

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-100, SUB 161

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)	
Commission Rules Related to Electric)	SUR-REPLY COMMENTS
Customer Billing Data		OF THE PUBLIC STAFF

NOW COMES THE PUBLIC STAFF – North Carolina Utilities Commission (Public Staff), by and through its Executive Director, Christopher J. Ayers, and respectfully submits the following comments addressing new issues raised in the December 2022 supplemental reply comments of the parties, pursuant to the North Carolina Utilities Commission’s (Commission) February 19, 2024 Order Allowing Sur-Reply Comments.

1. On February 4, 2019, the Commission issued an Order Requiring Information, Requesting Comments, and Initiating Rulemaking in the above-captioned docket. Since that time, the parties have filed several rounds of comments in this proceeding, as well as proposed rules.

2. Most recently, on December 9, 2022, the following parties filed supplemental reply comments: the Public Staff; Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina (DENC); Duke Energy Carolinas, LLC and Duke Energy Progress, LLC (together, Duke); the Mission:data Coalition (Mission:data); and the Attorney General’s Office (AGO). As an attachment to its comments, the AGO filed updated proposed rules.

3. On February 5, 2024, Duke filed a Joint Motion for Leave to File Sur-Reply Comments, stating that the parties' supplemental reply comments raised a number of new issues, including the AGO's updated proposed rules. Accordingly, Duke requested the opportunity for all parties to file sur-reply comments for the limited purpose of addressing new issues raised in supplemental reply comments.

4. On February 19, 2024, the Commission issued an order allowing parties to file sur-reply comments on or before April 5, 2024, for the limited purpose of addressing new issues raised in the previously filed supplemental reply comments.

The Public Staff's Comments on the 15/15 Rule for Aggregated Data

In its December 9, 2022 supplemental reply comments, the Public Staff recommended a delay in the consideration of the Public Staff's proposed Rule R8-51 in order for the parties to "(1) further investigate any potential shortcomings of the 15/15 Rule; (2) determine whether any other jurisdictions have experienced issues with the 15/15 Rule; and (3) investigate reasonable alternatives to the 15/15 Rule that would be sufficiently protective of customer information and feasible for the utilities to administer."¹ Since the filing of those comments, the Public Staff has further investigated the 15/15 Rule² and determined that it is sufficiently protective

¹ Public Staff Supplemental Reply Comments at 12-13.

² "A utility may disclose readily available aggregated data that consists of at least fifteen customers, where the data of a single customer or premise associated with a single customer's data does not comprise 15 percent or more of the aggregated data within the same customer class." Public Staff Proposed Rule R8-51(l).

of customer information. The 15/15 Rule is being used in other jurisdictions,³ and the Public Staff has not identified any jurisdictions that have experienced issues with customer privacy. Therefore, the Public Staff continues to recommend its adoption as set forth in the Public Staff's proposed Rule R8-51.

The AGO's Revised Proposal on Aggregated Data

The AGO's supplemental reply comments and revised rule propose treating different types of aggregated data differently. The utilities would be required to (1) publish and regularly update certain types of aggregated data; (2) provide, upon request, aggregated whole-property energy usage data for EnergyStar purposes; and (3) provide, upon request, certain types of aggregated data to academic researchers and government entities. In addition, the revised rule would establish a public university repository that would allow a public university to obtain data from the utilities and either perform its own research or provide the data to third parties. The Public Staff's positions on these proposals are discussed below.

Making certain aggregated data publicly available

The AGO's revised rule creates a category of "Publicly Available Aggregated Data," and requires that the electric public utilities make such data

³ Jurisdictions that have adopted the 15/15 Rule include Colorado, California, Illinois, and Minnesota. See Colorado 4 CCR 723-3 Section 3031(b) <https://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=5738>; California <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M090/K845/90845985.PDF>; Illinois <https://www.icc.illinois.gov/docket/P2013-0506/documents/208612/files/367604.pdf>; Minnesota <https://efiling.web.commerce.state.mn.us/edockets/searchDocuments.do?method=eDocketsResult&userType=public#{D0ABE675-0000-C61C-A8B3-DD9B6EE869D5}>.

publicly available on their websites, with regular updates. The revised rule specifically provides that the following data falls under this category⁴:

- (a) Usage data showing the total amount of energy used in one calendar year within the State of North Carolina, the utility, any municipality, any zip code, any census block group, or any census block. These data shall be posted as close to real-time as possible.
- (b) Usage data showing the total amount of energy used in any quarter in the State of North Carolina, the utility, any municipality, any zip code, any census block group, or any census block. These data shall be updated at least once every six months.
- (c) Usage data showing the total amount of energy used in any calendar month by the State of North Carolina, the utility, or a municipality. These data shall be updated at least once every six months.
- (d) Usage data showing the total amount of energy used in any increment of time collected by the utility within the State of North Carolina. These data shall be updated at least once every six months.
- (e) With respect to aggregated data for any municipality, the utility or the State of North Carolina, the utility shall provide such data with whether the usage is residential or nonresidential. These data shall be updated at least once every six months.

The AGO stated in its supplemental reply comments that providing aggregated data in a public manner at this level does not risk customer privacy.⁵

⁴ AGO Supplemental Reply Comments, Appendix A, AGO Proposed Rule R8-51(j)(2)(i) (Dec. 9, 2022).

⁵ AGO Supplemental Reply Comments at 4-5.

The Public Staff believes there is value in providing aggregated usage data, at a high level, that is publicly and easily accessible for research and academic purposes, among others. The Public Staff proposes a limited and simplified version of the AGO's proposal – that electric public utilities be required to publish aggregated monthly energy usage data for each zip code and county in the state. The publication of such data, however, should be limited to zip codes and counties with no fewer than 1,000 residents based on the most recent census.⁶ Such a broad limitation, as opposed to a more targeted exclusion (e.g., zip codes and counties with 15 or fewer customers) should help to reduce implementation costs for the utilities while also protecting customer data.

In response to discovery, Duke estimated the initial implementation costs for aggregating usage data at the zip code and county level, in monthly increments, and publishing that data on a publicly available dashboard to be approximately \$1.2 million dollars.⁷ In addition, Duke estimated ongoing operations and maintenance costs to be approximately \$315,000. Likewise, also in response to discovery, DENC estimated the initial implementation costs for aggregating data at the zip code and county level, in monthly increments, and publishing that data on a publicly available dashboard to be between \$100,000 and \$300,000 dollars. DENC noted that its ongoing costs would be dependent on whether ongoing

⁶ 2020 Census data is available through the North Carolina Office of State Budget and Management. Based on the 2020 Census, no county in North Carolina has a population below 1,000, with the least populous county, Tyrrell County, having a total population of 3,245. NC Census Data, NC OSBM (last accessed Apr. 19, 2024), <https://www.osbm.nc.gov/facts-figures/population-demographics/nc-census-data>.

⁷ Duke specified that these are Class 5 estimates, and that the Companies assumed that aggregated usage data only applies to retail customers served via AMI meters.

analysis would be required to ensure that customers could not be reidentified with any reasonable effort. If such ongoing analysis is needed, DENC believes there would be additional costs for personnel to analyze the monthly data; otherwise, ongoing costs to comply with this requirement would be *de minimus*.

Aggregated data for Energy Star purposes

The AGO's revised rule requires electric utilities to provide, upon request, certain types of aggregated data for EnergyStar purposes. Under this portion of the AGO's revised rule, if the utility receives a request from the owner or operator of a building or premises for aggregated data for that building or premises for the purpose of obtaining EnergyStar certification or ranking or complying with a law, ordinance, or regulation related to the EnergyStar program, then the utility must fulfill that request if the following requirements are met: (1) the aggregated data shall consist only of monthly, whole-building consumption data; (2) if the building or premises contains only residential or commercial units, or a combination thereof, all identifying information must be removed and there must be at least four customers, with no single customer's energy use equaling or exceeding 50% of the total energy use in any given month; (3) if the building or premises contains any industrial units, the requestor must obtain the consent of the customers before obtaining aggregated data; and (4) if the aggregated data are being provided

without customer consent, the recipient must enter into a non-disclosure agreement with the utility.⁸

The AGO explained in its supplemental reply comments that owners or operators of a building should be able to obtain monthly, whole-building data if there are at least four accounts and no one account represents more than 50% of the total load. According to the AGO, researchers have shown that when viewing a commercial building's energy use, "reidentification becomes substantially harder once there are four or five meters in a building."⁹

The Public Staff believes there is value in allowing building owners and operators to receive, upon request, whole-building aggregated monthly usage data, and believes that the 4/50 criteria included in the AGO's proposal is sufficiently protective of customer data.¹⁰ Access to aggregated whole-building energy usage data would enable benchmarking and allow property owners and operators to better understand the energy characteristics of their properties and make decisions regarding energy efficiency investments.

⁸ See AGO Supplemental Reply Comments, Appendix A, AGO Proposed Rule R8-51(ii) (Dec. 9, 2022).

⁹ AGO Supplemental Reply Comments at 5.

¹⁰ See Guidance for Utilities on Providing Whole-Building Energy Data to Enable Benchmarking in EPA's ENERGY STAR Portfolio Manager, at 3 (July 28, 2023), *available at* www.energystar.gov/sites/default/files/tools/energy-star-utility-guidance-building-benchmarking-073123_0.pdf.

Aggregated data for academic researchers and governmental entities

The AGO's revised rule requires a utility to provide, upon request, certain types of aggregated data to academic researchers and government entities without customer consent. Upon the execution of a nondisclosure agreement, academic researchers and government entities would be able to obtain the following aggregated data from the utility:¹¹

1. Aggregated data showing the amount of energy used in one calendar month by any zip code, census block group, or census block per rate class.
2. Aggregated data showing the amount of energy used in one day by any municipality, zip code, census block group, or census block per rate class.
3. Aggregated data showing the amount of energy used in any increment of time longer than 15 minutes by any municipality or zip code per rate class.

In its supplemental reply comments, the AGO explains that while data at this level is valuable, widespread disclosure could expose private information. The comments further state that it is appropriate to begin with providing academic researchers and government entities with this level of aggregated data, and that, "over time, the exact list of permitted entities may change."¹²

While the Public Staff broadly supports the underlying intent behind providing academic researchers and governmental entities with the usage data

¹¹ See AGO Supplemental Reply Comments, Appendix A, AGO Proposed Rule R8-51(j)(iii) (Dec. 9, 2022).

¹² AGO Supplemental Reply Comments at 5.

outlined by the AGO, the 15/15 criteria in the Public Staff's Proposed Rule R8-51 would allow for the provision of usage data to academic researchers and governmental entities, along with any other entities or individuals who request such information, while protecting customers' energy usage data. As such, the Public Staff continues to support its own Proposed Rule R8-51 and opposes the adoption of AGO Proposed Rule R8-51(j)(iii).

University repositories as holders of aggregated data

In addition to the provisions discussed above that would require the utilities to provide certain aggregated data under various scenarios, the AGO's revised rules would allow a public university in North Carolina to obtain data from the utilities and either perform its own research or provide the data to third parties. The university repository would be able to obtain two years of usage data with the corresponding address of record and rate class and would be able to receive updated usage data every six months. In turn, any person wishing to obtain aggregated data would be able to request such data from the university repository.¹³

Pursuant to the AGO's revised rule, the university repository would be subject to a nondisclosure agreement with the utility that would require the repository to implement "commercially reasonable data security and cybersecurity measures," and to use the usage data only for academic, research, or policy

¹³ AGO Supplemental Reply Comments, Appendix A, AGO Proposed Rule R8-51(iv) (Dec. 9, 2022).

purposes. The revised rule further states that the repository “may not use the usage data for *purely* commercial purposes.”¹⁴ The revised rule also provides that the repository may choose to provide aggregated data to third parties, and specifies the circumstances under which such data may be disseminated, including a requirement that the third party execute a nondisclosure agreement, that personally-identifying information be removed, and that the data be anonymized using privacy-enhancing techniques sufficient to prevent reidentification.¹⁵

The Public Staff has significant concerns regarding the AGO’s proposal for the creation of a university repository that would hold and disseminate energy usage data. First, under the AGO’s proposal, the utilities would be providing customer usage data, accompanied by the corresponding customer addresses, to a public university over which the Commission has no jurisdiction. Oversight over the university repository would be difficult and logistically unwieldy, and the potential for disclosure of individual customer usage data would be significant. Moreover, the benefits of such a repository are unclear. The AGO’s supplemental reply comments indicate that “[t]he rule contemplates the repositories using differential privacy, which is a statistical technique that adds noise to data to render it more private.” The 15/15 criteria in the Public Staff’s proposed rule, however, provides sufficient protection of customer information and does not broadly expose energy usage data and associated customer addresses to a third party not under

¹⁴ *Id.* (emphasis added).

¹⁵ *Id.*

the jurisdiction of the Commission.¹⁶ The Public Staff therefore opposes AGO Proposed Rule R8-51(iv) (Public University Repository).

Conclusion on aggregated data

With regard to aggregated data, for the reasons discussed above and set forth in the Public Staff's previous filings in this proceeding, the Public Staff continues to support its own Proposed Rule R8-51, as revised in its July 22, 2022 supplemental comments and opposes the adoption of AGO Proposed Rule R8-51(j) (Aggregated Data), with two exceptions. First, the Public Staff supports the ready availability of high-level energy usage data and therefore recommends that the Commission require the utilities to publish usage data showing the total amount of energy used in one calendar month for each zip code and county in the state, and that such data be limited to zip codes and counties with no fewer than 1,000 residents based on the most recent census. Second, the Public Staff supports allowing building owners and operators to receive, upon request, monthly whole-building aggregated energy usage data, as proposed by the AGO.

The AGO's Revised Proposed Rule R8-51(a)-(i), (k)-(u)

The AGO's Supplemental Reply Comments proposed numerous revisions to the non-aggregated data sections of their proposed rule, specifically, AGO Proposed Rule R8-51(a) – (i) and (k) – (u). The AGO proposes many revisions to

¹⁶ This is distinguishable from the Green Button Connect platform, which allows customers to voluntarily provide their own usage data to a third party of their choosing and for a timeframe of their choosing.

the definition of “Aggregated Data,” namely to remove the term “other data” and replace it with “energy savings data”; adding a subjective “reasonable effort” standard for data transferors to ensure that data cannot be reidentified; and adding conditions that a transferor of aggregated data must follow. These conditions include removing information that could identify the customer, combining or processing the customer data to be included in a larger group of customer data, and utilizing other techniques to anonymize the data by reducing granularity or using differential privacy.

The AGO also proposes to replace the term and definition of “primary purposes” with a new term “Electric Services Purposes” and a broader definition covering core electric utility functions. These proposed rule revisions also include additions to the rule relating to Notice of Use of Customer Information that would allow customers to opt out of their data being shared and to require utilities to provide information on how customers may opt out of their data being shared.

As discussed in the Public Staff’s July 17, 2020 reply comments, the Public Staff believes that the prescriptive nature of the AGO’s draft rule overlaps and is redundant with existing law, Commission authority, and the utilities’ Codes of Conduct.¹⁷ The Public Staff continues to support its own proposed Rule R8-51, and therefore opposes adoption of the AGO’s Proposed Rule R8-51(a) – (i) and (k) – (u).

¹⁷ See Public Staff Reply Comments, at 11-12 (July 17, 2020).

Mission:data Coalition Comments on Federal Funding Opportunities

Mission:data Coalition described in its comments¹⁸ two new federal funding opportunities under the Inflation Reduction Act (IRA) and Infrastructure Investment and Jobs Act (IIJA) that require the type of customer data portability that is provided by Green Button Connect to either receive funding or avoid significant administrative costs, depending on the funding program. These funding opportunities would provide funds for residential energy efficiency and smart grid investments. The Public Staff agrees with Mission:data that these are important funding opportunities that have the potential to assist ratepayers across the state to implement energy efficiency measures in their homes, and that the availability of a certified Green Button Connect offering by the Companies is critical for maximizing this funding to the benefit of North Carolina citizens. The Public Staff continues to support the requirement for the utilities to implement Green Button Connect and emphasizes that the new federal funding opportunities under the IRA and IIJA provide further support for such a requirement. As stated in Duke's Joint Motion for Leave to File Sur-Reply Comments, discussions regarding Green Button Connect functionality are ongoing between the Public Staff and Duke, and the Public Staff hopes to reach resolution on this issue with Duke and other parties in this docket.

¹⁸ Supplemental Reply Comments of Mission:data Coalition, at 2-5 (Dec. 9, 2022).

Conclusion

Based upon its review of the parties' supplemental reply comments in this proceeding, the Public Staff continues to maintain the positions expressed in its December 9, 2022 supplemental reply comments. In addition, the Public Staff has continued to investigate the 15/15 Rule and believes it to be sufficiently protective of customer information, and therefore continues to recommend its adoption. The Public Staff also, however, sees merit in two of the proposals set forth by the AGO, and therefore supports two new requirements pertaining to aggregated data, as discussed above.

WHEREFORE, the Public Staff respectfully requests that the Commission take the foregoing comments into consideration.

Respectfully submitted this the 19th day of April, 2024.

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CERTIFICATE OF SERVICE

I certify that a copy of these 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 19th day of April, 2024.

Electronically submitted
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