



**NORTH CAROLINA
PUBLIC STAFF
UTILITIES COMMISSION**

September 20, 2017

Ms. M. Lynn Jarvis, Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4300

Re: Docket No. W-549, Sub 10

Dear Ms. Jarvis:

In connection with the above-captioned docket, I transmit herewith for filing on behalf of the Public Staff the following:

1. Affidavit and Exhibit of Iris Morgan, Accountant, Water Section, Accounting Division;
2. Affidavit and Exhibit of Karen E. Proffitt, Utilities Engineer, Water and Sewer Division; and the
3. Affidavit of Calvin C. Craig, III, Financial Analyst, Economic Research Division.

By copy of this letter, I am forwarding a copy of the above to all parties of record.

Sincerely yours,

Electronically submitted
/s/ Robert S. Gillam
Staff Attorney
bob.gillam@psncuc.nc.gov

RSG/blm
Attachments

c: Parties of Record

| | | | | |
|--------------------------------------|-------------------------------------|-------------------------------------|-------------------------------|----------------------------------|
| Executive Director (919) 733-2435 | Communications (919) 733-2810 | Economic Research (919) 733-2902 | Legal (919) 733-6110 | Transportation (919) 733-7766 |
| Accounting (919) 733-4279 | Consumer Services (919) 733-9277 | Electric (919) 733-4326 | Natural Gas (919) 733-2267 | Water (919) 733-5610 |

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. W-549, SUB 10

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

Application by John W. Gensinger, Post)
Office Box 303, Raleigh, North Carolina)
27602, for Authority to Increase Rates for)
Water Utility Service in Pineview Estates)
Subdivision in Wake County, North)
Carolina)

AFFIDAVIT
OF
IRIS MORGAN

STATE OF NORTH CAROLINA

COUNTY OF WAKE

I, Iris Morgan, after first being duly sworn, do depose and say:

I am a Staff Accountant with the Public Staff Accounting Division, 430 N. Salisbury Street, Raleigh, North Carolina, and represent the using and consuming public. I have a Bachelor of Science degree in Accounting and Business Administration from North Carolina Wesleyan College. I have a Master's degree in Accounting and Financial Management, a Master's degree in Business Administration and a Master's degree in Public Administration from the Keller Graduate School of Management. I joined the Public Staff Accounting Division on December 1, 2008.

The purpose of my affidavit is to present the results of my investigation of the levels of operating revenue, expense and investment filed by John W. Gensinger (Applicant), in support of his requested increase in water service revenues from \$8,841 to \$19,144.

The Applicant filed his application for a rate increase on May 10, 2017, based on a test year ended December 31, 2016. My investigation included a review of the application, an examination of the Applicant's books and records for the test year, and a review of additional documentation provided by the Applicant in response to Public Staff written and verbal data requests.

Based on my investigation, the level of operating revenue deductions requiring a return under the operating ratio method (total operating expenses excluding regulatory fee, and income taxes) is \$14,743. The Applicant's original cost rate base at December 31, 2016, is \$23,684. As allowed under G.S. 62-133, I have used the rate base method to evaluate the Applicant's proposed revenue requirement.

I have calculated an increase in the gross revenue requirement using the overall rate return of 7.50%, the reasonable rate recommended by Public Staff Financial Analyst Craig. Use of this return on the rate base produces an increase in the gross revenue requirement will be \$16,808, of which \$16,683 is service revenues. The Applicant has agreed to accept the revenue requirement and rates as calculated by the Public Staff. Therefore, the Public Staff recommends that water service rates be set to reflect \$7,967 increase, resulting in the annual level of service revenues of \$16,683.

I made several adjustments to the Applicant's operating revenues, expenses, and investment levels. The adjustments are detailed in the attached Morgan Exhibit I. This exhibit also includes the effects of adjustments recommended by Public Staff Engineer Proffitt concerning the following items:

depreciation lives, service revenues under present and proposed rates, and the Applicant's test-year expenses for maintenance and repairs, electric power, testing, chemicals, and permit fees and licenses.

The accounting and ratemaking adjustments which I am proposing and will discuss relate to the following items:

1. Plant in service;
2. Accumulated depreciation and depreciation expense;
3. Cash working capital and average tax accruals;
4. Rate case expense;
5. Other expenses;
6. Regulatory fee;
7. Other taxes; and
8. State and federal income taxes.

PLANT IN SERVICE

In calculating an amount for plant in service, I began with \$20,210, the amount approved by the Commission in the Applicant's last rate case, Docket No. W-549, Sub 8. To this amount, I added \$19,005 of plant additions as recommended by Public Staff Engineer Proffitt. These adjustments result in a total of \$39,215 cost of plant in service prior to deducting accumulated depreciation, as shown on Schedule 2-1 of Morgan Exhibit 1.

ACCUMULATED DEPRECIATION AND DEPRECIATION EXPENSE

I calculated accumulated depreciation and depreciation expense based on my adjusted levels of plant in service, using the depreciation lives approved in the Applicant's last rate case. I depreciated plant additions since the last rate case based on the service lives recommended by Public Staff witness Proffitt. Accumulated depreciation was calculated based on the year each plant asset was placed in service, using the half-year convention in the first year of an asset's depreciable life. After deducting accumulated depreciation from total plant in service, the resulting net plant in service is \$22,182, as shown on Schedule 2-1 of Morgan Exhibit I.

CASH WORKING CAPITAL AND AVERAGE TAX ACCRUALS

I have included 1/8 of total operating expenses as a measure of cash working capital. I calculated average tax accruals as one-half of property tax, plus one-fifth of payroll taxes. After adding cash working capital to net plant in service and deducting average tax accruals, the resulting rate base is \$23,684.

RATE CASE EXPENSE

I calculated rate case expense to include the cost of the filing fee and postage costs for mailing notices to customers. I amortized the total cost for rate case expense over three years.

OTHER TAXES AND REGULATORY FEE

On its application, the Company included \$25 for other taxes. After reviewing the Company's financial records, I concluded that this amount was the regulatory fee. Therefore, I made an adjustment to remove the \$25 amount from

other taxes and calculated the regulatory fee based on the statutory rate of 0.14%.

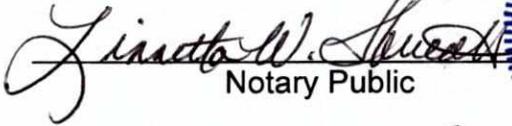
STATE AND FEDERAL INCOME TAXES

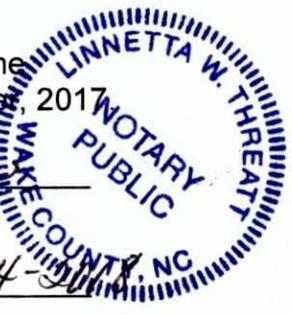
State and federal income taxes are based on the statutory corporate rates for the level of income presented after all Public Staff adjustments.

This completes my affidavit.


Iris Morgan

Sworn to and subscribed before me
this the 20th day of September, 2017


Notary Public



My Commission expires: 9-4-2018

INDEX TO MORGAN EXHIBIT I

| LINE NO. | TITLE | Schedule No. |
|-------------|---|-----------------|
| 1. | RETURN ON ORIGINAL COST RATE BASE | 1 |
| 2. | ORIGINAL COST RATE BASE | 2 |
| 3. | CALCULATION OF PLANT IN SERVICE, ACCUMULATED DEPRECIATION AND DEPRECIATION EXPENSE | 2-1 |
| 4. | NET OPERATING INCOME FOR A RETURN | 3 Page 1 |
| 5. | FOOTNOTES TO SCHEDULE 3 | 3 Page 2 |
| 6. | CALCULATION OF RATE CASE EXPENSE | 3-1 |
| 7. | CALCULATION OF INCOME TAXES | 3-2 |

Pineview Water System
Docket No. W-549 Sub 10
RETURN ON ORIGINAL COST RATE BASE
For the Test Year Ended December 31, 2016

Morgan Exhibit I
Schedule 1

| Line No. | <u>Item</u> | Capital-ization Ratio (a) [1] | Original Cost Rate Base (b) [2] | Embedded Cost (c) [3] | Overall Cost Rate (d) [6] | Net Operating Income (e) [8] |
|--|-------------|----------------------------------|------------------------------------|--------------------------|------------------------------|---------------------------------|
| <u>Present rates:</u> | | | | | | |
| 1. | Debt | 50% | \$11,842 [2] | 4.50% [1] | 2.25% | \$533 [8] |
| 2. | Equity | 50% | 11,842 [2] | -54.44% [6] | -27.22% | (6,447) [9] |
| 3. | Total | <u>100%</u> | <u>\$23,684</u> [3] | | <u>-24.97%</u> | <u>(\$5,914)</u> [10] |
| <u>Company proposed rates:</u> | | | | | | |
| 4. | Debt | 50% | \$11,842 [4] | 4.50% [1] | 2.25% | \$533 [8] |
| 5. | Equity | 50% | 11,842 [4] | 26.74% [6] | 13.37% | 3,167 [11] |
| 6. | Total | <u>100%</u> | <u>\$23,684</u> [3] | | <u>15.62%</u> | <u>\$3,700</u> [12] |
| <u>Public Staff recommended rates:</u> | | | | | | |
| 7. | Debt | 50% | \$11,842 [5] | 4.50% [1] | 2.25% | \$533 [8] |
| 8. | Equity | 50% | 11,842 [5] | 10.50% [1] | 5.25% | 1,243 [8] |
| 9. | Total | <u>100%</u> | <u>\$23,684</u> [3] | | <u>7.50%</u> | <u>\$1,776</u> |

[1] Provided by Public Staff Financial Analyst Craig.
 [2] Column (a) x Line 3, Column (b).
 [3] Morgan Exhibit I, Schedule 2, Line 7, Column (c).
 [4] Column (a) x Line 6, Column (b).
 [5] Column (a) x Line 9, Column (b).
 [6] Column (e) divided by Column (b).
 [7] Column (a) x Column (c).
 [8] Column (b) x Column (c).
 [9] Line 3 - Line 1, Column (e).
 [10] Morgan Exhibit I, Schedule 3, Line 33, Column (c).
 [11] Line 6 - Line 4, Column (e).
 [12] Morgan Exhibit I, Schedule 3, Line 33, Column (e).

Pineview Water System
Docket No. W-549 Sub 10
ORIGINAL COST RATE BASE
For the Test Year Ended December 31, 2016

Morgan Exhibit I
Schedule 2

| Line No. | Item | Per Application (a) | Public Staff Adjustments [1] (b) | After Public Staff Adjustments (c) |
|----------|--------------------------------------|------------------------|-------------------------------------|---------------------------------------|
| 1. | Plant in service | \$23,493 | \$15,722 | \$39,215 [2] |
| 2. | Accumulated depreciation | (19,047) | 2,014 | (17,033) [3] |
| 3. | Contributions in aid of construction | <u>0</u> | <u>0</u> | <u>0</u> |
| 4. | Net plant in service | 4,446 | 17,736 | 22,182 |
| 5. | Cash working capital | 0 | 1,660 | 1,660 [4] |
| 6. | Average tax accruals | <u>0</u> | <u>(158)</u> | <u>(158) [5]</u> |
| 7. | Original cost rate base | <u>\$4,446</u> | <u>\$19,238</u> | <u>\$23,684</u> |

- [1] Column (c) - Column (a).
[2] Morgan Exhibit I, Schedule 2-1, Line 11, Column (a).
[3] Morgan Exhibit I, Schedule 2-1, Line 11, Column (f).
[4] Calculated at one-eighth of total O & M expenses.
[5] Calculated at one-half property tax, plus one-fifth payroll taxes.

Pineview Water System
Docket No. W-549 Sub 10
CALCULATION OF PLANT IN SERVICE, ACCUMULATED
DEPRECIATION AND DEPRECIATION EXPENSE
For the Test Year Ended December 31, 2016

Morgan Exhibit I
Schedule 2-1

| Line No. | Item | Plant In Service Per Public Staff [1] (a) | Year Placed In Service [1] (b) | Life [1] (c) | Years in Service [4] (d) | Annual Deprec. [5] (e) | Accum. Deprec. [6] (f) |
|---|-------------------------|--|-----------------------------------|-----------------|-----------------------------|---------------------------|---------------------------|
| Per Sub 8 Rate Case: | | | | | | | |
| 1. | Land and right of ways | \$4,000 | | | | \$0 | \$0 |
| 2. | Pump house | 1,500 | 1971 | 30 | 45.5 | 0 | 1,500 |
| 3. | Wells | 4,900 | 1982 | 20 | 34.5 | 0 | 4,900 |
| 4. | Pumping equipment | 633 | 1996 | 5 | 20.5 | 0 | 633 |
| 5. | Treatment equipment | 218 | 1997 | 3 | 19.5 | 0 | 218 |
| 6. | Fully depreciated plant | 8,959 | | | | 0 | 8,959 |
| 7. | Total: | <u>20,210</u> | | | | <u>0</u> | <u>16,210</u> |
| Plant Additions Since Sub 8 Rate Case: | | | | | | | |
| 8. | Water tank replacement | 18,395 [2] | 2016 [2] | 25 [3] | 1.0 | 736 | 736 |
| 9. | Submersible pump | 610 [3] | 2016 [3] | 7 [3] | 1.0 | 87 | 87 |
| 10. | Total: | <u>19,005</u> | | | | <u>823</u> | <u>823</u> |
| 11. | Total: | <u>\$39,215</u> | | | | <u>\$823</u> | <u>\$17,033</u> |

- [1] Based on last general rate case, Docket No. W-549, Sub 8, unless otherwise noted.
- [2] Based on a review of Company records.
- [3] Provided by Public Staff Engineer Proffitt.
- [4] Based on year placed in service using half year convention.
- [5] Column (a) divided by Column (c), unless fully depreciated.
- [6] Column (d) multiplied by Column (e), unless fully depreciated.

Pineview Water System
Docket No. W-549 Sub 10
NET OPERATING INCOME FOR A RETURN
For the Test Year Ended December 31, 2016

Morgan Exhibit I
Schedule 3
Page 1 of 2

| Line No. | Item | Present Rates | | | Company Proposed Rates | | Public Staff Recommended Rates | |
|----------|------------------------------------|---------------------|----------------------------------|--------------------------|-------------------------------|---|------------------------------------|---|
| | | Per Application (a) | Public Staff Adjustments [1] (b) | Per Public Staff [2] (c) | Net Company Increase [10] (d) | Operations After Rate Increase [11] (e) | Net Public Staff Increase [14] (f) | Operations After Rate Increase [15] (g) |
| 1. | Operating Revenues: | | | | | | | |
| 2. | Service revenues | \$8,612 | \$104 | \$8,716 [3] | \$10,303 | \$19,019 [3] | \$7,967 | \$16,683 [16] |
| 3. | Miscellaneous revenues | 125 | 0 | 125 | 0 | 125 | 0 | 125 |
| 4. | Bad debt | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. | Total operating revenues | 8,737 | 104 | 8,841 | 10,303 | 19,144 | 7,967 | 16,808 |
| 6. | Operating Revenue Deductions: | | | | | | | |
| 7. | Salaries and wages | 7,017 | 0 | 7,017 | 0 | 7,017 | 0 | 7,017 |
| 8. | Contract labor | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9. | Administrative and office | 853 | 0 | 853 | 0 | 853 | 0 | 853 |
| 10. | Maintenance and repairs | 610 | 5 | 615 [3] | 0 | 615 | 0 | 615 |
| 11. | Electric power for pumping | 1,100 | 0 | 1,100 [3] | 0 | 1,100 | 0 | 1,100 |
| 12. | Chemicals | 356 | 0 | 356 [3] | 0 | 356 | 0 | 356 |
| 13. | Testing | 1,376 | (208) | 1,168 [3] | 0 | 1,168 | 0 | 1,168 |
| 14. | Permit fees and licenses | 325 | (12) | 313 [3] | 0 | 313 | 0 | 313 |
| 15. | Transportation expenses | 1,428 | 0 | 1,428 | 0 | 1,428 | 0 | 1,428 |
| 16. | Training | 150 | 0 | 150 | 0 | 150 | 0 | 150 |
| 17. | Insurance expense | 205 | 0 | 205 | 0 | 205 | 0 | 205 |
| 18. | Bank charges | 29 | 0 | 29 | 0 | 29 | 0 | 29 |
| 19. | Computer/software fees | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20. | Rate case expense | 0 | 48 | 48 [4] | 0 | 48 | 0 | 48 |
| 21. | Rent expense | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 22. | Other expenses | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23. | Total O&M expenses | 13,449 | (167) | 13,282 | 0 | 13,282 | 0 | 13,282 |
| 24. | Depreciation expense | 736 | 87 | 823 [5] | 0 | 823 | 0 | 823 |
| 25. | Property taxes | 101 | 0 | 101 | 0 | 101 | 0 | 101 |
| 26. | Payroll taxes | 537 | 0 | 537 | 0 | 537 | 0 | 537 |
| 27. | Other taxes | 25 | (25) | 0 [6] | 0 | 0 | 0 | 0 |
| 28. | Regulatory fee | 0 | 12 | 12 [7] | 15 | 27 [7] | 12 | 24 [7] |
| 29. | Gross receipts tax | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30. | State income tax | 0 | 0 | 0 [8] | 115 | 115 [12] | 45 | 45 [17] |
| 31. | Federal income tax | 0 | 0 | 0 [9] | 559 | 559 [13] | 219 | 219 [18] |
| 32. | Total operating revenue deductions | 14,848 | (93) | 14,755 | 689 | 15,444 | 276 | 15,031 |
| 33. | Net operating income for return | (\$6,111) | \$197 | (\$5,914) | \$9,614 | \$3,700 | \$7,691 | \$1,777 |

Pineview Water System

Docket No. W-549 Sub 10

FOOTNOTES TO SCHEDULE 3

For the Test Year Ended December 31, 2016

Morgan Exhibit I
Schedule 3
Page 2 of 2

- [1] Column (c) - Column (a).
- [2] Column (a) plus Column (b), unless otherwise footnoted
- [3] Per Public Staff Engineer Profit.
- [4] Morgan Exhibit I, Schedule 3-1, Line 5.
- [5] Morgan Exhibit I, Schedule 2-1, Line 11, Column (e).
- [6] Adjustment to remove regulatory fee.
- [7] Line 5 x 0.0014.
- [8] Morgan Exhibit I, Schedule 3-2, Line 13, Column (a).
- [9] Morgan Exhibit I, Schedule 3-2, Line 20, Column (a).
- [10] Column (e) - Column (c).
- [11] Column (c) plus Column (d), unless otherwise footnoted.
- [12] Morgan Exhibit I, Schedule 3-2, Line 13, Column (b).
- [13] Morgan Exhibit I, Schedule 3-2, Line 20, Column (b).
- [14] Column (g) - Column (c).
- [15] Column (c) plus Column (f), unless otherwise footnoted.
- [16] Calculated by Public Staff.
- [17] Morgan Exhibit I, Schedule 3-2, Line 13, Column (c).
- [18] Morgan Exhibit I, Schedule 3-2, Line 20, Column (c).

Pineview Water System
Docket No. W-549 Sub 10
CALCULATION OF RATE CASE EXPENSE
For the Test Year Ended December 31, 2016

Morgan Exhibit I
Schedule 3-1

| <u>Line No.</u> | <u>Item</u> | <u>Amount</u> |
|-----------------|--|----------------|
| 1. | Cost to mail notices | \$45 [1] |
| 2. | NCUC filing fees | <u>100 [2]</u> |
| 3. | Total rate case expense (Line 1+ Line 2) | 145 |
| 4. | Amortization factor | <u>3</u> |
| 5. | Amortized regulatory expense (Line 3 / Line 4) | <u>\$48</u> |

[1] Based on 35 customers x 2 mailings x \$.49 stamps plus \$.15 for envelopes and copying.
[2] Filing fee per application

Pineview Water System
Docket No. W-549 Sub 10
CALCULATION OF INCOME TAXES
For the Test Year Ended December 31, 2016

Morgan Exhibit I
Schedule 3-2

| Line No. | Item | Present Rates [1] (a) | Company Proposed Rates [3] (b) | Public Staff Recommended Rates [5] (c) |
|----------|--------------------------------------|--------------------------|-----------------------------------|---|
| 1. | Operating revenue | \$8,841 | \$19,144 | \$16,808 |
| 2. | Operating revenue deductions: | | | |
| 3. | O & M expenses | 13,282 | 13,282 | 13,282 |
| 4. | Depreciation expense | 823 | 823 | 823 |
| 5. | Property taxes | 101 | 101 | 101 |
| 6. | Payroll taxes | 537 | 537 | 537 |
| 7. | Other taxes | 0 | 0 | 0 |
| 8. | Regulatory fee | 12 | 27 | 24 |
| 9. | Gross receipts tax | 0 | 0 | 0 |
| 10. | Interest expense | 533 [2] | 533 [4] | 533 [6] |
| 11. | Total deductions (Sum of L3 thru L9) | 15,288 | 15,303 | 15,300 |
| 12. | Taxable income (L1 - L10) | (6,447) | 3,841 | 1,508 |
| 13. | Less: State income tax @3% | 0 | 115 | 45 |
| 14. | Less: Federal income tax | | | |
| 15. | First \$50,000 @ 15% | 0 | 559 | 219 |
| 16. | Next \$25,000 @ 25% | 0 | 0 | 0 |
| 17. | Next \$25,000 @ 34% | 0 | 0 | 0 |
| 18. | Next \$235,000 @ 39% | 0 | 0 | 0 |
| 19. | Over \$335,000 @ 34% | 0 | 0 | 0 |
| 20. | Total federal income taxes | 0 | 559 | 219 |
| 21. | Net amount (L11 - L12 - L19) | (6,447) | 3,167 | 1,244 |
| 22. | Add: Interest expense | 533 [2] | 533 [4] | 533 [6] |
| 23. | Net income for return (L20 + L21) | (\$5,914) | \$3,700 | \$1,777 |

- [1] Morgan Exhibit I, Schedule 3, Column (c).
- [2] Morgan Exhibit I, Schedule 1, Line 1, Column (e).
- [3] Morgan Exhibit I, Schedule 3, Column (e).
- [4] Morgan Exhibit I, Schedule 1, Line 4, Column (e).
- [5] Morgan Exhibit I, Schedule 3, Column (g).
- [6] Morgan Exhibit I, Schedule 1, Line 7, Column (e).

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. W-549, SUB 10

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of
Application by John W. Gensinger, Post Office)
Box 303, Raleigh, North Carolina 27602, for)
Authority to Increase Rates for Water Utility) AFFIDAVIT OF
Service in Pineview Estates Subdivision in) KAREN E. PROFFITT
Wake County, North Carolina)

STATE OF NORTH CAROLINA

COUNTY OF WAKE

I, Karen E. Proffitt, being duly sworn, do depose and say:

My name is Karen E. Proffitt. My business address is 430 North Salisbury Street, Dobbs Building, Raleigh, North Carolina. I am a Utilities Engineer with the Public Staff's Water, Sewer & Communications Division.

I graduated from North Carolina State University receiving a Bachelor of Science degree in Industrial Engineering. I have worked with the Public Staff since October 1993 as an engineer in the Communications Division and Electric Division, responsible for the review of the tariffs and incentive programs of local exchange companies and electric utilities, and for the forecasting of customer growth of regulated electric companies. In the Natural Gas Division, I was responsible for reviewing filings related to rate design, cost-of-service studies, purchased gas cost adjustments, tariff revisions, and annual review of gas costs. In March 2013, I joined the Water and Sewer Division, and have presented recommendations in rate

increase proceedings; new franchise, contiguous extension, and transfer applications; and other matters relating to water and sewer utility regulation before the Commission.

My duties with the Public Staff are to monitor the operations of regulated water and sewer utilities with regard to rates and service. Included in these duties are field investigations to review, evaluate, and recommend changes, when needed, in the design, construction, and operations of regulated water and sewer utilities; presentation of expert testimony in formal hearings; and presentation of information, data, and recommendations to the Commission.

The purpose of this affidavit is to describe my investigation and make recommendations concerning the application filed by John W. Gensinger (Applicant) with the Commission on May 10, 2017, seeking authority to increase rates for water utility service in Pineview Estates Subdivision in Wake County, North Carolina.

On June 6, 2017, the Commission issued an order establishing a general rate case, suspending rates, requiring customer notice and scheduling a customer hearing subject to cancellation if no significant protests were received subsequent to customer notice. The Certificate of Service was filed on August 30, 2017, stating that notice was provided to all customers in accordance with the Commission's order. There were no customer protests.

My investigation of the rate case included a field inspection, review of the Applicant's records, and review of records from the North Carolina Division of Environmental Quality (NCDEQ). I have conducted an analysis of revenues at

existing and proposed rates, and assisted Public Staff Accountant Iris Morgan in reviewing capital improvements and expenses.

The water system serving Pineview Estates Subdivision consists of two active wells with one entry point, one well house, a 1,000-gallon hydropneumatic storage tank, and chlorination equipment, and other appurtenances. The water system currently serves approximately 33 residential connections.

I discussed the status of the water system with Mr. Greg Vital of the NCDEQ. He indicates that there are no current regulatory issues with the water system.

On September 5, 2017, I inspected the Applicant's water system with John Gensinger and Public Staff Utilities Engineer Lindsay Quant. The treatment and distribution facilities appeared to be in good condition and operating properly.

Based on the lack of customer protests, information provided by Applicant, NCDEQ, and the Public Staff's investigation, I have found that the Applicant is providing adequate service to the customers.

The Applicant's present and proposed rates are as follows:

| <u>Water Utility Service:</u> | <u>Present Rates</u> | <u>Proposed Rates</u> |
|--------------------------------|----------------------|-----------------------|
| <u>Monthly Rates:</u> | | |
| Residential Service, flat rate | \$ 21.52 | \$ 46.96 |
| <u>Other Charges:</u> | | |
| Reconnect, Cut-off for Cause | \$ 14.35 | \$ 25.00 |
| Reconnect, Cut-off Requested | \$ 14.35 | \$ 25.00 |

I have calculated annual water revenues at present and proposed rates as follows:

Revenue at Present Rates = 405 test year billings x \$21.52 = \$8,716

Revenue at Proposed Rates = 405 test year billings x \$46.96 = \$19,019

I have reviewed the Applicant's maintenance and repair, electric power, chemicals, water quality testing, and permit fee and licenses expenses, and make recommendations as follows:

| | <u>Application</u> | <u>Adjustment</u> | <u>Expense</u> |
|------------------------|--------------------|-------------------|----------------|
| Maintenance and Repair | \$ 610 | \$ 5 | \$ 615 |
| Power | \$ 1,100 | \$ 0 | \$ 1,100 |
| Chemicals | \$ 356 | \$ 0 | \$ 356 |
| Testing | \$ 1,376 | (\$ 208) | \$ 1,168 |
| Permit Fees/Licenses | \$ 325 | (\$ 12) | \$ 313 |

The Applicant specified an annual maintenance and repair expense of \$610. This was the cost to replace the Well #3 submersible pump. I have removed this item and reclassified it as a capital improvement. During the test year, Applicant repaired a water line break at an expense of \$175. In addition, I have included an estimated expense of \$440 for well lot maintenance. The resulting maintenance and repair expense is \$615.

The Applicant specified an annual electric power expense of \$1,100. There is a single power meter which also provides power to other non-utility facilities. The Applicant performed a calculation in an attempt to isolate the utilities portion of the expense. I have reviewed the calculation and also compared the amount calculated to the annual expense for a similar water system, and find the amount to be reasonable.

The Applicant specified an annual chemical expense of \$356, derived from a calculation based on the estimated quantity of chlorine bleach purchased annually at the current unit cost. I have estimated the annual amount of chlorine bleach necessary based on the amount of water treated during the test year, and find the calculation to be reasonable. I agree with the estimated annual expense.

The Applicant specified an annual water quality testing expense of \$1,376. Upon review of the expense calculation, I determined that Pineview appropriately included testing that will be required in years outside the test year, annualized based on appropriate testing frequencies, except the Applicant included more than the twelve required coliform tests. I removed the excess coliform tests from the testing expense, and reduced the radiological test expenses to reflect current laboratory unit pricing. My adjusted calculation of the water quality testing expense is shown in Proffitt Exhibit 1.

The Applicant specified an annual permit fees and licenses expense of \$325. He provided documentation for operator license renewal fees and NCDEQ permit renewal fees, which have been verified. The Applicant's permit fees expense included a \$25 regulatory fee, which has been removed, recalculated, and reclassified to the appropriate expense category. The Applicant's water tank must be pressure tested once every four years, and therefore I included a \$13 tank certification expense (\$50 annualized over four years). The resulting permit fees and licenses expense is \$313.

I reviewed the Applicant's additions to plant in service since the last rate case, and recommend that the 1,000-gallon hydropneumatic tank expense of

\$18,935 incurred during the test year be allowed, with depreciation over 25 years. As stated previously, I have reclassified the \$610 cost to replace the Well #3 submersible well pump from maintenance and repair to plant in service, with a 7-year depreciation life.

Based upon the Public Staff's investigation, the Public Staff finds that the rates requested by the Applicant are in excess of the revenue requirement, as calculated in Schedule 3 of Public Staff witness Morgan's Exhibit 1. The Public Staff's proposed revenue requirement, as calculated by witness Morgan, is \$16,683. To calculate the allowable monthly flat rate of \$41.20, I divided the annual revenue requirement by 405, the number of test year billings. The result, when rounded up to the next higher cent, is \$41.20 per monthly bill.

The Applicant has agreed to the Public Staff's proposed rate.

The Applicant has requested an increase in its reconnection fees from \$14.35 to \$25. I have reviewed an estimate of the Applicant's expenses associated with reconnection of water service, and find his proposed reconnection fee to be fair and reasonable.

This completes my affidavit.

Karen E. Proffitt
Karen E. Proffitt

Sworn to and Subscribed before me,

This is the 20th day of September, 2017.

Linnetta W. Threatt
Notary Public



My Commission expires 9-4-2018

Pineview Water System
Docket No. W-549, Sub 10
NC0392177, 2 wells, 1 entry point
Water Quality Testing Expenses

| <u>Test</u> | | <u>No. of Tests</u> | <u>Freq. of Tests</u> | <u>Annual Tests</u> | <u>Cost Per Sample</u> | <u>Annual Expense</u> |
|-----------------------------|----|---------------------|-----------------------|---------------------|------------------------|-----------------------|
| Coliform Bacteria | S | 12 | per year | 12.00 | \$ 50.00 | \$ 600 |
| Asbestos | S | - | - | 0.00 | \$ 250.00 | \$ - |
| THM/HAA5 | S | 1 | per 3 years | 0.33 | \$ 185.00 | \$ 62 |
| Lead/Copper | S | 5 | per 3 years | 1.67 | \$ 35.00 | \$ 58 |
| Inorganics/Secondaries | EP | 1 | per 3 years | 0.33 | \$ 220.00 | \$ 73 |
| VOCs | EP | 1 | per 3 years | 0.33 | \$ 100.00 | \$ 33 |
| SOCs | EP | 1 | per 3 years | 0.33 | \$ 750.00 | \$ 250 |
| Nitrate | EP | 1 | per year | 1.00 | \$ 50.00 | \$ 50 |
| <u>Radiologicals</u> | | | | | | |
| Gross Alpha | EP | 1 | per 9 years | 0.11 | \$ 50.00 | \$ 6 |
| Comb. Uranium | EP | 1 | per 9 years | 0.11 | \$ 35.00 | \$ 4 |
| Comb. Radium | EP | 1 | per 6 years | 0.17 | \$ 190.00 | \$ 32 |

Total Average Annual Expense \$ 1,168

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. W-549, SUB 10

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)
Application by John W. Gensinger, Post Office)
Box 303, Raleigh, North Carolina 27602, for)
Authority to Increase Rates for Water Utility)
Service in Pineview Estates Subdivision in Wake)
County, North Carolina)

AFFIDAVIT OF
CALVIN C. CRAIG, III

State of North Carolina

County of Wake

I, Calvin C. Craig, III, being first duly sworn do depose and say:

I am a Public Utilities Financial Analyst with the Economic Research Division of the Public Staff of the North Carolina Utilities Commission representing the using and consuming public.

I received a B.S. degree in Industrial Relations from the University of North Carolina at Chapel Hill in 1985, an M.B.A. degree from East Carolina University in 1993, and a J.D. degree from North Carolina Central University in 2006. Since joining the Public Staff in November 1995, I have been involved with natural gas expansion projects, have conducted rate of return studies, and have filed affidavits assessing financial viability and fair rate of return in numerous water utility rate cases.

The purpose of my affidavit is to make a recommendation to the Commission regarding the fair rate of return to be employed as a basis for determining the appropriate revenue requirements for John W. Gensinger

(Applicant), to provide water utility service in Pineview Estates Subdivision in Wake County, North Carolina.

For the water utility service of John W. Gensinger, I recommend that he be granted a 7.50% margin on expenses. After investigation, the Public Staff has found that the Applicant's water rate base is greater than the reasonable level of operating expenses. My estimate of the risk-free rate is 4.50%, which when combined with the 3.0 percentage point risk factor produces the 7.50% margin. The overall rate of return is to be used in conjunction with a reasonable capital structure consisting of 50% debt and 50% common equity. As set forth in G.S. 62-133, I have used the rate base method to evaluate the Applicant's proposed rate increase.

As outlined in Docket No. W-173, Sub 14, Montclair Water Company, several factors should be considered when judging the adequacy of a return. These are interest coverage, adequacy of the income level after interest expense, the level of inflation, and the quality of service.

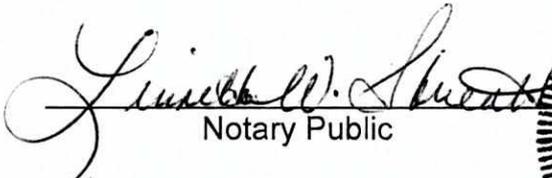
In considering these factors in conjunction with this proceeding, I have not incorporated any consideration with respect to quality of service. Interest coverage has been provided at an adequate level. The level of inflation has been factored into the U.S. Treasury bond rate by investor expectations of the future levels of inflation. In my opinion, the recommended rate of return provides an adequate level of income after interest expense.

For these reasons, I recommend to the Commission that John W. Gensinger be granted a 7.50% margin on rate base. This concludes my affidavit.

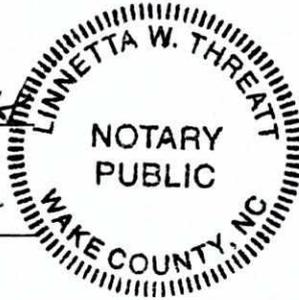

Calvin C. Craig, III

Sworn to and subscribed before me,

This the 20th day of September, 2017.


Notary Public

Linnetta W. Threatt
Printed Name



My Commission Expires 9-4-2018