DECISION **2016 NSUARB 169**
M07361

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 MULGRAVE**, 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 MULGRAVE**
Gerry Isenor, P.Eng.
G.A. Isenor Consulting Limited

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

Kevin Matheson
Acting Chief Administrative Officer

HEARING DATE: August 16, 2016

DECISION DATE: **September 27, 2016**

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

I SUMMARY

[1] The Town of Mulgrave ("Town") applied to the Nova Scotia Utility and Review Board ("Board") on behalf of the Mulgrave 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, 2010 and January 1, 2009, respectively.

[2] A rate study to support the Application ("Rate Study"), dated March 3, 2016 was prepared by G.A. Isenor Consulting Limited in association with Blaine S. Rooney Consulting Limited and was submitted to the Board on March 16, 2016. Information Requests ("IR"s) were issued by Board staff on April 11, 2016, and responses were filed on May 5, 2016. Included with the responses was a revised rate study which corrected errors in the original filing. Also attached to the IR responses were revised Schedules of Rates for Water and Water Services, incorporating the above noted changes.

[3] The Application proposed rate increases for the fiscal years 2016/17, 2017/18, and 2018/19 ("Test Years"). For the unmetered residential customers, based upon a quarterly consumption of 13,750 gallons, the proposed increases in each of the Test Years are 17.6%, 15.5% and 12.3%, respectively. For 5/8" meter residential customers, based upon average quarterly consumption, the proposed increases in each of the Test Years are 16.4%, 13.9% and 12.8%, respectively. For all other metered customers, based upon the average quarterly consumption of each meter size, the

proposed rate increases are between 15.0% to 20.0% in 2016/17, 11.8% to 18.8% in 2017/18, and 11.5% to 13.9% 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 for the provision of water for fire protection service. The total annual public fire protection charge is proposed to remain at $107,793 in 2016/17 and 2017/18, and increase to $119,807 in 2018/19.

[5] The public hearing was held at the Mulgrave Fire Station on August 16, 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 Kevin Matheson, the acting Chief Administrative Officer for the Town. 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 revised and included in the IR responses was presented at the hearing. It is the revised Rate Study 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 Grant Lake, via a wood stave pipeline owned by Port Hawkesbury Paper Ltd. which transports the water across the Strait of Canso to Point Tupper. The raw water is treated in the Utility's treatment plant, which was constructed in 1999. The treatment process includes chemical flocculation, dissolved air flotation, a granular sand filter process, and chlorination. A new water

treatment plant has been constructed in order to meet new regulations. This treatment plant is close to being complete and in service after a four year delay. Mr. Matheson explained the source of the delay:

> ... In this case the bulk of the initial delay, approximately three years of it, would have been in securing easements to run three-phase power to the plant. And that should have been done in advance of starting construction. It was not picked up until the plant was built and Nova Scotia Power was called to install and said, "We can't install powerline." So it got delayed for some period of time, and then it was resolved last year, that issue. But in fact the building then sat for three years. A number of other issues have cropped up that we've had to do remedial work on; particularly cracks in the clear wells would be the big ones. We've had to do remedial work on some of the concrete in the clear wells.
>
> [Transcript, pp. 21-22]

[9] The primary storage facility for the Utility is a reinforced concrete tank with a capacity of 1,095 cubic meters constructed in 1971. The Utility also has a second larger reinforced concrete tank with a capacity of 2,114 cubic meters constructed in 1984. This tank provides the required pressure and flows to the Mulgrave Marine Industrial Park.

[10] The Utility has 75 metered customers and 259 unmetered customers. The Utility also provides bulk water to boats, ships, and other commercial users.

[11] At the time of the last rate application, the Board noted its concern about the large percentage of non-revenue water.

[12] 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, most notably the new water treatment plant.

III REVENUE REQUIREMENTS

(A) Operating Expenditures

[13] For the year ended March 31, 2015, the Utility had an excess of expenditures over revenues of $46,761 and an accumulated deficit of $34,134. If current

rates are left in place, the Utility is projecting a deficit balance of $324,266 by the end of 2018/19.

[14] In response to Board IR-13, the Utility provided an updated Rate Study that corrected an error with the power and pumping expense. This correction resulted in a $44,000 increase to the revenue requirement annually. In order to mitigate the further increase to rates this would have caused, the Utility rescheduled some of the capital program for the first Test Year into the second Test Year, and the second into the third. This work is for distribution main replacement and the installation of meters. In the original Rate Study it was proposed to phase-in the recognition of the expected depreciation of the water treatment plant which is based on a 50 year life. In the updated Rate Study it is proposed to reduce further the phase-in to 10%, 10%, and 30%, of the expected depreciation over each of the Test Years, respectively.

[15] These changes result in the needed increase coming more from the commodity charge than the base charge for the first test year and less so in the second test year. In subsequent test years the allocation of the increase between base and commodity is roughly similar. For the residential customers, the proposed increases in the revised Rate Study are slightly less in the first two test years and slightly more in the third test year, than had originally been submitted. For all other metered customers, the proposed rate increases in the revised Rate Study from year to year, can vary significantly from that which had been originally proposed. Regardless, the overall increase over all the Test Years is similar to the original submission.

[16] The non-revenue water experienced by the Utility is estimated to be in the range of 45% - 50%. In the last rate application, the Board noted that the Utility may want

to consider the development and pursuit of an aggressive leak detection program, as well as metering all customers. In response to Board IRs, the Utility noted:

> The first step will be to install meters for all customers to get an accurate picture of revenue water. The extent of the difference will give indications of the cost/benefit of performing additional leak detection procedures. These would be initiated in the oldest sections of the distribution system first.
>
> [Exhibit M-3, IR-4]

[17] The response to Board IR-10 explained the reasons why some of the projected 2015/16 operating expense vary significantly from the previous year's actual expenses. The source of supply expense decreased by $43,340, (62%), and the power and pumping expense increased from nil in 2014/15 to $44,509 in 2015/16. The Utility noted that this was mainly due to source of supply and power and pumping being combined in 2014/15. The Utility also noted that the water treatment – purification expense decreased by $65,627, (42%), and the transmission and distribution expense decreased by $44,731, (58%), due to a change in the operator salary allocation between water and wastewater operations.

[18] 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. An exception to this is the water treatment – purification expense, which Mr. Matheson explained during the hearing is expected to decrease due to a reduction in required chemicals and additives in the new water treatment plant.

[19] The Applicant stated that the budget is prepared by the acting Chief Administrative Officer in consultation with senior staff. The prior year's budget and actual figures are reviewed and used to establish a baseline for determining where changes are required. In response to IR-14 the Utility noted that costs that are allocated between the

Town and the Utility consist of staff salaries which were re-examined and updated in the 2015/16 year. The allocations are projected to remain consistent during the Test Years.

[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 new water treatment plant is a significant addition to Utility Plant in Service in 2016/17. Because of the size of this addition, in order to avoid a material jump in rates, the depreciation on the new plant is being phased in over the Test Years in the Rate Study at 10% of the expected amount in the first Test Year, 10% in the second Test Year, and 30% in the final Test Year. The remaining 50% is proposed to be phased in by the time of the next rate hearing. 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, the rates are based upon the asset's expected useful life.

Findings

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

[22] The Board finds the 3% annual increase in operating expenses over the Test Years to be reasonable. The Board accepts the allocation of costs between the Town and the Utility, which were reviewed and updated in 2015/16. The Board reminds the Utility to review these allocations on a periodic basis to ensure accuracy.

[23] The Utility refiled the Rate Study in response to IR-13, to correct an error with respect to power and pumping expense. The Board accepts this revision to the power and pumping expense, as well as the revision to the capital budget and depreciation expense used to offset the increased power and pumping expense.

(B) Capital Budget and Funding

[24] The Rate Study included the Utility's capital budgets in each of the three Test Years, totaling $4,214,345, $440,000, and $460,000 respectively. The new water treatment plant ($4,174,345) accounts for most of the first Test Year budget. The Utility has budgeted $300,000 for distribution mains and $60,000 for meters in each of the second and third Test Years. Distribution reservoirs and standpipes are budgeted for $80,000 and $100,000 in the second and third Test Years.

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

	2016/17	**2017/18**	**2018/19**
Depreciation Fund	$ 40,000	$ 60,000	$ 80,000
Long Term Debt	$ 1,439,351	$ 200,000	$ 150,000
Outside Funding	$ 2,734,994	$ 180,000	$ 230,000
Total	**$ 4,214,345**	**$ 440,000**	**$ 460,000**

[26] The Rate Study projects that, with the proposed funding as set out above, the depreciation fund balance will be $21,351 at the end of the Test Years.

[27] During the hearing, the Applicant was further questioned by the Board on the issue of metering. The Chair pointed out that this was an issue noted during the last rate hearing, and it has not been addressed. Mr. Isenor responded:

> But we are planning to put them in this time when we built the funds in for it, Mr. Chairman. So sometimes progress comes slowly but it does come.
>
> [Transcript, p. 17]

[28] As part of the application for dissolution [M07152], the Town of Mulgrave commissioned a report on the Town infrastructure, which included the Utility. The Utility has used this report as a guide in setting out its capital plan, with some alterations from that recommended in the report. Mr. Isenor commented:

> ...there was a report done on infrastructure, that I'm sure you're aware of, on the whole infrastructure for the town by -- which we refer to as the Opus Report. We have delayed the implementation of the capital works from their schedule, and we did that... with the benefit of trying to even out the rate increases for the customers on an annualized basis.
>
> [Transcript, pp. 7-8]

Findings

[29] The new water treatment plant is the most significant capital addition over the Test Years. Apart from the water treatment plant, which has already been constructed, the Utility is focusing on replacing ageing infrastructure and metering customers over the Test Years. These efforts will aid in identifying the location where non-revenue water occurs. The Board again notes that metering customers is a much more equitable way to allocate its expenses to customers. The Board expects the Utility to continue its efforts to meter all its customers, and directs the Utility to continue to pursue this option.

[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 only other operating revenue is an amount for 'DSM Nutritional Products fire service' in the amounts of $1,049, $1,214, and $1,362, in each of the Test Years, respectively. This is a new revenue source for the Utility. The Utility is requesting a new rate for water used for regular testing of a new fire suppression system for DSM

Nutritional Products Canada Inc. ("DSM"). DSM explained in a letter to the Utility that weekly and yearly testing were required and calculated the consumption based upon the planned testing periods and required flows. This rate is an unmetered rate and is based on consumption information as provided by DSM, with a 50% contingency added.

[32] During the hearing, Mr. Isenor explained the reasoning behind the proposed 50% contingency built into the DSM rate:

> ... I mean, when DSM made the original request... they actually gave us fairly good evidence as to what they were using -- how much water they were planning on using based on the ratings of their equipment. So I was reasonably comfortable. What I wasn't comfortable with was the length of time.
>
> ... So that's what led more to the 50 percent factor than anything else. Because they said, "Well, we'll let it run for five minutes." Well, if they let it run for six, you know, we're 20 percent over, right? And so, for me, I wasn't so much doubting their ability or the pump manufacturer's ability to say, "My pump's going to move 800 gallons a minute"; it was more a question of how many minutes we're going to let it run. And that's what led to the suggestion that we put a 50 percent contingency in there and that would, in fact, give some comfort to the utility that they were not taking water and wasting it.
>
> [Transcript, p. 33-34]

[33] Non-operating revenues in each of the Test Years are: sales to boats in the annual amount of $10,000; interest on overdue accounts in the annual amount of $1,600; and other revenue in the annual amount of $500.

[34] The non-operating expenses include: current debt payment in the first Test Year of $10,700 and the corresponding interest payment of $450. Also included are principal payments on new debt of $68,333, $87,437, and $91,841 in each of the Test Years, and the corresponding interest, estimated in the amounts of $37,543, $55,175, and $61,596. New debt payments are being incurred to fund a portion of the capital program that has been planned to occur over the Test Years.

[35] Included in non-operating expenses is earnings in the third Test Year of $5,000. The earnings are identified as "dividend to owner" on Schedule D-2 of the Rate

Studies. The Board assumes, therefore, that the Utility plans on paying out the earnings as a dividend, and not to retain the earnings for the benefit of ratepayers.

[36] The calculated rates of return, which includes the earnings, are 4.21%, 4.75% and 4.97%, respectively, in each of the Test Years.

Findings

[37] The Board finds the Utility's other and non-operating revenues and expenditures, as presented, to be reasonable and accepts them as presented. The Board also accepts the proposed new rate for DSM fire suppression system testing.

[38] 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.

[39] The Application is phasing in the full recognition of the depreciation on the water treatment plant. The setting aside of depreciation funds for future major repairs and/or replacement is for the benefit of ratepayers, any delay in so doing can adversely affect future rates. The Application states that this is done to minimize the rate increase, but believes earnings are justified.

[40] The Board recognizes that the calculated rate of return is within an acceptable range, but cannot accept recognition of earnings when the depreciation is being underfunded. The Utility is directed, for the third test year, to increase the phase-in of depreciation on the water treatment plant to 35% and eliminate the earnings. This will not affect the proposed rates.

(D) Allocations of Revenue Requirement

1. Public Fire Protection

[41] The methodology used in the Rate Study for the determination of the public fire protection charge is in accordance with the *Accounting Handbook.* The method of allocation has changed from the use of net plant in service to the use of gross plant in service since the last rate application.

[42] The percentage allocation of utility plant in service to public fire protection is calculated in the Rate Study to be within a range of 17.7% to 22.5% over the Test Years. To address the resulting decrease to the fire protection charge this creates, for rate design purposes, the Utility is requesting to maintain the fire protection rate at the current level of $107,793 in all three Test Years.

Findings

[43] The Board accepts the Utility's determination of the fire protection charges, maintaining the current fire protection charge at its current level as presented in the Rate Study, and approves them.

2. Utility Customers

[44] 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.* The depreciation was allocated 100% to base charge in the last rate application. In the current Application, the Utility is proposing to change this to 80% to base, 10% to delivery, and 10% to production in

2016/17, and 60% to base, 20% to delivery, and 20% to production in the remaining Test Years. The Utility noted in its response to IR-27 that this is to keep the revenue from the base charge in the 45% - 50% range.

[45] The Utility currently has 334 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 24,666,812 gallons in all Test Years. The Utility explained in response to IR-29 that the largest customer has dramatically reduced consumption since the previous rate study and that this customer has indicated that no further reductions are expected. The Utility further explained that the residential customers will continue to be unmetered throughout the Test Years and therefore there is no effect on their assumed consumption.

[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 calculation of the rates for unmetered customers 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 are outlined in IR-32. The updated charges are for: the rate for sprinkler service, charge for re-establishing water service, new account creation fee, system connection fee, special service charge, charge for non-negotiable cheques, and the charge for missed appointment by customers.

[49] Mr. Isenor stated that the effective date in the first Schedule of Rates and Charges should read October 1, 2016, as opposed to July 1, 2016 given the timing of the hearing.

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 in the updated 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-33.

Findings

[53] The proposed Schedule of Rules and Regulations are 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 George Freer. In his letter, Mr. Freer

expressed concern regarding the community's ability to bear the financial burden of the rate increases.

[56] During the hearing the Chair questioned if the Applicant had considered phasing in the rate increases. Mr. Isenor explained that the phase in of depreciation, the postponement of the capital plan by one year, the partial reallocation of depreciation from base to consumption charge, and the maintenance of the fire protection charge at current levels had all been included in the calculation of rates in order to mitigate the increases to the rates while still maintaining the financial health of the Utility.

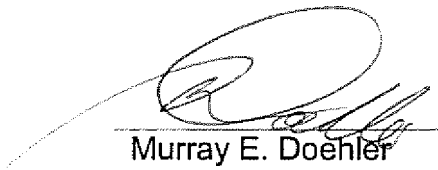
V CONCLUSION

[57] The Application proposed rates to be effective July 1, 2016. Mr. Isenor noted that given the timing of the hearing, it is now suggested that rates be effective October 1, 2016. Accordingly, the Board approves the Schedule of Rates and Charges for Water and Water Services, effective October 1, 2016, April 1, 2017, and April 1, 2018, as amended.

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

[59] An Order will issue accordingly.

DATED at Halifax, Nova Scotia, this 27th day of September, 2016.



Murray E. Doehler