

SANFORD LAW OFFICE, PLLC

Jo Anne Sanford, Attorney at Law

April 28, 2023

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

Via Electronic Delivery

Re: Docket No. W-354, Sub 414
Carolina Water Service, Inc. of North Carolina
Formal Complaint of Don Calhoun
Late-Filed Exhibits

Dear Ms. Dunston:

On November 7, 2022, Mr. Don Calhoun ("Complainant") filed a formal complaint ("Complaint") in this docket against Carolina Water Service, Inc. of North Carolina ("CWSNC" or "Company").

On January 31, 2023, the Commission entered an Order in this docket scheduling Mr. Calhoun's Complaint for hearing beginning at 11:00 a.m. on Thursday, March 23, 2023, in the Iredell County Hall of Justice Annex, in Statesville, North Carolina.

During the evidentiary hearing, the Commission requested CWSNC to file the following three Late-Filed Exhibits:

- A. An exhibit which details the size of the water meter(s) serving Mr. Calhoun's property and how much water can flow through per minute.
- B. An exhibit which describes (a) the Company's meter reading and billing procedures as they directly apply to each of the three water bills contested by Mr. Calhoun specifically related to flagging of high usage during the meter reading and billing processes as described by the Cavanaugh consulting group in Denton Affidavit Exhibit 1; (b) whether the Company's contacts with Mr. Calhoun related to the three water bills in question were a result of outreach by the Complainant or were they based on internal meter reading and /or billing system triggers; and (c) how estimated bills are developed and processed by the Company.

C. An exhibit summarizing the results of an investigation conducted by CWSNC testing Mr. Calhoun's irrigation system, monitored, and observed by the Complainant and his irrigation specialist.

The verified information set forth in the attached Post-Hearing Affidavits filed by CWSNC President Donald H. Denton III and Gary M. Peacock, CWSNC's Director of State Operations, constitute and set forth CWSNC's responses regarding Late-Filed Exhibits A, B, and C above, as requested by the Commission.

CWSNC requests that the attached Late-Filed Exhibits be admitted in evidence in this proceeding.

I hereby certify that copies of the attached Late-Filed Exhibits have been electronically served on the Complainant, who is the only other formal party to this proceeding.

Thank you and your staff for your assistance; please feel free to contact me if there are any questions or suggestions.

Sincerely,

Electronically Submitted

/s/Jo Anne Sanford

State Bar No. 6831

Attorney for Carolina Water Service,
Inc. of North Carolina

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. W-354, SUB 414

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	
Don Calhoun, 393 Bayberry Creek Circle,)
Mooreville, North Carolina 28117,)
Complainant)
)
v.)
)
Carolina Water Service, Inc. of North Carolina,)
Defendant)

**POST-HEARING AFFIDAVIT OF DONALD H. DENTON III
PRESIDENT OF
CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA**

Donald H. Denton III, President of Carolina Water Service, Inc. of North Carolina ("CWSNC" or "Company"), first being duly sworn, deposes and says:

On November 7, 2022, Don Calhoun (Mr. Calhoun or Complainant), a CWSNC water customer, filed a formal complaint (Complaint) with the North Carolina Utilities Commission (Commission or NCUC) challenging, in pertinent part, certain water usage and billing information affecting water bills from CWSNC that he received for water utility service at his property located at 393 Bayberry Creek Circle in Mooreville, North Carolina. On November 30, 2022, Mr. Calhoun filed an addendum to his Complaint.

On January 31, 2023, the Commission entered an Order in this docket scheduling Mr. Calhoun's Complaint for evidentiary hearing beginning at

11:00 a.m. on Thursday, March 23, 2023, in the Iredell County Hall of Justice Annex, in Statesville, North Carolina.

During the evidentiary hearing, the Commission requested CWSNC to file the following three Late-Filed Exhibits:

- A. An exhibit which details the size of the water meter(s) serving Mr. Calhoun's property and how much water can flow through per minute.
- B. An exhibit which describes (a) the Company's meter reading and billing procedures as they directly apply to each of the three water bills contested by Mr. Calhoun specifically related to flagging of high usage during the meter reading and billing processes as described by the Cavanaugh consulting group in Denton Affidavit Exhibit 1; (b) whether the Company's contacts with Mr. Calhoun related to the three water bills in question were a result of outreach by the Complainant or were they based on internal meter reading and/or billing system triggers; and (c) how estimated bills are developed and processed by the Company.
- C. An exhibit summarizing the results of an investigation conducted by CWSNC testing Mr. Calhoun's irrigation system, monitored, and observed by the Complainant and his irrigation specialist.

The verified information set forth in this Post-Hearing Affidavit constitutes and sets forth CWSNC's response regarding Late-Filed Exhibit B above, as requested by the Commission. Separately, Gary M. Peacock, CWSNC's Director of State Operations, addresses Late-Filed Exhibits A and C in a separate Post-Hearing Affidavit.

Late-Filed Exhibit B
Description of Meter Reading and Billing Procedures as Applied to
Complainant Don Calhoun Regarding Three Contested Water Bills and How
Estimated Bills Are Developed and Processed by CWSNC

The Commission requested that CWSNC file an exhibit which describes (a) the Company's meter reading and billing procedures as they directly apply to each of the three water bills contested by Mr. Calhoun specifically related to

flagging of high usage during the meter reading and billing processes as described by the Cavanaugh consulting group in Denton Affidavit Exhibit 1; (b) whether the Company's contacts with Mr. Calhoun related to the three water bills in question were a result of outreach by the Complainant or were they based on internal meter reading and /or billing system triggers; and (c) how estimated bills are developed and processed by the Company.

As I testified during the March 23, 2023 evidentiary hearing, CWSNC has multiple ways to identify unusual customer usage, including through third-party meter reading procedures and triggers in its billing system. The Company then creates a plan for appropriate follow-up.

In addition, as described in my December 16, 2022 Affidavit at Paragraph 36 on pages 16 - 17, in the fall of 2022, the Company, in response to the concerns expressed by Mr. Calhoun and in order to ensure that the issues raised in his Complaint were not global in nature, commissioned a professional, third-party audit by Cavanaugh & Associates, P.A. of "...the current billing processes as performed by staff of Carolina Water Service of North Carolina (CWS). Additionally, a sample of customer meter records were reviewed for The Harbour, The Point and The Farms potable water systems...." The results, captured in a Technical Memorandum,¹ received by CWSNC in October 2022, provided the following conclusion:

Based on the findings included in this analysis, we did not identify significant or negligent issues associated with current meter reading or billing processes of The Harbour/The Point/The Farms water systems. The items noted above in the review and sampling appear

¹ See Denton Affidavit Exhibit 1 filed in this docket on December 16, 2022.

consistent with routine operations and billing standards Cavanaugh has observed during similar analysis for Utilities nationally.”

In its Technical Memorandum, Cavanaugh described CWSNC’s meter reading and billing procedures, in pertinent part, as follows:

Cavanaugh conducted an interview with CWS staff to understand the current policies and practices associated with the billing of customers in the three subject systems. The meters in these systems are read monthly by a third-party contracted meter reader. The central CWS billing staff prepare a “read” file from the billing software which is then uploaded to a handheld data collector. The meter reader manually reads each of the meters (NOTE: There are two cell-transmitted automated meters in the system. These meters can provide an hourly consumption history through a separate, cloud based, read system).

As reads are manually conducted and entered into the handheld, an alert is registered for any abnormal consumption (zero, negative, high or low). This alert prompts the meter reader to check the entered reading. If the reading is correct, the reader can override the alert and a note is added to the file confirming the reading. If debris or condensation prevents a meter from being read, a note is written to the file and triggers a work order for either a re-read or a meter replacement....

Once all meters are read, the read file is exported back to the billing software. The billing software generates an exception report and billing technicians review the customer’s previous consumption history to either clear the exception or generate a work order for a field visit to the meter location for investigation. All bills are reviewed prior to release.

From the review conducted, the practices noted appear consistent with industry identified meter reading and exception investigation and mitigation best practices.

The purpose of CWSNC’s high usage procedures related to meter reading and billing is to provide the Company and its customers with insight regarding unusual water consumption and to prompt action by both the Company and the customer to identify a potential cause.

In this matter, Mr. Calhoun's primary complaint relates to three bills for water utility service which he received from CWSNC during the service periods extending from May 18, 2022, through August 16, 2022. A review of Mr. Calhoun's account for those billing periods demonstrates that, when combined, the meter reading and billing procedures effectively identified high customer usage and alerted the Company to take action to communicate with the customer and investigate the situation.

As noted in my December 16, 2022 Affidavit, the Company's work with Mr. Calhoun stretched over several months and went far beyond standard procedure, requiring a set of highly-customized actions to seek out the cause of the Complainant's high water usage. For example, three separate meters installed at the Complainant's home since August 5, 2022, are digital and unique to the neighborhood, so the Company, rather than its contractor, routinely reads Mr. Calhoun's meter. For that reason and others, standard protocols were set aside or could not be applied. Below is a summary of the extensive meter reading and billing actions taken by CWSNC for the Calhoun property during the months that are the subject of his Complaint:

- May 18, 2022 – The Complainant contacted the Company to report a water leak near the meter on his property. That same day a field operator responded to the home, determined the water leak was on CWSNC's side of the meter and replaced it with another Badger brand analog meter. In the following weeks, additional repairs were made to the line feeding into the Company's side of the meter.

- June 16, 2022 – A technician from CWSNC visited the Calhoun property to check on the repair and operation of the new meter.
- June 27, 2022 – The Complainant's meter was read by the third-party company retained by CWSNC to read the meters in his service area. Mr. Calhoun's meter registered high consumption totaling 67,750 gallons since May 18, 2022. Because the meter read was taken approximately ten days after the mid-June billing cycle closed on June 17, 2022, CWSNC's billing team estimated an average per-day usage for that period for Mr. Calhoun and reduced the amount to more accurately reflect usage as of June 17, 2022 of 63,750 gallons. Furthermore, because the meter was new, it did not house historical data that would alert the meter reader to something unusual, so there was no flag for high usage.
- Before July 4, 2022 – CWSNC begins to process the latest bills and, based on the meter reading data and Mr. Calhoun's historic usage, the billing system flags high consumption on the Complainant's account.
- July 6, 2022 – CWSNC generates a request to have one of its field technicians re-read the Complainant's meter and check for leaks. This action was driven by the Company's procedures, rather than a specific contact by Mr. Calhoun.
- July 19, 2022 – A CWSNC technician visits Mr. Calhoun's premises in response to the Company's field activity request; the request was closed with the technician noting that the meter was operating properly and there were no observable leaks. During the same field visit, the technician

performed a new meter read to capture usage since June 17, 2022. Although water consumption remained high at 43,090 gallons, it was lower than the previous billing cycle, so it did not trigger a high usage flag.

- July 21, 2022 –A bill for service from May 16, 2022 through June 17, 2022, was generated and mailed to Mr. Calhoun for 63,750 gallons.
- August 1, 2022 – Mr. Calhoun contacted Corix, the parent company of CWSNC, to express his concerns about high bills and high water usage. The Complainant's email and phone message were immediately relayed to Company President Denton to respond and determine next steps.
- August 2, 2022 – A CWSNC field technician visited Complainant's property to read the meter and check for leaks near that equipment. No leaks were apparent, and the meter appeared to be functioning properly. Based on the data gathered, the technician determined that approximately 25,000 gallons of water, an average of 1,800 gallons a day, had passed through the Complainant's meter in the past 14 days since the meter had last been read on July 19, 2022. The technician shared that information about high usage with Mr. Calhoun. The Company's technician also reported that he noticed an extensive irrigation system and inground pool at Mr. Calhoun's premises and that he spoke with the Complainant about potential high-water usage from those sources, as well as possible leaks.
- On August 2, 2022 – In an email exchange, Mr. Calhoun first disputed the amount of his bill dated July 21, 2022, for the billing period from May 16, 2022, through June 17, 2022, which showed 63,750 gallons of water used

and a billing cost of \$771.04. The Company reviewed Mr. Calhoun's average bill for the previous 12 months, compared that to the current bill, and provided the Complainant with a courtesy billing credit of \$650 to align it with his historic average usage.

- August 3, 2022 – The Company issued a bill for service from June 17, 2022 to July 19, 2022, charging Mr. Calhoun for 43,090 gallons of usage.
- August 12, 2022 – A CWSNC field technician visited Mr. Calhoun's property, read the meter and checked for leaks in the vicinity of the Company's equipment. The technician noted high usage of 9,139 gallons of usage in the past seven days and shared that information with Mrs. Calhoun.

Beginning on August 1, 2022, the Company began its robust and extensive investigation. For the next several months, CWSNC's interactions with Mr. Calhoun were in response to his requests and/or proactive efforts by the Company's staff to share information, monitor equipment and gather data. In my December 16, 2022 Affidavit, I summarized multiple communications via telephone, email and text; technician field visits to read meters and survey for leaks; and several meter replacements to allow the Company to gather and share hourly data and to ensure that its equipment was operating properly. As a result, for the last two months that are the subject of Mr. Calhoun's Complaint covering service from June 18, 2022 through August 16, 2022, the traditional meter reading process was replaced with more frequent reads by CWSNC staff, so there was no

need for the billing team to assign any actions since field technicians and their leadership were deeply involved and in frequent contact with Mr. Calhoun.

In addition to the specific information set forth above regarding the Company's meter reading and billing procedures and outreach activities, the Commission also requested that CWSNC describe how estimated bills are developed and processed by the Company. The Cavanaugh consulting group explored this as part of its audit. CWSNC hereby confirms that the Cavanaugh summary, as set forth in Denton Affidavit Exhibit 1 quoted in pertinent part below, is an accurate reflection of the Company's procedure to estimate bills, when necessary, based on the specific customer's previous consumption history:

...If an accurate read cannot be obtained within the read window, an estimate is generated based on the customers (sic) previous consumption history. If a reading can be obtained during the next read period, the reading is compared to the most recent actual reading and the bill adjusted accounting for the estimated consumption.

Once all meters are read, the read file is exported back to the billing software. The billing software generates an exception report and billing technicians review the customer's previous consumption history to either clear the exception or generate a work order for a field visit to the meter location for investigation. All bills are reviewed prior to release.

Conclusion

Accordingly, based on this latest investigation and the information gathered by the Company in its comprehensive assessment over several months, as more specifically detailed in the Post-Hearing Affidavits and Late-Filed Exhibits filed by both Gary M. Peacock and me (as well as my previously-filed December 16, 2022 Affidavit and attached Exhibits and the Company's Answer and Motion to Dismiss Complaint), CWSNC again asserts that Mr. Calhoun in fact used the water that

was delivered to his property during the three billing periods in question; that his Complaint should be dismissed; that his outstanding balance for water utility service in the amount of \$713.91 is correct and should be paid; and that no further billing adjustment is warranted or required.

Corrections to Denton Affidavit Filed on December 16, 2022

As previously stated, I filed an Affidavit in this docket on December 16, 2022, as part of the Answer and Motion to Dismiss Complaint filed by CWSNC on that date. I have the following corrections to that Affidavit which I hereby offer and request that the Commission accept into the record of this proceeding.

First, the number 83,750 set forth on the second line of Paragraph 5 at page 2 of the Affidavit is incorrect. The correct number is 63,750.

Second, the number 63,070 set forth on the third line of Paragraph 19 at page 7 of the Affidavit is incorrect. The correct number is 63,750.

Third, the language quoted at the top of page 17 as part of Paragraph 36 of the Affidavit is incomplete. The complete quote reads as follows:

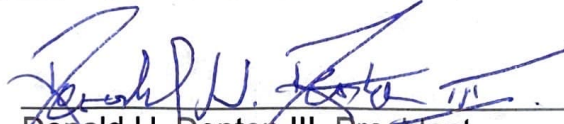
Based on the findings included in this analysis, we did not identify significant or negligent issues associated with current meter reading or billing processes of The Harbour/The Point/The Farms water systems. The items noted above in the review and sampling appear consistent with routine operations and billing standards Cavanaugh has observed during similar analysis for Utilities nationally.

Fourth, the date 2020 set forth at the end of Paragraph 7 on page 4 is incorrect. The correct date is 2022.

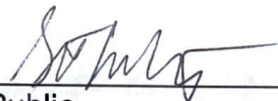
This concludes my Post-Hearing Affidavit.

FURTHER AFFIANT SAYETH NOT.

This the 28 day of April, 2023.


Donald H. Denton III, President
Carolina Water Service, Inc. of North Carolina

Sworn and subscribed before me this 28 day of April, 2023.

 (SEAL)
Notary Public

My Commission Expires: 11/07/24

Seth Bradbury
Notary Public
Mecklenburg County
My Commission Expires 11/07/24

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. W-354, SUB 414

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	
Don Calhoun, 393 Bayberry Creek Circle,)
Mooreville, North Carolina 28117,)
Complainant)
)
v.)
)
Carolina Water Service, Inc. of North Carolina,)
Defendant)

POST-HEARING AFFIDAVIT OF GARY M. PEACOCK II
DIRECTOR OF STATE OPERATIONS
CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA

Gary M. Peacock, Director of State Operations for Carolina Water Service, Inc. of North Carolina ("CWSNC" or "Company"), first being duly sworn, deposes and says:

I have been employed by CWSNC since May 1996. During my almost 27 years of employment with the Company, I have earned several promotions and attained multiple water and wastewater technical and operational state certifications in North Carolina and Tennessee. In October 2022, I was promoted to my current position as Director of State Operations for CWSNC.

On November 7, 2022, Don Calhoun (Mr. Calhoun or Complainant), a CWSNC water customer, filed a formal complaint (Complaint) with the North Carolina Utilities Commission (Commission or NCUC) challenging, in pertinent part, certain water usage and billing information affecting water bills from CWSNC

that he received for water utility service at his property located at 393 Bayberry Creek Circle in Mooresville, North Carolina. On November 30, 2022, Mr. Calhoun filed an addendum to his Complaint.

On January 31, 2023, the Commission entered an Order in this docket scheduling Mr. Calhoun's Complaint for hearing beginning at 11:00 a.m. on Thursday, March 23, 2023, in the Iredell County Hall of Justice Annex, in Statesville, North Carolina.

During the evidentiary hearing, the Commission requested CWSNC to file the following three Late-Filed Exhibits:

- A. An exhibit which details the size of the water meter(s) serving Mr. Calhoun's property and how much water can flow through per minute.
- B. An exhibit which describes (a) the Company's meter reading and billing procedures as they directly apply to each of the three water bills contested by Mr. Calhoun specifically related to flagging of high usage during the meter reading and billing processes as described by the Cavanaugh consulting group in Denton Affidavit Exhibit 1; (b) whether the Company's contacts with Mr. Calhoun related to the three water bills in question were a result of outreach by the Complainant or were they based on internal meter reading and /or billing system triggers; and (c) how estimated bills are developed and processed by the Company.
- C. An exhibit summarizing the results of an investigation conducted by CWSNC testing Mr. Calhoun's irrigation system, monitored, and observed by the Complainant and his irrigation specialist.

The verified information set forth in this Post-Hearing Affidavit constitutes and sets forth CWSNC's responses regarding Late-Filed Exhibits A and C above, as requested by the Commission. Separately, CWSNC President Donald H. Denton III addresses Late-Filed Exhibit B in a separate Post-Hearing Affidavit.

Late-Filed Exhibit A
Description of Water Meters Serving Complainant's Property

Two types of water meters were in service at Mr. Calhoun's property during the time period covered by the three water bills in question. During the period from May 18, 2022 through August 5, 2022, Mr. Calhoun was served by 5/8-inch analog Badger meters which have a normal operating range of a minimum of 0.5 gallons per minute (gpm) up to a maximum of 25 gpm. Since August 5, 2022, Mr. Calhoun has been served by 5/8-inch digital Neptune meters which have a normal operating range of a minimum of 0.1 gpm up to a maximum of 25 gpm. Thus, both types of meters have a maximum delivery of 25 gpm or 1,500 gallons per hour.

Late-Filed Exhibit C
Report Regarding Investigation and Test of Complainant's Irrigation System

I was designated by CWSNC to conduct the test of Mr. Calhoun's irrigation system. On Monday, April 3, 2023, at approximately 9:00 a.m., I arrived at Mr. Calhoun's property (located at 393 Bayberry Creek Circle in Mooresville, North Carolina) to inspect and test the Complainant's irrigation system. Mr. Calhoun and I had previously arranged the date and time based on our schedules and his interest having a third-party irrigation professional on site.¹

I expected and was prepared to conduct the irrigation system inspection as agreed upon in the hearing before the NCUC on March 23, 2023. When I arrived, Mr. Calhoun indicated that he had hired Irrigation Specialists of Lake Norman. According to that company's website, it is a Mooresville-based, North Carolina

¹ The Commission ordered that Mr. Calhoun not be charged for the water used during the irrigation system test. Based on meter data from Mr. Calhoun's property on the morning of April 3rd, the Company estimates that approximately 150 gallons of water were used during the time when the inspection and testing was being conducted. The Company will apply a credit in the amount of \$18.51 to the Complainant's account.

licensed company specializing in irrigation maintenance and repair. Technician Dave Dockery and his helper, Brian Dockery, arrived at the property a few minutes before I did and had already begun their assessment of the irrigation system infrastructure. They took the lead in this portion of the inspection while I observed. Their activities included checking the flow and operation of each zone of the system, which they reported to be normal. They also tested water pressure in the system at the reduced pressure zone (RPZ) valve or backflow preventer. Pressure measured 85 PSI, within normal limits. After their assessment, the irrigation company employees said they did not identify any leaks in the piping or sprinkler heads.

I concur in the above-summarized conclusions regarding normal operation of the irrigation system during the inspection, including normal pressure and identification of no leaks.

We also inspected the irrigation system controller, a programmable device that operates the system at predetermined days and times. In his April 3, 2023 filing in this matter, Mr. Calhoun wrote that he has had the system set to the same dates and times for ten years. He further stated, in pertinent part, that "...I have programed this system since we moved in and have only had 1 program running with watering 3 days/week in the summer months...." In addition, during the March 23rd evidentiary hearing, in response to questions from the Commission, Mr. Calhoun said he watered just two days a week, typically on Tuesday and Friday from 6:00 a.m. to 8:00 a.m., and that he would add an additional irrigation day during dry periods. (See Tr. Page 54)

The investigation conducted by Mr. Calhoun's irrigation specialists and me identified three active programs in the irrigation system controller. There was no program set to operate on Tuesday and Friday. Two of the programs were scheduled to water the lawn four times a week, more days than Mr. Calhoun acknowledged in previous statements. Both the irrigation company specialist Dave Dockery and I expressed concern to Mr. Calhoun that maintaining multiple active programs could lead to operator error and very high water usage.

More specifically, Program A had a start time of 5:00 a.m. on Monday, Wednesday, and Friday. It was set to run between four and 20 minutes in each of the 10 zones, completing the program after 2 hours, 49 minutes.

Program B was set to begin watering the lawn at 12:15 a.m. on Monday, Tuesday, Wednesday, and Thursday. It was set to run between 14 and 16 minutes in each of the 10 zones, finally shutting off entirely after 2 hours, 25 minutes.

Program C was set to begin operation at 4:45 a.m. on Monday, Tuesday, Thursday, and Saturday. It was set to run between zero and 15 minutes in each of the 10 zones, shutting off after 58 minutes.

The irrigation company representatives and I gathered with Mr. Calhoun to discuss our findings related to the irrigation system controller. The Complainant indicated that he only used the system when needed and that he would switch it from off to auto on those occasions. Dave Dockery and I explained that, if the controller was left on the auto setting, all the active programs would operate, potentially leading to very high usage if the system was not promptly turned off after a program completed its cycle. Based on my professional experience and

the size of the Complainant's water meter, I estimate that this irrigation system could use up to 10 gallons of water per minute. In the most extreme scenario, if all three active programs in the controller operated as designed, there would be up to eleven watering cycles in a six-day period, totaling an estimated 13,270 gallons of water use a week. If that happened for four weeks, irrigation usage alone would be very high, at approximately 53,000 gallons in approximately a month.

Irrigation program	Estimated water usage per day	Total estimated water usage per weekly cycle
Program A	1,690 gallons a day for three days	5,070 gallons per week
Program B	1,450 gallons a day for four days	5,800 gallons per week
Program C	600 gallons per day for four days	2,400 gallons per week
Total		13,270 gallons per week

In addition, the timing of certain programs could result in usage that is not obvious. Program B, for example, irrigates the lawn for almost two and a half hours beginning shortly after midnight and could easily escape notice. Similarly, Program C is set to operate for just under an hour beginning at 4:45 a.m., which could cause unintended irrigation to escape detection.

Based on visual inspection, the controller appeared to be in good working order and Mr. Calhoun expressed no concerns about its operation. Both Dave Dockery and I suggested that Mr. Calhoun remove the extra active programs from the controller. He agreed and allowed his irrigation specialist to delete Programs B and C from the system.

After the visit, I compared the irrigation system programs we observed at Mr. Calhoun's home with the high usage anomalies that the Company identified through hourly tracking beginning in August 2022, and found strong alignment. As

noted in Mr. Denton's December 16, 2022 Affidavit and Denton Affidavit Exhibit 8, two separate digital meters logged very high usage in six blocks of time generally in the 1:00 a.m. and 2:00 a.m. hours and again during the 6:00 a.m. and 7:00 a.m. hours on August 10 and August 12, 2022, and again on October 19, 2022.² I am not aware of anything on Mr. Calhoun's property that would use that amount of water except the irrigation system.

Early in the Company's investigation, CWSNC asked Mr. Calhoun about timing devices. As noted in Paragraph 33 of Mr. Denton's December 16, 2022 Affidavit, in early-September 2022, we shared the August 2022 anomaly data with Mr. Calhoun, suggesting the spikes could be a sign of a malfunction in pool or irrigation equipment that operated on a programmable timer. The Complainant disagreed, saying he did not believe that was the case.

Several clues strongly suggest the usage was tied to some type of programmable equipment. For example, three of the anomalies in August and October 2022 happened during the same overnight hours when there was virtually no other household use. Also, the anomalies follow a consistent pattern regarding time of day and duration.

I compared the six high usage anomalies during the overnight and early morning hours during August and October with the active programs in Mr. Calhoun's controller and assumed approximate water usage of up to

² Mr. Calhoun did not contest his water bill which included the October 19, 2022 usage anomaly. (More than 2,339 gallons of water passed through the meter during the overnight and early morning anomalies on October 19, 2022. The first anomaly occurred during meter hours ending at 1:35 a.m., 2:35 a.m. and 3:35 a.m. The second anomaly occurred during meter hours ending at 6:35 a.m. and 7:35 a.m.)

ten gallons per minute. As illustrated in Peacock Post-Hearing Affidavit Exhibit 1 attached hereto, my assessment determined that the days, times, and usage amounts of all six anomalies closely aligned with the settings for Programs A and B that we observed during our inspection. This data strongly supports the conclusion that operation of the irrigation system, and its multiple active programs, led to very high water consumption in the summer of 2022.

Furthermore, on August 13, 2022, CWSNC President Denton emailed Mr. Calhoun with a comprehensive update of the Company's efforts to investigate his claims. A substantive excerpt from that email was set forth in the December 16, 2022 Denton Affidavit at Paragraph 26 on page eleven. The Complainant was advised that during the period from May 18, 2022 until August 5, 2022, his meter recorded an average of 1,673 gpd of water having been used and that for the period from August 5, 2022 through August 12, 2022, his usage averaged 1,305.6 gpd. Here again, those averages align very closely with usage associated with either Program A or Program B that we observed in Mr. Calhoun's irrigation system.

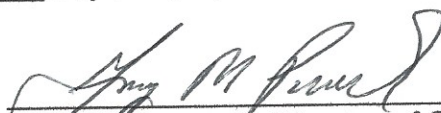
Despite the Complainant's claims that he turned the irrigation system off in late-June 2022 or early-July 2022 when he received his first high bill, the data strongly suggests that the system continued to operate in some manner through the summer and into the fall, resulting in continued high water usage from irrigation.

Based on this latest investigation and the information gathered by the Company in its comprehensive assessment over several months, as more

specifically detailed in Company President Denton's December 16, 2022 Affidavit and various exhibits, CWSNC again asserts that Mr. Calhoun in fact used the water that was delivered to his property during the three billing periods in question. The Company further asserts that human error related to the programmable irrigation controller and/or system operation likely led to numerous irrigation cycles resulting in high water usage at Mr. Calhoun's premises. This conclusion is supported by the close correlation between high usage anomalies the Company noted through hourly meter reading technology and the irrigation day/time programs found to be active on Mr. Calhoun's system at the time of the recent inspection.

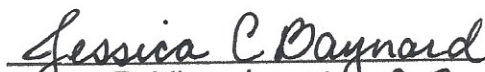
FURTHER AFFIANT SAYETH NOT.

This the 27th day of April, 2023.



Gary M. Peacock, Director of State Operations
Carolina Water Service, Inc. of North Carolina

Sworn and subscribed before me this 27th day of April 2023.



(SEAL)

Notary Public Jessica C Baynard Transylvania Co. NC

My Commission Expires: 12/13/2025



Date	Timing of high usage anomaly	Irrigation program correlation	Water use estimate (up to 10 gallons/minute)	Actual water use tracked by the digital meters*	Assessment
Wednesday, August 10, 2022	Meter hours ending at 1 a.m., 2 a.m. and 3 a.m.	Program B – Mon, Tues, Wed, Thurs Run time - 2 hours, 25 minutes from 12:15 a.m. to 2:35 a.m.	Program B would use an estimated 1450 gallons of water per cycle.	1320 gallons of water passed through the meter during those three hours.	Close correlation between meter data and the dates, times and water usage associated with Program B.
Wednesday, August 10, 2022	Meter hours ending at 6 a.m., 7 a.m., and 8 a.m.	Program A – Mon, Wed, Friday Run time - 2 hours, 49 minutes from 5 a.m. to 7:49 a.m.	Program A would use an estimated 1690 gallons of water per cycle.	1410 gallons of water passed through the meter during those three hours.	Close correlation between meter data and the dates, times and water usage associated with Program A.
Friday, August 12, 2022	Meter hours ending at 1 a.m., 2 a.m. and 3 a.m.	When observed on April 3, 2023, settings for Program B did not include a Friday cycle. However, the time, duration and amount of water used during this anomaly is consistent with other occasions when we believe Program B was operating.	Program B would use an estimated 1450 gallons of water per cycle.	1322 gallons of water passed through the meter during those three hours.	Although the settings for Program B, which were observed on April 3, 2023, did not include a Friday cycle, the time, duration and amount of water used during this anomaly is consistent with other occasions when we believe Program B was operating.

*Please note that the end time of each meter hour does not exactly match the start/end times of each irrigation program, so usage attributed to watering the lawn could be slightly higher or lower.

Date	Timing of high usage anomaly	Irrigation program correlation	Water use estimate (10 gallons/minute)	Actual water use tracked by the digital meters*	Assessment
Friday, August 12, 2022	Meter hours ending at 6 a.m., 7 a.m. and 8 a.m.	Program A – Mon, Wed, Friday Run time - 2 hours, 49 minutes from 5 a.m. to 7:49 a.m.	Program A would use an estimated 1690 gallons of water per cycle.	1415 gallons of water passed through the meter during those three hours.	Close correlation between meter data and the dates, times and water usage associated with Program A.
Wednesday, October 19, 2022	Meter hours ending at 1:35 a.m., 2:35 a.m. and 3:35 a.m.	Program B – Mon, Tues, Wed, Thurs Run time - 2 hours, 25 minutes from 12:15 a.m. to 2:35 a.m.	Program B would use an estimated 1450 gallons of water per cycle	1253 gallons passed through the meter during those three hours	Close correlation between meter data and the dates, times and water usage associated with Program B.
Wednesday, October 19, 2022	Meter hours ending at 6:35 a.m. and 7:35 a.m.	Program A – Mon, Wed, Friday Run time - 2 hours, 49 minutes 5 a.m. to 7:49 a.m.	Program A would use an estimated 1690 gallons of water per cycle.	1086 gallons passed through the meter during two hours, suggesting the cycle was not completed.	Close correlation between meter data and the dates, times and water usage associated with Program A.