BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of

Fortis Inc. et al.

and

Ch Energy Group, Inc.

Case 12-M-0192

October 2012

Prepared Testimony of
Hieu T. Cam:

Office of Electric,
Gas, & Water

State of New York
Department of Public
Service
Three Empire State
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12223-1350

Introduction and Qualifications

Q. Mr. Cam, please state your name, employer and business address.

A. Hieu Cam. I am employed by the Department of Public Service (Department). My business address is Three Empire State Plaza, Albany, New York 12223.

Q. Mr. Cam, what is your position at the Department?

A. I am employed as a Utility Engineer 1 in the Major Utility Rates Section of the Office of Electric, Gas and Water.

Q. Mr. Cam, please state your educational background and professional experience.

A. I received a Bachelor of Science Degree in Civil Engineering from Clarkson University in 2007. After graduating from Clarkson University, I worked for The Whiting-Turner Contracting Company where my responsibilities included estimating projects, monitoring sub-contractors, drafting bid documents and performing field

inspections to ensure work was done in accordance with plans and specifications. In 2008, I returned to Clarkson University where I obtained a Master of Science in Civil Engineering. I joined the Department in 2010 as a Junior Engineer.

Q. Have you previously testified before the Public Service Commission?

A. Yes, I previously testified in Case 11-G-0280 and 12-G-0202 regarding loss and unaccounted for gas, cost of service, rate design, merchant function charges, site investigation and remediation and sales forecast.

Scope of the Testimony

Q. What is the purpose of this testimony?

A. The purpose of this testimony is to standardize the calculation of the fixed Lost and Unaccounted for Gas (LAUF) factor and recommend a more equitable way to charge/refund full service and transportation customers.

Q. How is the fixed LAUF factor related to this

case?

A. The fixed LAUF factor is typically reviewed in rate cases filed by New York local distribution companies. Central Hudson Gas and Electric Corporation (Central Hudson or the Company) has proposed a rate freeze for at least one-year as part of the proposed merger filing. The Company was eligible to file in or around August 2012. If approved as filed, the merger will cause a delay in filing for rates where the fixed LAUF factor would have been addressed. I believe that the modifications to the fixed LAUF factor are in the public interest and addressing them should not be delayed.

Lost and Unaccounted For Gas

Q. When was the current fixed LAUF factor established for Central Hudson, the major subsidiary of CH Energy Group, Inc.?

A. The current fixed LAUF factor was established in Central Hudson's last rate case, 09-G-0589, as listed in response to Department Staff (Staff)

interrogatory (IR) DPS G-108 (see Exhibit ___(HTC-1)).

Q. How was the current fixed LAUF factor set?

A. The current fixed LAUF factor of 1.0055 was calculated using the latest three-year average of actual loss percentages, with some minor adjustments, converted to the LAUF factor.

Q. Please explain the difference between the percentage of gas lost, or LAUF percentage, and the LAUF factor?

A. The percentage of gas lost is used as an indicator of the system's performance and is determined by first taking the difference between the amount of gas delivered to the system and the amount of gas metered out of the system, then dividing that difference by the amount of gas delivered to the system. The LAUF factor, which is often used interchangeably with factor of adjustment (FOA), is used to determine how much gas the Company needs to deliver into the system by "grossing up" or multiplying the

FOA by its forecast sales. The FOA is developed using the following formula: 1/(1-loss percentage). The FOA is a ratio between the amount of gas entering the system and the amount of gas metered out of the system.

Q. Please describe how the current LAUF incentive mechanism operates.

A. The Company currently has a fixed FOA of 1.0055 which means it is allowed to recover no more than 0.55% of the total full service commodity sales to compensate for system losses. If the Company's actual system loss is above 0.55%, the Company is not allowed to recover commodity costs associated with the lost gas above the target. If the Company's actual losses are below the 0.55%, the Company is allowed to retain the commodity cost savings associated with the reduction in lost gas.

Q. Did Staff conduct a study regarding the LAUF incentive mechanism?

A. Yes. Staff conducted an internal study in September of 2011 regarding the LAUF incentive mechanism and developed several recommendations, as shown in Exhibit ___(HTC-4).

Q. Please describe the study's recommendations.

A. The study recommended: (1) the LAUF factor calculation and incentive should be standardized based on total city gate receipts and total system deliveries with no adjustments except for dedicated lines, (2) the establishment of a dead band around the FOA, and (3) the institution of a System Performance Adjustment Clause (SPAC) to both full service and transportation customers.

Q. Does the Panel recommend the Company to adopt these changes?

A. Yes, I recommend: (1) standardizing the fixed FOA by removing "line pack" and having the FOA set at 1.0057 beginning September 1, 2013, (2) establishing a dead band of 1.0000 to 1.0140 around the fixed FOA, and (3) having any differences between the actual LAUF factor and

the fixed FOA be refunded or surcharged to all firm customers via the System Performance Adjustment Clause (SPAC).

Q. Please explain why Staff recommends the Company adopt these changes.

A. As discussed in the Staff's September 2011 report, the current LAUF incentive was initially designed to provide the Company with an incentive to improve the efficiency and the performance of the distribution system. The efficiency of the system increases as gas losses are reduced as older pipes are replaced with newer pipes. There is a point in which the system reaches its equilibrium and further reduction in lost gas is minimal and not easily measured. A dead band is an appropriate way to acknowledge the arrival of the equilibrium point while still maintaining the improvements in the distribution system.

In addition, as discussed in further detail in the September 2011 report, the current LAUF

incentive mechanism does not treat full service and transportation customers equally. The energy supply companies (ESCOs) are required to deliver transportation customer's sales grossed up for the fixed FOA. The LAUF incentive is only applied to any savings resulting from the differences between actual and tariff LAUF percentage to full service customers. Because the transportation customers did also contribute to the costs associated with the lost gas, these customers should be able to share the LAUF incentive if there are any costs savings. Therefore, the proposed dead band will equally surcharge and refund to both full service and transportation customers when there are any differences in actual LAUF and fixed LAUF factor. Adopting the recommendations from Staff's September 2011 report would ensure both transportation customers and full service customers are treated fairly.

Q. Does the Panel recommend resetting the current fixed FOA after the end of the current rate plan?

A. Yes, I recommend adopting the fixed FOA of 1.0057 on September 1st, 2013 using the latest three-year average of the actual system loss performance with no other adjustments.

Q. Please explain how Staff developed the fixed FOA of 1.0057.

A. Staff used the latest three years of data to calculate the FOA and made adjustments to total receipts to reflect gas used for “line packing” the system. Staff’s proposal is to adopt the recommendation from the study to exclude any adjustments from the FOA calculation. For state wide consistency and simplicity, the September 2011 report recommended the FOA or LAUF percentage be determined from using total system receipts and total deliveries with no other adjustments.

Q. Did excluding the adjustments to total system receipts have any impacts on the calculated FOA or the dead band?

A. The impacts were insignificant and negligible since the “linepack” adjustments accounted for less than 0.017% of total system receipts. To be consistent with the recommendations from the report, I proposed to exclude the linepack adjustment.

Q. Why does Panel propose using a three year average opposed to the five year average, as recommended in Staff’s study?

A. A three year average is more reflective of the current condition of the Central Hudson’s distribution system. This method is also consistent with the most recent gas rate order (09-G-0589) which requires the Company to use the latest three years of data to determine the fixed FOA. As shown in Exhibit ___(HTC-2), the LAUF percentage or FOA of the distribution system has been steadily declining due to

constant upgrades, repairs of known leaks and replacement of the older leak prone pipes, thus using the latest three years is more reflective of the actual performance and efficiency of the distribution system.

Q. Please explain why you recommend resetting the fixed LAUF factor on September 1, 2013 and not at the beginning of the stay out, July 1, 2013.

A. The current incentive mechanism is reconciled in conjunction with the annual gas cost reconciliation filing due October 15th of every year. The filing reconciles the Company's gas purchases for the twelve month period ending August 31st. The LAUF incentive is determined with the annual gas costs, and therefore, for ease of calculating the LAUF benefit, the dead band should not be implemented until the next Gas Adjustment Clause (GAC) reconciliation period which begins on September 1st, 2013 and will continue until changed by the Commission.

Q. Please describe the development of the dead band.

A. Following the recommendations in the Staff report, I propose modifying the current LAUF incentive mechanism to a dead band equal to two standard deviations as determined from using the previous three years of actual system-wide FOA experienced. However, the maximum standard deviation is limited to 0.5% and a limit of 1.0000 for the bottom of the dead band. If the bottom of the dead band is at the 1.0000 limit, the top of the dead band will be set at one plus four standard deviations.

Q. Using the new fixed FOA of 1.0057, what are the upper and lower dead band limits for the incentive mechanism?

A. For the Central Hudson system, the calculated minimum dead band is 0.9987 below the 1.0000 limit established in the report. However, I recommend a lower dead band of 1.0000 because this represents the system operation at 100%

efficiency - the amount of gas that comes in equals the amount of gas comes out of the system. The upper dead band calculated using four standard deviations, as recommended in the report is 1.0140.

Q. Please explain how the establishment of a dead band will work with the LAUF incentive mechanism.

A. For Central Hudson, the top and the bottom of the dead band is 1.0140 and 1.0000, respectively. The target factor of adjustment is 1.0057. For any given year, if the actual FOA is within the dead band, the difference in the FOA between the target and the actual is surcharged or refunded to both full service and transportation customers based on their previous year’s usage. If the actual FOA exceeds the dead band, the Company cannot recover any portion that exceeds the dead band and if the actual FOA is below the dead band of 1.0000 it

must refund any portion that exceeds the dead band.

Q. Has the Commission previously adopted a dead band to replace the current LAUF incentive?

A. Yes, in Case 11-G-0280, the Commission adopted a LAUF mechanism for Corning Natural Gas Corp. identical to what Staff is proposed in this case. That LAUF mechanism consists of a dead band using two standard deviations around a fixed FOA determined from using the latest three years of data. The Commission is currently reviewing a similar LAUF mechanism proposal in Case 12-G-0202 for National Grid.

Q. How are the customers surcharged or refunded for the difference between the actual LAUF factor and the fix FOA?

A. Full service customers paid actual gas costs grossed up to the target factor of adjustment in the Gas Supply Charge (GSC). During the GAC reconciliation period, the LAUF incentive is determined, the differences in FOA will be

grossed up using average commodity cost of gas and allocated to both full service and transportation customers. Full service customers will be surcharged/refund through a newly created SPAC that will be added to the GSC. Similarly, transportation customers will be surcharged or refunded through a SPAC in the Firm Transportation Rates (FTR).

Q. Please provide a sample calculation showing how customers will be surcharged or refunded?

A. There are three examples in Exhibit ___(HTC-3) showing how to calculate the surcharge or refund when (1) the actual LAUF is beyond the top of the dead band, (2) the actual LAUF is higher than the FOA but still inside the dead band, and (3) the actual LAUF is lower than the fixed FOA.

Q. Please describe Exhibit ___(HTC-3).

A. On page 3 of 4, this particular example assumes an actual LAUF of 1.0098 which is inside the dead band of 1.0000 to 1.0146. The fixed FOA is set at 1.0057. The average commodity cost of

gas is assumed at $6.11. The amount to be refunded/surcharged to full service customers can be calculated by first multiplying the difference between the actual LAUF and fixed FOA with the average commodity cost of gas, then that quantity is multiplied by the volumes that were delivered to the full service sales customers. Likewise, the amount to be refunded or surcharged to transportation customers can be calculated by first, multiplying the difference between the actual LAUF and the fixed FOA with the average commodity cost of gas, then that quantity is multiplied by the volumes that were delivered to the transportation customers. Full service customers and transportation customers will be surcharged or refunded through the GSC and the FTR, respectively. The surcharge rate will be determined by dividing the amount to be surcharged or refunded by the forecast sales for those customers.

Q. Does this conclude your testimony?

A. Yes, at this time.