges most often expressed in  
19       dollars per MMBtu per day. For example, the recently approved contract with Tennessee  
20       Gas Pipeline (“Tennessee”) allows the Company to transport up to 40,000 MMBtu per  
21       day and costs \$0.14/per MMBtu per day. Thus, the fixed annual charge for that contract

is approximately \$2 million (40,000 MMBtu/day x \$0.14/MMBtu x 365 days =  
\$2,044,000).

The Company currently holds firm transportation contracts on Tennessee (146,833  
MMBtu/day) and Portland Natural Gas Transmission System (“PNGTS”) (1,000  
MMBtu/day) to provide a daily deliverability of 147,833 MMBtu/day to the Company’s  
citygate stations. In addition to these citygate delivery contracts, the Company also holds  
other transportation contracts further upstream on other pipelines that feed into these  
citygate delivery transportation contracts. Schedule 12, page 1, in the Company's filing is  
a schematic diagram of the transportation contracts, and Schedule 12, page 2, is a table  
listing these contracts. Illustration below:



1 The transportation contracts provide for the delivery of natural gas from three sources as  
2 described below.

3 First, the Company holds firm transportation contracts to allow for delivery of up to  
4 13,122 MMBtu/day of Canadian supply. These consist of the following:

- 5 • The Company can receive up to 4,000 MMBtu/day of firm Canadian supply from  
6 Dawn, Ontario. This supply is delivered to the Company on Company-held firm  
7 transportation contracts on Enbridge Inc. (formally Union Gas Limited),  
8 (“Enbridge”), TC Energy Corporation (formally TransCanada Pipelines Limited)  
9 (“TC Energy”), Iroquois Gas Transmission System (“Iroquois”), and Tennessee.
- 10 • The Company can also receive up to 5,000 MMBtu/day of firm Canadian supply  
11 from Dawn, Ontario. This supply is delivered to the Company on Company-held  
12 firm transportation contracts on Enbridge, TC Energy, PNGTS, and Tennessee.
- 13 • The Company can receive up to 3,122 MMBtu/day of firm Canadian supply from  
14 the Canadian/New York border at Niagara Falls, NY. This supply is delivered to  
15 the Company on Company-held firm transportation contracts on Tennessee.
- 16 • The Company can receive up to 1,000 MMBtu/day of firm Canadian supply from  
17 a Company-held firm transportation contract PNGTS for delivery to its Berlin  
18 service territory.

19 Second, the Company holds the following firm transportation contracts to allow for  
20 delivery of up to 106,596 MMBtu/day of domestic supply from the producing and market  
21 areas within the United States.

- The Company can receive up to 21,596 MMBtu/day of firm domestic supplies from Texas and Louisiana production areas. These supplies are delivered to the Company on firm transportation contracts on Tennessee.
- The Company can receive up to 85,000<sup>1</sup> MMBtu/day of firm supply from Tennessee's Dracut receipt point located in Dracut, Massachusetts. This supply is delivered to the Company on three firm transportation contracts on Tennessee.

Third, the Company holds the following firm transportation contracts to allow for delivery of up to 28,115 MMBtu/day of domestic supply from underground storage fields in the New York/Pennsylvania area or the purchase of flowing supply in or downstream of Tennessee Zones 4 and 5.

- The Company can receive up to 19,076 MMBtu/day of firm domestic supplies from its Tennessee FS-MA storage contract. This contract allows for a storage inventory capacity of 1,560,391 MMBtu. These supplies are delivered to the Company on firm transportation contracts on Tennessee.
- The Company can receive up to 9,039 MMBtu/day of firm domestic supplies from its storage contracts with National Fuel Gas Supply Corporation, Honeoye Storage Corporation, and Dominion Transmission, Inc. In aggregate, these contracts allow for a storage inventory capacity of 1,019,740 MMBtu. These

---

<sup>1</sup> An additional 5,000 MMBtu/day of Dracut capacity is used to transport the previously described 5,000 MMBtu/day of firm Canadian supply from Dawn, Ontario via Enbridge, TC Energy, and PNGTS.

1 supplies are delivered to the Company on a firm transportation contract on  
2 Tennessee.

3 **Q. Please describe the source of gas supplies used with the firm transportation**  
4 **contracts described above.**

5 A. The above transportation contracts only grant Liberty the right to transport the gas; they  
6 do not include the purchase of the gas itself. The Company must separately purchase the  
7 gas to be transported to New Hampshire.

8 The firm transportation contracts that interconnect at the Canadian border enable the  
9 Company to purchase firm gas supplies from both Eastern and Western Canada. The  
10 Company's domestic firm transportation contracts enable the Company to buy gas  
11 supplies from the U.S. Gulf Coast and the Marcellus Shale area which is located in Zone  
12 4 on Tennessee. Supplies the Company purchases at the Dracut receipt point, on the  
13 other hand, may originate from any number of locations. The Dracut receipt point is  
14 located in the same market area as EnergyNorth's citygates, which is Zone 6 on  
15 Tennessee. The Dracut purchase point is notably one of the most expensive places to buy  
16 gas in the nation during peak periods.

17 The reason that the Company holds so much of its transportation capacity from Dracut,  
18 with no additional upstream path to less expensive sources of gas, is a function of history  
19 and the lack of new pipelines being built to serve New England. The Company's  
20 transportation contracts that originate from less expensive areas for buying gas, such  
21 from Canada or in Gulf zones, have been in the EnergyNorth portfolio for decades,

1 having been signed when pipeline capacity to New England was roughly sufficient to  
2 meet demand. As EnergyNorth and other gas utilities in the region grew, those existing  
3 pipelines became fully subscribed and fewer new pipelines were being built. The  
4 Company thus had no other option but to take the Dracut capacity that was available or  
5 else declare a moratorium on growth due to an insufficient portfolio of resources needed  
6 to serve peak winter loads.

7 **Q. Could you provide the status of the Company's storage refill plan?**

8 A. Yes. During the 2022 off-peak period, the Company has been injecting supplies into its  
9 underground storage fields. The Company has 2,580,131 MMBtu's of combined space  
10 available from the Company's four firm storage facilities. These storage resources allow  
11 the Company the ability to withdraw for citygate delivery up to 28,115 MMBtu's per day  
12 in winter. During the months of May through October, the Company purchases and  
13 injects baseload quantities of gas to refill the winter storage supply at off-peak summer  
14 pricing ensuring that these facilities are refilled in time for withdrawal in the peak season.

15 **Q. Ms. Gilbertson, what was the source of the projected sendout requirements and**  
16 **costs used in the Summer 2022 COG filing?**

17 A. As in prior cost of gas filings, the Company used projected sendout requirements and  
18 costs from its internal budgets and forecasts.

1   **Q.     Would you please describe the forecasted sendout requirements for the off-peak**  
2       **period of 2022?**

3   **A.**     Schedule 11A of the Company's filing shows the Company's forecasted sendout  
4           requirements of 22,950,820 therms over the period May 1 to October 31, 2022, under  
5           normal weather conditions, which is slightly higher than last year's forecasted volume of  
6           22,065,798 therms over the period May 1 to October 31, 2021.

7           Schedule 11B shows the Company's forecasted sendout requirements of 22,928,033  
8           therms over the period May 1 to October 31, 2022, under design weather conditions,<sup>2</sup>  
9           which is higher than last year's forecasted volume of 22,175,995 therms over the period  
10          May 1 to October 31, 2021.

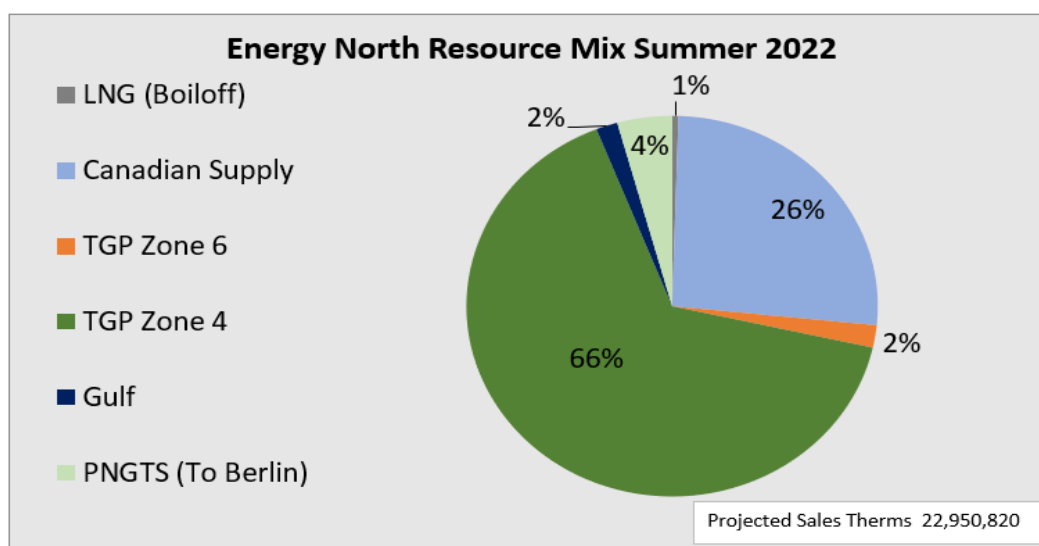
11          In Schedule 11C, the Company summarizes the normal and design off-peak sendout  
12          requirements, the seasonally available contract quantities (inclusive of assigned and  
13          Company Managed capacity), and the calculated utilization rates of its pipeline  
14          transportation and storage contracts based on the normal and design off-peak forecasts  
15          contained in Schedules 11A and 11B.

---

2   The difference between "normal weather conditions" and "design weather conditions" in the summer is much smaller than the difference during the winter. Since the variable portion of EnergyNorth's load is for heating, load variations in summer are modest.

**Q. Using Schedule 11C, can you illustrate the Company's planned gas purchases and dispatch over the summer of 2022?**

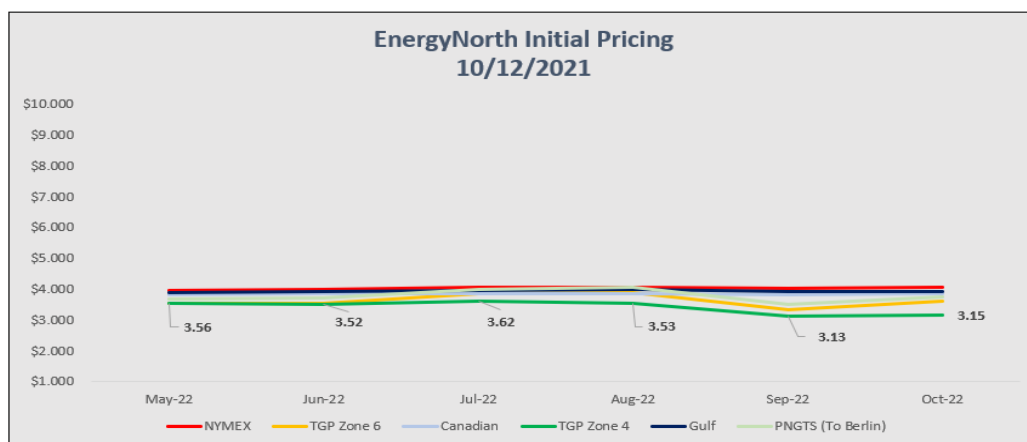
**A.** Yes, the chart below shows the expected purchase and dispatch of natural gas using the Company's transportation resources described above. With projected therm sales at 22,950,820, the Company will purchase gas at the least cost using projected pricing at the various receipt points to which the Company has access.



Because prices are lowest in Zone 4, the Company purchases most of its summer gas quantities in the TGP Zone 4 area. Once Zone 4 options are fully utilized, the Company will buy gas according to a scale of the next least-cost option as determined by the available transportation resources described in the paragraphs above.

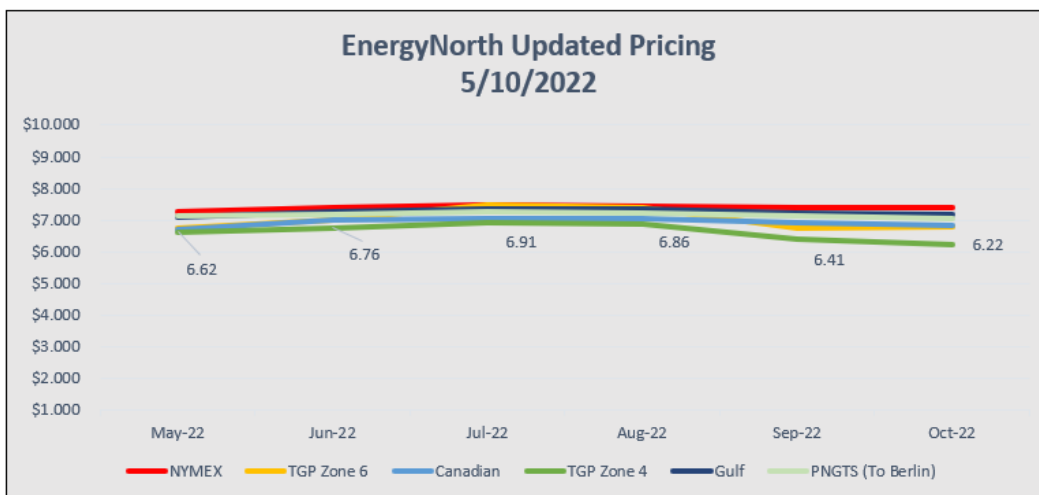
1 **Q. When the Company estimated the Summer cost of gas in September of 2021, and**  
2 **then subsequently updated the pricing before the October hearing, what were the**  
3 **prices compared to the prices today?**

4 A. The chart below illustrates the updated Summer 2022 pricing at the time of the original  
5 cost of gas hearing last fall, which was used to determine the 2022 summer rates at that  
6 time.



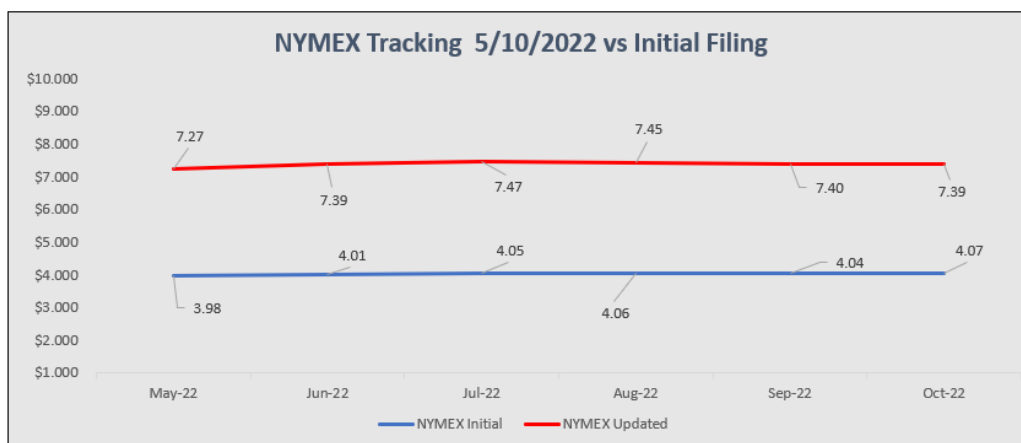
7  
8 The green line shows the prices of TGP Zone 4, which, as explained above, is where the  
9 majority of the gas is purchased for summer consumption. As one can see, although TGP  
10 Zone 4 is the least cost, the other receipt zones are similarly priced with NYMEX,  
11 illustrated on the red line, all at approximately \$3.50 per MMBtu.

The chart below shows prices for the same Summer 2022 period as of May 10, 2022:



As can be seen from comparing the two charts, the TGP Zone 4 prices, as well as all other relevant prices, have essentially doubled to approximately \$7.00 per MMBtu since the updated pricing at the time of the Summer 2022 Cost of Gas hearing in October 2021.

See below for a chart that illustrates the difference in the NYMEX price from last October until May 10, 2022.



1   **Q.   Ms. Gilbertson, can you comment on the cost of gas increases and what market**  
2       **analysts use to determine the price predictions?**

3   A.   Yes, in projecting where prices are going domestically, experts rely on several factors to  
4       gauge the health of the U.S. natural gas market. These factors include U.S. natural gas  
5       production, U.S. Liquefied Natural Gas (“LNG”) export demand, U.S. power generation,  
6       and U.S. industrial demand. These factors, together, strongly correlate to where the U.S.  
7       five-year storage balances are predicted to be at certain times of the year. At the risk of  
8       oversimplifying, if storage balances are predicted to be below average, the market grows  
9       concerned about a supply shortage, and therefore prices go up. When storage balances  
10      are above average, the market pricing retracts as the market is encouraged that supply  
11      will be sufficient to meet demand.

12   **Q.   Can you explain where the five-year storage balances are currently?**

13   A.   Yes, currently there is a substantial deficit to the five-year average, which is a primary  
14       driver of the higher prices described above. However, despite a rocky start, market  
15       analysts predict that production will eventually outweigh incremental demand growth so  
16       that storage at the end of the injection season will be only slightly less than in previous  
17       years. The question remains, however, as to whether this can happen before the market’s  
18       impatience keeps prices high or even pushes prices to higher levels over the rest of the  
19       Summer 2022 period. The experts do not believe there will be a significant and quick  
20       drop in prices over the coming months.

1    **Q.    Are there factors outside the U.S. that are affecting the price of natural gas?**

2    A.    Yes. The war in Ukraine has had a profound impact on the world market for natural gas  
3        as many countries fear the loss of natural gas from Russia and have begun looking for  
4        supplies elsewhere. LNG from the U.S. is an important option for these countries, which  
5        has been driving up the price of LNG here.

6    **Q.    What strategies does the Company employ to stabilize and mitigate costs?**

7    A.    The Company engages in a number of strategies to reduce and stabilize costs for  
8        customers. First, as described above, over the summer period the Company injects gas  
9        into the storage facilities using off-peak and generally lower summer pricing from the  
10       least cost supply points as determined by transportation and storage capacity assets.  
11       Next, the Company initiates requests for proposals, or RFPs, from suppliers which serve  
12       to obtain the lowest price for supply services. The Company also uses an asset  
13       management strategy where the Company allows third parties to take capacity that  
14       Liberty holds on various pipelines in exchange for a supply call option, often resulting in  
15       significant payments to Liberty, all to the benefit of customers. For the winter period, the  
16       Company issues RFPs for a fixed price delivered supply from Dracut (TGP Zone 6),  
17       where the Company buys much of its winter period gas. This fixed-price supply is  
18       considered a physical hedge that serves to stabilize the price at Dracut in peak periods  
19       when prices are extremely volatile and weather reactive. The Company also has a  
20       monthly process of releasing unutilized capacity in the open market to obtain some relief  
21       from annual demand charges from assets which are used mostly in winter but for which  
22       demand charges are assessed all year. Although the goal of the physical hedge program

1 is to stabilize price and not to guarantee a reduction in cost, the program allowed for a  
2 reduction in cost by \$4.4 million last winter when compared to the monthly settled price  
3 at TGP Zone 6 (Dracut). In contrast to the physical hedge program, the cost mitigation  
4 efforts which serve to reduce costs through asset management fees and capacity release  
5 payments reduced costs to customers by \$[REDACTED] and \$57.5K, respectively. These cost  
6 mitigation efforts continue all year and not just in winter.

7 **Q. How much does the Company expect to recover through asset management fees and**  
8 **capacity release activities over the upcoming summer?**

9 A. Although the Company cannot predict what can be recovered from capacity release  
10 activity over the summer since it is entirely speculative, it expects to recover  
11 approximately \$[REDACTED] from our asset management program.

12 **Q. Is the Company considering changes to its hedging and price mitigation strategies?**

13 A. Yes. In light of the current market dynamics and the fact that it has been some years  
14 since the Commission approved the Company's current hedging strategy,<sup>3</sup> Liberty is  
15 conducting a thorough review of its existing strategy and potential adjustments or  
16 alternatives. The Company will present its findings and recommendations to the  
17 Commission for its review prior to the next annual cost of gas filing.

18 The Company is also reexamining the Fixed Price Option ("FPO") offered to residential  
19 customers during the winter period. Under the FPO program, the Commission approves

---

3 See Order No. 25,691 (July 10, 2014).

1 a rate that is two cents higher than the calculated COG rate, and customers who opt-in  
2 pay that FPO rate for the entire winter period.

3 The purpose of the FPO is to “offer[] an alternative to customers who do not want to be  
4 subject to the volatility of market prices. The availability of two pricing options will  
5 allow firm sales cost of gas customers to decide the level of price risk they wish to  
6 tolerate while providing better price signals to the marketplace.” Order No. 23,272 at 4  
7 (Aug. 2, 1999) (establishing the predecessor of the FPO). The primary risk posed by the  
8 FPO is that, if the COG and FPO rates diverge significantly, an unfair subsidy may arise  
9 between FPO and COG customers. *See* Order No. 24,515 at 7 (Sept. 16, 2005)  
10 (amending the FPO to “provide[] greater certainty that the FPO Program will not be  
11 subsidized by non-participants”). That is, FPO customers may subsidize COG customers  
12 if the COG rate falls low enough, or COG customers may subsidize FPO customers if the  
13 COG rate rises.

14 The Company is examining the FPO in light of these issues and would appreciate input  
15 from the Commission and the parties.

16 **Q. Does this conclude your testimony?**

17 **A.** Yes.