STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. M-100, SUB 164

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Consideration of the Federal Funding Available Under the Infrastructure Investment and Jobs Act	)))	REPLY COMMENTS OF THE PUBLIC STAFF

NOW COMES THE PUBLIC STAFF – North Carolina Utilities Commission, by and through its Executive Director, Christopher J. Ayers, and in response to the Commission's Order Allowing Comments Regarding Federal Funding for Utility Service in North Carolina issued February 14, 2022 (Sub 164 Order), and the initial comments filed by the parties on or about March 15, 2022, respectfully submits the following reply comments.

On April 19, 2022, the Commission issued an order granting the Public Staff's motion for extension of time until April 28, 2022, to file reply comments.

Background

1. On November 15, 2021, President Biden signed into law the Infrastructure Investment and Jobs Act, H.R. 3684, 117th Cong. (2021) (IIJA),[1] also known as the Bipartisan Infrastructure Law. The IIJA allocates an estimated $1.2 trillion in total funding over ten years, including $550 billion in new spending

[1] https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf IIJA text.

during the next five years.[2] $266 billion is directed toward "core infrastructure" including:

Power Infrastructure and Grid Automation	$73 billion
Water Infrastructure	$55 billion
Broadband	$65 billion
Environmental Resiliency	$47 billion
Environmental Remediation	$21 billion
Other	$5 billion
Total	**$266 billion**

2. The IIJA funding for water infrastructure will flow through the Clean Water State Revolving Funds (CWSRFs) and Drinking Water State Revolving Funds (DWSRFs) over a period of five fiscal years. The law includes two appropriations per year for the CWSRF (CWSRF General Supplemental Funding and CWSRF Emerging Contaminants Funding) and three appropriations per year

[2] https://www.mckinsey.com/industries/public-and-social-sector/our-insights/the-us-bipartisan-infrastructure-law-breaking-it-down McKinsey & Company, The US Bipartisan Infrastructure Law: Breaking It Down, November 2021.

for the DWSRF (DWSRF General Supplemental Funding, DWSRF Emerging Contaminants Funding, and DWSRF Lead Service Line Replacement Funding).

3. As discussed in further detail below, investor-owned water utilities (IOUs) are currently eligible for DWSRF funding in North Carolina. IOUs are not currently eligible for CWSRF funding, but efforts have been made at the federal level to expand eligibility for CWSRF funding to IOUs.[3]

4. Of the $284 billion that is related to transportation, $15 billion is related to electric vehicle (EV) charging infrastructure, including infrastructure for school and transit buses and ferries. Another $39 billion is related to the modernization and replacement of transit vehicles with zero-emission vehicles.

5. North Carolina's estimated share of these transportation-related funds will include $109 million related to transit system improvements and movement toward electrification, $59 million related to addressing climate change, including a share of the $3.5 billion that IIJA allocates to weatherization assistance for families, and $1.1 billion toward water infrastructure to ensure safe and clean drinking water. No information is available at this time as to North Carolina's estimated share of energy-related funding. [4]

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[3] See Clean Water SRF Parity Act H.R. 4597 https://www.congress.gov/bill/117th-congress/house-bill/4597/text?r=6&s=1

[4] See https://www.whitehouse.gov/wp-content/uploads/2021/08/NORTH-CAROLINA_Infrastructure-Investment-and-Jobs-Act-State-Fact-Sheet.pdf for North Carolina's share of transportation-related IIJA funding.

Reply Comments Regarding Water Infrastructure Funding

6. The Public Staff reviewed and conducted discovery on the verified responses filed on March 15, 2022, by Aqua North Carolina, Inc. (Aqua), and Carolina Water Service, Inc., of North Carolina (CWSNC).

Utilization of DWSRF Funds

7. IOUs are currently eligible for DWSRF loans for a term of up to 30 years, depending on the estimated life of the asset, an interest rate between 0% and one-half the 20-year bond rate percentage (3.06% on April 25, 2022), and a closing fee of 2%. The amount of these loans cannot exceed $20 million. There are two funding cycles per year, and the application deadline for the Spring 2022 funding round is May 2, 2022.

8. The IIJA appropriates $11.7 billion in DWSRF General Supplemental funding. Applications may be submitted for projects that are at any stage from conceptual to shovel-ready. Given the magnitude of this funding and the savings to ratepayers if IOUs secure DWSRF funding, the Public Staff agrees with the preliminary conclusion of the Commission in its February 14, 2022 Order that, “it is in the public interest for the public utilities of this State to fully and carefully consider taking advantage of these available federal grants and loans, in order to promote adequate, reliable, and economical utility service to the citizens and residents of the State.” Funding projects through low-interest debt with the

possibility of forgiveness[5] would decrease an IOU's cost of capital, thereby reducing the costs recovered from customers in rates. For example, the pre-tax cost to finance $4 million over 20 years at a fixed rate of 5% would be $2.3 million. This is compared to $645,693 in interest for a $4 million loan financed over the same period at a fixed rate of 1.53% (one-half of the 20-year bond rate percentage as of April 25, 2022). In this example, the revenue impact on ratepayers of funding projects through low-interest debt is a $1.7 million reduction in revenue requirement over the 20-year life of the loan, or $84,604 per year.

9. Aqua indicated in response to data requests from the Public Staff that it applied for DWSRF funding three times for three different projects, and that it was awarded funds for two projects in 2013 in the total amount of approximately $3.86 million at 0% interest. On March 1, 2022, Aqua filed its Ongoing Three-Year WSIC/SSIC Plan that lists proposed eligible water system improvements totaling $45,305,879 during the period of 2022 through 2024. CWSNC indicated in response to a Public Staff data request that it has not applied for DWSRF funds since at least 2008. On May 28, 2021, CWSNC filed its Ongoing Three-Year WSIC/SSIC Plan that lists proposed eligible water system improvements totaling $6,649,977 during the period of 2021 through 2023. Based on these responses, the Public Staff does not believe Aqua and CWSNC have made reasonable efforts to utilize federal funding already available to them under the DWSRF. The Public Staff also believes Aqua and CWSNC should make more concerted efforts to "fully

[5] The Public Staff has requested but has not yet received clarification from DWI regarding whether IOUs are eligible for loan forgiveness under the DWSRF. The Public Staff encourages Aqua and CWSNC to coordinate with DWI regarding this and other DWSRF-related issues.

and carefully" explore utilizing existing DWSRF funding and forthcoming funding under the IIJA.

10. Aqua indicates in its comments that "properly assessing [population socio-economic factors and affordability criteria] is a hurdle that exists for investor-owned utilities made up of tens, if not hundreds, of diverse self-contained water systems across a wide geographic footprint that maintains consolidated rates." In anticipation of filing these reply comments, the Public Staff met with representatives of the North Carolina Department of Environmental Quality Division of Water Infrastructure (DWI) to discuss the funding available under IIJA. Based on conversations with DWI, it is the Public Staff's understanding that a variety of metrics, including appraised property value, county-level population change, poverty rate, median household income, and unemployment rate, may be utilized to determine eligibility for funding directed toward supporting disadvantaged communities. The Public Staff encourages Aqua and CWSNC to coordinate with DWI to assess available appropriate metrics for determining eligibility.

DWSRF Lead Service Line Replacement Funding

11. Both Aqua and CWSNC reference the DWSRF Lead Service Line Replacement funding established by the IIJA. According to the US EPA's March 8, 2022 Bipartisan Infrastructure Funds Implementation Memorandum,[6] the IJAA dedicates $15 billion to funding for lead service line identification and replacement.

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[6] https://www.epa.gov/system/files/documents/2022-03/combined_srf-implementation-memo_final_03.2022.pdf

Funding is also available for the identification of lead service lines. The Public Staff encourages Aqua and CWSNC to coordinate with DWI regarding funding for the inventory and replacement of lead service lines.

12. Aqua noted in its comments that the IIJA's requirement that the entire lead service line from the distribution line to the home be replaced "may cause property rights concerns that could make utilization of this specific fund impractical by Aqua." It is the Public Staff's understanding that the same property rights issues would be encountered by a local government unit (LGU) seeking to replace lead service lines using DWSRF Lead Service Line Replacement funding. Therefore, Aqua's concerns should not prevent it from pursuing this funding.

DWSRF Emerging Contaminants Funding

13. The IIJA appropriates $4 billion in funding to address emerging contaminants in the form of loans with 100% principal forgiveness, grants, or a combination of the two. In their Joint Response to Commission Order Regarding Unplanned Emergency Capital Additions filed in Docket No. W-100, Sub 63, Aqua and CWSNC identified material changes to primary water or sewer treatment standards, such as for PFAS/PFOA, as an example of "circumstances outside the utility's control and unforeseeable at the time of the initial WSIP application and proceeding" that might prompt the companies to file a petition for approval of cost recovery pursuant to N.C.G.S. § 62-113.1B.(c).[7]

[7] N.C.G.S. § 62-113.1B.(c) (Subsection(c)) states:

14. The Public Staff urges Aqua and CWSNC to pursue the funding available through the IIJA Emerging Contaminants appropriation to address PFAS and PFOA issues in their systems. This would avoid the costs of addressing these emerging contaminants being added to rate base and recovered through rates, which has added significance in the context of a Water and Sewer Investment Plan (WSIP) because N.C.G.S. § 62-113.1B.(c) authorizes the Commission to add certain unplanned emergency capital investments to an approved WSIP "even if such expenditures would cause the above-referenced cap to be exceeded."

Additional Considerations

15. State-funded grants are currently available to LGUs and non-profit water corporations for asset inventory and assessment (AIA) and merger/regionalization and feasibility (MRF) studies. Additional funding through the State Wastewater Reserve and Drinking Water Reserve Programs (State Reserves) and through the DWSRF and CWSRF is available for necessary improvements identified through AIA and MRF studies. The American Rescue Plan Act provides an additional $77.6 million in funding to the State Reserves for grant programs, including AIA and MRF studies.

Any rate adjustment allowed under a Water and Sewer Investment Plan approved pursuant to this section shall not, on an annual basis for years two and three of the plan, exceed five percent (5%) of the utility's North Carolina retail jurisdictional gross revenues for the preceding plan year. Upon a petition to the Commission, the Commission may consider the addition of unplanned emergency capital investments that must be undertaken during a plan term to address risk of noncompliance with primary drinking water or effluent standards, or to mitigate cyber or physical security risks, even if such expenditures would cause the above-referenced cap to be exceeded.

16. While these funds are not directly available to IOUs, it is the Public Staff's initial understanding that an IOU seeking to purchase an LGU-owned system and establish rate base using the fair value methodology authorized under N.C.G.S. § 62-133.1A could partner with the LGU to ensure that the IOU's customers receive the benefit of AIA and MRF study grants through lower rates.

17. N.C.G.S. § 62-133.1A(b)(2) provides that "[t]he acquiring public utility and selling utility shall jointly retain a licensed engineer to conduct an assessment of the tangible assets of the system to be acquired, and the assessment shall be used by the three appraisers in determining fair value." Commission Rules R7-41(g)(2) and R10-28(g)(2) provide as follows:

> Consistent with G.S. 62-133.1A(b), the Commission will allow the inclusion of the costs of the engineering assessment, transaction and closing costs incurred by the utility, and fees paid to Utility Valuation Experts, including fees paid by the acquiring utility to a Utility Valuation Expert that represents the Public Staff, in the rate base value of the acquired system upon a finding that those costs were reasonably and prudently incurred[.]

18. Under the AIA study grant program, grants are available up to $150,000 and are eligible for asset inventory and condition assessment. Asset inventory and condition assessment are required under N.C.G.S. § 62-133.1A(b)(2), and the Commission's rules allow IOUs to recover the cost of those assessments. This program provides an opportunity for these costs to potentially be reimbursed as opposed to being added to rate base and recovered through rates.

19. Pursuant to N.C.G.S. § 62-133.1A(b)(1)a., "[o]ne appraiser shall represent the public utility acquiring the system, another appraiser shall represent the utility selling the system, and another appraiser shall represent the Public Staff of the Commission." As part of the study of the feasibility of merger or regionalization, privatization may be considered. The Public Staff has requested but has not yet received clarification from DWI regarding whether the cost of a fair value appraisal may be reimbursed through the MRF grant program, under which up to $50,000 is available per study. The Public Staff encourages Aqua and CWSNC to coordinate with DWI on this issue.

Reply Comments Regarding Funding Available to Electric and Natural Gas Utilities

20. The Public Staff reviewed each of the nine filings of Initial Comments by the parties. However, the review focused primarily on those filed by the regulated investor-owned electric and gas utilities, which include Duke Energy Carolinas, LLC, Duke Energy Progress, LLC (collectively Duke); Piedmont Natural Gas Company, Inc. (Piedmont); Virginia Electric and Power Company d/b/a Dominion Energy North Carolina (DENC); and Public Service Company of North Carolina (PSNC) (collectively, Utilities).

21. At this time, there is little detail regarding the impacts of the IIJA and related spending, or how the IIJA will impact future spending by the Utilities. Duke and DENC (Electric Utilities), as well as Piedmont and PSNC, have experience in developing energy efficiency measures, programs, and renewable energy programs that take advantage of federal and state tax credits/rebates that are

either directly available to them or indirectly to their customers or trade allies. The Utilities should take similar advantage of any IIJA spending that will funnel down to North Carolina.

22. The Utilities should also investigate and develop cost-effective programs that could work alongside federal and state programs to take advantage of the funding available through the IIJA. A cursory read of the IIJA suggests the Utilities will not have direct access to several funding sources originating from the IIJA. The Utilities are identified as "eligible recipients" of several programs related to energy, grid and/or pipeline improvement/security, cyber security, and EV charging infrastructure.

23. There may be additional opportunities where Utilities can be secondary or indirect recipients of funding; however, it is unclear what mechanisms would be used to convey such funds to Utilities. For example, several United States Department of Energy (USDOE) initiatives regarding research or demonstration projects cite "industry partners" as eligible recipients. Other direct funding is given to state and local government entities that could provide indirect funding to Utilities, or at least impact programs that are offered by Utilities. Energy efficiency program development, weatherization of homes and businesses, building codes, research and development projects, and EV charging are just a few examples of IIJA-related funding that might be available to Utilities.[8]

[8] See https://www.energy.gov/bil/bipartisan-infrastructure-law-programs-department-energy for a list of IIJA-related programs at the USDOE.

24. The Public Staff has reviewed the IIJA to gain a better understanding of the areas where the Utilities could potentially access IIJA-related federal funding dollars. The following comments respond to those areas that are energy-related:

a. With respect to the natural gas local distribution companies, PSNC and Piedmont, the IIJA has very limited implications. The IIJA provides funding for new alternative-fuel infrastructure for natural gas, hydrogen, and propane fueled vehicles (Section 11401 and 11403) that are intended to address climate change mitigation. Section 40125 discusses potential programs and funding related to natural gas networks that are intended to respond to electric grid security matters. The only reference to potential funding for natural gas transmission and distribution assets appears to be related to retrofitting existing infrastructure to allow those assets to be used for alternative-fueled transportation, including hydrogen (Section 40313).

b. Of the transportation-related spending estimated over the next five years ($284 billion), only $54 billion is associated with EV charging infrastructure, the purchase of EV school and transit buses, and the replacement of older diesel-powered buses with zero-emission vehicles. Few, if any, of these funds are likely to be available to the Electric Utilities. However, several transportation-related activities are related to the relocation of electric transmission and distribution assets from overhead to underground (Section 40101), replacement of existing street and traffic lighting systems with more efficient lighting (Section 11403), installation of EV charging infrastructure (Sections 11401 and 40431), all for the purpose of electrifying transportation.

c. The greatest impact on Electric Utilities involves the production, transmission, and distribution of electricity. Almost half of the core infrastructure (non-transportation) funding for the next five years ($266 billion) is intended to be used for electric grid infrastructure ($73 billion) and environmental resiliency ($47 billion). Much of these funds will go toward the development of new transmission and distribution assets to interconnect renewable energy and other distributed energy resources, development of alternative clean energy sources such as hydrogen, and capture/sequestration of carbon (Sections 40001 through 40556). Areas of funding that are identified in the IIJA include: outage prevention (Section 40101); demand response and grid flexibility (Sections 40104 and 40107); evaluating codes and standards related to energy storage systems (Section 40111); grid security (Sections 40121 through 40126); carbon capture (Sections 40301 through 40308); and hydropower (Sections 40331 through 40336). The Electric Utilities are identified as eligible recipients of funds for many of these projects.

d. Another area that will involve the Electric Utilities is related to energy efficiency and buildings. Funding will be available to state and local agencies to develop loan/grant programs for energy efficiency, including audit programs and upgrade/retrofit programs (Sections 40502 and 40503). The Electric Utilities are not listed as eligible recipients of these funds. However, it is expected that Electric Utilities will be at least indirectly involved with these programs. The Electric Utilities should monitor the development of state-sponsored programs that could work alongside programs sponsored by the Electric Utilities.

e. Other areas related to energy efficiency are directed toward making building codes more energy efficient. Electric Utilities may be eligible for grants for educating and training trade allies and working with code implementers to develop more efficient codes (Sections 40511 through 40513).

f. The IIJA also provides funding to assist the industrial and manufacturing sectors with research, training, and adoption of more energy efficient processes and construction, including combined heat and power systems (Sections 40521 through 40533). Schools are also recipients of energy efficiency and renewable energy-related funding (Section 40541). The Electric Utilities are not identified as eligible recipients of any of these funds. However, the Electric Utilities should work with trade allies and customers to develop programs that could work alongside other programs that may be developed through this funding.

g. The Public Staff did not identify any areas (transportation- or core infrastructure-related) where the Utilities would have direct access to funding that is intended to address issues related to low-income customers, building owners, or communities. Transportation-related funding related to climate change mitigation (Sections 11404 and 11406) and funding for weatherization assistance programs (Section 40551) are two examples of indirect funding. While Electric Utilities are not likely to receive any of this funding, they should work with the state, weatherization agencies, and individual weatherization providers to seek opportunities to work cooperatively with those agencies to deliver weatherization services to qualifying customers (Section 40551).

25. The Public Staff reached out to representatives in the Department of Environmental Quality (DEQ) to gain an understanding of how the IIJA will impact DEQ. DEQ anticipates receiving additional funds for current energy and weatherization-related programs, though it does not yet know what requirements will be imposed on receipt of those funds. Distribution of those funds would likely occur through a bidding process. DEQ also indicated that there are a number of grant opportunities and that it has started to identify trade allies and partners who will participate in delivering these programs. DEQ cites the energy efficiency opportunities for schools as an example. It also mentioned its work in gaining an understanding of the IIJA requirements to consider environmental justice issues and "buy America" components of the funding. Lastly, DEQ cited E4 Carolinas' work to develop a southeast coalition working on developing a hydrogen hub in the southeast.

26. Like many of the parties filing Initial Comments, the Public Staff believes it is too early to estimate the impacts of any funding mechanisms that might be developed as a result of implementing the goals and initiatives of the IIJA. The Utilities have committed to pursue all available funding sources (direct and indirect sources) that will be developed as the plans for implementation of the IIJA become clearer, and to do so for the benefit of all customers and the environment. Review of specific projects, initiatives, or funding mechanisms should occur in proceedings such as general rate cases, riders, the integrated resource plans, or Carbon Plans, where the parties can more fully review the merits of projects and funding. The Public Staff will continue to work with the Utilities and other parties to ensure that any projects for which the Utilities seek cost recovery are fully scrutinized to ensure that they are cost-beneficial to customers, and that the Utilities have not foregone any opportunities to obtain funding that would benefit ratepayers.

WHEREFORE, the Public Staff prays that the Commission take these reply comments into consideration in making any future determinations.

Respectfully submitted this the 28th day of April, 2022.

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CERTIFICATE OF SERVICE

I certify that a copy of these reply comments has been served on all parties of record or their attorneys, or both, by United States mail, first class or better; by hand delivery; or by means of facsimile or electronic delivery upon agreement of the receiving party.

This the 28th day of April, 2022.

Electronically submitted
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