



**NORTH CAROLINA
PUBLIC STAFF
UTILITIES COMMISSION**

January 31, 2024

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4300

Re: Docket No. W-1263, Sub 4 – Application by JPC Utilities, LLC for Authority to Adjust and Increase Rates for Water and Wastewater Utility Service in Its Service Areas in Guilford County, North Carolina

Dear Ms. Dunston,

Attached for filing on behalf of the Public Staff – North Carolina Utilities Commission (Public Staff) in the above-referenced docket is the testimony of Lindsay Q. Darden, Engineer with the Water, Sewer, and Telephone Division of the Public Staff.

By copy of this letter, we are forwarding a copy to all parties of record by electronic delivery.

Sincerely,

Electronically submitted
/s/ James Bernier, Jr.
Staff Attorney
james.bernier@psncuc.nc.gov

/s/ Davia Newell
Staff Attorney
davia.newell@psncuc.nc.gov

cc: Parties of Record

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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. W-1263, SUB 4

In the Matter of
Application of JPC Utilities, LLC, for)
Authority to Adjust and Increase Rates)
for Water and Wastewater Utility Service)
in its service areas in Guilford County,)
North Carolina)

**TESTIMONY OF
LINDSAY Q. DARDEN
PUBLIC STAFF –
NORTH CAROLINA
UTILITIES COMMISSION**

January 31, 2024

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

3 A. My name is Lindsay Q. Darden. My business address is 430 North
4 Salisbury Street, Dobbs Building, Raleigh, North Carolina. I am an
5 engineer with the Water, Sewer, and Telephone Division of the
6 Public Staff – North Carolina Utilities Commission (Public Staff).

7 **Q. Briefly state your qualifications and duties.**

8 A. My qualifications and duties are included in Appendix A.

9 **Q. What is the nature of the Company's application in this rate**
10 **case?**

11 A. On September 6, 2023, JPC Utilities, LLC (JPC or Company) filed
12 an application seeking authority to increase rates and charges for
13 water and sewer utility service in its service area in Guilford County,
14 North Carolina (Application). The test year for this rate case is the
15 12-month period ended December 31, 2022.

16 On October 3, 2023, the Commission issued an order establishing a
17 general rate case and suspending rates. On October 20, 2023, the
18 Commission issued an order scheduling a public witness hearing
19 subject to cancellation if no significant protests were received,
20 scheduling an evidentiary hearing, and requiring customer notice.
21 JPC filed a Certificate of Service on October 27, 2023, stating that
22 all customers received notice on or before October 30, 2023. One

1 customer protest was received by January 3, 2024, and on January
2 5, 2024, the Commission issued an order cancelling the public
3 witness hearing and requiring customer notice. On January 12, 2024,
4 the Public Staff received a consumer statement in the form of a letter
5 from Clancy Laizure, a commercial customer of the Company, and
6 an accompanying petition with 35 signatures. On January 17, 2024,
7 the Public Staff filed a cover letter explaining that Mr. Laizure's
8 statement appeared to have been received by the Post Office on or
9 before December 22, 2023, and recommending that a public witness
10 hearing be rescheduled as soon as possible.

11 **Q. Briefly explain the scope of your investigation regarding the**
12 **Application.**

13 A. My areas of investigation in this proceeding were the review of the
14 Application, data request responses, and records from the North
15 Carolina Department of Environmental Quality (DEQ). I conducted
16 an analysis of revenues at existing and proposed rates, completed a
17 billing analysis including rate design, conducted a site visit, and
18 assisted Public Staff Financial Analyst David Lentz in reviewing
19 capital improvements and expenses.

20 **Q. Briefly describe JPC's water and sewer utility systems.**

21 A. JPC's service area is located at the intersection of Oak Ridge Road
22 and Highway 68 in Guilford County. JPC has one community water

1 system, Oak Ridge Commons (NC3041019), consisting of three
2 wells and two additional transient systems consisting of one well
3 each for a total of five groundwater wells operated by JPC. The wells
4 are treated with a combination of chlorine, caustic soda, and
5 orthophosphate. The community water system also includes an
6 80,000-gallon capacity ground storage tank and a 6,000-gallon
7 hydropneumatic tank. The water system serves approximately 68
8 commercial connections as of December 31, 2022.

9 JPC's sewer system consists of a 30,000 gallons per day (GPD)
10 wastewater package treatment plant and a 6,000 GPD sand filtration
11 system. The sewer system consists of three lift stations and two
12 ponds, one for wastewater treated to reuse standards and the other
13 for storage of non-reuse wastewater. The reuse wastewater feeds
14 into a spray irrigation system for disposal. The wastewater treatment
15 plant operates under the DEQ permit number WQ0019755, and the
16 collection system is deemed permitted. The wastewater system
17 serves approximately 58 commercial connections as of December
18 31, 2022.

1 **Q. Have you conducted a site visit of the JPC water and sewer**
2 **systems and, if so, what were your observations?**

3 A. Yes. On January 17, 2024, I visually inspected the JPC water and
4 sewer systems. I was accompanied by JPC's owner, Philip Cooke,
5 water operator, Chad Linebach, and sewer operator, Doug Smith.

6 The water system appears to be in fair condition. The water storage
7 tank had fresh exterior paint. All wells were fully operational and had
8 well maintained well houses.

9 The sewer system appears to be in fair condition as well. It has been
10 operational and has not caused service issues for customers. The
11 three lift stations have duplex pumps. The sewer lift stations
12 appeared secure and functional. The storage ponds, spray fields,
13 and wastewater treatment plant all appeared to be operating and
14 functional. At the time of my visit, one irrigation pump had been sent
15 out for repair. Philip Cooke stated that the next major upgrade project
16 for the wastewater plant was to replace the storage pond liners in the
17 fall of 2025.

18 **Q. Briefly describe the results of your investigation of DEQ's**
19 **records.**

20 A. In the past three years, the JPC community water system
21 (NC3041019) has received one Notice of Violation (NOV) by DEQ.
22 On March 30, 2022, the system was issued a reporting violation for

1 failure to submit a lead consumer notice. The violation was resolved
2 and the water system returned to compliance on the same day. In
3 the report from the most recent DEQ sanitary survey inspection
4 conducted on November 16, 2023, by the Winston-Salem Regional
5 Office, DEQ stated that the water system is in good condition and did
6 not identify any deficiencies during the inspection.

7 **Q. Is JPC providing safe and reliable service?**

8 A. Yes. Based on my site visit, review of environmental records, the
9 minimal amount of NOVs issued by DEQ, and the lack of customer
10 complaints regarding water quality or customer service issues over
11 the past three years, I conclude that JPC is providing adequate
12 service to its water and sewer customers.

13 **BILLING ANALYSIS**

14 **Q. What are the present and proposed water and sewer utility**
15 **service rates?**

16 A. JPC's present rates, fees, and additional charges were approved in
17 by the Commission in Docket No. W-1263, Sub 0, the Company's
18 application for a certificate of public and convenience, and revised in
19 W-1263, Sub 1 to reflect House Bill 998 and have been in effect since
20 February 13, 2015. The present rates and the rates proposed by JPC
21 are as follows:

		<u>Present</u>	<u>Proposed</u>
1			
2	<u>Metered Water</u> (monthly):		
3	Base charge, zero usage:		
4	5/8-inch meter	\$ 22.80	\$ 54.93
5	1-inch meter	\$ 57.00	\$ 137.32
6	1 ½ -inch meter	\$ 114.00	\$ 274.64
7	2-inch meter	\$ 182.40	\$ 439.42
8	Usage charge, per 1,000 gallons	\$ 3.80	\$ 10.40
9	<u>Metered Sewer</u> (monthly):		
10	Base charge, zero usage:		
11	5/8-inch meter	\$ 28.20	\$ 57.01
12	1-inch meter	\$ 56.40	\$ 114.02
13	1 ½ -inch meter	\$ 103.40	\$ 209.03
14	2-inch meter	\$ 159.80	\$ 323.05
15	Usage charge, per 1,000 gallons	\$ 15.08	\$ 29.45
16	JPC has not proposed any changes to the following rates, fees, and		
17	charges:		
18	<u>Connection Charge:</u>		
19	Water & Sewer Utility Service		\$ 600.00
20	<u>Reconnection Charge:</u>		
21	If water service cut off by utility for good cause		\$ 14.40
22	If water service discontinued at customer request		\$ 14.40
23	If sewer only service cut off by utility for good cause by means other		
24	than discontinuing water service		\$ 14.10
25	<u>Bills Due:</u>	On billing date	
26	<u>Bills Past Due:</u>	25 days after billing date	
27	<u>Billing Frequency:</u>	Shall be monthly for service in arrears	

1 Finance Charge for 1% per month will be applied to the
2 Late Payment: unpaid balance of all bills still past due 25
3 days after the billing date.

4 **Q. Briefly explain your billing analysis.**

5 A. I reviewed and analyzed JPC's billing data for the test year ended
6 December 31, 2022. I performed a billing analysis to determine the
7 level of annual service revenues produced at present and proposed
8 rates utilizing the billing data provided for the test year. I normalized
9 the billing determinants for end of period (EOP) customer counts and
10 analyzed the consumption data for the test year ended December
11 31, 2022. I did not apply any growth adjustments to the billing
12 determinants since JPC stated that significant customer growth is not
13 expected in the near future, which is consistent with my observations
14 during the site visit.

15 I developed a recommended rate design to recover the service
16 revenue requirements determined by Public Staff Financial Analyst
17 David Lentz.

18 **Q. What are the Public Staff's annual service revenues under**
19 **present and proposed rates?**

20 A. The present and proposed service revenues for the water and sewer
21 rate divisions for the 12-month period ended December 31, 2022,
22 are shown below in **Darden Table 1**. The revenues were calculated
23 using the Public Staff's recommended billing determinants and JPC's

1 present rates approved in Docket No. W-1263, Sub 1, and JPC's
2 proposed rates.

3 **Darden Table 1 - Public Staff's Calculated Service Revenues**

Rate Division	Present Rates	Proposed Rates
Water	\$ 66,487	\$168,069
Sewer	\$130,831	\$257,850
Total	\$197,318	\$425,920

4 **Q. What is your recommendation concerning JPC's proposed**
5 **rates?**

6 A. The Public Staff recommends a partial rate increase for the water and
7 sewer rate divisions. My revenue calculations for each rate division are
8 shown in **Darden Exhibit No. 1**. The Public Staff recommended rates
9 are as follows:

10 Metered Water (monthly):

11 Base charge, zero usage:

12	5/8-inch meter	\$ 46.26
13	1-inch meter	\$ 115.65
14	1 ½ -inch meter	\$ 231.30
15	2-inch meter	\$ 370.08

16	Usage charge, per 1,000 gallons	\$ 13.69
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17 Metered Sewer (monthly):

18 Base charge, zero usage:

19	5/8-inch meter	\$ 47.21
20	1-inch meter	\$ 118.03
21	1 ½ -inch meter	\$ 236.05
22	2-inch meter	\$ 377.68

23	Usage charge, per 1,000 gallons	\$ 25.33
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RATE DESIGN

2 **Q. Briefly describe the rate design proposed by JPC.**

3 A. JPC proposes to utilize a similar ratio of base facility charges to
4 volumetric charges as the current rates approved by the Commission
5 in Docket No. W-1263, Sub 0. The present rates have a rate design
6 ratio of 64:36 (base facility charge: usage charge) for water and
7 26:74 for the sewer rates. The Company's proposed rate design ratio
8 is 61:39 for the water rates and 27:73 for the sewer rates.

9 **Q. What is the Public Staff's position on rate design?**

10 A. The Commission has previously said that it, "seeks to strike an
11 appropriate balance between achieving revenue sufficiency and
12 stability to ensure quality, reliability, and long-term viability for [a
13 utility company] on the one hand, and setting fair and reasonable
14 rates that effectively promote efficiency and conservation on the
15 other hand." See Order Approving Partial Settlement Agreement and
16 Stipulation, Deciding Contested Issues, Granting Partial Rate
17 Increase, and Requiring Customer Notice, Docket No. W-218, Sub
18 526. Based on this principle, the Public Staff recommends a service
19 revenue ratio of 50:50 (base facilities charge: usage charge) for the
20 water rates and 30:70 for the sewer rates.

21 A lower base facility charge reduces the cost burden on customers
22 for access to utility service before the use of any service. It allows

1 customers to have greater control over their total bill by adjusting
2 their usage through conservation and improved efficiency. The
3 Public Staff's recommended rate design ratios of 50:50 for water and
4 30:70 for sewer have been implemented in my recommended rates
5 and supporting exhibits detailing the billing analysis.

6 JPC customers have filed consumer statements about the rising cost
7 of their water and sewer service. A rate design that is more heavily
8 weighted to the volumetric charges gives customers more control
9 over their monthly bill. With the continued rising cost of service, a
10 rate design that achieves an appropriate balance between revenue
11 sufficiency and stability and setting fair and reasonable rates that
12 effectively promote efficiency and conservation, as the Public Staff
13 has proposed, could ease the effects of the rate increases for
14 customers.

15 **Q. Did the Public Staff make any other recommended changes to the**
16 **rate design?**

17 A. Yes, I have adjusted the meter size multiplier that applies to increasing
18 meter size for my recommended base charges for sewer rates.
19 Consistent with meter size multipliers used for the water rates and by
20 the Public Staff in the most recent rate cases for Aqua North Carolina,
21 Inc., Carolina Water Service, Inc. of North Carolina, and Old North
22 State Water Company, Inc., a 1-inch meter base charge should be

1 increased by a multiplier of 2.5 times the base charge of a <1-inch
2 meter, a 1½-inch meter base charge should be increased by a
3 multiplier of 5, and a 2-inch meter base charge should be increased by
4 a multiplier of 8.

5 EXPENSES

6 **Q. Have you recommended any adjustments to expenses related to**
7 **water and sewer operations?**

8 A. Yes, I have provided Public Staff Financial Analyst David Lentz with
9 recommendations for adjustments to testing, electric power,
10 chemicals, maintenance and repair (M&R), sludge hauling, permit,
11 contract operator, and miscellaneous expenses.

12 For the following expenses, an allocation factor is used to allocate a
13 portion of the expense between the water and sewer customers: M&R,
14 electric power, and miscellaneous. I determined the EOP customers to
15 be 68 water and 58 sewer customers; therefore, the allocation factor
16 applied is 54% for water and 46% for sewer.

17 TESTING EXPENSES

18 The Public Staff has reviewed JPC's water and sewer testing
19 expenses. For the water testing, I reallocated an invoice for testing that
20 was included in the contract operator expense. For the sewer testing,
21 I included the total from the invoices provided in response to Public

1 Staff Data Request No. 2. The Public Staff recommends testing
2 expenses of \$205 for water and \$2,564 for sewer.

3 ELECTRIC POWER EXPENSES

4 The Public Staff has reviewed JPC's electric power expenses for the
5 water and sewer operations. JPC provided electric power invoices in
6 response to Public Staff Data Request No. 2 that totaled \$21,062. I
7 applied the allocation factor based on EOP customer counts to
8 recommend the electric power expense of \$11,374 for water and
9 \$9,689 for sewer.

10 CHEMICALS EXPENSE

11 The Public Staff has reviewed JPC's expenses for chemicals for both
12 its water and sewer operations. For the water chemicals expense, I
13 reallocated \$980 that was included in a contract operator invoice to the
14 chemicals expense. I also reallocated \$125 from the chemicals
15 expense to the testing expense based on the invoice description. For
16 the sewer testing expense, I removed an invoice for \$111 that was
17 outside the test year. Based on these changes, the Public Staff
18 recommends chemicals expenses of \$980 for water and \$5,298 for
19 sewer.

20 CONTRACT OPERATOR EXPENSE

21 The Public Staff reviewed JPC's expenses for contract operator for its
22 water and sewer operations. The Public Staff agrees with the

1 Company's contract operator expense of \$19,200 for JPC's water
2 systems. The Company provided a monthly operations sewer contract
3 with Bradley Flynt in response to Public Staff Data Request No. 3. The
4 Public Staff's recommendation for the contract operator expense for
5 sewer annualizes the monthly amount stated in the contract of \$1,700
6 per month. The Public Staff recommends a contract operator expense
7 of \$20,400 for JPC's sewer system.

8 MAINTENANCE AND REPAIR EXPENSE

9 The Public Staff reviewed JPC's expenses for M&R expenses for its
10 water and sewer operations. The Company provided invoices and
11 explanations for expenses in response to Public Staff Data Requests
12 No. 2 and No. 5. I reclassified \$41,013 from M&R to salaries expense.
13 I agreed with the Company's pro forma adjustment that reclassified the
14 pump replacement and pump reset to plant in service. I removed
15 \$1,525 worth of invoices that were dated outside the test year. I applied
16 the allocation factor based on EOP customer counts to recommend a
17 M&R expense of \$23,198 for water and \$19,702 for sewer.

18 SLUDGE HAULING EXPENSE

19 The Public Staff has reviewed the sludge hauling quantities and
20 expenses provided by JPC. Sludge hauling can vary from year to
21 year depending on operational changes or system maintenance
22 requirements needed in addition to routine sludge hauling. JPC

1 stated in response to Public Staff Data Request No. 3 that the sludge
2 hauling events that occurred during the test year were normal sludge
3 removal costs and were not associated with a specific project or
4 repair. Based on my review of the invoices and Company input, I
5 determined that the test year served as a representative annual level
6 for sludge hauling. I removed one invoice for \$1,200 that did not
7 occur during the test year. The Public Staff recommends a sludge
8 hauling expense of \$3,725 for sewer.

9 MISCELLANEOUS EXPENSE

10 The Public Staff has reviewed JPC's miscellaneous expenses for the
11 water and sewer operations. The Public Staff agrees with the
12 Company's pro forma adjustment to remove \$120 for a charity event. I
13 reclassified \$150 for water and \$1,310 for sewer to the permit fees
14 expense. I applied the allocation factor based on EOP customer counts
15 to recommend the miscellaneous expense of \$450 for water and \$383
16 for sewer.

17 PERMIT FEES EXPENSE

18 As stated above, I reallocated \$150 for water and \$1,310 for sewer
19 from miscellaneous expense to the permit fees expense. The Public
20 Staff recommends the permit fees expense of \$150 for water and
21 \$1,310 for sewer.

1 PLANT IN SERVICE

2 **Q. What adjustments have you made to plant additions since the**
3 **Docket No. W-1263, Sub 0 case?**

4 A. In response to Public Staff Data Requests No. 2 and No. 4, when
5 asked to provide invoices and supporting documentation for plant
6 additions made since May 2008, which was JPC's last case in
7 Docket No. W-1263, Sub 0, JPC provided only a few invoices as
8 support for the list of plant additions. JPC stated in response to Public
9 Staff Data Request No. 4 that due to the number of years since 2008,
10 the Company is having a hard time finding the older invoices. The
11 Public Staff asked again in an email on January 19, 2024, and JPC
12 did provide additional invoices. The Public Staff has incorporated all
13 the plant in service items that were supported by invoices or other
14 sufficient documentation. The remaining plant in service items that
15 were unsupported were nearing their fully depreciated life. I
16 recommend excluding the plant in service items that lacked sufficient
17 documentation. The plant in service items that I recommend
18 including, along with recommended service lives approved in Docket
19 No. W-1263, Sub 0, or engineering judgment, are shown on **Public**
20 **Staff Lentz Exhibit 1 Schedule 2-1** included in Public Staff witness
21 Lentz's testimony.

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

23 A. Yes, it does.

APPENDIX A

QUALIFICATIONS AND EXPERIENCE

Lindsay Q. Darden

I graduated from North Carolina State University, earning a Bachelor of Science Degree in Civil Engineering. I am a licensed Professional Engineer (PE - State of North Carolina #042110). I am also certified as a B-Well Operator (#130281) by the North Carolina Water Treatment Facility Operators Certification Board. I worked for the North Carolina Department of Environmental Quality (DEQ), Public Water Supply Section for four years prior to joining the Public Staff in December 2016. Prior to working for DEQ, I worked for Smith Gardner, an engineering consulting firm.

My duties with the Public Staff are to monitor the operations of regulated water and wastewater utilities with regard to rates and service. These duties include conducting field investigations, reviewing, evaluating, and recommending changes in the design, construction, and operations of regulated water and wastewater utilities, presenting expert testimony in formal hearings, and presenting information, data, and recommendations to the North Carolina Utilities Commission.

JPC Utilities, LLC
Docket No. W-1263, Sub 4
For the 12 Months Ending December 31, 2022

Public Staff
Darden Exhibit No. 1
Page 1 of 1

Revenue at Public Staff Recommended Rates

PS Recommended Rates

WATER

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Metered Commercial								
5/8" Meter	1,427,966	\$13.69	\$19,549	42	504	\$46.26	\$23,315	\$42,864
1" Meter	788,240	\$13.69	\$10,791	14	168	\$115.65	\$19,429	\$30,220
1.5" Meter	511,100	\$13.69	\$6,997	6	72	\$231.30	\$16,654	\$23,651
2" Meter	3,609,200	\$13.69	\$49,410	6	72	\$370.08	\$26,646	\$76,056
Total Commercial Metered	6,336,506		\$86,747	68	816		\$86,044	\$172,790

SEWER

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Metered Commercial								
5/8" Meter	1,427,606	\$25.33	\$36,161	40	480	\$47.21	\$22,661	\$58,822
1" Meter	861,430	\$25.33	\$21,820	9	108	\$118.03	\$12,747	\$34,567
1.5" Meter	511,100	\$25.33	\$12,946	4	48	\$236.05	\$11,330	\$24,277
2" Meter	3,609,200	\$25.33	\$91,421	5	60	\$377.68	\$22,661	\$114,082
Total Commercial Metered	6,409,336		\$162,348	58	696		\$69,399	\$231,747

Total Revenue: \$404,538

CERTIFICATE OF SERVICE

I certify that I have served a copy of the foregoing Testimony on all parties of record, the attorney of record of such party, or both in accordance with Commission Rule R1-39, by United States mail, postage prepaid, first class; by hand delivery; or by means of facsimile or electronic delivery upon agreement of the receiving party.

This the 31st day of January, 2024.

Electronically submitted
/s/ James Bernier, Jr.