

**DECISION**

**2016 NSUARB 182  
M07463**

**NOVA SCOTIA UTILITY AND REVIEW BOARD**



**IN THE MATTER OF THE PUBLIC UTILITIES ACT**

- and -

**IN THE MATTER OF AN APPLICATION** of the **TOWN OF YARMOUTH**, on behalf of its **WATER UTILITY**, for Approval of Amendments to its Schedule of Rates and Charges for Water and Water Services and its Schedule of Rules and Regulations

**BEFORE:** Murray E. Doehler, CPA, CA, P.Eng., Member

**APPEARING:** **TOWN OF YARMOUTH**  
Gerry Isenor, P.Eng.  
G.A. Isenor Consulting Limited

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

David Ernst, P.Eng.  
Town Engineer

Gerry Verran, CPA, CMA  
Director of Finance

**HEARING DATE:** August 23, 2016

**UNDERTAKINGS:** September 6, 2016

**DECISION DATE:** **October 26, 2016**

**DECISION:** **Schedule of Rates and Charges approved, as amended.  
Schedule of Rules and Regulations approved, as amended.**

## I SUMMARY

[1] The Town of Yarmouth ("Town") applied to the Nova Scotia Utility and Review Board ("Board") on behalf of the Yarmouth Water Utility ("Utility" or "Applicant") for amendments to its Schedule of Rates and Charges for Water and Water Services and its Schedule of Rules and Regulations pursuant to the *Public Utilities Act*, R.S.N.S. 1989, c. 380 as amended ("Act"). The existing Schedule of Rates for Water and Water Services and Schedule of Rules and Regulations have been in effect since April 1, 2012 and June 1, 2010, respectively.

[2] A rate study to support the Application ("Rate Study"), dated April 22, 2016 was prepared by G.A. Isenor Consulting Limited in association with Blaine S. Rooney Consulting Limited and was submitted to the Board on May 5, 2016. Information Requests ("IR"s) were issued by Board staff on June 14, 2016, and responses were filed on July 6, 2016.

[3] The Application proposed rate increases for the fiscal years 2016/17, 2017/18, and 2018/19 ("Test Years"). For 5/8" meter residential customers, based upon average quarterly consumption, the proposed increases in each of the Test Years are 8.6%, 5.3% and 1.4%, respectively. For all other metered customers, based upon the average quarterly consumption of each meter size, the proposed rate increases are between 10.1% to 23.3% in 2016/17, 6.0% to 10.1% in 2017/18, and 2.4% to 11.2% in 2018/19.

[4] The Application also proposes amendments to the annual public fire protection charge to be paid to the Utility by the Town and the Municipality of the County of Yarmouth ("Municipality") for the provision of water for fire protection service. The total

annual public fire protection charge was proposed to remain at \$508,503 in 2016/17 and 2017/18, and increase to \$517,563 in 2018/19 in the Application. In the course of responding to the Undertakings, the Utility became aware of an error in the previous three years' fire protection charge calculations, and provided a revised Rate Study to reflect the correct fire protection charge calculations.

[5] The public hearing was held at the Yarmouth Town Council Chambers on August 23, 2016, after due public notice. Gerry Isenor of G.A. Isenor Consulting Limited and Blaine Rooney of Blaine S. Rooney Consulting Limited, represented the Utility. The Utility was also represented by David Ernst, P.Eng., Town Engineer, and Gerry Verran, CPA, CMA, Director of Finance. There were no formal intervenors in the proceeding, and no requests to speak. One letter of comment was received by the Board.

[6] The Rate Study as included in the Application was presented at the hearing. The original Rate Study was amended in response to the Information Requests. It was subsequently revised in response to the Undertakings. It is the revised Rate Study as presented in the Undertakings that is referenced in this decision, unless otherwise noted.

[7] The Schedule of Rates and Charges and the Schedule of Rules and Regulations are approved, as amended and requested by the Utility.

## **II INTRODUCTION**

[8] The water source for the Utility is surface water from Lake George, located in Yarmouth County. The raw water is withdrawn from Lake George via a water intake to a treatment plant, commissioned in 2003. The treatment process includes dissolved air flotation, filtration, and chlorination.

[9] The distribution system for the Utility consists of mains ranging in size from 4" to 12" in diameter and two above ground steel water storage reservoirs.

[10] The Utility has 2,936 metered customers. The Utility also provides bulk water to boats, ships, and other commercial users.

[11] The Application was presented to the Board based upon the need to adjust the rates as a result of increased operating costs and to fund the projected capital program.

### **III REVENUE REQUIREMENTS**

#### **(A) Operating Expenditures**

[12] For the year ended March 31, 2015, the Utility had an excess of revenues over expenditures of \$332,877 and an accumulated surplus of \$661,122. However, if current rates are left in place, the Utility is projecting a deficit balance of \$40,559 by the end of 2018/19.

[13] The revised Rate Study corrected an error in the calculation of the fire protection charge. This correction resulted in shifting some of the revenue requirement from the fire protection charge to the customers in 2016/17 and 2017/18. As a result there are slightly higher rates for the customers in 2016/17 and 2017/18 than had been in the original submission.

[14] The Utility notes in its response to Board IR-5 that the non-revenue water experienced by the Utility in 2015 is 46.3%. This has been reduced from 51.7% in 2012. In the last rate application, the Board noted that water loss was a significant issue for the Utility. In response to Board IRs, the Utility noted:

... The Utility has replaced a number of water mains in recent years and eliminated several blow offs. The Utility is now using auto flushers on hydrants in areas requiring regular flushing to ensure minimal usage for this need. The Utility is continuing to replace old inaccurate meters on a regular basis and any stopped meters found during the reading cycle are replaced in a timely manner. The Utility is planning to undertake an IWA Water Audit for 2015 to compare to the one completed in 2012.

[Exhibit Y-3, IR-5]

[15] This issue was further explored during the hearing. Mr. Ernst explained:

Well, our system is a very linear system. It's an old system. We have a lot of water frontage with – in town, which leaks disappear into and you never find them, the same without [sic] in the County. We have a lot of old mains, 12-inch transmission main that was turned into a distribution main, and that's very linear with a very low number of users on it; comparatively, I mean.

So it's difficult to narrow down where exactly leaks are. I mean, there are probably a lot of little leaks. There's nothing major that shows up readily. And, I mean, we've been working at it. I mean, you can say it's only 3 percent but, I mean, 3 percent is like 75 million gallons from 2012 to 2015, and prior to that it was a 90 million gallon reduction that we achieved.

[Transcript, p.43]

[16] The response to Board IR-10 explained why some of the projected 2015/16 operating expenses vary significantly from the previous year's actual expenses: water treatment expense increased by \$89,987, (20%), due to lagoon cleaning completed in 2016; transmission and distribution expense increased by \$111,640, (39%), due to increased maintenance budgeted in 2016 based on the age of the system; and administration and general expense increased by \$49,887, (13%), due to a staff vacancy in 2015 that was budgeted to be filled in 2016.

[17] The projected operating expenses for the Test Years are generally based upon the Utility's budget for 2015/16 plus an annual increase of 3% for inflation. Exceptions to this are the power and pumping – maintenance of pumping equipment, and transmission and distribution – maintenance of meters. The maintenance of pumping equipment expense is higher because of recent failures in the high and low lift pumps which are at an age where they require significant maintenance. The maintenance of

meters expense is higher to fund the purchase of radio-read "acu-stream couplers" that are to be installed over the existing outside readers, which will enable the Utility to do drive-by readings with a hand-held unit. These items are not being capitalized.

[18] The Applicant stated that the budget is prepared by the Director of Finance in consultation with the Town Engineer and Treatment Plant Manager based on the prior year's historical information and planned projects for the upcoming year. The costs that are allocated between the Town and the Utility consist of staff salaries. Staff that work at the water treatment plant are allocated 100% to the Utility while the remaining staff are allocated based on time sheets.

[19] The Town Engineer will be retiring within the test period and this has been considered in the budget. Mr. Isenor stated that the salary of a replacement has been budgeted to overlap and allow for a smooth succession and adequate training before Mr. Ernst retires.

[20] The projected depreciation expense in each of the Test Years is based upon the planned infrastructure additions included in the Utility's capital budget. The expected depreciation is based on rates as set out in the Water Utility Accounting and Reporting Handbook ("Accounting Handbook"), or, in several cases where they differ or no specific guidance is given, the rates are based upon the asset's expected useful life.

### **Findings**

[21] The Utility is projecting to be in a deficit position by the end of the Test Years, without an amendment to its rates.

[22] The Board finds the general 3% annual increase in operating expenses over the Test Years to be reasonable, and, where it is more, the budget has been adjusted

appropriately. 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.

[23] The Board accepts the revised Rate Study which resulted in a minor increase to the revenue requirement that is subsequently allocated to customers.

**(B) Capital Budget and Funding**

[24] The Rate Study included the Utility's capital budgets in each of the three Test Years, totaling \$910,000, \$885,000, and \$505,000 respectively. The Utility has budgeted \$750,000, \$450,000 and \$465,000 for distribution mains in each of the Test Years, respectively. The first Test Year also has budgeted \$75,000 related to the water treatment plant and \$85,000 for Lake George ERP and a Sludge Report. The third Test Year includes \$40,000 for transportation equipment.

[25] The capital budget in the second Test Year has \$400,000 in funds for sludge dewatering. Mr. Ernst and Mr. Isenor explained that the Utility is trying to find a better way to deal with the sludge disposal at the treatment plant: one that will reduce the annual operating costs.

[26] The proposed funding for the capital budget is as follows:

	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>
Depreciation Fund	\$ 820,000	\$ 375,000	\$ 370,000
Long Term Debt	\$ 65,000	\$ 465,000	\$ 50,000
Capital out of revenue	\$ 25,000	\$ 45,000	\$ 85,000
Total	<b>\$ 910,000</b>	<b>\$ 885,000</b>	<b>\$ 505,000</b>

[27] The Rate Study projects that, with the proposed funding as set out above, the depreciation fund balance will be \$103,597 at the end of the Test Years.

[28] The Utility explained its philosophy related to the level of borrowing, in particular, with respect to the older mains and the high level of non-revenue water. As much as possible the preference was to pay from Utility funds rather than borrow. Mr. Rooney noted:

Those type of infrastructure, they were put in over time, they should be replaced over time, and if you ever got them all replaced it would be time to start again. So it's kind of an ongoing capital revolving need every year as opposed to a treatment plant or a large project or a reservoir that's – once it's done it's good for 25 or 30 or 40 years.

[Transcript, p. 42]

### **Findings**

[29] The Utility is primarily focusing on replacing ageing infrastructure over the Test Years. This work should aid in reducing the level of non-revenue water. The Board expects the Utility to continue its efforts to reduce the non-revenue water in the system.

[30] The Board finds the proposed capital budget and funding for each of the three Test Years to be reasonable. However, the Utility is reminded that the inclusion of the proposed capital projects in the Rate Study does not constitute Board approval of these projects. Separate Board approval is required for projects in excess of \$250,000 as set out in s. 35 of the Act.

### **(C) Non-Operating/Other Revenues and Expenditures**

[31] The total annual amount for other operating revenues in each of the Test Years is \$12,000. The only non-operating revenue is \$750 for interest in each year.

[32] The non-operating expenses include the current and future debt payment in the each of the Test Years, and the corresponding interest expense. The new debt payments are being incurred to service the long term debt portion of the capital program for the Test Years.

[33] Also included is the capital out of revenue needed for each of the Test Years.

[34] The Utility is proposing a dividend of \$100,000 in each of the Test Years. The dividend to the Town is a continuation of a practice established in the past. The dividend goes into the general revenues of the Town and is not earmarked for any specific expenditure.

[35] The rates of return, which are calculated using the total non-operating expense revenue requirement, are 1.59%, 1.87% and 1.87%, respectively, in each of the Test Years.

### **Findings**

[36] The Board finds the Utility's other and non-operating revenues and expenditures to be reasonable and accepts them as presented.

[37] The Board notes that the interest rate of 6% is included in the Rate Study on new debt over the Test Years which is consistent with other rate applications recently approved by the Board, and only applies to new debt. The Board finds it reasonable to use 6% interest for the purposes of the Rate Study.

[38] The Utility is not in a deficit position and can pay a dividend. The calculated rates of return are within what the Board accepts as reasonable. The Board finds the projected non-operating expense revenue requirement to be reasonable.

### **(D) Allocations of Revenue Requirement**

#### **1. Public Fire Protection**

[39] The methodology used in the Rate Study for the determination of the public fire protection charge is in accordance with the *Accounting Handbook*. The percentage

allocation of utility plant in service to public fire protection is calculated in the Rate Study to be within a range of 29.5% to 30.2% over the Test Years.

[40] In the original submission, the Utility was requesting to maintain the fire protection charge at \$508,503 in the first two Test Years. During the hearing, the Board questioned the derivation of this figure. In response to Undertaking U-3, the Utility responded that there had been an error in this calculation for the last three years, and that the Municipality and the Town would be refunded the overcharge. In light of this error, a revised Rate Study was submitted to the Board requesting a fire protection charge of \$465,964 in the first Test Year and \$498,128 in the second Test Year. The third Test Year remained unchanged from the original Rate Study at \$517,563.

[41] The fire protection charge is allocated between the Town and the Municipality in proportion to the number of hydrants in each, consistent with the last rate application.

### **Findings**

[42] The Board accepts the Utility's determination of the fire protection charges, as presented in the revised Rate Study, and approves them. The Board further accepts the allocation of the total public fire protection charge between the Town and the Municipality based upon the number of hydrants in each jurisdiction, which is consistent with the methodology used in other jurisdictions.

### **2. Utility Customers**

[43] The remaining revenue requirement, after the allocation to the fire protection charges, is to be recovered from the customers of the Utility. The allocations

used for the base charge, customer charge, delivery and production are consistent with the methodology as set out in the *Accounting Handbook*.

[44] The Utility currently has 2,936 service connections, which is projected to remain the same throughout the Test Years. The consumption volume, based upon the Utility's current total annual consumption, is estimated to be 227,551,100 gallons in the first Test Year, and decline by 2% annually.

[45] The Utility currently has a two block consumption rate structure based upon 1,000,000 gallons per year per customer for the first block. The Utility is proposing to change the first block to 1,400,000 gallons per year per customer in 2016/17; 2,400,000 gallons per year per customer in 2017/18; and 4,000,000 gallons per year per customer in 2018/19.

[46] The Applicant proposes an amendment to the Bulk Water Rates in each of the Test Years, using the same methodology as is used by other Utilities throughout the Province.

### **Findings**

[47] The Board accepts the methodology used by the Utility in the calculation of base and consumption rates for each of the Test Years as proposed.

[48] The Board further accepts the amendment to the consumption volume used to determine the first block, and the calculation of the rates for bulk water sales. The proposed rates are approved as calculated in the revised Rate Study.

### **(E) Schedule of Rates and Charges**

[48] In addition to the rates for water supply to its customers, the Application included a number of proposed changes to its Schedule of Rates and Charges. These

changes, as outlined in IR-28, are for: a rate for sprinkler service, new account creation fee, system connection fee, and charge for non-negotiable cheques.

[49] The Utility bills its customers for quarterly consumption on a rotating monthly schedule. As such, the rates can be effective at the beginning of any month. If there has been a change in rates over a quarterly billing period, the bills are pro-rated. The Application was for an effective date of July 1, 2016, which, depending on the date of the Board's decision, could change to the beginning of a month.

### **Findings**

[50] The Board has reviewed the proposed amendments included in the Schedule of Rates and Charges, and finds them to be reasonable.

[51] The Schedule of Rates and Charges for the Test Years are approved as calculated in the revised Rate Study.

### **(F) Schedule of Rules and Regulations**

[52] There were also several changes to the Schedule of Rules and Regulations. The Utility outlined the changes and reasons for them in IR-29.

### **Findings**

[53] The proposed Schedule of Rules and Regulations is consistent with most other water utilities in the Province which have had recent rate applications.

[54] The Board approves the Schedule of Rules and Regulations as requested.

## **IV SUBMISSIONS**

[55] There were no formal intervenors to the Application. There was one letter of comment received prior to the hearing from Charles Jess. In his letter, Mr. Jess

expressed concern regarding the non-revenue water of the Utility as well as the level of contracted out work.

[56] During the hearing the Chair questioned whether the Utility had considered Mr. Jess' comments. Mr. Isenor and Mr. Ernst explained that Mr. Ernst's time is spread very thin, and the Utility does not have the staff to be able to do all the work in-house. As a consequence, a substantial portion is contracted out.

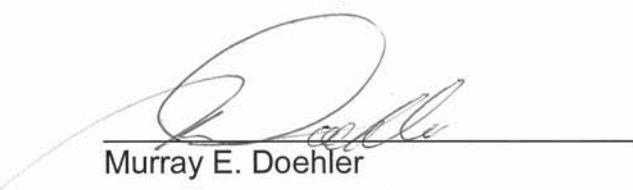
## V CONCLUSION

[57] In response to Undertaking U-3, the Utility refiled the Schedule of Rates and Charges for Water and Water Services and amended the effective date to November 1, 2016. Accordingly, the Board approves the Schedule of Rates and Charges for Water and Water Services, effective November 1, 2016, April 1, 2017, and April 1, 2018, as amended.

[58] The Board approves the Schedule of Rules and Regulations as proposed, effective November 1, 2016.

[59] An Order will issue accordingly.

**DATED** at Halifax, Nova Scotia, this 26<sup>th</sup> day of October, 2016.



Murray E. Doehler