



# STATE OF CONNECTICUT

PUBLIC UTILITIES REGULATORY AUTHORITY  
TEN FRANKLIN SQUARE  
NEW BRITAIN, CT 06051

DOCKET NO. 18-05-16 APPLICATION OF CONNECTICUT NATURAL GAS  
CORPORATION TO INCREASE ITS RATES AND  
CHARGES

By the following Commissioners:

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**DECISION**

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## DECISION

### **I. INTRODUCTION**

#### **A. SUMMARY**

In this Decision, the Public Utilities Regulatory Authority approves the August 30, 2018 Settlement Agreement on Revenue Requirements, as filed by Connecticut Natural Gas Corporation, the Office of Consumer Counsel and the Prosecutorial Staff of the Public Utilities Regulatory Authority, and the October 4, 2018 Settlement Agreement on Rate Design, as filed by Connecticut Natural Gas Corporation, the Office of Consumer Counsel, the Prosecutorial Staff of the Public Utilities Regulatory Authority and the Connecticut Industrial Energy Consumers. The Public Utilities Regulatory Authority finds that the total revenue increase of \$19.747 million over the three-year rate period will allow Connecticut Natural Gas Corporation to attract capital needed for the company to continue to provide safe, adequate and reliable gas distribution services at reasonable rates.

#### **B. BACKGROUND OF THE PROCEEDING**

On May 30, 2018, pursuant to §16-1-22(b) of the Regulations of Connecticut State Agencies (Conn. Agencies Regs.), Connecticut Natural Gas Corporation (Company or CNG) filed a Notice of Intent to file an application with the Public Utilities Regulatory Authority (Authority or PURA) for an increase in its rates and charges. The Company proposed a total rate increase of \$28.1 million over the three-year rate plan.

On June 29, 2018, pursuant to §§16-19 and 16-19e of the General Statutes of Connecticut (Conn. Gen. Stat.), CNG filed its application for approval of amended rates and schedules, effective January 1, 2019 (Application).

On July 10, 2018, CNG submitted a motion to approve its customer notice and requested permission to provide the notice to customers. On July 11, 2018, the Authority approved the customer notice.

On July 11, 2018, the Company and the Office of Consumer Counsel (OCC) filed a joint motion requesting the Authority to appoint Prosecutorial Staff in order to facilitate settlement discussions.

On August 15, 2018, CNG, OCC and the Prosecutorial Staff of the Authority (PRO; together, the Parties) filed a joint motion to suspend the procedural schedule, in order to allow the Parties an opportunity to continue discussions to resolve matters on mutually agreeable terms, as an alternative to a fully litigated proceeding. The Authority suspended the schedule, effective as of August 15, 2018.

On August 30, 2018, CNG, OCC and PRO (together, the Revenue Settling Parties) filed a joint motion requesting approval of a settlement agreement pertaining to the revenue requirement component of the Application (Revenue Settlement Agreement).

On October 4, 2018, CNG, OCC, PRO and the Connecticut Industrial Energy Consumers (together, Rate Settling Parties) filed a joint motion requesting approval of a settlement agreement that would resolve the rate design portion of the Application (Rate Settlement Agreement).

### **C. CONDUCT OF THE PROCEEDING**

Pursuant to a Notice of Pre-Hearing Conference dated June 28, 2018, the Authority conducted a Pre-Hearing Conference on July 11, 2018, to discuss procedural issues with all admitted parties and intervenors, at the offices of the Authority located at Ten Franklin Square, New Britain, Connecticut.

Pursuant to a Notice of Audit dated July 10, 2018, the Authority conducted an audit of the Company's books and records beginning on August 14, 2018, at the offices of the Company located at 180 Marsh Hill Road, Orange, Connecticut.

Pursuant to a Notice of Rescheduled Hearings dated September 7, 2018, the Authority conducted hearings on October 3, 2018, October 4, 2018, October 5, 2018 and October 11, 2018 at the offices of the Authority.

Pursuant to Notice of Close of Record dated November 26, 2018, the record was closed.

The Authority issued the Proposed Final Decision on December 6, 2018. Pursuant to Notice of Written Exceptions, Briefs and Oral Arguments dated December 6, 2018, the Authority allowed written exceptions and the right to oral arguments from admitted parties and intervenors concerning the Proposed Draft Decision.

### **D. PARTIES AND INTERVENORS**

The Authority recognized the following as parties to this proceeding: Connecticut Natural Gas Corporation, 180 Marsh Hill Road, Orange, CT 06477; Office of Consumer Counsel, Ten Franklin Square, New Britain, CT 06051; the Commissioner of the Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106; and Prosecutorial Staff of Public Utilities Regulatory Authority, Ten Franklin Square, New Britain, CT 06051.

The Authority granted intervenor status to the Office of the Attorney General, Ten Franklin Square, New Britain, CT 06051; the Connecticut Industrial Energy Consumers, HQ Hartford, 100 Pearl Street, 14<sup>th</sup> Floor, Hartford, CT 06103; and the Connecticut Independent Utility Workers Local 12924, 100 Pitkin Street, Suite B, East Hartford, CT 06108.

### **E. PUBLIC COMMENT**

On August 28, 2018, the Authority held an evening Public Comment Hearing at the offices of the Authority, to receive comments from the general public, concerning the Application. Approximately 13 members of the public attended the hearing and one

person publicly commented regarding increases to the customer service charge, mainly involving low-usage customers. Tr. 8/28/18, pp. 4 and 5.

The Authority received five letters and emails regarding the Company's Application and all were opposed to a rate increase, generally out of concern about keeping rates reasonable for all Connecticut customers.

## **II. AUTHORITY ANALYSIS**

Pursuant to Conn. Gen. Stat. §4-177, a contested case may be resolved by a proposed settlement agreement, unless it is precluded by law. Conn. Gen. Stat. §16-19jj encourages the use of settlement agreements to resolve contested cases, when the Authority deems it appropriate to do so. The Authority may approve proposed settlements that are just and reasonable and in the public interest, pursuant to Conn. Gen. Stat. §§16-19 and 16-19e.

To determine the reasonableness of the settlement amount and to exercise its due diligence responsibility, the Authority conducted an analysis based on the record evidence that included approximately 560 interrogatories and audit requests.

### **A. APPLICATION**

The Company's original application requested a three-year rate plan for the rate years 2019 (Rate Year 1), 2020 (Rate Year 2) and 2021 (Rate Year 3), with new rates effective January 1, 2019. The original proposed rate plan included increases in revenues of \$16.564 million in Rate Year 1; \$10.098 million in Rate Year 2; and \$1.123 million in Rate Year 3, for a total increase of \$27.785 million over the three-year rate plan.

### **B. REVENUE SETTLEMENT AGREEMENT**

The Revenue Settlement Agreement proposes a total revenue increase of \$19.747 million over the three-year rate plan and represents a reduction of approximately \$8 million from the original proposal. The Revenue Settlement Agreement proposes that the Company will recover an increase in revenues of \$9.907 million over currently effective rates in Rate Year 1; an incremental increase of \$4.628 million over then-currently effective rates in Rate Year 2; and an incremental increase of \$5.212 million over then-currently effective rates in Rate Year 3.

In addition, the Revenue Settlement Agreement includes adjustments made to Rate Base, Operation and Maintenance Expense, Depreciation and Amortization, Cost of Capital, Earnings Sharing Mechanism, Distribution Integrity Management Program, System Expansion Rates, and Revenue Decoupling. The Revenue Settlement Agreement does not include a settlement on Rate Design.

### **C. RATE SETTLEMENT AGREEMENT**

The Rate Settlement Agreement modifies the class revenue allocation proposed in the Application and moves certain rate classes closer to their full cost of service.

Under the Rate Settlement Agreement, the firm rate classes, with rates of return (ROR) that are currently below the system average ROR, are being allocated a higher than average rate increase, and those firm rate classes with RORs above the system average ROR are being allocated a lower than average rate increase. This results in the class RORs moving closer to the system average for each primary firm rate class (as measured by the ratio of the class ROR to the total Company ROR). The Rate Settlement Agreement includes proportional rate increases for each of the three rate years, and it proposes to resolve all outstanding issues related to the Company's rate increase allocation and rate design.

## **D. CUSTOMER SERVICE REVIEW**

### **1. Standard Bill Form and Termination Notice**

The Company's standard bill form, termination notice and customer rights notice were reviewed and are in compliance with the applicable regulations. Application, Schedule H-2.0 and H-2.0(A); Response to Interrogatories CA-10 through CA-14. According to the Company, a customer with a pending termination notice that pays via a payment agent, is instructed to call the Company in order to avoid termination. The Company is presently working on an enhancement that posts payments in real time, as payments are made to a third party agent online. Tr. 10/5/18, pp. 88 and 89.

CNG noted that its most effective credit and collections initiatives are shut off notices, outbound calls and disconnections for non-payment. Response to Interrogatory CA-1. The Company is presently evaluating the use of texting and emails to enhance customer communications. Tr. 10/05/18, p. 87. CNG also confirmed that customers are not terminated for unregulated charges, in compliance with applicable regulations. Application, H-2.0(B); Response to Interrogatory CA-12.

### **2. Policies and Procedures for Estimating Bills**

The Company provided its policies and procedures for generating an estimated bill. CNG's billing system produces an estimated bill based upon historical usage in the comparable month, in the prior year. If the corresponding month of the previous year is not available, the amount is based on the previous month. All of these procedures have been reviewed and are in compliance with applicable regulations. Application, Exhibit H-2.2.

CNG's bill form and associated customer notices were also reviewed and are acceptable. The Company provides customers with the proper estimated bill form and also provides customers with notification, as required by Conn. Agencies Regs. §16-3-102C3. After the second consecutive estimated bill, the Company sends a letter to alert its customers. Response to Interrogatory CA-13.

The Authority notes that the Company's issuance of estimated bills occurs very infrequently. The table below shows the percentage of meters that have not been read, over the last 3 years:

2015	2016	2017
0.097%	0.103%	0.129%

The data shows that the percentage of meters that have not been read is approximately one tenth of one percent (0.1%), an extremely low percentage due to the high read rate from its ITRON Meter Reading System. When a device does not obtain a reading, CNG is notified in real time and immediately deploys a technician to address the problem. It is rare that a meter is estimated for more than a couple of months, unless the customer does not allow the Company access to the device so that it can be repaired or replaced. Response to Interrogatory CA-14

### **3. Customer Security Deposits**

The Authority reviewed the Company's current policies and procedures regarding administering customer security deposits and finds that each is in compliance with the applicable regulations. Presently, the Company utilizes a residential security deposit checklist when customers request to initiate service, including those customers whose service was terminated for non-payment, during the last two years. The security deposit includes all of the questions and provisions to be discussed with customers, as required by Conn. Agencies Regs. §16-262j-1. Application, Schedule H-2.3.

CNG does not provide a written copy of its policies and procedures to those customers that are required to provide a security deposit but notes that it is provided on the disconnect notice. Historically, CNG has provided a copy of the applicable security deposit regulation, pursuant to Conn. Agencies Regs. §16-262j-1, to any customer that stated that they lacked the financial ability to pay. CNG provides the information annually, in a bill insert that includes the security deposit policies and procedures. Responses to Interrogatories CA-15 and CA-16.

### **4. Service Appointments**

Non-emergency, service appointments can be scheduled during normal hours of operation by calling the Customer Service Department on Monday through Friday from 8:00 a.m. to 6:00 p.m. and customers can request a two-hour or four-hour window. Emergency calls are responded to 24 hours a day. Application, Schedule H-2.4; Response to Interrogatory CA-17. Over the last three years, CNG has honored at least 95.5% of its scheduled service appointments. Response to Interrogatory CA-18.

### **5. Customer Care Center**

The Company maintains a Customer Care Center to address customer complaints and inquiries. The operating hours for the call center are Monday through Friday, 8:00 a.m. to 6:00 p.m. Response to Interrogatory CA-27. According to CNG, there is no queue time in the interactive voice response (IVR). The IVR offers an option for self-service or an option to be transferred to a customer service representative.

Statistics below indicate the monthly performance of the Call Center:

<b>2016</b>	<b>ASA<sup>1</sup></b>	<b>ACR<sup>2</sup></b>	<b>2017</b>	<b>ASA</b>	<b>ACR</b>
January	45	4.3%	January	45	3.0%
February	30	2.5%	February	47	3.1%
March	21	1.5%	March	49	3.0%
April	44	3.6%	April	50	2.8%
May	1:27	7.2%	May	1:19	4.9%
June	1:24	6.8%	June	52	2.8%
July	1:02	5.1%	July	53	3.3%
August	28	2.2%	August	22	1.1%
September	25	2.7%	September	33	1.8%
October	31	2.4%	October	43	2.5%
November	31	2.3%	November	41	2.2%
December	30	2.1%	December	19	1.2%

Response to Interrogatory CA-28.

## **6. Customer Service Summary**

The Authority notes that the Company has continued to meet monthly with the Authority's Consumer Affairs staff and finds that the meetings have been valuable, as discussions have involved complaint trends, ongoing issues and anticipated issues. The Authority finds that there is value in continuing the monthly compliance meetings. Accordingly, the Authority will direct CNG to continue the monthly meetings with PURA staff.

Overall, the Authority finds that the Company's customer service policies and procedures are in compliance with applicable statutes and regulations.

## **E. COST OF CAPITAL**

### **1. Introduction**

In determining the appropriate cost of capital, Conn. Gen. Stat. §16-19e(a) requires that:

[t]he level and structure of rates be sufficient, but no more than sufficient, to allow public service companies to cover their operating costs including, but not limited to, appropriate staffing levels, and capital costs, to attract needed capital and to maintain their financial integrity, and yet provide appropriate protection to the relevant public interests, both existing and foreseeable . . .

<sup>1</sup> Average Speed of Answer, in seconds

<sup>2</sup> Abandoned Call Rate

In addition, in Federal Power Commission v. Hope Natural Gas Company, 320 US 591 (1944) (Hope Decision), the Court established criteria to determine cost of capital allowances. In that decision, the Court determined that companies need to be allowed to earn a level of revenues sufficient to enable them to operate successfully, maintain their financial integrity and to attract capital and compensate their investors for their risk.

To determine an ROR on rate base that is appropriate for the Company's overall cost of capital, the Authority identifies the components of its capital structure and estimates the cost of each component. The components are then weighted according to their proportion of total capitalization. These weighted costs are summed to determine the Company's overall cost of capital, which becomes the allowed ROR. In the below analysis, the Authority reviewed the Revenue Settlement Agreement and its negotiated cost of capital components in light of the Hope Decision.

## 2. Capital Structure and Costs

### a. Capital Structure

The Revenue Settling Parties agreed to a capital structure consisting of 54.00% common equity for Rate Year 1, 54.50% for Rate Year 2 and 55.00% for Rate Year 3. Revenue Settlement Agreement, Section 1.7.2.

The overall capital structures for the three rate years is as follows:

<b>Class of Capital</b>	<b>Rate Year 1</b>	<b>Rate Year 2</b>	<b>Rate Year 3</b>
Short-term Debt	5.08%	5.64%	5.87%
Long-term Debt	40.84%	39.78%	39.04%
Preferred Stock	0.09%	0.09%	0.08%
Common Equity	54.00%	54.50%	55.00%
<b>Total Capitalization</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

Revenue Settlement Agreement, Sections 1.7.1, 1.7.2 and 1.7.3; Attachment 6.

The Revenue Settling Parties indicated that the allowed return on common equity (ROE) and allowed capital structure represent overall trade-offs encompassed in the Revenue Settlement Agreement and are critical, interrelated cost-of-service elements that, in addition to other agreed upon provisions, embody the trade-offs made by each party to obtain the Revenue Settlement Agreement. The Revenue Settling Parties indicated that the graduated equity component, ranging from 54% to 55%, was part of the negotiations process, as the Company was initially asking for 55% common equity in each of the three rate years. Tr. 10/5/18, pp. 54-56.

The proposed rate year capital structures are supported by market conditions and are consistent with the Company's peer group. For example, the Company indicated its peer group operating and holding companies have average equity ratios of 57.45% and 58.57%, respectively. Thus, the Revenue Settlement Agreement's

proposed common equity ratio for each of the three rate years, is below the mean of the peer companies. Responses to Interrogatories FI-85, FI-86, and FI-224. The Company indicated that increased common equity ratios will become more common in the energy and water utility sectors. This increasing common equity trend was one of the crucial factors that the Company considered during the negotiation process, in balancing out the overall Revenue Settlement Agreement. Tr., 10/5/18, pp. 56-57.

The Revenue Settling Parties indicated that since 2013, allowed common equity ratios for ratemaking purposes have ranged from 50.0% to 53.0% for Connecticut gas and electric utilities. These equity ratios were granted prior to the 2018 Tax Cuts and Jobs Act (2018 TCJA), and the 2018 TCJA has had a negative effect on utility cash flow metrics. Responses to Interrogatories FI-87 and FI-225. The 2018 TCJA was one of the factors driving the need for an increased equity component, as it is expected to reduce utility revenues due to the lower federal income tax rates, loss of bonus depreciation and the requirement to return excess accumulated deferred income taxes. This change in revenue is expected to reduce the funds from operation credit metrics across the utility sector. According to the Company, the 2018 TCJA is expected to lead to weaker credit metrics and negative credit rating outcomes for some utilities. Response to Interrogatory FI-86. The Revenue Settlement Agreement's increased equity ratio and higher ROE, relative to the currently authorized levels are expected to alleviate the expected adverse effects of the 2018 TCJA. The Revenue Settlement Agreement's ratemaking capitalization should also provide stability to CNG's current rating levels. Response to Interrogatory FI-231. The Company also anticipates that the debt capital markets will likely view the Revenue Settlement Agreement favorably, as it will preserve the Company's credit quality and provide rate stability over the term of the rate plan. Response to Interrogatory FI-223.

In reaching the agreed upon ROE and capital structure, the Revenue Settling Parties considered many factors and emphasized that the Revenue Settlement Agreement took into consideration not only the capital structure and ROE, but also O&M, rate base and other adjustments. Overall, the negotiated Revenue Settlement Agreement should be considered a total package for the three year term of the rate plan and the Authority's rate making precedent. Tr. 10/5/18, p. 58.

The Authority considered the Revenue Settling Parties rationale regarding the negotiated 54% to 55% common equity portion for ratemaking purposes and concurs that this percentage falls within the parameters established by credit rating agencies to maintain the Company's current credit rating and also falls within the range of common equity ratios, examined in the company peer group. The Authority approves the Revenue Settlement Agreement's 54%, 54.5% and 55% common equity portion of the ratemaking capital structures for the three rate years of 2019, 2020 and 2021, respectively.

#### **b. Cost of Short-Term Debt**

The Revenue Settlement Agreement provided for short-term debt cost rates of 3.07% for 2019, 3.34% for 2020 and 3.43% for 2021; and, these were the same as proposed in the Application. Revenue Settlement Agreement, Attachment 6. These rates were supported by the Company's interest rate forecasts. Typically CNG borrows

from Avangrid, its parent corporation, under its bi-lateral loan agreement or under the Virtual Money Pooling Agreement with its utility affiliates. The rate charged on these borrowings would be the 30-day A2/P2, non-financial commercial paper rate published by the Federal Reserve. The Federal Reserve has raised interest rates for the last several quarters. The expectation was that short-term rates will rise, as the Federal Reserve would likely continue to increase the Federal Funds rate. Responses to Interrogatories FI-228 and OCC-96. The Authority approves the cost rates of short-term debt of 3.07% in 2019, 3.34% for 2020 and 3.43% for 2021.

**c. Cost of Long-Term Debt**

The Revenue Settlement Agreement provided for long-term debt cost rates of 5.13% for each of the three rate years 2019, 2020; and 2021. These rates were the same as proposed in the Application. Revenue Settlement Agreement, Attachment 6.

The Company has no maturities and no new long-term debt issuances, during the forecast period. All of the Company's long-term debt is fixed. Subsequently, the long-term debt rate is constant for each of the three rate years, and reflects the Company's actual embedded cost of long-term debt. Response to Interrogatory FI-227. The Authority approves the 5.13% cost of long-term debt for each of the three rate years.

**d. Cost of Preferred Stocks**

The Revenue Settlement Agreement provided for a cost of preferred stock rate of 8.00% for each of the three rate years 2019, 2020 and 2021, and was the same as proposed in the Application. Revenue Settlement Agreement, Attachment 6.

The preferred stock was issued in 1910 and had been issued with a fixed dividend that cannot be altered by the Company. The Company does not have an option to redeem the preferred stock at a fixed price, as it has a non-redeemable clause. The Company had made tender offers for the outstanding shares. At the time CNG was acquired by UIL Holdings in 2010, the Company had \$750,000 in preferred stock outstanding. Since then, tender offers have been made with the latest in 2014, and the Company has been successful in reducing the amount to \$340,000, presently. The Company has no plans to execute another tender offer and expects the remaining balance to remain outstanding. At this point, the Company indicated that it is not possible to tender more of the preferred stock, as the remaining handful of preferred stock holders do not want to redeem their holdings, given the 8.0% yield. Responses to Interrogatories FI-114 and FI-229; Tr. 10/5/18, pp. 59 and 60.

The Authority considers that preferred stock carries the characteristics of both long-term debt, as it pays a fixed dividend, and common equity. As a result, the Company's common equity portion for credit rating purposes increases, all else equal. Additionally, the cost of preferred stock is cheaper than the cost of common equity but more costly than long-term debt; thus, it is more cost effective for the Company and its customers to keep the preferred stock, rather than refinancing it with common equity. The Authority approves the 8.00% cost of preferred stock for each of the three rate years.

**e. Cost of Equity**

The Revenue Settlement Agreement provided for an ROE of 9.30% for each of the three rate years. Revenue Settlement Agreement, Section 1.7.1, Attachment 6. The ROE in the Revenue Settlement Agreement was the product of negotiations and one of many considerations of the Revenue Settling Parties. The 9.30% ROE was not developed based on formulaic calculations such as Discounted Cash Flow, Capital Asset Pricing Model or Risk Premium methods typically employed by the Authority in past precedent. Response to Interrogatory FI-248. The Revenue Settlement Agreement strikes a balance that achieves a fair disposition of the issues posed in the Company's Application. This balance of the Revenue Settlement Agreement ensures that the rates will be sufficient but no more than sufficient and conform to the Authority's rate-making standards. The 9.30% ROE in the Revenue Settlement Agreement does not include explicit adjustments for decoupling or DIMP; however, this approach is consistent with the Authority's recent precedent and subsequently. Responses to Interrogatories FI-234, FI-244, FI-246 and FI-247.

The Company's current allowed ROE is 9.18% and the Revenue Settling Parties indicated that the national average authorized ROE for gas companies through June 2018 was 9.55%. The Company's initially proposed ROE was 10.2%; thus, the negotiated 9.3% ROE represented a 0.90% reduction to the originally requested return. Marone PFT, p. 7; Response to Interrogatory FI-245, Attachment 1; CNG, OCC and PRO Brief (Joint Brief), p. 12.

In support of the Revenue Settlement Agreement's proposed 9.30% ROE, the Revenue Settling Parties indicated that the 10 and 30-year US Treasury bond yields have been increasing since a July 2016 low point. The Company indicated that since 2014, the Federal Reserve Bank has increased interest rates seven times and there is an expectation that interest rates will continue to increase. Response to Interrogatory FI-249. The Revenue Settling Parties also supported the proposed 9.30% ROE, indicating that the range of recently authorized ROEs for fully litigated natural gas rate proceedings in 2018, was 9.30% to 10.00% and average authorized ROE's from these cases was 9.69%. Including settlements, the average falls to 9.60%, as of the third quarter of 2018. In addition to the national range of ROEs, the Revenue Settling Parties also indicated that past Authority precedent, with regards to recently awarded ROEs (i.e., 9.25% for Southern Connecticut Natural Gas and Connecticut Light & Power Company) and trending higher US interest rates, all played a role in the ultimate settlement on a mutually acceptable ROE. Responses to Interrogatories FI-245 and FI-249; Tr. 10/5/18, pp. 73-78; Joint Brief, p. 12.

The Revenue Settling Parties indicated that the allowed ratemaking capitalization mix and ROE were critical, interrelated cost-of-service elements that in addition to other agreed upon provisions, embody the trade-offs made by each Party to obtain a settlement. Therefore, the Revenue Settling Parties requested that the negotiated ratemaking capitalization mix and ROE be accepted as proposed and not disturbed by the Authority. The Revenue Settling Parties all concurred that the negotiated Revenue Settlement Agreement, including the 9.30% ROE taken as a whole package, meet the Hope Decision and the Authority's ratemaking mandate. Tr. 10/5/18, p. 79. The

Authority finds an allowed ROE of 9.30% for CNG to be fair and reasonable, based on other allowed ROEs of gas companies with comparable risk and it is hereby approved.

**f. Summary of Capital Structure and Rates of Return**

The following tables summarize the approved capital structure and associated rates of return.

**Rate Year 1**

<b>Class of Capital</b>	<b>Weight</b>	<b>Cost Rate</b>	<b>Weighted Cost</b>
Short-term Debt	5.08%	3.07%	0.16%
Long-term Debt	40.84%	5.13%	2.09%
Preferred Stock	0.09%	8.00%	0.01%
Common Equity	54.00%	9.30%	5.02%
Total Capitalization	100.00%		7.28%

**Rate Year 2**

<b>Class of Capital</b>	<b>Weight</b>	<b>Cost Rate</b>	<b>Weighted Cost</b>
Short-term Debt	5.64%	3.34%	0.19%
Long-term Debt	39.78%	5.13%	2.04%
Preferred Stock	0.09%	8.00%	0.01%
Common Equity	54.50%	9.30%	5.07%
Total Capitalization	100.00%		7.30%

**Rate Year 3**

<b>Class of Capital</b>	<b>Weight</b>	<b>Cost Rate</b>	<b>Weighted Cost</b>
Short-term Debt	5.87%	3.43%	0.20%
Long-term Debt	39.04%	5.13%	2.00%
Preferred Stock	0.08%	8.00%	0.01%
Common Equity	55.00%	9.30%	5.11%
Total Capitalization	100.00%		7.32%

Revenue Settlement Agreement, Sections 1.7.1, 1.7.2 and 1.7.3; Attachment 6.

**g. Credit Rating, Financial Viability and Capital Markets**

The Company improved its credit ratings since 2014, but it had not accessed the capital markets since 2013. Response to Interrogatory FI-230. The Company is presently rated A-/stable by Standard & Poor's (S&P). Responses to Interrogatories FI-78 and FI-82, Attachments 1 and 2; Tr. 10/5/18, pp. 67 and 68. Although CNG has not communicated with the rating agencies with regards to the particulars of the Revenue Settlement Agreement, the Company noted the credit metrics, under all scenarios, are supportive of the existing CNG credit ratings, under the proposed Revenue Settlement Agreement. CNG suggested that the credit rating agencies would view the thicker equity portion and higher ROE, as positive signs that could help to alleviate the perceived extra financial risk from the 2018 TCJA. Responses to Interrogatories FI-82

and FI-233; Tr. 10/5/18, p. 64. Subsequently, the Company indicated that the proposed Revenue Settlement Agreement would preserve the credit quality and would be consistent with the current credit rating. Furthermore, the ring fencing measures incorporated into the 2015 Iberdrola Change of Control, provide the credit rating agencies a measure of security because CNG's regulated operating company assets are insulated from an affiliate company's bankruptcy and credit risk. According to CNG, it has become increasingly common to see ring fencing requirements, given the number of utility mergers. The ring fencing provision allows the operating company to be rated higher than its parent company, and this is reflected in the Company's current rating. Response to Interrogatory FI-232; Tr. 10/5/18, pp. 65-67.

CNG indicated that it does not target a specific dividend amount or payout ratio. However, based upon the Revenue Settlement Agreement's revenue requirement, its forecasted dividend payout ratio was 64% for 2019, 68% for 2020 and 79% for 2021. Response to Interrogatories FI-94, FI-95, FI-96 and FI-236; Tr. 10/5/18, pp. 70-72.

The Company did not develop forecasted financial statements reflecting the proposed Revenue Settlement Agreement or calculate key financial credit ratios incorporating all aspects of the negotiated Revenue Settlement Agreement's financial parameters (e.g. ROE, capital mix). Response to Interrogatory FI-240. CNG had previously computed these ratios under a 9.20% ROE baseline and calculated sensitivity for 10 basis point intervals up to a 10.2% ROE, in response to Interrogatory FI-104. The Company indicated that the response to Interrogatory FI-104 is sufficient for credit ratio analysis, as the 10 basis point change to ROE was not material.

These ratios, at the 9.20% ROE baseline, are as follows:

Financial Ratios:	2019	2020	2021
Total Asset Turnover	0.40x	0.41x	0.42x
Current Ratio	1.11x	1.10x	1.06x
Cash Flow from Operations	14%	19%	21%
Total Debt to Total Capitalization	45%	45%	45%
Times Interest Earned	7.4x	8.1x	8.4x
Fixed Coverage Ratio	7.4x	8.1x	8.1x
Cash Flow Coverage Ratio	9.7x	10.6x	10.9x
Operating Margin	11.5%	11.4%	11.4%
Profit Margin	7.5%	7.5%	7.5%
Contribution Margin	55.8%	57.3%	57.4%
Return on Total Assets	3.0%	3.1%	3.1%
Return on Invested Capital	5.0%	5.1%	5.1%
ROE Net Income Method	7.5%	7.5%	7.6%
ROE Cost of Capital Method	9.2%	9.2%	0.2%

Responses to Interrogatories FI-104 and FI-240.

The Authority reviewed the Company's response to FI-104 and applied the values of the sensitivity analysis for a 10 basis point change, to replicate the allowed 9.30% ROE, and concurs that the difference is not material.

CNG also indicated that the Revenue Settlement Agreement would be supportive of the Company's current credit ratings and allow for continued access to bank and capital markets, on competitive terms. Response to Interrogatory FI-241. The Company supported its position indicating that the financial ratio Earnings Before Interest and Taxes, Depreciation and Amortization (EBITDA) to Interest Expense will be 9.7x to 10.7x over the rate years, which indicated a very strong ability to meet debt service obligations. Response to Interrogatory FI-243.

CNG also provided an exhibit that forecasted the financial ratios that are typically examined by the three credit ratings agencies, over the rate years at a 9.20% ROE base line and used the provided sensitivity analysis at increments of 10 basis points, to estimate the financial ratios at the proposed 9.30% ROE. To this financial ratio analysis, the Company overlaid the benchmarking criteria used by each rating agency, for each of the financial ratios. This analysis was done to provide an estimate regarding where each ratio, at the proposed 9.30% ROE, falls within the credit rating process. These financial ratios included various Moody's Key Indicators, S&P Ratios and Fitch Key Metrics. Response to Interrogatory FI-82; Attachment 1; Tr. 10/5/18, pp. 68-71. Based upon the Authority's review of these forecasted financials and an overlay of the benchmarking ranges of the respective credit rating agencies, the Authority concurs that the Revenue Settlement Agreement would be supportive of the current Company credit rating.

#### **h. Weighted Average Cost of Capital**

Consistent with Conn. Gen. Stat. §16-19e(a)(4), the Authority identified an appropriate ROR on the rate base for the Company's overall capital structure. The Authority reviewed the key components of the Revenue Settlement Agreement's capital structure, estimated the cost of each component of capital and then calculated its overall cost of capital, by weighting each component cost by its proportionate share of the overall capital structure. The Authority approves the Revenue Settlement Agreement's ratemaking capitalization mix, including capital structure components, in full. The allowed weighted cost of capital for each of the rate years is an ROR on rate base of 7.28% for the Rate Year 2019, 7.30% for the Rate Year 2020 and 7.32% for the Rate Year 2021.

### **3. Earnings Sharing Mechanism (ESM)**

The Revenue Settlement Agreement provides for a continuation of the current ESM to be shared with customers and shareholders on a 50/50 basis, above the Revenue Settlement Agreement's authorized ROE of 9.30%. In terms of administration, CNG will file an annual ESM report at the end of a calendar year, and, if the Company has earned above its allowed ROE for the year, any earnings above the allowed 9.30% ROE will be shared equally (50/50) between ratepayers and the Company, through a credit applied on bills. Revenue Settlement Agreement, Sections 1.8.1 and 1.8.2; Response to Interrogatory FI-237; Joint Brief, p. 12.

The Authority considered the proposed ESM and finds it to be consistent with past Company precedent, with regards to the equal sharing between ratepayers and the Company, at or above the allowed ROE. The proposed ESM is adopted without modification.

## F. RETIREMENT BENEFITS

### 1. 401(k)

A 401(k) plan is a qualified retirement plan, under the Internal Revenue Code, that allows employees to save a portion of their salary for retirement, on a pre-tax or after-tax basis. Typically, employers match a portion of each employee's contribution, with the employee choosing the investment options for the contributions.

The following table shows the amount of 401(k) in the initial application and subsequent adjustment for the 401 (k) included in the Revenue Settlement Agreement:

	2019	2020	2021
Total 401(k) included in initial application	\$1,052,000	\$1,084,000	\$1,117,000
401 (k) adjustment per Settlement	(\$127,000)	(\$130,000)	(\$134,000)
Total 401 (k) expense in Settlement	\$925,000	\$954,000	\$983,000

Response to Interrogatory FI-210.

The Revenue Settling Parties adjusted the 401(k) by using 50% of the cost of employees receiving other compensation in the form of bonuses. The rationale for using this 50% adjustment is that, "it was a percentage that had been used in the past, as far as the disallowance is concerned. So we're just using something that has been accepted in the past by the department, by the Authority." Response to Interrogatory FI-210, Attachment 1 and Tr. 10/5/18, pp. 46 and 47.

Specifically, the 401(k) adjustment is calculated as follows:

Description	Rate Year 1 in (000)	Rate Year 2 in (000)	Rate Year 3 in (000)	Reference
Employer Match	930	958	986	Schedule WP C-3.24f Line 32
Less Cost for Employees not Receiving Other Compensation	570	587	604	Schedule WP C-3.24f Line 11
Cost for Employees Receiving Other Compensation	360	371	382	
OCC Adjustment (50% of employees receiving Other compensation)	180	185	191	

401 (k) Expense Allocation Percentage	70%	70%	70%	Schedule WP C-3.24f A-C
Adjustment (50% of employees receiving other compensation)	127	130	134	

## Response to Interrogatory FI-210, Attachment 1

The Authority agrees with the Revenue Settlement adjustment. The Authority approves the adjusted 401(k) expense of \$925,000 for Rate Year 1, \$954,000 for Rate Year 2 and \$983,000 for Rate Year 3.

## 2. Pensions

In the Revenue Settlement Agreement, CNG's expense for its pension plans remained the same, as proposed in its original Application. The pension expense is \$6,631,000 for Rate Year 1, \$6,186,000 for Rate Year 2 and \$4,944,000 for Rate Year 3. Revenue Settlement Agreement, Attachment 3. The pension expense is calculated on the basis of the accounting rules, set forth in Accounting Standards Codification (ASC) 715-30. Response to Interrogatory FI-45. The pension plans are as follows:

1. CNG New Hartford Union Plan Participants - As of December 1, 2009, the Company no longer offers a Defined Benefit Pension Plan to newly hired CNG Hartford Union employees. Employees hired on or after December 1, 2009, receive a Company match on a per pay period basis of 150% up to 6% of base pay. Employees hired prior to December 1, 2009, receive a Company match on a per pay period basis of 100% up to 2% of base pay, prior to the earlier of age 35 or 10 years of service. Employees who attain the age 35, or 10 years of continuous service, receive a Company Match of 100% up to 3%; employees who attain the age 45, or 20 years of continuous service, receive a Company Match of 100% up to 4.5%. Application, Schedule WP C-3.24f.
2. CNG New Greenwich Union Plan Participants - As of April 1, 2011, the Company no longer offers a Defined Benefit Pension Plan to newly hired CNG Greenwich Union employees. Employees hired on or after April 1, 2011, receive a Company match on a per pay period basis of 150% up to 6% of base pay. Employees hired prior to April 1, 2011, receive a Company match on a per pay period basis of 100% up to 2% of base pay, prior to the earlier of age 50, or 30 years of service. Employees who attain age 50, or 30 years of continuous service, receive a Company Match of 100% up to 6% of compensation. Application, Schedule WP C-3.24f.
3. CNG New Nonunion Plan Participants - As of January 1, 2018, the Company no longer offers a Defined Benefit Pension Plan to newly hired CNG Non-Union employees. Employees hired on or after January 1, 2018, receive a 6% of eligible pay non-elective contribution, on a per pay period basis. In addition, all nonunion employees receive a Company match of 50% up to 6% of eligible pay, prior to the earlier of age 45, or 20 years of continuous service. Employees who

attain the age of 45, or 20 years of continuous service as of June 30th of a year, receive a Company match of 75% up to 6% of eligible pay. Application, Schedule WP C-3.24f.

CNG's pension funding policy is to contribute no less than the greater of the minimum required contribution or the amount needed to reach an 80% funded status, in order to avoid benefit restrictions. Response to Interrogatory FI-218; Tr. 10/5/18, pp. 48 and 49. The Authority finds CNG's pension funding policy to be acceptable.

The Authority analyzed CNG's pension plan expense through examination of their actuarial statements. Response to Interrogatory FI-45. In addition, the Authority reviewed CNG's capital market assumptions on pensions, based on a combination of historical data and forward looking analysis over the forecast period as developed by outside financial advisors. Response to Interrogatory FI-13. The Authority finds CNG's pension expense request to be reasonable. A representative of the OCC confirmed this by stating, "From OCC's standpoint I think we had reviewed those expenses. We had some help from our consultants and we believe that the level of those expenses were -- were reasonable." Tr. 10/5/18, p. 46. The Authority approves the Revenue Settlement Agreement's pension expense as follows:

Rate Year	Pension Expense
1	\$6,631,000
2	\$6,186,000
3	\$4,944,000

### 3. Non-Qualified Plan

The Company offered a non-qualified pension plan for officers earning above the level of compensation, as designated by the Internal Revenue Service (IRS). This non-qualified pension plan, known as the CNG Officers' Retirement Plan, is commonly known as the supplemental employees retirement plan (SERP). The SERP provided a maximum of 65% of average annual compensation minus benefits from the qualified plan, to eligible participants that terminated employment on or after age 60. Eligibility for the SERP was determined to be any officer designated by the Board of Directors of the Company. Response to Interrogatory FI-73. The following table shows the amount of SERP in the initial application, and the subsequent adjustment for the SERP included in the Revenue Settlement Agreement:

	2019	2020	2021
Total SERP included in application	\$186,235	\$187,219	\$188,100
SERP adjustment %	0.00%	33.33%	66.67%
SERP settlement adjustment	-----	\$62,406	\$125,400
Total SERP in settlement	\$186,235	\$124,813	\$62,700

Response to Interrogatory FI-222.

The Revenue Settlement Agreement has a three year phase out of the SERP, which is consistent with The United Illuminating Company (UI) SERP treatment, in the

Decision dated December 14, 2016 in Docket No. 16-06-04, Application of the United Illuminating Company to Increase Its Rates and Charges, and with The Southern Connecticut Gas Company (Southern) SERP treatment in the Decision dated December 13, 2017 in Docket No. 17-05-42, Application of The Southern Connecticut Gas Company to Increase its Rates and Charges (Southern Decision). The SERP is an additional pension plan for executive class employees and has been closed to new entrants, since May 1, 2004. Response to Interrogatory FI-71. Tr. 10/5/18, pp. 52 and 53. The Authority approves this three year phase out treatment of the SERP.

#### **4. Post Retirement Benefit Plan (OPEB)**

CNG, in its last rate case in 2013, provided retiree medical benefits on the basis of the accounting rules set forth in ASC 715-60. CNG was required to recognize these benefits during the working career of employees, not after they retired. However, at present, a change has taken place such that employees at age 65 that become eligible for Medicare, will be required to have their group health expense through the parent, Avangrid. However, Avangrid will continue to pay for employees' new health care insurance. Avangrid selected RightOpt, a private health insurance exchange, to assist in choosing and paying for the new health care insurance. After enrollment in a medical plan through RightOpt, Avangrid will continue to assist in payment of the new insurance, by providing an annual tax free subsidy via a Health Reimbursement Arrangement (HRA). Response to Interrogatory FI-29, Attachment 1. Most recently, in 2016, post-65 non-union retirees were offered the option of a Medicare exchange program with a funded HRA. There are no legacy options for the post 65 retirees. Response to Interrogatory FI-11.

There are several reasons that CNG has been able to contain costs for its OPEB expense. The medical service cost declines each year since the OPEB Plans are closed to new participants. The Greenwich union employees hired on or after December 1, 2009, Hartford union employees hired on or after April 1, 2011, and nonunion employees hired after April 1, 2010, are not eligible to participate. In addition, the Medical Service Cost decreases to \$0, once an active participant is fully eligible for benefits. This occurs at age 55 with 10 years of service, for all eligible employees in the Hartford union, hired before January 1, 2004, Greenwich union employees hired before January 1, 2005, and nonunion participants hired before January 1, 2004. Further, the eligible population ages and declines in number annually, which results in a decrease in the Medical Service Cost. Response to Interrogatory FI-30.

The Medical Non-Service Cost is declining due to the following factors:

1. The Accumulated Post-retirement Benefit Obligation is declining, since the plans are closed and also because of the demographics of the active and retired populations. The retiree obligation declines as retirees pass away.
2. As of January 1, 2016, all post-65 non-union retirees are offered the option of a Medicare exchange program with a funded HRA, further reducing the Company's liability.

Response to Interrogatory FI-30.

CNG stated that the IRS does not require plan sponsors to make contributions to OPEB Plans. In addition, there is no established methodology for calculating a minimum required contribution. Historically, CNG has varied its contributions to the OPEB plans to meet its funding objectives. In some years, CNG's OPEB contributions exceeded the amount allowed in rates and, in some years, contributed less than the amount allowed in rates. CNG requested that it should be allowed the flexibility, based on advice and analysis of its actuaries and tax advisors, to choose the timing and level of contributions for its OPEB plans, which will maximize savings for customers. Response to Interrogatory FI-216. The Authority concurs with giving CNG this flexibility, as it serves to maximize savings for customers and there are no required contributions mandated by the IRS.

The Authority approves the OPEB expenses as follows.

Rate Year	OPEB Expense
1	\$162,000
2	\$44,000
3	(\$12,000)

## G. EXPENSES

### 1. Operations & Maintenance (O&M) Expenses

The Revenue Settling Parties made reductions to operating expenses, as a result of the settlement negotiations and Revenue Settlement Agreement. Expenses were reduced in such categories as depreciation, audit/accounting, travel, education, and training, including significant reductions of \$5.227 million and \$1.667 million in amortization expenses, for Rate Years 2 and 3. Settlement Agreement, Attachment 3, Lines 13 through 40. The Authority approves the operating expense, as reduced by the Revenue Settlement Agreement.

The table below depicts the original filing from CNG, the overall expense reduction and the final amount of expense to be included in rates, as a result of the Revenue Settlement Agreement:

	O&M Expenses	Settlement Adjustment	Settlement Agreement
Rate Year 1	\$173,734	(\$1,700)	\$172,034
Rate Year 2	\$185,455	(\$7,031)	\$178,424
Rate Year 3	\$188,953	(\$3,600)	\$185,353

(In thousands)

Revenue Settlement Agreement Attachment 3, Line 24

### 2. Credit Card Fees

The applicant proposed that credit and debit card convenience fees be recovered from ratepayers. The program allows residential customers the option of paying their bills using a credit or debit card. The originally proposed estimated costs provided by

the company are \$460,000 for Rate Year 1, \$468,000 for Rate Year 2, as well as \$476,000 for Rate Year 3, for a total of \$1.404 million. Earley PFT, p. 27. The Revenue Settlement Agreement makes no adjustment to the originally proposed amounts in the Application.

The Authority finds that the proposal is consistent with the Southern Decision. As part of the Revenue Settlement Agreement, the Company shall reconcile actual costs and the allowed amounts, in the Company's next rate case. Based on the facts presented by the Settling Parties, the Authority approves the proposed credit card/debit card fee recovery.

### **3. Non-Hardship Uncollectible Expenses**

CNG originally proposed total non-hardship uncollectible expenses of \$5.774 million for 2019, \$5.821 million for 2020 and \$5.914 million for 2021. Application, Schedules WP C-3.20 A, C-3.20 B and C-3.20 C. These amounts were based on CNG's proposed uncollectible factor of 1.62%. Id. The Revenue Settling Parties proposed increases of \$0.067 million for Rate Year 1, \$0.068 million for Rate Year 2, and \$0.068 million for Rate Year 3. Revenue Settlement Agreement, Attachment 3. As a result, the revised non-hardship uncollectible expenses are \$5.841 (\$5.774 + \$0.067) million for 2019, \$5.889 (\$5.821 + \$0.068) million for 2020 and \$5.982 (\$5.914 + \$0.068) million for 2021. Id. The Revenue Settling Parties agreed to additional revenue requirements of \$9.907 million for 2019, \$4.628 million for 2020 and \$5.212 million for 2021. Thus, the uncollectible expenses associated with the additional revenues are \$0.160 ( $\$9.907 \times 1.62\%$ ) million for 2019, \$0.235 ( $[\$9.907 + \$4.628] \times 1.62\%$ ) million for 2020 and \$0.320 ( $[\$9.907 + \$4.628 + \$5.212] \times 1.62\%$ ) million for 2021. Thus, the allowed non-hardship expenses are \$6.001 (\$5.841 + \$0.160) million for 2019, \$6.124 (\$5.889 + \$0.235) million for 2020 and \$6.302 (\$5.982 + \$0.320) million for 2021.

### **4. Hardship Uncollectible Expenses**

#### **a. Hardship Account Net Write-Offs**

CNG proposed annual hardship account net write-offs of \$2.726 million, for each rate year. Application, Schedules WP C-3.20 A, C-3.20 B and C-3.20 C. The proposed amount is a three-year average of the hardship account net write-offs for 2015 to 2017. Id. The Revenue Settling Parties increased the annual hardship write-off amount by \$0.462 million to \$3.188 million per year. Revenue Settlement Agreement, Attachment 3. The Company reported a deferred hardship account net write-offs balance of \$9.952 million as of December 31, 2018, and proposed a four-year amortization period for the deferred amount. Application, Schedule WP C-3.29 A-C, p. 2. Thus, CNG proposed a deferred hardship account net write-offs amortization expense of \$2.488 million ( $\$9.952 / 4$ ) for each rate year. Id. Therefore, the total allowed hardship account net write-offs, in each rate year, is \$5.676 ( $\$3.188 + \$2.488$ ) million.

#### **b. Matching Payment Program**

CNG proposed an annual matching payment program (MPP) cost of \$2.040 million, for each rate year. The proposed amount is a three-year average of the MPP

charges, for 2014 to 2016. Application, Schedule WP C-3.29 A-C, p. 4; Revenue Settlement Agreement, Attachment 5. Also, the Company reported an MPP regulatory asset balance of \$1.705 million as of December 31, 2018, and proposed a four-year amortization period. Thus, CNG proposed to add \$0.426 million ( $\$1.705 / 4$ ) in each rate year. *Id.* Finally, in accordance with Section 1.6.5 of the Revenue Settlement Agreement, the Company is allowed to defer the differences between the ongoing MPP cost of \$2.040 million allowed in base rates and the actual annual amounts incurred. These amounts were unchanged from the Application to the Revenue Settlement Agreement. Thus, the allowed annual MPP expense, in each rate year, is \$2.466 ( $\$2.040 + \$0.426$ ) million.

### c. Hardship Grant Program

CNG originally proposed to recover an annual hardship grant program cost of \$3 million in 2019, 2020 and 2021. Application, Schedules WP C-3.29 A-C, p. 3. The Revenue Settling Parties agreed for CNG to implement a hardship grant program, similar to the program currently in place for Southern. CNG will implement the hardship grant program starting in Rate Year 2, at \$1.500 million, and continue annually at that level, until its next rate case. The Authority will order CNG to submit, on or before July 1, 2019, a compliance filing for design of the hardship grant program. The Revenue Settling Parties proposed to collect \$1.5 million in 2020 and 2021, with no collection in 2019. The Authority accepts those hardship grant costs of \$1.5 million for years 2020 and 2021. Settlement Agreement, Attachment 5.

### d. Summary of Uncollectible Expenses

Based on the Revenue Settlement Agreement, the Authority approves the allowed non-hardship and hardship uncollectible expenses, as summarized in the table below:

<b>Uncollectible Expenses (000)</b>	<b>Rate Year 1</b>	<b>Rate Year 2</b>	<b>Rate Year 3</b>
Non-Hardship	\$6.001	\$6.124	\$6.302
Hardship Accounts Net Write-Offs	\$5.676	\$5.676	\$5.676
Hardship Matching Payment Program	\$2.466	\$2.466	\$2.466
Hardship Grant Program	<u>\$0.000</u>	<u>\$1.500</u>	<u>\$1.500</u>
Total Allowed Uncollectible Expenses	\$14.143	\$15.766	\$15.944

## 5. Impact of Federal Tax Law Change

With the passing of the 2018 TCJA, the Federal corporate income tax rate was cut from 35% to 21%. As part of the Revenue Settlement Agreement, the Company reflected the lower corporate tax rate of 21%, the amortization of a 2018 tax deferral and a credit of \$371,000, related to the Company's amortization over 32 years of its excess accumulated deferred federal income tax (EDIT). Settlement Agreement, Section 1.5.1.

The 2018 tax deferral equals the tax savings for the period January 2018 through December 2018, due to the tax act. Settlement Agreement, p. 6(n3). In its original application, the Company calculated the deferral to be \$6.742 million. Application, Schedule C-3.29. Subsequently, the Revenue Settling Parties increased the deferral to include carrying costs of \$378,000, for calendar year 2018. The total \$7.120 million tax deferral (\$6.742 million + \$0.378 million) will be amortized at \$3.560 million per year, for Rate Years 1 and 2. Revenue Settlement Agreement, Attachment 5, p. 1. The revenue requirement in the Revenue Settlement Agreement reflects the amortization of the \$7.120 million tax deferral. Revenue Settlement Agreement, p. 6(n3).

The Authority approves the Revenue Settling Parties' proposed plan for addressing the impacts of the 2018 TCJA.

#### **H. COMPENSATION/FULL TIME EQUIVALENTS**

In its Application, the Company requested a compensation expense of \$26.979 million for Rate Year 1, \$28.001 million for Rate Year 2 and \$29.062 million for Rate Year 3. Application, Schedule C-3.23 A – C and Earley PFT, p. 17. The compensation expense included six incremental full-time equivalents (FTEs) to be hired in 2019, for its Apprentice Helper Resource Plan (AHRP). Judge and Hawley PFT, pp. 17 and 18. CNG stated that the AHRP should establish a pool of six Apprentice Helpers, to be trained and ready to move into skilled positions in construction and maintenance, customer services, and gas operations technical services. The Company contended that the AHRP is set-up to mirror Southern's AHRP that was approved by the Authority in the Southern Decision. Id.

The Revenue Settling Parties made no changes to the Company's compensation expense and the incremental FTEs, in the original Application. As part of the Revenue Settlement Agreement, the Company agrees to submit bi-annual compliance filings in 2019, 2020 and 2021, to report on the status of the FTE's in the AHRP. Revenue Settlement Agreement, Section 1.4.3.

The Authority approves the proposed compensation expense and FTE proposal for the three rate years, as proposed in the Revenue Settlement Agreement.

#### **I. PIPELINE SAFETY**

##### **1. Geographic Information System (GIS)**

CNG currently maintains gas service records with a paper records system involving thousands of paper records. The paper records provide system information and location of the gas facilities. The Company's proposed GIS Service Attribute Project (GIS SAP) will digitize these gas service records to create a line from the gas main to the approximate meter location in the GIS system. The service cards will be reviewed to obtain attributes including age, size, pressure class and material of the service. The gas service attributes will be tagged to the digitized service line. Judge and Hawley PFT, pp. 21 and 22. The GIS SAP will bring efficiencies in managing the distribution facilities by allowing leaks to be tracked, repaired and documented. The project will enable the Company to improve outage response in the event of a gas

outage. Id. The Authority finds the GIS SAP to be a critical component to the advancement of the Company's distribution integrity management program. The GIS SAP is necessary to update and modernize the Company's system mapping. The GIS SAP is expected to cost approximately \$2.0 million, of which \$600 thousand will be funded by the Company and not recovered in rates as specified in the Authority's Decision dated January 31, 2018 in Docket No. 17-12-02, Assessment of Civil Penalty Against Connecticut Natural Gas Corporation for Pipeline Safety Violations. Judge and Hawley PFT, pp. 3- 5.

## **2. No Access Charge on Inside Service Line Inspections**

CNG is required to inspect and perform maintenance on company owned piping, as required by Title 49 of the Code of Federal Regulations Part 192. If company owned piping is inside a building, CNG must be provided access to the inside gas piping. CNG stated that they have not gained access to inspect approximately 3,998 inside service lines. Judge and Hawley PFT, p. 19. CNG planned to impose a \$90 trip charge on a customer's account, if the customer repeatedly fails to provide the Company access to perform mandated inspections on inside gas services. Revenue Settlement Agreement p. 13. It is expected that the customer will call the Company when they see the charge on the gas bill, and CNG will advise the customer of the necessity for entry and performance of the inside inspection. It will be at CNG's discretion to waive the \$90 charge as a means to motivate the customer. Judge and Hawley PFT, p. 21. The Authority will order CNG to establish a trip charge to be applied in each instance the Company is denied access to perform mandated inspections on inside gas services, based on the criteria specified in the Revenue Settlement Agreement.

## **3. Pipe Replacement Program**

CNG is currently four years into a 20-year program to replace all cast iron and bare steel within the distribution system. Judge and Hawley, PFT, p. 11. Cracking of cast iron and corrosion of bare steel are major sources of leaks. Smaller diameter pipes are more susceptible to breaks, but even large diameter cast iron pipes can break and result in leaks or incidents. The only way to reduce the threat of cast iron and bare steel pipe leaks is through replacement. State-of-the-art materials, such as cathodically protected and coated steel and plastic pipe, are much less leak prone. Judge and Hawley PFT, p. 12.

As of year-end 2017, CNG had 296 miles of cast iron and 12 miles of bare steel mains and approximately 7,000 non-state-of-the-art service laterals. Judge and Hawley PFT, pp. 6 and 13. According to CNG, "there is currently not a proven analytical method in the industry for determining where the next failure might occur, so CNG is continuing on pace with its 20-year replacement plan to mitigate [this] risk." Id. CNG proposed its capital spending on cast iron and bare steel replacement to be \$23.447 million in 2019, \$23.450 million in 2020, and \$23.500 million in 2021. Revenue Settlement Agreement Attachment 2, p. 3. The Authority finds that the level of capital spending proposed for replacement of cast iron mains, bare steel mains and bare steel services, is reasonably adequate to provide for the integrity of CNG's pipeline system. This level of replacement reflects the improvement required by the Gas Distribution Integrity Management regulations. The Authority will order CNG to spend

approximately \$23.447 million in 2019, approximately \$23.450 million in 2020, approximately \$23.500 million in 2021, and no less than \$23.500 million over each subsequent calendar year.

The Authority, through the Gas Pipeline Safety Unit (GPSU), will be actively reviewing the Company's progress and will work with CNG to determine if an adequate level of safety improvement is being attained. In addition to the on-going review provided by the GPSU, CNG will be ordered to file a pipe replacement program report.

#### **4. Staffing**

As with most companies, CNG's current workforce is maturing. CNG faces challenges with the replacement of the current workforce with skilled individuals, as positions are vacated by retirements. Judge and Hawley PFT, p. 17. CNG's proposed Apprentice Helper Resource Plan will provide a feeder pool of apprentices that will be trained, capable and available to move into a skilled position. Id. With retirements occurring in the near future, the Company will be faced with a reduction in its skilled workforce. In addition, the Company continues to expand its gas system and increase its cast iron/bare steel replacement program. With the potential for a significant loss of experience and knowledge in the near future, the Company must ensure that adequate staffing of competent and qualified personnel are in place in a timely manner, to provide the necessary project design, construction, operations, maintenance, training and oversight at CNG. The Authority will take staffing levels into consideration if future violations of federal or state safety regulations necessitate civil penalties.

#### **5. Pipeline Safety Orders**

In the July 17, 2014 Decision in Docket No. 09-09-08RE01, DPUC Investigation into the Contemplated Workforce Reductions by Connecticut Natural Gas Corporation and Southern Connecticut Gas Company – Modify and Rescind Orders, the Authority concluded that any orders contained in the February 11, 2010 Decision in Docket No. 09-09-08, DPUC Investigation into the Contemplated Workforce Reductions by Connecticut Natural Gas Corporation and Southern Connecticut Gas Company would terminate at the time of issuance of the final Decision in CNG's next rate case. The Authority has determined that continuance of some of these orders is necessary to ensure public safety and, therefore, will provide a set of new orders to provide ongoing oversight of the Company's operations and maintenance programs. In addition, Order No. 14, Decision dated January 22, 2014 in Docket No. 13-06-08, Application of Connecticut Natural Gas Corporation to Increase Its Rates and Charges (2014 CNG Decision), will be rescinded. Order No. 14 required the Company to reduce the number of class 3 leaks on state-of-the-art pipe to 120 or less at the end 2017, and at the end of each calendar year. Order No. 14 is duplicative of an order in this Decision and is no longer needed to assist the Authority.

#### **6. Civil Penalty and Management Audit**

On January 31, 2018, the Authority issued its final decision in Docket No. 17-12-02, Assessment of Civil Penalty Against The Connecticut Natural Gas Corporation for Pipeline Safety Violations. In that Decision, the Authority assessed CNG a \$1.5 million

civil penalty for multiple violations of Title 49 of the Code of Federal Regulation Part 192 resulting from CNG management's failure to address the improper installation and operation of medium density polyethylene (MDPE) electrofusion tees in excess of the maximum allowed operating pressures. The Authority is in the process of conducting a management audit to evaluate CNG's response to these violations. The Authority notes that, irrespective of the approvals granted in this Docket, any negative findings that arise from the management audit may subject CNG to additional penalties, prudence review, or other remedies available to the Authority.

## **J. REVENUE, RATE DESIGN AND TARIFFS**

### **1. Distribution Rates / Other Revenues**

The Revenue Settlement Agreement reduced the distribution revenue request of \$27.785 million, submitted in the Company's original application, by \$8.038 million, or approximately 29%. The Revenue Settlement Agreement's distribution rate increase reflects incremental distribution revenue requirements of \$19.747 million over a three-year rate period, as filed in the Application. The incremental distribution revenue requirements in the Revenue Settlement Agreement are \$9.907 million, \$4.628 million and \$5.212 million, for Rate Years 1, 2, and 3, respectively. Revenue Settlement Agreement, pp. 1 and 2. The Company stated that under the Revenue Settlement Agreement, distribution revenues will incrementally increase over prior year revenues, by 4.78% for Rate Year 1, 2.13% for Rate Year 2, and 2.32% for Rate Year 3. Overall revenues will experience an incremental increase of 2.60% for Rate Year 1, 1.18% for Rate Year 2, and 1.34% for Rate Year 3. *Id.*, p. 4.

In its Application, the Company included an exhibit of Other Revenues of approximately \$2.265 million for Rate Year 1, \$2.294 million for Rate Year 2, and \$2.32 million for Rate Year 3. Application, Schedule WP C 3.1b A-C. The Company's other revenues consist primarily of late payment charges, returned check fees, service rental, and miscellaneous revenues. Other Revenues are included in the Company's total revenue calculations.

The Authority accepts the distribution rate revenue adjustments proposed in the Revenue Settlement Agreement. The reduced incremental revenue amounts proposed in the Revenue Settlement Agreement (as compared to the original Application), will lessen the overall bill impact to customers. Other Revenues, though small in magnitude, reduce the distribution revenue requirements and therefore, benefit ratepayers.

### **2. Rate Mechanisms**

#### **a. Decoupling**

In its original Application, the Company stated that it was not introducing any new rate mechanisms. The Company has rate mechanisms for Decoupling, DIMP, and System Expansion Reconciliation. However, CNG requested to make certain modifications to its Decoupling and DIMP rate mechanisms. Goodwin PFT, p. 12. First, the Company proposed to apply the current decoupling mechanism to all firm customers

going forward. CNG's current decoupling mechanism only applies to existing customers, not system expansion (SE) customers. Under the Company's modified decoupling mechanism, both existing and SE customers will receive a decoupling charge or credit. The Company noted that CNG's proposed decoupling mechanism is consistent with the decoupling mechanism approved in the Southern Decision. Goodwin PFT, p. 4.

The Company expressed that it will include all distribution revenue, other non-tariff-based revenue and special contract revenue, in its decoupling calculation. CNG noted that it will exclude the merger-related credit of \$1.25 million per year, Conservation Adjustment Mechanism (CAM) revenues, all DIMP-related revenues, System Expansion Revenues, non-firm margin revenues, and revenues related to gas costs. Any over or under recovery of other revenues, will be reflected in the Company's revenue decoupling adjustment. Id., pp. 13 and 14. The Company proposed a decoupling target illustration of approximately \$178.5 million for Rate Year 1, \$183.6 million for Rate Year 2, and \$189.2 million for Rate Year 3.<sup>3</sup>

The Company provided its rationale to expand the decoupling mechanism to include all firm customers. The Company maintained that SE customers were excluded from the decoupling mechanism due to an incorrect understanding of the SER mechanism that resulted from the Decision dated January 22, 2014 in Docket No. 13-06-08, Application of Connecticut Natural Gas Corporation to Increase its Rates and Charges (2014 CNG Decision). Specifically, the Company referenced the following:

“Effectively, the SER will recover any revenue shortfalls from new customers, which occur for any reason. Consequently, the decoupling mechanism should apply to only existing customers.”

2014 CNG Decision, p. 121.

The Company stated that because the SER only trues-up the direct incremental costs of providing service to new SE customers, the SER does not encompass the cost recovery for gate stations, existing infrastructure that connects new SE customers to the system, and other rate base or operational & maintenance expenses, such as payroll, benefits, facilities and the like. The Company contended that if only non-SE customers are held responsible for any under or over-recovery of allowed cost of service levels, the result would be unfair as the bulk of the costs intended for the decoupling target set in a rate case goes far beyond just the costs to serve new SE customers. Response to Interrogatory RA-57.

Section 1.11 of the proposed Revenue Settlement Agreement modifies CNG's revenue decoupling mechanism to include SE customers. The Authority finds that the Company's rationale regarding the boundaries of the current SER mechanism in relation to SE customer cost recovery, to be valid. Specifically, the Company identified that certain cost categories related to existing infrastructure that connects SE customers to CNG's system, are accounted for in the decoupling mechanism. Therefore, the

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<sup>3</sup> System expansion revenues were estimated using current rates. Revenue Settlement Agreement, Attachment 9.

Authority agrees with Section 1.11 of the Revenue Settlement Agreement, which modifies CNG's existing Revenue Decoupling mechanism to be applied to existing and SE customers going forward.

The Company will file its annual compliance filing on revenue decoupling as stated in Section IV.B.6, superseding the order in the 2014 CNG Decision.

**b. DIMP Reconciliation Mechanism**

The Company proposed to modify its DIMP Reconciliation Mechanism to recover projected DIMP costs in base rates. Under the Revenue Settlement Agreement, DIMP revenue requirements will be included in base rate recovery. The DIMP reconciliation mechanism will, therefore, only reconcile the difference between the DIMP revenue requirement in base rates and actual revenue requirements incurred by CNG. Revenue Settlement Agreement, Section 1.9.4. The Company stated that it would make its annual DIMP filing around April 1<sup>st</sup> each year, to become effective in the May billing cycle. Id., Section 1.9.2.

The Company identified that its projected 2019 DIMP filing will likely reflect a shortfall in the recovery of actual 2018 DIMP revenue requirements because the 2018 DIMP revenue requirement was designed to be recovered in rates for the 12-month period of May 2018 through April 2019. However, the 2018 DIMP revenue will be a blend of 4 months at 2017-based rates and 8 months at 2018-based rates, which will result in lower 2018 revenues compared to 2018 revenue requirements. CNG proposed to charge the current DIMP rate through April 2019 to complete the 12-month recovery designed in the May 2018 through April 2019 DIMP Rates. Id., pp. 18-19. The Company provided additional information and an exhibit that further demonstrated the lag in the annual revenue collected to the annual revenue requirement, due to the timing of the DIMP rate changes. Response to Interrogatory OCC-174.

Section 1.9.5 of the Revenue Settlement Agreement acknowledges the lag time described above and that the 2019 filing will need to reconcile prior period true-ups. Further, the 2019 DIMP filing will address the DIMP revenue requirement through the end of 2018 compared with DIMP revenue collected. Under or over recoveries of the DIMP revenue requirement will be collected or refunded on a volumetric basis, using a Ccf rate applicable to all firm customers. Costs will be included in the distribution charge on customer bills and will not be a separate line item. Revenue Settlement Agreement, Sections 1.9.6 and 1.9.7.

Under the Revenue Settlement Agreement, the Company provided its DIMP revenue requirement analysis that identified the following required revenues; \$16.847 million in Rate Year 1, \$20.256 million in Rate Year 2 and \$23.587 million in Rate Year 3. Revenue Settlement Agreement, Attachment 7. These DIMP revenue requirements will be included in the Company's total revenue requirement and, as such, recovered in base rates.

The Authority finds that the proposed modification to the DIMP Reconciliation Mechanism, under the terms of the Revenue Settlement Agreement, is acceptable. The modifications will create a DIMP reconciling mechanism that will true-up base rate

recovery that will reconcile actual rate year DIMP costs with those contained in base rates for each year.

### **c. System Expansion Reconciliation Mechanism**

The Company did not propose modifications to its System Expansion Reconciliation Mechanism (SER). Goodwin PFT, p. 12. CNG will continue to reflect System Expansion Revenue requirements and revenues in base rates. Settlement Agreement 1.10.1. The Company provided an exhibit that illustrates the estimated under or over recovery of SE revenue requirement under the Revenue Settlement Agreement for Rate Years 2019 through 2021. Based on the estimates, the Company projected excess revenue requirements of approximately \$1.5 million for Rate Year 1, \$2.5 million for Rate Year 2 and \$3.3 million for Rate Year 3. Settlement Agreement, Attachment 8.

### **3. Sales Forecast**

The Company testified that, traditionally, customer forecasts were the product of time series analysis where historical trends heavily influenced forecasts. More recently, since initiation of the state's Comprehensive Energy Strategy (CES) and related gas expansion program in 2014, the Company attributed customer growth more as a function of the CES program and less driven by traditional drivers. Goodwin PFT, p. 7. For this reason, the Company relied on new customer addition projections to forecast customer growth in the rate years. Specifically, CNG projected that approximately 2,584 new system expansion customers and an additional 250 conversions from residential non-heating to residential-heating, will occur each year. *Id.*, p. 8. The Company provided the supporting documentation that was used to determine its projected customer growth. Response to Interrogatory RA-9.

The Company explained its methodology to forecast normalized use per customer (NUPC). CNG utilized six econometric models to forecast firm NUPC that covers Residential Heating, Residential Multi-dwelling and combined Commercial and Industrial usage. The Company stated that each model uses ten years of normalized throughput data divided by actual customer counts to derive historical monthly NUPC trends. Each model was then regressed with independent and trend variables. CNG identified that trend variables account for a variety of factors that could influence the change in energy use over time, including equipment upgrades, equipment replacement, turnover of the building stock and the penetration of new energy technologies. Response to Interrogatory RA-13. Lastly, the Company stated that a few large Industrial customers were removed from the econometric data and handled as an out of model adjustment to avoid the impact of a large customer on econometric results. Goodwin PFT, p. 9

The Company described how it determined peak day demand for each rate class with a demand component. CNG used actual maximum daily quantity (MDQ) values billed to customers for the Residential Multi Dwelling Service, Small General Service, Medium General Service and Large General Service rate classes, for the most recent twelve months. These values were then divided by the actual number of customers in each rate class to derive a monthly MDQ per customer figure. A twelve-month average

for each rate class was calculated using the monthly MDQ per customer figures. Customer counts, prior to any out of model adjustments, were then multiplied by the average MDQ per customer value.

In addition, the Company seeks input from its Sales group prior to the development of any sales forecast seeking information on known or expected significant changes in customer loads. The Sales group identifies if, on the horizon, there are any large new customers or load additions, loss of customers or significant reductions in customer loads, or new and emerging technologies that would likely impact sales and sales growth. The Rates and Sales groups will then typically have a discussion and the Rates group determines whether such a load change should be considered as an out-of-model adjustment or whether it is the normal trend of sales growth. Response to Interrogatory RA-15.

The Authority reviewed the Company's testimony and multiple interrogatory responses regarding its sales forecast. The Authority determines that the Company's sales forecast is acceptable as it encompasses normalized weather, out of model adjustments, and trend variables including energy efficiency, and economic conditions. In addition, the Authority finds that the Company proactively utilizes its Sales group and will consider any significant customer data provided by its Sales group that would warrant an adjustment to its sales forecast. The Authority finds that this "hands on practice" has merit because it demonstrates that the Company is attuned to current changes regarding its large customers and, as a result, CNG will reflect any substantial changes in its sales forecast.

#### **4. Cost of Service Study**

In general, a COSS is a mathematical business model that systematically assigns cost responsibility among customer classes for company assets and expenses incurred by a LDC to serve customers. Since the COSS culminates in summarizing customer, energy, demand and total costs by customer class, it is an important tool for documenting equity and establishing revenue requirements and tariff charges by customer class.

The Company filed its Cost of Service Study (COSS) in its Application and testified that the COSS follows the directives in the Authority's prior generic gas-related COSS proceedings.<sup>4</sup> Goodwin PFT, p. 20. Specifically, CNG affirmed that all of the allocators used in its COSS conform to the Authority's Generic COSS Decision. Response to Interrogatory RA-31. The Company identified its intent to recover the incremental electricity costs related to upgraded LNG liquefaction as part of the

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<sup>4</sup> By Decision dated August 9, 2000 in Docket No. 99-03-28, DPUC Review of Natural Gas Companies Cost of Service Methodologies, the Authority established a COSS architecture that included prescribing extensive allocation rules that standardized COSS methodologies for all gas companies. (Generic COSS Decision). By Decision dated September 5, 2007, in Docket No. 06-04-04, DPUC Review of Natural Gas Companies Cost of Service Methodologies, the Authority made further modifications to the COSS standards regarding cost allocations between merchant and distribution functions, on-site LNG facilities, upstream storage, and firm sales and firm transportation administrative costs.

purchased gas adjustment (PGA). CNG's COSS consisted of a twelve month study period for calendar rate year 2019. The Authority finds that the Company's COSS study is consistent and complies with prior PURA Decisions regarding gas COSS methodologies, and accepts the COSS as a guide to be used for revenue allocation.

## 5. Revenue Allocation

The relative position of an individual rate class compared to all rate classes is an indicator of class cost responsibility. The results of the COSS are used to shape the allocation of the Company's proposed revenue requirements among the firm rate classes, and to a lesser extent, the apportionment of those dollars among the individual rate billing components. Rate classes currently earning below the average Company ROR are allocated a greater proportion of the Company's proposed rate increase in proportion to their relative class RORs. Similarly, certain rate components such as monthly customer and demand charges may be currently set below COSS levels. The Company has proposed to increase certain customer and demand charges to move closer toward COSS levels. The Company proposed a revenue allocation based upon the results of its class COSS and with the goal to design rates that are cost-based, fair and equitable, both within and among rate classes. Goodwin PFT, pp. 21 and 22.

The revenue allocation proposed in the Rate Settlement Agreement is based on the Company's class COSS. The Authority finds that it is good practice to move each class towards cost of service as it sends the proper cost signals to customers, and over time, rates will approach cost. As a result of the lower revenue requirements from the Revenue Settlement Agreement, the revenue allocation proposed in the Rate Settlement Agreement moves some classes towards the cost of service. Rate Settlement Agreement, p. 4.

A review of the table below indicates that the class ratio to total has moved towards 1.0 for each class, which over the long term, is a reasonable target.

Rate	Description	Present Rates		Proposed Rates	
		Class Rate of Return	Ratio to Total	Class Rate of Return	Ratio to Total
RSG	Residential Non-Heat	0.31%	0.05	5.00%	0.69
RSH	Residential Heating	4.42%	0.74	5.92%	0.81
RMDS	Residential Multi-Dwelling	1.74%	0.29	4.52%	0.62
SGS	Small General Service	8.31%	1.39	8.50%	1.17
MGS	Medium General Service	5.93%	0.99	7.13%	0.98
LGS	Large General Service	7.39%	1.24	7.77%	1.07
Total		5.97%		7.28%	

Rate Settlement Agreement, Attachment 1(A)

The Authority finds that the revenue allocation proposed in the Rate Settlement Agreement is consistent with the class COSS and is designed to move rate classes closer to rate parity over the long term. The expected class impact, as detailed in the Rate Settlement Agreement, is reasonable. The Authority accepts the proposed revenue allocation.

## 6. Rate Design

Rate design is the intraclass development of rates that will achieve the individual class revenue allocation. Rate design focuses on achieving a transition to cost based rate elements over the long term. As this transition occurs, there will be a disparate impact on customers within a rate class, based on consumption and demand levels. This impact is similar to the impact of a revenue allocation focused on achieving parity over the long term. In its application filing, the Company set the customer charge, volumetric, and demand rates at levels that attempted to move current prices closer to levels indicated in the COSS. Goodwin PFT, p. 21.

To implement the revenue allocation proposed in the Rate Settlement Agreement, a rate design by class and rate element was included in the Rate Settlement Agreement. This proposed rate design framework is similar in structure to CNG's original proposal filed in the Application. However, the rate design was revised to reflect the reduction in revenue requirements and different revenue allocations to the various customer classes. Tr. 10/11/18, p. 121.

The Company will recover the revenue requirement increase from all rate classes, consistent with the rate allocation specified in Attachments 1-5 of the Rate Settlement Agreement. The Rate Settlement Agreement includes a detailed rate design for all classes in Attachment 6 of the Rate Settlement Agreement.

The Rate Settlement Agreement included a detailed rate design for each rate class for Rate Years 1 through 3. Rate Settlement Agreement, Attachments 1-5. The Company proposed modifying the Customer Service Charge (CSC), demand and volumetric charges, by varying amounts by rate class.

For Residential Service Heating Rate (RSH), the Company originally proposed increasing the CSC from \$16.50 per month to \$17.50 per month and increasing the volumetric charges by approximately 13.5% for Block 1 and 5.6% for Block 2. Per the terms of the Rate Settlement Agreement, the Company will increase the CSC to \$17.50 per month, and the volumetric charges will be increased by approximately 15.1% and 12.0% for Block 1 and Block 2, respectively, per the terms of the attachments to the Rate Settlement Agreement. Rate Settlement Agreement, Attachment 6(A) p. 1; Tr. 10/11/18, p. 121.

A review of the Rate Settlement Agreement was performed by investigating individual elements and the percentage and absolute value change of these elements, as detailed in Rate Settlement Agreement, Attachment 6. In some cases, a large percentage increase is applied to a small value, resulting in a limited dollar impact on a customer. The analysis identified a number of rate elements that were explored on cross examination. The Company explained that there were several rate design goals. One Company rate design goal was to achieve parity over time between CNG and SCG, to allow for a potential merger of the operating companies, if appropriate. A second goal was to look holistically at the rate elements that were billed together, such as demand charges and demand levied DIMP charges or delivery charges and commodity based charges, such as decoupling along with TSC or SSC charges. Tr. 10/11/18 pp. 121-127.

At the Authority's request, the Company submitted detailed customer impacts for the proposed rate design. The customer impacts were reviewed to consider the impact at various levels of usage, considering percentage and/or absolute value changes. Recognition of the movement toward cost based customer and demand charges allows for differences in customer impact due to differing levels of consumption. Tr. 10/11/18 pp. 132-135; Response to Late Filed Exhibit No. 9. The Authority reviewed the bill impact information provided and finds no undue impact on the rate classes, when the revenue allocation and long term transition to cost based rates are considered.

The Company is required to submit its detailed rate schedules in a compliance filing, as ordered below. The Authority accepts the proposed rate design from the Rate Settlement Agreement.

## **7. Tariffs**

The Company proposed tariff modifications in Application, Schedule E-1.0. The proposed changes incorporate the Company's proposed rate changes, necessary language for the applicability of the proposed rate mechanisms and certain clarifications and additions to the Company's definitions. The Company also proposed several changes including: (i) closing its Seasonal and Lighting rates to new customers, effective January 1, 2019; (ii) a manufacturing rider as required by 2017 legislation; and (iii) changes to the filing of Lost and Unaccounted For factors. Goodwin PFT, pp. 30-33.

The Company provided the annual revenue and number of seasonal and outdoor lighting customers in its territory. Responses to Interrogatories RA-66 and RA-67. Further, CNG's witness testified that both the Lighting (Rate L) and Seasonal (Rate SE) rates are old rates, with a limited number of customers. Additionally, CNG's affiliate company, Southern, does not have either rate in its tariffs. Tr. 10/11/18, pp. 140-142.

The Company stated that its proposed Qualified Manufacturing Rider is compliant with §16-19hh of the Conn. Gen. Stat. Section 16-19hh defines a qualified manufacturer based on industrial code, date of service and size, describes availability in terms of PURA process, and defines the rate discount. The Company expressed that its proposed Tariff Rider mirrors these legislative provisions. Response to Interrogatory RA-63.

The Company also proposed to increase its late payment charge from 1% to 1.25% consistent with its affiliates, SCG and the United Illuminating Company. CNG stated that the increase to 1.25% would be a greater deterrent to late payers, who drive uncollectible expenses. The Company also provided its rationale and cost support for its proposed increase to the late payment charge.

The Authority accepts the proposed tariff changes in the Application, and as modified by the Rate Settlement Agreement, subject to a revision of the rates to reflect the approved revenue requirement targets in each of the rate years.

## **8. Rates and Revenue Conclusion**

The Company will be directed to submit final rates and tariffs for each of the rate years, including the appropriate revenue proof exhibits, and all work papers, typical bill comparison work papers, written comments and tariff sheets, in conformance with the Revenue Settlement Agreement.

**K. OPERATING INCOME**

**1. Capital Expenditures**

In the Application, CNG proposed a total of \$152.47 million in capital expenditures for the three rate years. The capital expenditures are disaggregated by four major categories (Customer, Infrastructure Improvement and Replacement, System Operators and Business Effectiveness) and the respective individual programs within each category. The Revenue Settlement Agreement proposed no changes in the Company's capital expenditures. See table below.

**Settlement Agreement Attachment 2**  
**Capital Expenditures**  
**Rate Years 2019 - 2021**  
**(Thousands of Dollars)**

Connecticut Natural Gas Corporation  
Docket No. 18-05-16

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Description	2019	2020	2021
<b>Customer</b>			
New Business	\$ 9,618	\$ 10,054	\$ 10,610
Meters and Regulators	4,752	5,004	5,751
Total Customer	<u>14,370</u>	<u>15,057</u>	<u>16,361</u>
<b>Infrastructure Improvement and Replacement</b>			
Cast Iron and Bare Steel Replacement	\$ 23,447	\$ 23,450	\$ 23,500
District Regulators and Gate Stations	2,096	1,278	1,251
LNG Modernization and Infrastructure Replacement	240	1,247	397
Other Infrastructure Improvement and Replacement	4,525	4,534	4,642
Total Infrastructure Replacement	<u>30,308</u>	<u>30,509</u>	<u>29,790</u>
<b>System Operations</b>			
Operations Equipment	\$ 246	\$ 325	\$ 254
Fleet	903	753	753
Facilities	2,840	4,821	4,577
Total System Operations	<u>3,990</u>	<u>5,899</u>	<u>5,584</u>
<b>Business Effectiveness</b>			
Information Technology	\$ 100	\$ 251	\$ 251
Total Business Effectiveness	<u>100</u>	<u>251</u>	<u>251</u>
<b>Total Capital Expenditures</b>	<b><u>\$ 48,769</u></b>	<b><u>\$ 51,717</u></b>	<b><u>\$ 51,987</u></b>

Amounts may not add due to rounding.

Revenue Settlement Agreement, Attachment 2.

For comparison, the Company's capital expenditures for the period 2013 through 2018 regarding as shown below:.

**Historical Capital Budget**

	<i>\$ in thousands</i>					
	2013	2014	2015	2016	2017	2018
Customer	\$ 19,588	\$ 28,999	\$ 33,545	\$ 25,922	\$ 21,556	\$ 17,718
Infrastructure Improvement and Replacement	17,153	23,069	29,606	50,714	44,607	30,914
System Operations	2,307	3,935	3,603	3,986	2,478	3,413
Business Effectiveness	1,090	1,992	309	994	1,555	101
	<u>\$ 40,139</u>	<u>\$ 57,996</u>	<u>\$ 67,063</u>	<u>\$ 81,616</u>	<u>\$ 70,195</u>	<u>\$ 52,146</u>

Response to Interrogatory OCC-122.

Based on the above, for the three rate years, the Company planned to invest approximately \$90.6 million (30,308,000+30,509,000+29,790,000) under the Infrastructure Improvement and Replacement category. In that category, the largest component cost is \$70.40 million for the Cast Iron and Bare Steel Replacement program. This amount represents approximately 46% ( $70.40/152.47 \times 100$ ) of the Company's total capital expenditures is specifically for the Cast Iron and Bare Steel Replacement program. As discussed in Pipeline Safety, Section II.1.3 of this Decision, the Authority finds this investment is reasonable to support the integrity of CNG's pipeline system which is required by the Gas Distribution Integrity Management regulations.

The other major component cost in the capital expenditure is the Customer category in which CNG planned to invest \$45.8 million (14,370+15,057+16,361) or average of \$15.26 million from 2019 to 2021 to connect new customers to its distribution system. This is a decrease in investment when compared to \$65.20 million or average of \$24.6 million from 2013 through 2018 for this same Customer category. The reduction in the proposed non-safety capital spending under the Customer category indicates a slowdown in the number of new customers projected to take service under the Natural Gas Expansion Plan. In the Decision dated November 22, 2013, in Docket No. 13-06-02, PURA Investigation of Connecticut's Local Distribution Companies' Proposed Expansion Plans to Comply with Connecticut's Comprehensive Energy Strategy (CES Decision), the Authority approved a Natural Gas Expansion Program to comply Section 51 of Public Act 13-298, An Act Concerning Implementation of Connecticut's Comprehensive Energy Strategy and Various Revisions to the Energy Statutes, to provide natural gas service to on and off-main gas customers consistent with the goals of the 2013 Comprehensive Energy Strategy. In that Decision, the Authority anticipated a slowdown in the number of new customers converting to natural gas and questioned the ability of the Company to convert the total projected off-system customers to natural gas cost effectively over the life of that plan. CES Decision, pp. 8 and 9.

As a result of the decrease in customer conversions to natural gas and the associated decrease in capital spending for its Natural Gas Expansion Plan, the impact to the ratepayers' total bill related to capital expenditures is not expected to increase during the Rate Plan. In light of the above, the Authority finds the total of \$152.47 million in capital expenditures for the three rate years presented in the Revenue Settlement Agreement is acceptable.

## **2. Depreciation**

In the Application, the Company's proposed the depreciation expense of \$40.2 million for Rate Year 1, \$41.9 million for Rate Year 2 and \$43.8 million for Rate Year 3. The Revenue Settlement Agreement reduces the Company's proposal to \$38.5 million for Rate Year 1, \$40.1 million for Rate 2 and \$42.0 million for Rate Year 3. A comparison of Company's proposal and Revenue Settlement Agreement for depreciation expense is shown below.

### Depreciation Expense

	Rate Year 1	Rate Year 2	Rate Year 3
Application Total Expense	\$40.2 million	\$41.9 million	\$43.8 million
Settlement Total Expense	\$38.5 million	\$40.1 million	\$42.0 million
Total Reduction	\$1.7 million	\$1.8 million	\$1.9 million
Percentage of Settlement Reduction	4%	4%	4%

#### Revenue Settlement Agreement, Attachments 2 and 3.

The Revenue Settling Parties agreed to a four percent reduction per year in the Company's proposed depreciation expense. This equates to a total savings of \$5.4 million (\$1.7 million + \$1.8 million + \$1.9 million) over the three rate years which will benefit customers. The Authority finds that the depreciation expenditures presented in the Revenue Settlement Agreement will result in a slight reduction to customers' bills as compared to the Company's Application. Further, the proposed Settlement depreciation rates will allow the Company to retain cash flow necessary to support the cost of removal and the retirement of plant in-service associated with its cast iron and bare steel replacement program.

### III. FINDINGS OF FACT

1. The Company's standard bill form, termination notice and customer rights notice comply with applicable regulations.
2. The Company's estimated bill form complies with applicable regulations.
3. The Company's policies and procedures, for the administration of customer security deposits, comply with applicable regulations.
4. The Company's Customer Care Center is available Monday through Friday, from 8:00 a.m. to 6:00 p.m., for customer complaints and inquiries.
5. The Revenue Settling Parties proposed rates that are based on a capital structure consisting of a 9.30% Rate of Return (ROE) and 54.00% common equity for Rate Year 1, 54.50% for Rate Year 2 and 55.00% for Rate Year 3.
6. The 2018 TCJA has had a negative effect on utility cash flow metrics.
7. The Company peer group of operating and holding companies average equity ratios were 57.45% and 58.57%, respectively.

8. The Revenue Settlement Agreement's thicker equity ratio and higher ROE relative to the currently authorized levels, are expected to alleviate the expected adverse effects of the 2018 TCJA.
9. The Revenue Settlement Agreement provided for short-term debt cost rates of 3.07% in 2019, 3.34% for 2020 and 3.43% for 2021.
10. The Revenue Settlement Agreement provided for long-term debt cost rates of 5.13%, for each of the three rate years.
11. The Revenue Settlement Agreement provided for a cost of preferred stock rate of 8.00%, for each of the three rate years.
12. The Revenue Settlement Agreement provided for an ROE of 9.30%, for each of the three rate years.
13. The 10 and 30-year US Treasury bond yields have been increasing, since a July of 2016 low point.
14. The range of recently authorized ROEs, for fully litigated natural gas rate proceedings in 2018, was 9.30% to 10.00% and average authorized ROE from these cases was 9.69%.
15. The Company improved its credit ratings since 2014, but it had not accessed the capital markets, since 2013.
16. The Revenue Settlement Agreement's revenue requirement its forecasted dividend payout ratio was 64% for 2019, 68% for 2020 and 79% for 2021.
17. The Company's EBITDA to Interest Expense will be 9.7x to 10.7x, over the rate years.
18. The allowed weighted cost of capital for each of the rate years is an ROR on rate base of 7.28% for the Rate Year 1, 7.30% for the Rate Year 2 and 7.32% for the Rate Year 3.
19. The current ESM will be continued with sharing between customers and the Company, on a 50/50 basis above the Revenue Settlement Agreement's authorized ROE of 9.30%.
20. The Revenue Settlement Agreement adjusted the 401(k) by using 50% of the cost of employees receiving other compensation.
21. The 401(k) expense in the Revenue Settlement Agreement is \$925,000 in the Rate Year 1, \$954,000 in Rate Year 2 and \$983,000 in Rate Year 3.
22. The pension expense in the Revenue Settlement Agreement is \$6,631,000 for Rate Year1, \$6,186,000 for Rate Year 2 and \$4,944,000 Rate Year 3.

23. The pension expense is calculated on the basis of the accounting rules, set forth in Accounting Standards Codification 715-30.
24. CNG's pension funding policy is to contribute no less than the greater of the minimum required contribution or the amount needed to reach an 80% funded status, in order to avoid benefit restrictions.
25. The Company offered a non-qualified pension plan for officers earning above the level of compensation, as designated by the IRS.
26. The SERP is an additional pension plan for executive class employees.
27. The SERP provided a maximum of 65% of average annual compensation minus benefits from the qualified plan to eligible participants that terminated employment on or after age 60.
28. The SERP has been closed to new entrants, since May 1, 2004.
29. The Revenue Settlement Agreement has a three-year phase out of the SERP, which is consistent with the UI and Southern rate cases.
30. CNG, in its last rate case in 2013, provided retiree medical benefits, on the basis of the accounting rules set forth in ASC 715-60.
31. CNG was required to recognize these benefits during the working career of employees, not after they retire.
32. Employees at age 65 that become eligible for Medicare, will have their group health expense through the parent Avangrid.
33. Avangrid will continue to pay for employees' new health care insurance.
34. Avangrid selected RightOpt, a private health insurance exchange to assist in choosing and paying for the new health care insurance.
35. After enrollment in a medical plan through RightOpt, Avangrid will continue to assist in payment of the new insurance, by providing an annual tax free subsidy via a HRA.
36. The OPEB medical service cost declines each year, since the OPEB Plans are closed to new participants.
37. The Accumulated Postretirement Benefit Obligation is declining, since the plans are closed and also because of the demographics of the active and retired populations.
38. As of January 1, 2016, all post-65 non-union retirees are offered the option of a Medicare exchange program, with a funded HRA.

39. The IRS does not require plan sponsors to make contributions to OPEB Plans.
40. The OPEB expense, in the Revenue Settlement Agreement, is \$162,000 for Rate Year 1, \$44,000 for Rate Year 2 and (\$12,000) for Rate Year 3.
41. Total O&M expenses were reduced to \$172.034 million in 2019, \$178.424 million in 2020 and \$183.353 million in 2021.
42. Credit or debit card costs provided by the company were \$460,000 for Rate Year1, \$468,000 for Rate Year2, as well as \$476,000 for Rate Year 3, totaling at \$1.404 million.
43. CNG originally proposed total uncollectible expenses of \$5.774 million for 2019, \$5.821 million for 2020 and \$5.914 million for 2021.
44. The Revenue Settling Parties agreed to additional revenue requirements of \$9.907 million for 2019, \$4.628 million for 2020 and \$5.212 million for 2021.
45. Allowed non-hardship expenses are \$6.001 million for 2019, \$6.124 million for 2020 and \$6.302 million for 2021.
46. CNG proposed annual hardship account net write-offs of \$2.726 million, for each rate year.
47. The Revenue Settling Parties increased the annual hardship write-off amount by \$0.462 million, to \$3.188 million per year.
48. A calculated net write-offs amortization expense of \$2.488 million plus the annual hardship write-off amount of \$3.188 million totaled \$5.676 million, for net write-offs.
49. Annual MPP costs were \$2.040 million per year plus amortization of the projected \$1.705 million December 31, 2018 regulatory asset balance over four years of \$0.426 million, for a total MPP expense in each rate year of \$2.466 million.
50. CNG proposed to recover an annual hardship grant program cost of \$3 million in each rate year, but the Revenue Settling Parties lowered that amount to just \$1.5 million in years 2020 and 2021.
51. The Company requested a compensation expense of \$26.979 million for Rate Year 1, \$28.001 million for Rate Year 2 and \$29.062 million for Rate Year 3.
52. The compensation expense included six incremental FTEs to be hired in 2019, for its AHRP.
53. The Revenue Settlement Agreement reduces the distribution revenue submitted in the Company's original application by \$8.038 million, or approximately 29%.

54. Under the Company's modified decoupling mechanism, both existing and System Expansion customers will receive a decoupling charge or credit.
55. The Revenue Settlement Agreement will create a DIMP reconciling mechanism that will true-up base rate recovery that will reconcile actual rate year DIMP costs with those contained in base rates for each year.
56. The allocators used in its COSS conform to the Authority's Generic COSS Decision.
57. The Company projected approximately 2,584 new system expansion customers and an additional 250 conversions from residential non-heat to residential heating, will occur each rate year.
58. CNG's original revenue allocation proposal and the revenue allocation proposed in the Rate Settlement Agreement, are based on the Company's class COSS.
59. The Company set rates for the customer and demand-related components of service, at levels that attempted to move current prices closer to levels indicated in the COSS.
60. The Company will recover the revenue requirement increase from all rate classes, consistent with the rate allocation specified in Attachments 1-5 of the Rate Settlement Agreement.
61. The Company proposes to increase its late payment charge from 1% to 1.25% consistent with its affiliates, Southern and the United Illuminating Company.
62. The Lighting (Rate L) and Seasonal (Rate SE) rates are old rates, with a limited number of customers.

#### **IV. CONCLUSION AND ORDERS**

##### **A. CONCLUSION**

The Authority finds both the Revenue Settlement Agreement and Rate Settlement Agreement to be just and reasonable and in the public interest. Approval of the total revenue increase of \$19.747 million over the three-year rate period will allow CNG to attract capital needed for it to continue to provide safe, adequate and reliable gas distribution services at reasonable rates. The Authority hereby approves both Settlement Agreements subject to the orders below.

##### **B. ORDERS**

For the following Orders, the Company shall submit one original of the required documentation to the Executive Secretary, 10 Franklin Square, New Britain, Connecticut 06051 and file an electronic version through the Authority's website at [www.ct.gov/pura](http://www.ct.gov/pura). Submissions filed in compliance with the Authority's Orders must be identified by all three of the following: Docket Number, Title and Order Number. Compliance with orders shall commence and continue as indicated in each specific Order or until the Company requests and the Authority approves that the Company's compliance is no longer required after a certain date.

1. No later than 12:00 p.m. on December 26, 2018, CNG shall file with the Authority its proposed final rates and tariffs for Rate Year 1, in accordance with the directives herein in Section J, Revenue, Rate Design and Tariffs.
2. No later than December 31, 2018, CNG shall acknowledge in writing that it will submit for the Authority's approval, any changes to its customer service practices, procedures or policies, in writing at least 30 business days prior to the effective date of such changes.
3. No later than December 31, 2018, CNG shall acknowledge in writing that the Company shall continue its monthly meetings with the Authority's Consumer Affairs Unit.
4. No later than January 20, 2019, and quarterly thereafter, until the Authority issues its final Decision in CNG's next rate proceeding, CNG shall submit to the Authority a tabulation of the Class 2 and Class 3 leak statuses (e.g., beginning balance, leaks detected, leaks repaired, other disposition, ending balance), for the prior quarter. The submittal shall report Class 3 leaks on coated and cathodically protected steel pipe and plastic pipe separately from all other Class 3 leaks. The submittal shall include all available data for the current calendar year and the data for the previous calendar year.
5. No later than January 20, 2019, and quarterly thereafter, until the Authority issues its final Decision in CNG's next rate proceeding, CNG shall submit to the Authority a tabulation of third-party damages for the prior quarter.

The submittal shall include all available data for the items listed below for the current calendar year and the data for the previous calendar year:

- a. total number of Call Before You Dig tickets;
  - b. total number of damages;
  - c. total number of damages/1,000 tickets;
  - d. number of contractor at fault (not including no notice) damages;
  - e. number of contractor at fault damages/1,000 tickets;
  - f. number of no notice damages;
  - g. number of no notice damages/1,000 tickets;
  - h. number of company markout person at fault damages;
  - i. number of company markout person at fault damages/1,000 tickets;
  - j. number of company records at fault damages; and
  - k. number of company records at fault damages/1,000 tickets.
6. No later than February 20, 2019, and every six months thereafter until the Authority issues its final Decision in CNG’s next rate proceeding, the Company shall submit to the Authority a pipe replacement program report for the preceding six months. The submittal shall be formatted and contain the same information as shown below:

Facility	Material	Pressure	Size	Mileage on 7/1/18	Miles (to nearest 1/10 mile) replaced btwn 7/1/18 and 12/31/18	Mileage on 12/31/18
<b>Mains</b>	Cast Iron	High Pressure	4" or less			
			Over 4" thru 6"			
			Over 6" thru 8"			
			Over 8"			
		Low Pressure*	4" or less			
			Over 4" thru 6"			
			Over 6" thru 8"			
			Over 8"			
	Bare Steel	High Pressure	All			
		Low Pressure*	All			
	<b>Material</b>	<b>Pressure</b>	<b>Size</b>	<b>Number of Services on 7/1/18</b>	<b>Services Replaced Between 7/1/18 and 12/31/18</b>	<b>No. of Services on 12/31/18</b>
<b>Services</b>	Bare Steel	High Pressure	All			
		Low Pressure*	all			
<b>1.</b>						
<b>Capital Expenditures for Cast Iron and Bare Steel Main replacement - 7/1/18 - 12/31/18</b>						<b>\$</b>

<b>Capital Expenditures for Bare Steel service replacement - 7/1/18 – 12/31/18</b>	\$
* Low pressure means a gas distribution system in which the gas pressure in the main is substantially the same as the pressure provided to the customer.	

7. No later than February 25, 2019 and annually thereafter, the Company shall file with the Authority its revenue decoupling calculations for approval. The Company shall calculate its decoupling adjustment, as discussed in Section J.2.a, superseding the order in the 2014 CNG Decision.
8. No later than ten days after the filing of Avangrid's Forms 10k and 10Q with the SEC, the Company shall annually file with the Authority an earnings sharing report.
9. No later than April 1, 2019 and annually thereafter, the Company shall file with the Authority its DIMP compliance, in accordance with the directives herein in Section V.A.1.9.2.
10. On or before July 1, 2019, CNG shall submit a compliance filing, pursuant to the Authority's final decision in this docket for design of the hardship grant program.
11. No later than December 18, 2019, the Company shall file with the Authority its proposed final rates and tariffs for Rate Year 2, in accordance with the directives herein in Section J, Revenue, Rate Design and Tariffs.
12. No later than December 18, 2020, the Company shall file with the Authority its proposed final rates and tariffs for Rate Year 3, in accordance with the directives herein in Section J, Revenue, Rate Design and Tariffs.
13. No later than the 20<sup>th</sup> of each month until the Authority issues its final Decision in CNG's next rate proceeding, the Company shall submit to the Authority a tabulation of suspected Gas Odor Complaint responsiveness for the prior month. The submittal shall include all available data for the current calendar year up to and including the prior month and the data for the previous calendar year. The submittal shall include a detailed timeline (time call received, time call dispatched, time of arrival onsite) and a detailed explanation for any response time, in excess of 30 minutes during normal business hours and 45 minutes at all other times. If CNG exceeds the guidelines, it shall include in its explanation whether or not the local fire department was utilized and if so, it's associated response time.
14. No later than June 1, 2019, and annually thereafter until the next general rate proceeding, the Company shall provide its previous calendar year 401 (k) payments.
15. No later than June 1, 2019, and annually thereafter until the next general rate proceeding, the Company shall provide its calendar year actuarial minimum

- pension contribution and provide the amount of actual pension contribution made for the corresponding calendar year.
16. No later than June 1, 2019, and annually thereafter until the next general rate proceeding, the Company shall provide its previous calendar year amount of actual medical retiree contributions.
  17. The Company shall submit bi-annual compliance filings in 2019, 2020 and 2021 to report on the status of the FTE's in the AHRP.
  18. CNG is directed to spend \$23.447 million in 2019, approximately \$23.450 million in 2020, and approximately \$23.500 million in 2021, and no less than \$23.500 million over each subsequent calendar year on system integrity projects, following a risk based system replacement methodology, until the Authority approves any alternative following CNG's next rate application. If CNG does not spend the full amount on system integrity projects in any rate year, the difference shall be made up the following rate year.
  19. CNG shall establish a trip charge to be applied to the customer's account each time that the Company is denied access to perform mandated inspections on inside gas services, based on the criteria specified in Section 1.14 of the Revenue Settlement Agreement, p. 13. This order shall remain in effect until the Authority issues its final Decision in CNG's next rate proceeding.
  20. CNG shall achieve a Class 2 leak backlog of 60 or less leaks at the end of each calendar year, until the Authority issues its final Decision in CNG's next rate proceeding.
  21. CNG shall achieve a Class 3 leak backlog of 120 or less leaks on coated and cathodically protected steel and plastic pipe, at the end of each calendar year until the Authority issues its final Decision in CNG's next rate proceeding.
  22. CNG shall submit to the PURA Gas Pipeline Safety Unit, any and all material changes or revisions to its operating procedures, maintenance procedures or construction standards, no later than 10 days prior to their implementation. If an unforeseen circumstance(s) does not allow for that notification, CNG shall telephonically notify the GPSU, as soon as possible. This order shall remain in effect until the Authority issues its final Decision in CNG's next rate proceeding.
  23. The Authority hereby rescinds Order No. 14 in the 2014 CNG Decision dated January 22, 2014.

**V. APPENDIX A**

**A. REVENUE SETTLEMENT AGREEMENT (ATTACHMENTS A1 AND A2)**

**B. RATE SETTLEMENT AGREEMENT (ATTACHMENTS B1, B2, B3 AND B4)**

**DOCKET NO. 18-05-16 APPLICATION OF CONNECTICUT NATURAL GAS CORPORATION TO INCREASE ITS RATES AND CHARGES**

This Decision is adopted by the following Commissioners:

John W. Betkoski, III

Katherine S. Dykes

Michael A. Caron

CERTIFICATE OF SERVICE

The foregoing is a true and correct copy of the Decision issued by the Public Utilities Regulatory Authority, State of Connecticut, and was forwarded by Certified Mail to all parties of record in this proceeding on the date indicated.



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Jeffrey R. Gaudiosi, Esq.  
Executive Secretary  
Public Utilities Regulatory Authority

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December 19, 2018  
Date