STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 24-0969-TF

Petition of Woodstock Aqueduct Company for a change in rates pursuant to 30 V.S.A. § 225 et seq.	

REBUTTAL TESTIMONY OF WITNESS
JIREH BILLINGS
ON BEHALF OF WOODSTOCK AQUEDUCT COMPANY

September 4, 2024

Mr. Billings' testimony supports Woodstock Aqueduct Company's rate request and responds to the Department of Public Service's recommendation to severely reduce the cost of service, limiting WAC's ability to address major DEC deficiencies or service its current debt obligations. Mr. Billings discusses each of the proposed reductions to operating expenses and explains why the Test Year amount for those expenses provides a more accurate way to forecast Rate Year expenses. Additionally, Mr. Billings discusses the application of the "used and useful" standard in this case, explains why a strict application of that standard here will harm the Company's ability to address serious flood repairs and an aging water system, and discusses why WAC's proposal does not create added rate volatility or risk for customers.

REBUTTAL TESTIMONY OF WITNESS
JIREH BILLINGS
ON BEHALF OF WOODSTOCK AQUEDUCT COMPANY

1. Q. Please state your name, occupation, and business address.

A. My name is Jireh Billings. I am the President of the Woodstock Aqueduct Company ("WAC" or the "Company"), a publicly regulated water utility located at 16 Elm Street, Woodstock, Vermont.

2. Q. Have you previously provided testimony in this case?

A. Yes, I filed Direct Testimony in this case on April 1, 2024.

Introduction

3. Q. Please summarize the purpose of your Rebuttal Testimony.

A. My rebuttal responds to the recommendation of the Department of Public Service as set forth in the Direct Testimony of Sean Foley and Carol Flint on August 7, 2024. The Department's recommended adjustment falls into two major categories, (1) reductions to operating expenses in the Rate Year and (2) removal of costs associated with various capital projects based on the "used and useful" standard. My testimony addresses both of these categories and explains why (1) the Department's adjustments to Rate Year expenses do not accurately reflect the cost WAC will incur in the Rate Year—which were largely based on the Test Year in this case, and (2) why strict application of the used and useful standard in WAC's case will further undermine WAC's efforts to address the serious financial challenges the Company must confront in the coming years.

In general, I appreciate the Department's interest in protecting ratepayers through traditional rate concepts like the "used and useful" standard, however, the Department's recommendation in this case does not account for the fact that WAC is unable to raise capital and does not have a long history of earning a return on equity. At the same time, the water system needs significant investment—particularly to comply with mandates imposed by the Department of Environmental Conservation ("DEC"), which I discussed in my Direct Testimony. Accordingly, application of the "used and useful" standard here creates a serious "chicken and egg" situation, where we cannot include investments in rates until they are "used and useful," but at the same time, we are unable to pursue those investments because we have neither the capital needed nor the ability to incur additional debt without an increase in cashflow.

While these kinds of traditional rate principles may be useful context for a typical investor-owned utility with a healthy balance sheet, strong financial backing, and a long history of earning a return on equity sufficient to attract ongoing capital investments, strict application of these rate theories here will further imperil our ability to operate the Company for the best interests of ratepayers. For example, if we are unable to make progress on the $4.4 million investment needed to address DEC deficiencies relating to WAC's fire hydrants, we will be faced with unthinkable operational decisions like taking those fire hydrants out of service to comply with DEC regulations. My testimony discusses these overarching issues while also responding to each of the Department's specific recommendations.

My testimony starts with a recap of the major drivers in this rate request and why we have structured the rate request in the manner proposed. I then summarize the Department's adjustments to the rate case, and before discussing each of those adjustments in detail, I offer an overview of the general restraints that are reflected in the Department's recommendations and explain what kind of operational challenges WAC will face in the upcoming year if the Department's recommendations are adopted by the Commission.

Thereafter, I discuss each of the Department's proposed adjustments in detail. This begins with a discussion of the Department's proposed adjustment to operating expenses, including reductions to the rate year expense for Heat, Electricity, and Operating Supplies, as well as two adjustments WAC made to the Test Year to generate revenue needed to commence DEC required pipe replacement and replace our SCADA System. I also discuss the Department's proposal to reduce the expense for office supplies and professional services. While these discrete adjustments are each relatively small, they add up to a significant reduction to Rate Year revenue of over $170,000.[1]

I next address the Department's proposal to reduce Rate Year revenue by another $131,000 by cutting the amount WAC recovers in rates to service its debt, including substantial increases in debt that were incurred following extensive damage to the water system during last year's flooding. Together, these adjustments reflect an overall reduction in WAC's proposed cost of service by $304,853 (from WAC's proposed $936,253 to $631,400)—and that is before we even address the proposed ANR Deficiency Fund. The Department also proposes to eliminate the annual revenue needed to service a loan of approximately $4.4 million that WAC needs to address deficiencies to comply with DEC regulations. When all these adjustments are accounted for, the Department's recommendation reflects a $597,613 reduction to Rate Year revenue.

I conclude my testimony with a discussion of the traditional ratemaking concepts the Department relies upon. A great deal of the Department's recommendation is grounded in the

---

[1] The Department reduces "Operating Expenses" by $216,457 and then increases the cost of service under "Administrative & General" by $42,849 by reducing some annual expenses under that category and then adding "Depreciation & Amortization" of $53,457. See Exhibit DPS-SF-1.

"used and useful" standard. And while I am not a ratemaking expert, I do try to explain why relying on those traditional ideas is not consistent with WAC's prior rate case history and impractical given the real challenges we are facing as a utility. Rather than "protecting" customers from costs that have not yet been incurred, application of this standard here will make it impossible for WAC to undertake investments in the water system that are necessary to maintain adequate service. As I discussed in my Direct Testimony, I further elaborate on why WAC cannot fund these investments with capital and how we have reached that conclusion after a great deal of effort. I will discuss the work we have done to identify potential sources of capital and the reality that there is no capital investor willing to take on the investment that is needed to bring the water system up to par.

I will also explain why I believe the structure of our proposed rate increase is better for customers—even if we were able to find an investor that would inject the significant capital needed to maintain adequate service. In this case, WAC has proposed that rates include the cost to service its debt, including interest and principal. While this may be unusual, it is also necessary for a utility like WAC that has almost no equity and no access to capital. Additionally, if these projects were to be funded by a hypothetical investor and treated under normal principles, customers would end up paying even higher rates. I discuss this hypothetical in some detail and explain the basis for my conclusion that WAC's proposal here has a lower rate impact.

<u>Overview of Department Adjustments</u>

4. Q. Please summarize the major drivers in this rate request and how the Department proposes to adjust WAC proposal.

A. As I discussed in my Direct Testimony, I recognize that this rate request is significant, but the magnitude of this rate change is needed to address three serious factors that the Company needs to manage in order to continue providing adequate service: (1) extensive system repairs that are needed to address the severe damage to our water system that occurred last summer; (2) significant system upgrades that are mandated by the Department of Environmental Conservation ("DEC"), including over $4 million in system upgrades to address DEC deficiencies; and (3) the transition of the water company's ownership and operational management, resulting in increases in salaries and wages.

After we experienced severe flooding damage last summer, we applied for emergency Commission approval of a $150,000 loan to help manage cash flow. This loan was difficult for WAC to obtain because the Company is already severely leveraged. We have now effectively maximized the amount of debt that we are able to take on based on our current revenue and will not be able to increase our debt obligations without demonstrating that we will have the cash flow to meet those obligations. At the same time, we need to borrow another $664,602 to repair the Elm Street river crossing. On top of that, we need to borrow over $4 million to upgrade the system so that water pressure can be maintained while fire hydrants are in use and also find a way to annually invest $150,000 in pipe replacement in order to meet DEC regulations.

The Department's recommendation not only reduces operating expenses, which are largely based on Test Year expenses, it would also remove (1) the Elm Street crossing loan and the revenue needed to service that loan, (2) the $150,000 annual cost of pipe replacement, and (3) the revenue needed to service a $4.4 million loan.[2] At the same time, the Department has not offered alternatives about how we can pursue these initiatives. This leaves the Company in a

[2] WAC has applied to VEDA for $9,178,130 to begin funding this work, however, we do not expect that loan to be approved without assurance about WAC's ability to service the loan. The $4.4 million we've included in the ANR Deficiency Fund includes only part of the overall solution, which also includes building a new tank near well number one. The loan application reflects the cost to do both of these projects. If we get approval, we will then submit an application for Commission approval of that additional debt.

precarious position. I do not see any feasible alternatives to funding this work without customers participating in the funding solution. Since we have operated this Company effectively as a non-profit for decades, I also think WAC's proposal is fair and provides a solution where we can make investments that will preserve customers' access to service, move toward compliance with DEC regulations, and improve the long-term sustainability of the water system.

<u>Discussion of Specific Operating Expense Adjustments</u>

5. Q. Please explain why the Department's reduction in Heat expense by $626 does not reflect the expected cost for this expense in the Rate Year.

A. The Department reduced several expenses, including this one, by using a five-year average of WAC's expenses rather than relying on the Test Year expenses that we used to establish WAC's proposed rate change. In general, our experience has shown that the previous year is the best guide to what to expect for the following year, and if anything, we should expect typical operating expenses to increase.

In this case, WAC included $2,347 in the case based on the Test Year expense for heating oil of $2,347. The Department proposes to reduce that in the Rate Year by $626 based on a five-year average, however, this reduction does not reflect our anticipated Rate Year expense. Like most Vermonters, WAC has experienced increased fuel oil costs over the last five years. Because the Department's five-year average includes a year (2019) when our fuel expense was less than half of what we incurred in the Test Year of 2024, it inaccurately reduces the Test Year expense well below what we expect in 2025. We have not only experienced higher propane prices, but we have also increased our usage in the last year or so because we have increased the temperature that we maintain in the shop. This change was intended to make the temperature 65 degrees to improve the working environment. For these reasons, the Department's adjustment to this expense does not reflect what we expect to spend on heating costs in the Rate Year.

6. Q. Please explain why the Department's reduction in Electricity expense by $11,787 does not reflect the expected cost for this expense in the Rate Year.

A. The Department uses a five-year average to reduce the Rate Year expense for electricity by $11,787. This proposed change to the cost of service is purportedly based on a lack of certainty about our electricity expense in the rate year, but I disagree with it for several reasons. First, over the last five years, our electricity expense has steadily and rapidly increased: $1,700 in 2019, $5,281 in 2020, $7,903 in 2021, $12,821 in 2022, and $21,660 in 2023. It is simply unreasonable to expect this trend to reverse itself in the Rate Year. When an expense is trending upward on a consistent basis, using a five-year average will always understate the expense. Accordingly, this proposal should be rejected because it necessarily means we will not recover our basic cost of electricity in rates.

Second, WAC uses electricity to run the water pump that maintains system pressure. In the last few years, we have experienced more water loss, which is also one of the reasons it is critical that we find a way to make larger investments in the water system. In any event, this trend will increase—especially if we are unable to advance serious system repairs. Increasing water loss means that we have needed to run the pump during more hours of the day; and sometimes 24 hours a day. This not only means that we are consuming more electricity, but it also means that we often must run the pump during peak hours when our electric rates are higher. On top of this trend, we have experienced a decline of 8% to 10% in solar production over several of the last years. Since our net metering credits offset the electric charge, this reduction in output has also translated into higher electricity expenses.

Accordingly, the Test Year expense for electricity more accurately captures what we expect to incur in the Rate Year than the Department's proposed reduction, which does not account for the fact that this expense is trending upward and there is no reason to believe that trend will suddenly reverse itself in the Rate Year.

7. Q. Please explain why the Department's reduction in Operating Supplies expense by $10,895 does not reflect the expected cost for this expense in the Rate Year.

A. The rate year cost of $31,270 is more reflective of what we expect for the Rate Year because the operating supplies increase when we improve the system. We expect to need more valves and other expensive parts as we continue to reduce water loss and fix leaks. In the long run, the more repairs we make the less the rates will need to be increased. The Department appears to be using averaging on this expense going back five years, but the current trend for repairs and maintenance continues to rise as water loss increases. This expense category increases to support increased repairs. Since the system needs to keep improving for the ratepayers to best protected in the long run, this is not an area where I would recommend reducing the annual budget. If we were able to do so, I would recommend increasing this budget over the Test Year expense.

8. Q. Please explain why the Department's elimination of the ANR required planned pipe replacement does not reflect the expected cost for this expense in the Rate Year.

A. I discuss the more general issue of capital investment and debt further below, however, this proposed investment was included as an operating expense in the cost of service because the system has over 17 miles of pipes, most of which are over 100 years old, and we need to invest $150,000 annually in standard pipe replacement in order to adhere to our action plan to address DEC deficiencies, as discussed in my Direct Testimony. This should be allowed as an annual expense because DEC has indicated that we need to include this amount in our annual budget, and as discussed further below, rate revenue is our only source of funding; we are not able to address this DEC deficiency by raising capital. Moreover, we are already planning on significant increases in debt levels to fund the larger $4.4 million DEC deficiency investment and other flooding damage. Accordingly, we have proposed this as an annual expense to balance the extent to which WAC is funding investments with debt versus rate revenue. Since this is a long-term annual cost and will continue indefinitely based on the extensive amount of pipe replacement on the system, we think it makes the most sense to include this as an annual expense.

9. Q. Do you agree with the Department's recommendation to eliminate the SCADA expense of $45,300?

A. Not necessary, however, we agree this could be treated differently. I have talked to our bank about this and, if we could borrow the money for this expense, we could amortize the expense over 5 years and move it into our debt expense. We would prefer to reserve our ability to borrow for larger critical projects like the DEC fire hydrant deficiency. It is possible to pay for this investment with debt, but of course, our ability to borrow more money without a significant increase in the cash flow is very limited.

10. Q. Please explain why the Department's reduction in Office Supplies expense by $4,116 does not reflect the expected cost for this expense in the Rate Year.

A. Our computers and billing system are old and need updating. A rate year expense of $10,450 is needed. The billing system has a maintenance agreement that is increasing by $800 a year and that expense will go up when we upgrade that system to comply with the billing format the Department has asked us to use. Postal costs are continuing to increase which effect the mailing cost for our billing. We have been using postcards for our bills and we need to change to bills in envelopes which will increase postage as well. In 2022 this expense was $12,322, and in 2023 it was $10,045. We believe that $10,045 is the best estimate of what to expect in 2025.

11. Q. Do you agree with the Department's proposal to reduce professional services by $7,649?

A. No. The Department's testimony does not appreciate that we are fighting to keep this water company alive, which requires a lot of professional assistance and will continue to require a substantial annual expense for the foreseeable future. The Department recommends reducing WAC's ability to pay for professional services by $7,649, in part to reflect average expenses, however, we expect that legal, accounting, and engineering services will be increasing in the coming years; whether the Town purchases the company's assets, or it continues under WAC's guidance. We will need to engage in a variety of complicated financial transactions and debt service arrangements to implement the system improvements that are needed and will also need to improve the timing of our rate cases to keep rates more in line with the timing of our changing costs. In addition, we will experience a significant increase in engineering costs in the coming years as we implement these changes. As a result, I do not believe professional services expense will begin to decline for at least four or five years.

12. Q. What do you think WAC's overall operating expense in the Rate Year will be based on the above discussion?

A. If we borrow the money for the SCADA system and remove that expense from the Rate Year, Rate Year expenses will be $890,224—which does not include the debt expense needed to pursue the fire hydrant deficiency. If we also removed the $150,000 in pipe replacement, the Rate Year expense would be $740,225. Accordingly, even if the Commission adhered to strict used and useful standards for the SCADA and pipe replacement costs, the Rate Year cost of service is still $740,225—significantly higher than the Department's $631,400.

Cost of Debt

13. Q. Please explain why the Department's adjustments to the Cost of Debt are not just and reasonable and how WAC will manage this debt if revenues are not sufficient to service existing debt.

A. The Department's proposed adjustments to WAC's debt expense reduce the expense such that WAC would only recover the interest expense on this debt. There are several reasons this will not work in our case.

First, the Department applies ratemaking methods that do not work for a small water utility with an approximately 95%/5% debt to equity ratio. For a healthy investor-owned utility, I understand the typical debt-to-equity ratio is closer to 50%/50%. While I am not an expert, I have also learned that it is typical for rates to include both (1) a return on equity on the capital an investor has made to provide service and (2) the cost of maintaining its debt. In this circumstance, it would make sense to include only the interest expense as proposed by the Department because the overall principal on the debt does not generally change in proportion to the debt-to-equity ratio. Accordingly, the utility can recover just the expense (the interest on the debt) associated with the debt, while principal on the debt is effectively maintained through a stable debt-to-equity ratio or the utility earns a return on debt that is converted to capital. Under these circumstances, I understand that a weighted average cost of capital would be included in rates.

In WAC's case however, there is almost no equity upon which we earn a return and we have never—to my recollection—established rates in a manner where we included a return on equity or recovered a "weighed average cost of capital." Furthermore, as discussed below, we are not able to raise any capital, so there is no way to effectively convert debt to capital. As a result, our debt continues to grow and there is no equity or earnings with which WAC can even maintain current debt to equity ratios—let alone reduce the principal on current debt obligations. As a result, if we only recover the interest expense on our current debt, we will default on our loans, which require payments of both debt and equity. This path will push WAC closer and closer to bankruptcy and further imperil the Company's ability to continue to provide service.

Second, the Department's recommendation does not account for the principal owed on our debt. If the assumption is that we can service that debt through capital infusions, it is wrong. As I have noted before, WAC cannot raise capital and has not earned capital through a return on equity in rates. We know this because, over the last several years, we have made a concerted effort to do so. We have discussed the possibility of raising capital with several potential investors and possible buyers of the company. Additionally, every generation of my family has tried to convince the Town of Woodstock to buy the company with no success. I have been working with the town for over two years to try to get the purchase of the company to a town-wide vote. At the same time, I have reached out to large companies that have purchased other small water companies around the country. The two companies that I found that were willing to assess the possibility of investing in WAC concluded that Vermont had too few private water companies for them to get involved with the Vermont regulatory environment.

I have also tried to find equity investors who might contribute capital without a full sale of the Company. Most recently I discussed this possibility with a group from the Royal Bank of Canada, who ultimately concluded that there is no economy of scale in private water companies that could be found in Vermont. They also told me that the risk of our water system was too great for the return they could expect to earn in Vermont. Accordingly, I am virtually certain that—in the absence of a sale to the Town—WAC will be unable to raise any capital whatsoever.

For these reasons, recovering only the interest on our debt will surely increase the financial problems that we are trying to manage. I cannot see how we will pay the current loans we have under these circumstances—let alone increase our debt to advance the serious capital projects that are needed to improve the water system and advance compliance with DEC regulations.

Traditional Ratemaking

14. Q. Please explain how WAC has traditionally set rates with the Commission's approval and whether the Commission has typically applied concepts like the "used and useful" standard to WAC's rate?

A. In past rate cases, the revenue requirement has been established without any reference to a "rate base" or return on equity because the stockholders have not taken money out of the company. No return on equity has been included in the rates to my knowledge. We have acted like a non-profit in business for the good of the town. The rates have been set by looking at our existing expenses and income. We would next make our case for improvements and repairs and negotiate with the Department. This is a small company with limited resources that has tried to protect its ratepayers and continue to improve the system.

While this has helped keep rates low, we have not appreciated or benefited from some of the traditional ratemaking concepts the Department hopes to apply to WAC for the first time in this case. For example, without a return on equity, WAC's debt to equity ratio has steadily increased to the point that we have almost no equity at all, resulting in the challenges I discussed in the prior section of this testimony. Additionally, I do not recall applying the "used and useful" standard in prior cases—particularly because that standard determines what WAC is permitted to earn a return upon by allowing the investment in "rate base." Again, while I have not had the benefit of a rate expert in prior rate cases, I do not believe we have ever earned a return on "rate base." As a result, I'm afraid rates have been chronically below what would have been just and reasonable under standards like the "used and useful" standard for decades, which may have contributed to our current financial challenges.

15. Q. Does WAC's proposed rate structure create more risk or increase rates for customers compared to the Department's proposal?

A. No. The Department discusses concerns about using our actual debt obligation as a basis for rates, explaining that depreciation should be used to set the cost of service because it spreads the cost of an asset of its useful life and avoids potential fluctuations in rates that could be driven by varying loan repayment schedules and different loan structures. In concept, I generally agree. It would be great if WAC was able to recover the cost of assets over the useful life of the asset through traditional depreciation, return on equity, and debt expense. In combination, this would create just and reasonable rates. But as discussed above, this only works if you have all three legs of that stool, (1) sufficient capital for a balanced debt/equity ratio, (2) a reasonable return on equity that enables you to maintain a healthy debt/equity ratio, and (3) stable debt that can be maintained as an expense. As I discussed above, WAC is not in this position and I do not think it is either practical or fair to apply these traditional ratemaking theories, like "used and useful," when they have not been used in prior WAC cases and cannot be applied consistently so that we would earn a return on equity. Contrary to the Department's claim that use of these standards will "protect" customers, it is more likely to seriously hamper our ability to raise funds needed for serious investments and further expose customers to serious service quality problems.

Moreover, even if it was possible for WAC to raise the capital needed to get this Company on track without funding projects through rates and more debt, it would not reduce risk to customers or reduce rates. For example, WAC's cost of service includes (1) annual expense, (2) actual debt service obligation (rather than just interest charges), and (3) the debt service obligation we will need to secure a $4.4 million loan to address DEC deficiencies. There is almost no equity in the Company and no return on equity included in the rates. So customers are not paying any investor 9% to 15% on their investment.

If we imagined for a moment that someone would invest $4.4 million dollars in WAC so that we could make $4.4 million in "used and useful" investments rather than creating the ANR Deficiency Fund, that investor would probably require somewhere between a 9% and 15% return on equity. Even with returns that high, I still do not think we could raise this capital based on my prior discussions with potential investors. But even if we assumed it was possible, the return on equity alone would increase rates by $396,000 to $660,000 in the Rate Year (assuming 9%-15% ROE and straight-line depreciation). While that would be reduced over time as the assets depreciated, customers would still have to pay that investor between $1.7 and $5.8 million in profit alone over the course of 30 years. In contrast, we are proposing that WAC pass the benefits of a very low VEDA interest rate on to customers so that we can fund the $4.4 million ANR deficiency through debt service obligations that are less than $300,000 annually and therefore less expensive than private capital. This seems like a far more just and reasonable approach and will not result in drastic fluctuation in rates.

For similar reasons, we think it makes the most practical sense to include $150,000 a year in rates so that we can demonstrate to DEC that we are budgeting, and are capable of budgeting, for the annual investment that is needed to maintain compliance with DEC regulations. Without these investments, I am not sure what the next step with DEC will be. We will either be faced with mounting enforcement costs, serious operational challenges like reducing fire hydrant service or discontinuing that service altogether, or some other unknown mandate or order to cease certain services.

This investment as proposed by WAC would also be incurred by customers “at cost” rather than with the added cost of capital—assuming that was even possible. If we found an investor willing to fund this need, the depreciated value of that investment after ten years would be around $1,275,000, with a capital cost of $114,750 to $191,250. Accordingly, including this as an annual expense of $150,000 is on par with the more traditional long-term carrying cost and would be more stable.

16. Q. Does this conclude your testimony?

A. Yes.

DECLARATION OF JIREH BILLINGS

I declare that the above statements are true and accurate to the best of my knowledge and belief. I understand that if the above statements are false, I may be subject to sanctions by the Commission pursuant to 30 V.S.A. § 30.

September 4, 2024
Date

/s/ Jireh Billings
Jireh Billings