# NOVA SCOTIA UTILITY AND REVIEW BOARD

# IN THE MATTER OF THE PUBLIC UTILITIES ACT

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**IN THE MATTER OF** an application by the **TOWN OF TRENTON**, on behalf of its **WATER UTILITY**, for approval to amend its Schedule of Rates and Charges for Water and Water Services and its Schedule of Rules and Regulations

- BEFORE: Jennifer L. Nicholson, CPA, CA
- APPEARING: TOWN OF TRENTON

Blaine Rooney, CPA, CA Blaine S. Rooney Consulting Limited

Alana McDonald Chief Administrative Officer

Oliver Browning, PMP, FEC, P.Eng PDI Engineering

Brenda MacKay Chief Financial Officer

- **HEARING DATE:** December 14, 2022
- DECISION DATE: February 17, 2023

DECISION: The application is approved, as amended by the utility.

### I SUMMARY

[1] The Town of Trenton on behalf of its water utility, applied to the Nova Scotia Utility and Review Board, under the *Public Utilities Act*, R.S.N.S. 1989, c. 380 (*Act*), to amend its Schedule of Rates and Charges for Water and Water Services (Rates and Charges) and its Schedule of Rules and Regulations (Rules and Regulations). The utility's existing Rates and Charges have been in effect since April 1, 2011, and the Rules and Regulations have been in effect since July 1, 2009.

[2] The utility presented the application to the Board based upon a need to adjust rates because limited maintenance for years has resulted in infrastructure that requires significant upgrades. The increase in rates will fund an ambitious capital program to replace or upgrade existing aging infrastructure. The utility supported its application with a rate study prepared by G. A. Isenor Consulting Limited, in association with Blaine S. Rooney Consulting Limited. The rate study was dated July 13, 2022, and filed with the Board on July 29, 2022.

[3] In preparing responses to Board staff Information Requests (IRs), the utility's consultant realized there was an error in detailing the operating expenses. Corrections were made and a revised rate study dated October 19, 2022, was filed along with the IR responses. The Board reviewed this revised study during the public hearing and it is the study referred to in this decision.

[4] The Board held a public hearing on December 14, 2022, after due public notice. Blaine Rooney, CPA, CA, of Blaine S. Rooney Consulting Limited, represented the utility. Municipal staff also represented the utility: Alana MacDonald, Chief Administrative Officer; Oliver Browning, P. Eng., PDI Engineering; Brenda MacKay, Chief

Financial Officer. The Municipality of the County of Pictou was a formal intervenor but did not participate in the hearing.

[5] During the public hearing, the Board requested information on the splash pad and water fountain and the utility identified corrections to worksheet D-1 in the rate study. The utility filed the additional information and corrections as undertakings.

[6] The application proposes rate increases for the fiscal years 2023/24, 2024/25 and 2025/26 (Test Years). For 5/8" meter residential customers, based upon average quarterly consumption, the proposed increases in each of the Test Years are 121.2%, 16.8%, and 20.5%, respectively. For all other metered customers, based upon the average quarterly consumption of each meter size, the proposed rate increase is between 0.0% to 148.8% in 2023/24, 0.0% to 22.4% in 2024/25, and 0.0% to 22.0% in 2025/26. Pictou County is a wholesale customer, and the proposed increases are 100.2% in 2023/24, 19.9% in 2024/25 and 22.3% in 2025/26.

[7] The application also proposed amendments to the annual public fire protection charge the Municipality and Town pay to the utility for water for fire protection service. The total annual public fire protection charge is currently \$136,672 and the utility proposed to increase it to \$287,491 in 2023/24, \$333,197 in 2024/25, and \$373,576 in 2025/26 (split 14.8% to Municipality and 85.2% to the Town).

[8] The utility updated other charges to align them with actual costs for services. The utility revised its Rules and Regulations to align them with similar regulations for other water utilities in Nova Scotia.

[9] The Board received two letters of comment and six requests to speak at the evening hearing session. Five people spoke at the session. The speakers were heartfelt

in their submissions about the challenges of such a significant rate increase, especially for those on fixed incomes. There was frustration over the lack of maintenance over the years and the length of time since the last rate hearing. Several speakers commented that they understood that major upgrades and maintenance are needed but feel that the timing for a large increase is not appropriate given the current economic climate.

[10] The Board considered all the comments made in the written submissions and during the evening session in making its decision. The Board is mindful of its responsibility to consider the public interest in its decisions.

[11] The Board is keenly aware that cost of living is already challenging for many, and any rate increase will be difficult, especially for low-income customers and those on a fixed income. Deferring the required maintenance and resulting rate increases is not prudent considering the deteriorating condition of the infrastructure. The impact of not doing these upgrades would be a significant increase in operational and financial risk and the potential for even higher rates if components of the system fail.

[12] As set out in this Decision, the Board approves the utility's requested Schedule of Rates and Charges and the Schedule of Rules and Regulations, as amended by the utility.

### II INTRODUCTION

[13] The utility's source of water supply is from five deep wells in the Town of Trenton. The water is pumped to a treatment plant where it is filtered to remove iron and manganese, the pH is adjusted, and it is disinfected. An 800,000-gallon reservoir is next to the water treatment plant. The treated water is pumped to customers in the upper

pressure zone and is distributed by gravity to customers in the lower pressure zone. The utility's customers are in the Town and Pictou County. Pictou County is a wholesale customer who distributes water in the community of Hillside.

[14] The utility currently serves 960 metered service connections, with no change projected over the Test Years. The rate study assumes a decrease of 1.5% in consumption per year for the average residential customer. There has been a decline in consumption since 2009 and the rate increase may see a conservation effect on water usage.

[15] The application was presented to the Board based upon the need to adjust the rates because of limited maintenance for years which has resulted in infrastructure that requires significant maintenance and upgrades.

## III REVENUE REQUIREMENTS

## a) Non-revenue Water

[16] Non-revenue water is water treated by the utility that does not generate revenue. The utility has not conducted a water loss assessment or leakage study but estimates the total non-revenue water to be about 26% of production. This is a decrease since the last rate application when it was estimated to be about 37% of production. Leak detection is completed monthly, and the budget includes replacement of distribution watermains and increases in operating budgets that will help to reduce water leakage in the system.

### Findings

[17] The non-revenue water percentage has decreased since the last rate study. The utility has a robust capital spending budget and some of the projects will have an impact on water loss reductions. The Board understands that the infrastructure upgrades are a priority, and the utility can put more effort into reducing non-revenue water in the future.

### b) Operating Expenditures

[18] The utility's financial information for the year ended March 31, 2021, indicated that its expenses exceeded its revenues by \$91,060 with an accumulated surplus of \$264,428. Without a rate adjustment, the utility expects a revenue deficiency of \$872,987 in the final Test Year, and an accumulated deficit of \$2,170,262 at the end of 2025/26.

[19] The utility operating budget process involves a review of the previous year's costs as a guideline and is updated for new information for the current year. The rate study projects a 3% increase for inflation in each of the Test Years for the operating expense items. The utility posts operating costs directly to the water utility and administration costs are allocated to the water utility based on a percent of utility expense to the total expenses for both the Town and the utility. The utility manager, CAO and finance staff are involved in drafting the budget which is presented to Council for approval.

[20] The high asset replacement costs noted in this application are due to age and lack of maintenance over the years. The utility explains that the forecasted costs for repair and maintenance have increased substantially over prior year actuals to address this lack of maintenance and to avoid being in the same situation in the future. A source water protection committee has been formed to maintain the source water, set direction, address concerns, and make recommendations for action. The committee consists of the water utility manager, a member of council, engineering and two citizen appointees.

[21] In the hearing the utility explained that the source water quantity is stable but about 50% of the operating expenses are for water treatment costs. A full treatment plant is required to ensure the groundwater meets the Nova Scotia Environment regulations.

[22] In response to IR-23, the utility identified depreciation rates for the capital additions that were different than those set out in the *Water Utility Accounting and Reporting Handbook (Accounting Handbook).* The differences use the estimated useful life of the capital works.

[23] The utility is requesting the depreciation on the reservoir construction in 2023/24 be deferred for one year and start in 2024/25. The deferral is for rate design purposes to balance the rate of increase for the residential customers.

### Findings

[24] The operating expenses over the Test Years are generally based upon an annual increase of approximately 3%, and the utility explained the reasons for the items that differed. The Board accepts the operating and depreciation expenses projected by the utility for the Test Years.

[25] The Board approves the deferral of the annual depreciation payment of \$37,626 on the reservoir construction for one year for the purpose of rate design.

[26] The Board accepts the allocation of costs between the Town and the utility. The Board reminds the utility to review these allocations on a periodic basis to ensure accuracy.

# c) Capital Budget and Funding

[27] Two reports were completed by consultants on the state of infrastructure and a system water assessment. Overall, the water utility infrastructure requires attention, financial resources, and optimization to maintain sustainability. Items identified as being in poor shape and critical to the operation of the water system were prioritized for immediate replacement or upgrade. Projects identified as priority and included in this application are a new reservoir, booster station replacement, water treatment plant upgrades, and some waterline replacements.

[28] The rate study included the utility's capital budgets in each of the three Test Years, \$3,029,000, \$1,200,000 and \$1,680,000 respectively. The table below summarizes the capital projects and proposed funding:

	2022/23	2023/24	2024/25	2025/26
Structures and Improvements	16,008			
Distribution Reservoir and Standpipes		2,829,000		
Water Treatment Plant Upgrade			1,000,000	
Equipment	24,550			1,480,000
Booster Station	565,000			
Distribution	124,000	200,000	200,000	200,000
	729,558	3,029,000	1,200,000	1,680,000
Grants from outside sources				
Depreciation Fund	58,558	400,000	140,000	185,000
Long Term Debt	671,000	2,629,000	1,060,000	1,495,000
Capital from Revenue				
	729,558	3,029,000	1,200,000	1,680,000

[29] In response to IR-24, the utility supplied details of its major budgeted capital expenses and funding. Projects the utility had previously approved by the Board are a

reservoir facility and pressure booster station and Duke Street waterline replacement (M10543).

[30] The proposed funding for the utility's capital budget in the Test Years is through depreciation and new long-term borrowing. Based on the projected expenses and funding, the utility expects the balance of its depreciation fund to be \$60,689 at the end of the Test Period. The utility described the projected depreciation fund balance as appropriate given the size of the utility. The utility has a robust capital program and is using almost all its annual contribution to fund, in part, its capital plan. As with most utilities, the debt will be amortized for 20 years and a 6% interest rate is assumed for this rate study. The actual debt repayment will be finalised when construction is complete, and the utility applies to the Nova Scotia Municipal Finance Corporation for funding.

[31] The utility explained that grant applications are being pursued and a Provincial Capital Assistance Program (PCAP) grant is currently being reviewed. An update was provided that the Duke Street project was put on hold as the tender came in higher than original expectations but that \$64,000 of the external funding could be used towards another project and will contribute to a control system.

[32] It is the utility's understanding that the Investing in Canada Infrastructure Program (ICIP) funding requires that the project cannot be started before receiving approval. While about \$6,000,000 is being addressed in this application for the most critical infrastructure, there are additional projects identified in the reports of about \$20,000,000 that are required. The reports identify and prioritize the projects and demonstrate that the utility is prepared and ready for the projects. The utility is actively seeking future funding opportunities and is ready when they are presented.

## Findings

[33] The Board has considered the proposed capital projects included in the rate study and associated funding. The Board finds the proposed capital budget to be reasonable and necessary for the replacement of aging infrastructure. It is the Board's understanding that pushing these projects out may result in major consequences that cannot be fixed easily or in a short amount of time. The operational and financial risks are increasing over time and there is potential for cost increases if upgrades are further delayed.

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[34] The utility projects a need for new borrowing for capital project funding in the Test Years. With the proposed use of depreciation funding, the utility's projected depreciation fund balance at the end of the Test Period appears reasonable. The Board accepts the proposed funding of the utility's capital budget.

[35] The Board encourages the utility to continue to seek sources of external funding to reduce the amount of debt needed and complete additional projects identified but not included in this rate application.

[36] The Board reminds the utility that the inclusion of proposed capital projects in the rate study is not Board approval of these projects. The Commission needs separate Board approval for projects exceeding \$250,000, as set out in s. 35 of the *Public Utilities Act*.

### d) Non-Operating/Other Revenue and Expenditures

[37] The utility identifies other annual operating revenue in each of the Test Years in the rate study for sprinkler/hydrant service at \$6,520 annually. Interest on outstanding accounts receivable of \$3,000 is also included in each of the Test Years. [38] The non-operating expenses include current debt payments in each of the Test Years, and new debt payments associated with funding the capital budgets in the Test Years. The utility projects its debt charge, including principal and interest, to be \$301,005 in 2023/24, \$391,408 in 2024/25 and \$519,736 in 2025/26.

[39] The utility calculates its return on rate base using its non-operating expenditures less non-operating and other revenue. Using the assumptions and projections in the rate study, and the corrections in response to the IRs, the rate of return on rate base is calcuted as 5.84% in 2023/24, 6.31% in 2024/25, and 6.76% in 2025/26. The utility explained that the calculated rate of return on rate base over the Test Period is increasing as the utility is investing in replacing aging infrastructure which increases the accumulated depreciation and the principal and interest charges and is considered reasonable for the utility.

## Findings

[40] The Board finds the utility's other operating revenues and the non-operating expenditures over the Test Period to be reasonable and accepts them as presented in the rate study. The Board notes that the annual debt expenses are increasing during the Test Years but that is due to the robust capital expenditure profile.

[41] The Board finds the utility's proposed return on rate base over the Test Years to be reasonable.

# IV REVENUE REQUIREMENT ALLOCATION

## e) Public Fire Protection

[42] The utility divides the total public fire protection charge between the Town and the Municipality based on a split of 14.8% Municipality and 85.2% Town. The response to IR-5 explains the methodology as follows.

The determination of the public fire protection charge is based on the percentage of utility plant in service that is dedicated to fire protection as recommended by the American Water Works Association and accepted by the Board. All plant in service is allocated between Fire protection and General Service and resulting percentage is used to calculate the revenue requirement allocation to fire protection and that is deducted from the revenue requirement to establish the revenue requirement needed form the customer rates.

[43] The allocations are based on the *Accounting Handbook*. Since the last application, the Town lost a very high fire demand customer which has impacted the allocation percentages.

[44] The rate study calculated the allocation of the utility plant in service to public fire protection as 48.7%, 43.9% and 38.9%, respectively, in each of the Test Years. Using the methodology set out in the *Accounting Handbook*, the projected annual fire protection charge in the application is proposed to be set at \$287,491, \$333,197, and \$373,576 respectively, in each of the Test Years.

## Findings

[45] The allocations of utility plant in service to fire protection are consistent with those set out in the *Accounting Handbook*. The Board accepts the public fire protection charge as presented in the application.

#### f) Customer Revenue Requirement

[46] After distributing part of the utility's revenue requirement to charges for fire protection, collected from the Town and the Municipality, the utility assigns its remaining revenue requirement for recovery from the utility's customers.

[47] Pictou County is a wholesale customer. The methodology for the joint use charges is based on the use of the assets and includes the allocation of unaccounted for water between the utility and the Pictou County Water Utility to determine total consumption for both. The allocation percentage for future calculations has been approved by the Board at previous hearings (e.g. Westville Water Utility M10026). The County consumes about 27% more than shown in the last rate study.

[48] The remaining costs are for the customers in Trenton and the method used in the rate study to distribute the rest of the revenue requirement to the various components of customer rates uses the *Accounting Handbook*, with exceptions to maintain the base rate within an acceptable range. This balances the need for revenue security for the utility and gives the customer control of consumption charges. The utility is requesting the allocation of the depreciation be 100% to base for all three test years and the allocation of the return on rate base be set at 100% to base in the first test year, 80% to base, 10% to delivery and 10% to commodity in the second test year, and 60% to base, 20% to delivery and 20% to commodity in the third test year. The request is made for rate design purposes and keeps the revenue from the base charge at about 43%.

[49] The utility currently has 960 metered service connections and is projected to remain at the current levels over the test years. The average consumption for a 5/8" meter residential customer is currently 146m<sup>3</sup>. The water consumption for residential

customers has been declining since the last rate study and calculations include a 1.5% decline over the test years. There are three flat rate customers, and all others are metered.

### Findings

[50] The Board accepts the method used by the utility to distribute expenses to base, customer, delivery, and production charges. An anticipated decrease in residential consumption is included in the determination of rates, consistent with the historical data.

[51] The Board accepts the utility's explanation for deviating from the suggested allocations in the *Accounting Handbook* to mitigate risk by providing revenue stability.

## V SCHEDULE OF RATES AND CHARGES

[52] The utility proposed amendments to its Rates and Charges, other than the rates charged to its customers and the fire protection charge, discussed above. The utility's response to IR-40 outlined these proposed revisions.

[53] The application proposes to increase the rates charged for sprinkler service, re-establishing water service, account creation fee, connection fee, disconnection fee, special service charges and charges per collection visit.

[54] The utility explained that the amendments and additions are to reflect the utility's cost of providing the service and that the charges are in line with those of other water utilities in the province.

### Findings

[55] The Board finds the proposed changes to the utility's miscellaneous charges, based upon the cost to supply the service, to be reasonable and accepts them as proposed.

[56] The Board accepts and approves Schedules A, B, and C, as filed in response to the IRs.

# VI SCHEDULE OF RULES AND REGULATIONS

[57] In response to IR-46, the utility listed the proposed amendments to its Rules and Regulations. The main reason for the proposed revisions is to update the Regulations to make them comparable to other water utilities in the province, update charges to cover the cost of service, and give the utility better control over the system.

#### Findings

[58] The Board finds that the proposed amendments to the Rules and Regulations are reasonable and consistent with other water utilities in the province. The Board approves the Rules and Regulations, as filed in response to the IRs, with an effective date of April 1, 2023.

## VII CONTINGENCY PLANNING

[59] In response to IR-62, the utility provided general information about its efforts related to contingency planning and emergency preparedness for the utility. It stated that there is no formal emergency preparedness plan in place and that staff are informed

immediately by the utility of any issues. Qualified staff are available to resolve issues or emergencies.

[60] It is important for utilities to have contingency planning and an emergency preparedness plan. The Board encourages the utility to review its operations and develop contingency and emergency response plans and review them on an annual basis.

### VIII CUSTOMER CONCERNS

[61] For many, the cost of living is already unaffordable. This was certainly the sentiment expressed by the Town of Trenton residents who took the time to prepare and speak at the hearing and send letters of comment to the Board about this application.

[62] The utility has not had a rate increase since 2011 and the state of the system requires significant infrastructure upgrades. No rate increase is ever welcomed by ratepayers but access to safe drinking water is a necessity. It is the Board's opinion, the projects in the application are required in the near term to keep the water services and the water quality sufficient for the residents of Trenton.

[63] It is unfortunate that the system is in such poor shape and that a rate study has not been done in 13 years, but the Board understands that the current administration has a sense of urgency for the issues that need to be addressed and are taking the proper steps to ensure the system will maintained and upgraded. The Board believes the utility is prepared to leverage all external funding as it becomes available.

[64] Currently Trenton has one of the lowest water rates in the province but by 2025/26 the rates will be higher than the province average and higher than others within the same county. All water utilities are different and have different sources of water,

infrastructure needs, customer base and revenue requirements so it is difficult to make comparisons and these comparisons are not relevant to this decision. A longer-term solution that may need to be re-evaluated is working with utilities in the surrounding areas to determine if there is a more efficient, cost-effective solution by sharing resources and infrastructure.

[65] The Board encourages the utility to do regular water rate studies to avoid the significant rate increases as calculated in this rate application.

[66] The response to U-1 addresses a customer concern that was emailed to the Board regarding the fountain and splash pad water consumption. The utility confirmed that the fountain was not operational in 2022 and there are not plans for future operations. The splash pad opened in 2022 and does not recycle water. It consumed 1,383m<sup>3</sup> of water which was billed to the Town.

## IX CONCLUSION

[67] The Board approves the Rates and Charges, including the public fire protection charge, effective April 1, 2023, April 1, 2024, and April 1, 2025, as shown in Schedules A, B, and C, as received by the Board in response to the IRs.

[68] The Board approves the Rules and Regulations, effective April 1, 2023, as shown in Schedule D.

[69] An Order will issue accordingly.

DATED at Halifax, Nova Scotia, this 17<sup>th</sup> day of February, 2023.

Jennifer L Micholson