

NOVA SCOTIA UTILITY AND REVIEW BOARD

IN THE MATTER OF THE PUBLIC UTILITIES ACT


- and -

IN THE MATTER OF AN APPLICATION by the **MUNICIPALITY OF THE DISTRICT OF WEST HANTS**, on behalf of the existing three water utilities (FALMOUTH, HANTSPORT, AND THREE MILE PLAINS/WENTWORTH) to amalgamate the three utilities into one utility named the **WEST HANTS WATER UTILITY** and to apply for approval of a Schedule of Rates and Charges for Water and Water Services and a Schedule of Rules and Regulations

BEFORE: Stephen T. McGrath, LL.B., Member

APPEARING: **MUNICIPALITY OF THE DISTRICT OF WEST HANTS**

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

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

Martin Laycock
Chief Administrative Officer

Brad Carrigan
Director of Public Works

Carlee Rochon, CPA, CGA
Director of Finance

HEARING DATE: March 27, 2019

DECISION DATE: **May 27, 2019**

DECISION: **Application to consolidate the Falmouth Water Utility, the Hantsport Water Utility and the Three Mile Plains/Wentworth Water Utility into the West Hants Water Utility is approved, but the Municipality is directed to submit a plan for phasing-in rates for further approval.**

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I INTRODUCTION

[1] The Municipality of the District of West Hants applied to the Nova Scotia Utility and Review Board on behalf of its three water utilities: Falmouth, Hantsport and Three Mile Plains/Wentworth. The Municipality applied to amalgamate the three utilities to form the West Hants Water Utility. The Municipality also applied for the approval of Schedules of Rates and Charges for Water and Water Services for 2019/20, 2020/21 and 2021/22 (Test Years), and a Schedule of Rules and Regulations for the new utility.

[2] The Municipality proposed common rates for all customers of the new utility starting July 1, 2019. Under this proposal, rates for customers of the former Falmouth Water Utility would increase significantly on July 1, 2019, while customers of the former Hantsport Water Utility would see a large decrease and customers of the former Three Mile Plains/Wentworth Water Utility would see a slight decrease. After this initial adjustment, all customers would see the same increases on April 1, 2020 and April 1, 2021.

[3] The Board approves the consolidation of the Municipality's three utilities into the West Hants Water Utility but finds that the transition to uniform rates should be phased-in to mitigate the impact that changing rates will have on customers of the Falmouth Water Utility. The Board directs the Municipality to phase-in the transition to common rates for the amalgamated water utility over the Test Years, rather than adopt common rates in the first Test Year. The Board accepts the Municipality's estimate of the revenue it requires for water services in the Test Years. The Schedule of Rules and Regulations is approved, as amended during the proceeding. Approval of the Schedules

of Rates and Charges for the amalgamated utility is subject to a compliance filing, once the phasing-in of rates during the Test Years has been approved.

II ISSUE

[4] The application is governed by the *Public Utilities Act*, R.S.N.S. 1989, c. 380 (*Act*).

[5] The Municipality supported its application with a rate study prepared by G.A. Isenor Consulting Limited, in association with Blaine S. Rooney Consulting Limited (Rate Study). The Rate Study projects the revenue required by the new West Hants Water Utility to fund its operations and support capital improvements and additions to the utility's water system (Revenue Requirement) for the Test Years. The Rate Study allocates a part of the Revenue Requirement to the Municipality, the Municipality of the County of Kings, and the Glooscap First Nation for fire protection services. The utility's water service customers share the balance of the Revenue Requirement. Rates for services provided to customers are determined in the Rate Study. The Municipality supported its application with more information supplied in responses to Information Requests (IRs) issued by Board staff. During this proceeding, the Municipality amended the Rate Study to include projected revenue from bulk water sales, correct errors in the allocation of utility plant in service to public fire protection and correct the calculated proposed rate increases.

[6] After due public notice, the Board held a public hearing at the Municipality's Council Chambers on March 27, 2019. The Municipality's consultants, Gerry A. Isenor, P.Eng., of G.A. Isenor Consulting Limited, and Blaine S. Rooney, CPA, CA, of Blaine S. Rooney Consulting Limited, gave evidence for the Municipality. The following municipal

staff also testified for the Municipality: Martin Laycock, Chief Administrative Officer; Brad Carrigan, Director of Public Works; and Carlee Rochon, Director of Finance.

[7] Before the hearing, the Board received letters of comment from Avon Valley Floral Inc. (Avon Valley) and Windsor Elms Village, both located in Falmouth. In addition, one member of the public, a resident of Falmouth, requested to speak. The focus of the comments was the proposed amalgamation of the Municipality's three water utilities and rate implications for customers in Falmouth.

[8] In this case, the Board must determine whether to allow the proposed amalgamation of the Municipality's three utilities and whether the projected Revenue Requirement and proposed rates in the Rate Study are just and reasonable for the Test Years.

III BACKGROUND INFORMATION ON THE MUNICIPALITY'S WATER UTILITIES

[9] The water systems of the Municipality's three existing utilities are not physically connected and there are no plans to connect them. The utilities currently serve 2,427 metered customers. Of these, 2,376 customers are served using 5/8" water meters, which is the meter size generally used to serve residential customers. The application projects annual growth of five residential customers, primarily in the Falmouth and Three Mile Plains/Wentworth service areas, with no change to the service area from that currently covered by the three existing utilities.

[10] The Falmouth Water Utility sources water from the French Mill Brook impoundment, a dam constructed approximately two kilometres west of Falmouth. The raw water is pumped to a water treatment plant. The treated water is stored in a standpipe and is distributed to customers by gravity.

[11] The source of water for the Hantsport Water Utility is Davison Lake, approximately 12 km southwest of Hantsport. The raw water flows by gravity through transmission mains to the utility's microfiltration water treatment plant. During the utility's last rate application, the Board noted that the water treatment processes did not produce water meeting Guidelines for Canadian Drinking Water Quality for trihalomethanes and haloacetic acids. In this hearing, the Municipality confirmed that plant upgrades necessary to produce water which now meets the Guidelines were completed in 2016. A 1,000,000 gallon capacity steel reservoir on Holmes Hill stores the treated water. The Utility's distribution pipes range in size from 4" to 12" in diameter.

[12] The Three Mile Plains/Wentworth Water Utility purchases water from the Town of Windsor through several metered connection points at wholesale rates approved by the Board. The distribution system for the utility consists of mains ranging in size from 6" to 12" in diameter, with one pressure boosting station on the Panuke Road.

[13] As is common for water systems like the ones operated by the Municipality's three utilities, some water escapes the water system. The calculated amount of this non-revenue water was presented by the Municipality for each of the Falmouth, Hantsport and Three Mile Plains/Wentworth water utilities as 17.51%, 13.53% and 56.7%, respectively. The high percentage of non-revenue water experienced by the Three Mile Plains/Wentworth Water Utility, which was noted in the last rate application for that utility, is due in part to a poor section of lateral piping along Highway Trunk #1. Work is currently underway to replace these service pipes. In addition, the proposed Revenue Requirement includes costs for leak detection services.

[14] The Board issued a letter dated April 24, 2019, to all regulated water utilities discussing water loss assessment and reliability issues associated with the percentage method calculation set out in the Board's *Water Utility Accounting and Reporting Handbook (Accounting Handbook)*. The intent of this letter is to raise awareness of the Standard Water Balance (SWB) process for assessing water loss so that water utilities could consider this method and discuss it as part of individual water utility rate applications. Although the public hearing in this case was held before this letter was issued, the Board had asked questions about this issue during the hearing. The Municipality's consultants acknowledged that while the SWB methodology may provide better results, many of the small utilities in the Province may not have the resources to acquire and maintain the water loss data required to use this approach.

IV SHOULD THE UTILITIES AMALGAMATE?

[15] The Municipality says that common rates for its customers would be fairer and that applying uniform regulations would be less confusing. The Municipality supplied information showing that combining the three utilities would result in modest cost savings, but cost effectiveness is not the primary justification for the proposed amalgamation.

[16] The three utilities are not distinct legal entities. The Municipality runs the utilities on behalf of residents in the areas served by those utilities. The Municipality incorporates financial information for each utility in its consolidated financial statements. The Municipality's financial statements include segregated financial information for each utility, but after amalgamation, the Municipality would combine the financial information for the three utilities into a single set of accounts.

[17] The transition from separate rates for each existing utility to a common rate for the new utility would result in significantly different rate changes for customers. Residential customers of the Hantsport Water Utility served using a 5/8" meters would see their water bills drop by an estimated 22% in the first year of operations of the new water utility. The Municipality estimates that Three Mile Plains/Wentworth Water Utility customers using this size meter would have a 1.1% reduction in water bills. In contrast to these reductions, customers using the same meter size in the Falmouth Water Utility would see a 52.4% increase in their bills. These estimates will vary for individual customers. The Board must decide whether to allow the three utilities to merge despite this disparity.

[18] The Municipality says that combining the water utilities will allow it to merge sewer rates for municipal residents as well. It explained that the methods used to charge sewer rates in different areas of the Municipality vary, resulting in an inequitable distribution of these costs. The Municipality wants to move to a common method to determine costs based on water consumption and a uniform rate. The Municipality said that the impact of changes in water rates from the consolidation of the three water utilities offsets the impacts arising from changing the way that sewer rates are determined. As such, the Municipality said that it will not go ahead with changes to its sewer rates without the amalgamation of the water utilities.

[19] The Board received a letter about the application from Kevin A. White, President and CEO of Avon Valley. Avon Valley is a current customer of the Falmouth Water Utility, receiving service through 3", 1" and 5/8" metered connections. Avon Valley acknowledged that a common administration of the three utilities makes sense but

expressed significant concern about the proposed water rate increases for Falmouth customers, and suggested that the offsetting sewer charge reductions in Falmouth proposed by the Municipality were “highly misleading”. Avon Valley said that the proposed average increases were also misleading, given a higher average consumption per customer for the Falmouth Water Utility noted in IR responses provided by the Municipality. Avon Valley questioned whether the Municipality could adopt a single average rate for the three separate utilities without considering each individual water system’s present and future capital and servicing needs and costs.

[20] The Board also received a letter supporting Avon Valley’s position from Donald van Nostrand, Director of Finance and Facilities, Windsor Elms Village. While Windsor Elms Village agreed that combining common services to gain efficiencies makes sense, it noted that this only works if the parties involved have comparable infrastructure and resources and said that it believes that this is not the current situation. Windsor Elms Village said that Falmouth has newer infrastructure and more adequate reserve funds in comparison to the other two utilities. It further noted that the rates proposed shift the deficiencies of the other two utilities onto customers of the Falmouth Water Utility resulting in significant rate increases for Falmouth customers. Windsor Elms Village said this was not fair and not reasonable.

[21] Kevin Matheson, a resident of Falmouth, spoke during the hearing. He noted that he is in favour of the proposed amalgamation and is pleased with the quality of water and service he receives. His main concerns with the application related to whether customers of each utility should repay debt relating to that utility’s existing infrastructure before moving to common rates. He also questioned whether customers

of each utility should receive the benefit of the depreciation reserves accumulated by another utility. In his opinion, the application lacked information about these issues; however, Mr. Matheson said he had fewer concerns after reviewing other sources of information, such as the Municipality's website which included the new sewer by-law and rates and a Committee of the Whole Report relating to the Municipality's proposal.

[22] The Board has no authority over the operation of the Municipality's sewer systems, or the rates charged by the Municipality for sewer services. The Board must assess the consolidation of the water utilities on its own merits. In essence, the Board must determine whether services received by the customers of the three existing water utilities are provided by the Municipality under substantially similar circumstances and conditions such that it is just and reasonable that rates for those services should be the same.

[23] Subsection 67(1) of the *Act* guides the Board when considering the justness of rates as between customers:

All tolls, rates and charges shall always, under substantially similar circumstances and conditions in respect of service of the same description, be charged equally to all persons and at the same rate, and the Board may by regulation declare what shall constitute substantially similar circumstances and conditions.

This is a mandatory provision that requires that customers who receive a regulated service under substantially similar circumstances be charged the same rate. What constitutes "substantially similar circumstances and conditions in respect of service of the same description" is not defined in the *Act*; however, the Board routinely approves rates that are different for different classes of customers of utilities.

[24] The Board described how rates are allocated to various customer classes of a utility in *Re Nova Scotia Power Inc.*, 2006 NSUARB 97. Although this discussion

was in the context of electricity rates, the same general principles apply to the establishment of water rates. In that case, the Board said:

[85] Electricity rates are set on the basis that the costs incurred by the utility to serve its customers, together with a reasonable rate of return, are recovered from its customers. Customers are divided into customer classes. These classes reflect variations in the services required by different customers (e.g., domestic customers and industrial customers) which are received from the utility. Since the services required by each customer class differ, the utility's cost to serve each customer class also differs. For example, in order to serve domestic customers, the utility must have an extensive distribution system. Large industrial customers do not require this infrastructure and, therefore, the costs to serve these two classes of customers are quite different. As a result, the total revenue requirements of the utility must be fairly divided by customer class and allocated accordingly. The requirement for fair allocation of costs ensures that all customers pay for the cost of the service they receive and their rates do not subsidize the rates of other customers.

[25] Despite the grouping of customers into rate classes on a cost of service basis, the cost to serve every member of a rate class is not the same. Rate classes may sometimes consist of a small number of customers, or even a single customer who uses a significant amount of the utility's services, but most customers of a utility are grouped into larger rate classes. It is not practical or cost effective for a utility to precisely determine the costs of serving every single customer. Even if the utility could do so, the calculation would not be precise given the need for subjective assumptions relating to the use of common infrastructure and services. The classification of customers into rate classes is necessary, and as a result, customers in a class pay the average cost of serving a customer in that class.

[26] Grouping customers into classes that receive service under substantially similar circumstances and conditions requires judgment. Many factors influence the exercise of such judgment. In L.R. Nash, *Public Utility Rate Structures* (New York and London: McGraw-Hill Book Company Inc., 1933), 273, the author states:

Discrimination is commonly understood to mean a difference in rates or service conditions relating thereto for service of substantially the same characteristics, taking into account

volume, load factor, load density, time of use, character of use, and any other significant factors. Because of the many factors involved in discrimination, its precise definition is necessarily left to the judgment of the regulatory commissions in each case.

[27] In the past, the Board has exercised its discretion to approve the amalgamation of water utilities for a variety of reasons. In at least a couple of cases, these amalgamations have resulted in rate increases exceeding 50% for some customers of at least one of the consolidated utilities (*Re Municipality of Annapolis County*, 2009 NSUARB 159 and *Re Municipality of the County of Victoria*, 2009 NSUARB 53). Factors that have influenced the Board's approvals have included:

- consolidation would improve administrative efficiency;
- consolidation would reduce the cost and effort of invoicing customers;
- consolidation would allow the utility to better predict and budget costs;
- consolidation would reduce the risk of operating deficits;
- consolidation would spread the revenue requirement of the utility over a larger customer base and promote predictability and stability of rates;
- the utilities were physically connected;
- the utilities were essentially one operation sharing the same staff and vehicles with the Municipality;
- one or more of the utilities to be amalgamated was so small as to not be viable;
- consolidation would minimize the risk of inappropriate expenditure decisions because of rate considerations in the territories served by small utilities in a municipality;
- consolidation would reduce friction between regions in a municipality served by a utility; and

- consolidation would improve economies of scale.

[28] The Board must consider similarities and differences in the circumstances and conditions of supplying service to the customers of the three utilities involved in the proposed amalgamation. As noted previously, the utilities are not separate legal entities. The Municipality owns the utilities and supplies water service to residents in various parts of the Municipality. Rate structures in all three utilities are similar. Customers of all the utilities are billed based on water meter sizes.

[29] The Municipality's existing three water utilities have similar, but not identical, water systems. Falmouth and Hantsport have surface water sources. Both utilities treat and store water before supplying it to customers. The Three Mile Plains/Wentworth system connects to the Town of Windsor water system and buys treated water from the Town of Windsor. The Three Mile Plains/Wentworth system has a pressure boosting station. All three of the Municipality's existing water utilities have distribution systems to deliver water to customers.

[30] The water received by the customers of all three utilities is comparable. The Municipality advised that water received by its customers in all areas meets or exceeds Guidelines for Canadian Drinking Water Quality. Service in some parts of Hantsport relies on four-inch piping that does not provide adequate fire protection. The Municipality advised that this affects 76 customers located on a certain stretch of a half dozen streets and roads within the Municipality.

[31] The utilities share resources amongst themselves and with the Municipality. The segregated funds for each utility show various transfers amongst themselves and with the Municipality for services and other accounts. The Municipality also assigns costs

for the use of municipal infrastructure and equipment. This includes related expenses such as maintenance costs, fuel, heat, lights, insurance, and other general administrative costs.

[32] There are four municipal employees specifically assigned by the Municipality to all three of its existing water utilities. Another eight employees in the Municipality's Public Works Department perform services for the utilities from time to time, in addition to their duties working with other municipal infrastructure such as sewer systems, roads and sidewalks. A clerk in the Municipality's General Administration Department does administrative tasks for the utilities.

[33] The Municipality estimates that, upon consolidation, approximately \$41,000 a year could be saved in reduced staff time, information technology support, and from savings on audits and consultant costs. This is modest compared to the Revenue Requirement for the combined utility in the Rate Study. The small amount of savings highlights how highly integrated the three utilities are already. The Board expects that any savings that can be realized at this point would be from a reduction in work required to track, allocate, and assign costs for a single water utility rather than the three separate water utilities. Savings would also likely result from the consolidation of billing processes, and from efficiencies gained from not having to manage separate sets of rates and regulations for customers in different regions.

[34] Although operationally connected, the water systems for the three utilities are not physically connected and there is no suggestion that they ever will be. Customers within the service territory of each utility do not use infrastructure found in the service territories of the other two utilities. Physical differences in the infrastructure used by each

existing utility, the size of its system, customer density, historical financing of the infrastructure and similar factors combine to create different cost profiles for each of the three existing utilities.

[35] A customer's use of physical infrastructure is a relevant factor to consider, but there are many examples in Nova Scotia where customers in the same rate class do not use the same infrastructure. This is particularly true where the use of different facilities relates to geographic differences, such as the location of a customer on the utility's system. For example, a residential electricity customer in Nova Scotia who lives close to a large generation facility in Cape Breton pays the same rate as a residential customer in Yarmouth who lives farther away from large generation facilities. Similarly, a residential customer of a water utility who lives close to the outlet of a water treatment plant pays the same rate for water as a residential customer who is at the most distant point on the water utility's distribution system. Utility rates under the *Act* in Nova Scotia are often called "postage stamp rates" because they have not traditionally reflected such geographic factors.

[36] Combining the utilities would create a single utility, which although still small, would have a larger customer base. This larger customer base would be a better economic foundation for the Municipality for the operation of a water utility. It would also increase the stability of rates for all customers so that the effects of larger capital projects needed to continue to safely operate the utility are less noticeable in rates. Similarly, changes to consumption patterns over time will have a more muted effect on overall rates.

[37] Overall, the Board finds that the Falmouth Water Utility, the Hantsport Water Utility and the Three Mile Plains/Wentworth Water Utility are run by the Municipality in a

highly integrated fashion. The Board finds that differences in the water systems operated by the Municipality are like the differences that exist in larger, physically integrated utilities where customers in the same rate class are often served by different parts of the system. Given the small size of these utilities in the same municipality, there is little justification for keeping them segregated; doing so results in some inefficiencies and somewhat increases costs for all customers. The quality of the water provided to customers of these utilities is good, and the Board is satisfied that the service is substantially the same for these customers. The Board finds that the Municipality's three existing water utilities should be consolidated as proposed in the Rate Study.

[38] The Board is mindful that rates for customers served by the Falmouth Water Utility will increase significantly upon transition to uniform rates for all utilities. However, the Municipality supplied the Board with information showing that Falmouth Water Utility rates would increase significantly even without the consolidation of the Municipality's utilities. In its response to undertaking U-8, the Municipality supplied the Board with tables showing rate increases that customers of the Falmouth Water Utility would have received in 2018/19, 2019/20, and 2020/21 without consolidation. In Exhibit W-8, the Municipality supplemented its response to show the rate impact from planned work on the dam on the French Mill River. The cost of this work was included in the third year of the Rate Study for the combined utility (2021/22) but not included in the original response to undertaking U-8. The Municipality estimates that including the cost of the work on the dam would increase average quarterly bills for customers using 5/8" meters in its Falmouth Water Utility to \$141.22 in a few years. The Municipality says that much of the increase in rates that would occur in its Falmouth Water Utility is from a significant drop in water

consumption (Exhibit W-8). The estimated average quarterly bill in the first year under the rates proposed in the Rate Study is \$133.65, but this increases to \$150.29 in the third year.

[39] The Board accepts the Municipality's evidence and finds that much of the increase in rates in Falmouth would occur even without consolidating the three water utilities; however, the Board finds that the consolidation of the utilities proposed in the Rate Study focuses the impact of consolidation on the proposed rates for the first year of the Rate Study, compounding the significant increase in rates that customers of the Municipality's Falmouth Water Utility would have seen because of declining consumption.

[40] The Board understands that the Municipality proposes to manage these increases through offsetting decreases from changes to its sewer charges. As discussed previously, the Municipality's sewer system is not within the Board's jurisdiction. The Board recognizes the holistic view that the Municipality has taken towards the merging of its water and sewer systems, and the unification of rates for these systems throughout the Municipality, but the Board must consider issues relating to the water systems on their own merits. Furthermore, the response that the Municipality supplied to Undertaking U-4 indicates that nearly 20% of the customers of the Falmouth Water Utility (152 out of 792 customers) do not receive sewer service. Similarly, of the two large Falmouth Water Utility customers who supplied the Board with letters of comment in this proceeding, the Municipality told the Board that it projected that one of those customers would fare better overall once sewer rates changed. The Municipality's evidence about whether the other customer would similarly benefit from changing sewer rates was much less positive.

[41] In the past, the Board has found that significant rate increases for a group of customers arising from the consolidation of utilities may warrant a phasing-in of rates:

The Board has considered the matter carefully. In addressing this issue, the Board is aware that there are several public utility principles to be balanced, for example, "rates should be just and reasonable" and "rate discrimination should be avoided". As well, "avoidance of rate shock" and "gradualism in the introduction of rates increases" are well recognized rate-making principles.

Section 67(1) of the Act mandates that customers in similar circumstances pay the same rates and charges for similar services. The Board is of the opinion that KEC's residential and small general customers would not be in substantially similar circumstances as would NSPI customers in the same rate classes at the time KEC is sold to NSPI. In view of the very real rate shock which would be experienced by KEC's residential and small general customers if no phase-in were permitted, the Board is of the opinion that it would be just and reasonable to approve the phase-in, in the form requested by NSPI. Given that the Board is of the opinion that the sale should be allowed to proceed, it believes that it should mitigate the impact of the significant rate increase which would otherwise be incurred immediately by the residential and small general customers. The Board is also of the view that existing NSPI customers will not be prejudiced by the proposed phase-in. Accordingly, the phase-in is approved.

[Re Nova Scotia Power Inc., 1998 CarswellNS 652, paragraphs 76-77]

Findings

[42] The Board approves the consolidation of the Municipality's three utilities into the West Hants Water Utility but finds that transition to uniform rates should be phased-in to mitigate the impact that changing rates will have on customers of the Falmouth Water Utility. While the Board is satisfied that those customers would have seen significant increases without consolidation, the merger proposed in the Rate Study exacerbates this by placing the primary burden of consolidation only in the first year of the proposed three-year rate period. As there may be alternatives to the way rates for the new utility are moved to common rates, the Board directs the Municipality to provide the Board with a proposed method for phasing-in rates over the Test Years. The Board will review the Municipality's proposed methodology and render a decision on the way rates will be phased-in after that.

V REVENUE REQUIREMENTS

a) Operating Expenditures

[43] The operating expenses of the new amalgamated utility contained in the Rate Study are the combined expenses of the Municipality's three existing utilities. The Rate Study includes actual (2017/18), estimated (2018/19), and projected (Test Years) expenses for the West Hants Water Utility. In 2017/18, the Falmouth Water Utility had an operating deficit of \$58,614; the Hantsport Water Utility had an operating surplus of \$3,252; and the Three Mile Plains/Wentworth Water Utility had an operating surplus of \$40,363. The Rate Study showed that for the 2017/18 fiscal year, the combined utility had an operating deficit of \$14,999, and an accumulated operating deficit of \$17,320. The Rate Study projects that at current rates, expenditures will increasingly exceed revenues, resulting in an accumulated operating deficit for the amalgamated utility of \$1,030,064 on March 31, 2022.

[44] The Test Years' operating expenses for the new amalgamated utility are based on the estimated 2018/19 operating budgets of the three current utilities and a projected annual increase of 3%, with some exceptions. The Municipality noted that although it estimated the 2018/19 financial information at the time of preparing the Rate Study, based upon the most up-to-date information then available, there are no material changes to the data presented.

[45] The Municipality supplied explanations for estimated operating expense line items in 2018/19 which deviated significantly from 2017/18. It noted that it had previously followed the Nova Scotia Environment requirement for a qualified person designated to be in "overall direct responsible charge" of a facility by subcontracting staff of the Town of Windsor, and the cost for this was included as an administration and general expense

item. In 2018/19, the Municipality assigned an internal employee to this role. This contributed in part to an estimated decrease in administration and general expenses (-27%). Added labour costs resulted in increases to the source of supply (5%), power and pumping (6%) and water treatment (10%) expenses.

[46] The Municipality clarified budgeted expense items. The source of supply expense includes the cost to buy water from the Town of Windsor Water Utility. Mr. Isenor explained that in 2018/19, the estimated quantity of purchased water was higher than usual to account for ongoing leakage issues in Three Mile Plains/Wentworth Water Utility system. The Municipality's budget for 2019/20 is based on its budget for the previous year and increases by 3% annually in the remaining Test Years.

[47] The budgeted transmission and distribution expenses include costs associated with leak detection services in each of the Test Years. The Applicant explained that this relates to leak detection efforts primarily in Three Mile Plains/Wentworth Water Utility system, due to the area's volume of non-revenue water.

[48] A tax expense is estimated in 2018/19 but was not included in the 2017/18 figures. The Municipality noted that its tax exemption policy was revised in 2017/18, making all water utility property taxable, whereas previously it was not. The estimated tax expense for the amalgamated utility is based upon the total of the taxes paid by the separate utilities. The Municipality's budget for the tax expense in the Test Years increases annually by 3%.

[49] The Municipality explained its budgeting process. Its Director of Public Works meets with staff to assess future needs and operating costs. From this a budget

is drafted and given to the Director of Finance and CAO for review, before being submitted to Council for review and final approval.

[50] The method used to allocate costs between the Municipality and the amalgamated utility is not proposed to change from what is currently used in the three existing utilities. The Municipality explained that identifiable costs incurred on behalf of the utility are charged to the utility. Salary and wages are allocated to the utility based upon the proportion of time spent on utility functions. Mr. Laycock explained that the administrative and general expenses, which includes the water utility clerk expenses and non-labour items, are assigned 15% to the utility.

[51] The annual depreciation expense for the utility is based upon its proposed capital additions over the Test Years. In general, the depreciation rates used in the Rate Study are as set out in the *Accounting Handbook*, with any deviations explained by the Applicant in terms of the asset's expected useful life.

[52] Based upon the assumptions in the Rate Study, with the proposed rates in place, the Municipality projects that the new utility will have an accumulated operating deficit in each of the Test Years of more than \$70,000. Mr. Isenor noted that the Rate Study did not build earnings into the application to reduce this deficit, as the focus was on merging the three utilities. He said situations such as construction delays may reduce the deficit. He added that the utility may address any deficit in a future rate application.

Findings

[53] The Board has considered the utility's projected operating expenses. For this application, the Board accepts the methodology used to determine the 2018/19 operating expenses using the estimated line item operating expenses of each of the three

utilities. The Board accepts the Municipality's explanations for variations in operating expenses between the 2017/18 actuals and the 2018/19 estimated amounts, including the inclusion of the tax expense item. The Board further accepts the estimated annual increase of 3% for the operating expenses and proposed deviations from that, and the depreciation rates used in the Rate Study.

[54] A major leakage issue exists in the Three Mile Plains/Wentworth water system and needs to be addressed. The utility has included expenses for leak detection in its budget, which the Board accepts. A reduction in water loss will result in a lower volume of water purchased from the Town of Windsor Water Utility and will have a positive impact on the West Hants Water Utility's financial position. The Board encourages the utility to continue leak detection and prompt repair efforts.

[55] The Municipality estimated cost savings from merging its three water utilities in response to Undertaking U-1. Given the projected operating deficit and no request for earnings in its Revenue Requirement, the Board encourages the utility to further explore any operating efficiencies which may be gained through amalgamation, as well as any other options to reduce operating expenses and thus the projected operating deficit.

[56] The Board accepts the allocation of costs between the Municipality and the utility. The Municipality should review these allocations periodically to ensure accuracy.

[57] Based upon the information provided, the Board finds the projected operating expenses for the Test Years to be reasonable. The Board further accepts the increases in annual depreciation expense, based upon the capital budgets for the Test Years, as set out in the application.

b) Capital Budget and Funding

[58] The 2018/19 capital budget in the Rate Study combines the capital budgets of each of the Municipality's three water utilities. The total amount of \$2,113,500 includes the following four projects with costs exceeding \$250,000: Distribution Reservoirs and Standpipes (\$420,000); Electrical Pumping (\$460,000); Distribution Mains (\$417,000); and Service Upgrades (\$614,000). Mr. Isenor noted that some of the projects are ongoing, and the Municipality will carry costs over to the next year. The Rate Study identifies funding for this work of \$1,460,000 from outside sources consisting of a combination of Gas Tax funds and Federal/Provincial funds, and \$653,500 from depreciation funds. The Municipality noted that the government funding is pending approval. The Municipality explained that the opening balance of the utility's depreciation fund, in the amount of \$1,222,097, consists of the addition of the 2017/18 fund balances from each of the Municipality's water utilities as follows: Falmouth (\$478,902), Hantsport (\$169,416) and Three Mile Plains/Wentworth (\$573,779).

[59] The Rate Study includes the utility's proposed capital budget for the Test Years of \$3,150,000 in 2019/20, \$592,500 in 2020/21, and \$1,784,500 in 2021/22. Mr. Isenor described the capital expenditures as extensive, noting that the water systems have reached a point where these types of capital improvements are necessary.

[60] The 2019/20 capital budget includes two projects estimated to be more than \$250,000: Transmission Mains (\$2,125,000); and Services, including replacements (\$514,000). The Applicant explained that the transmission main project, involving the replacement of the 10" main from the Hantsport water treatment plant to the reservoir, was identified in an infrastructure report filed in relation to the 2015 Town of Hantsport dissolution. The expenditure related to service replacements includes work to reduce the

water loss in Three Mile Plains/Wentworth Water Utility system. The capital budget also includes design costs of \$200,000 for the Falmouth Water Utility dam improvement project. The Municipality proposes to fund the 2019/20 capital budget from a combination of outside sources (\$830,000), depreciation funds (\$1,500,000) and long-term debt (\$820,000).

[61] The 2020/21 capital budget consists of a variety of projects with costs of \$250,000 or less, including the construction of a bulk fill station (\$60,000). The Municipality proposes to fund the 2020/21 capital budget from outside sources (\$250,000) and depreciation funds (\$342,500).

[62] The 2021/22 capital budget includes \$1,500,000 for the Falmouth Water Utility dam improvement project, and a variety of projects with costs less than \$250,000. The Municipality explained that because of supply forecasts, it is necessary to raise the dam to increase the available water yield from the French Mill Brook watershed. The proposed funding of the 2021/22 capital budget is from outside sources (\$500,000), depreciation funds (\$750,000) and long-term debt (\$534,500).

[63] The Applicant's description of the three existing utilities indicated that there are areas in Hantsport, serviced with 4" diameter mains, which do not receive adequate fire protection. In response to Undertaking U-7, the utility listed the areas affected, which includes 76 customers. Mr. Carrigan explained that the utility is planning to address the issue, with the associated costs included in the utility's capital budgets.

[64] The Municipality said that the outside funding sources for the Test Years' capital budgets have not yet been confirmed. The terms of the proposed long-term debt funding in each of 2019/20 and 2021/22 are 6% over 20 years, and 5% over 20 years,

respectively. The Municipality projects the depreciation fund balance to be \$82,724 at the end of the Test Years, which Mr. Isenor described as an adequate balance to deal with any ongoing issue which may arise.

Findings

[65] The application proposes significant capital expenditures in the Test Years, with major infrastructure replacement and rehabilitation projects including service lateral replacements for the Three Mile Plains/Wentworth Water Utility system, transmission main replacement for the Hantsport Water Utility system and a watershed dam project for the Falmouth Water Utility system. The Board has considered the utility's proposed funding and finds it to be a reasonable combination of depreciation, debt and outside sources. However, it is noted that the proposed outside funding sources have not yet been confirmed. The Board encourages the utility to continue to actively pursue any opportunities for outside funding.

[66] Based upon the information provided, the Board finds the proposed capital budget and funding for each of the Test Years to be reasonable. The proposed projects are necessary improvements in each of the three existing water utility service areas, as noted above. The Board encourages the utility to continue with its efforts to reduce water loss, especially in the Three Mile Plains area. It further expects that the Municipality will promptly address the issue of inadequate fire protection in areas of Hantsport.

[67] The Board reminds the utility that the inclusion of the proposed capital projects in the Rate Study does not constitute Board approval of these projects. The Municipality needs separate Board approval for projects costing more than \$250,000, as set out in s.35 of the *Act*.

c) Non-Operating Revenues and Expenditures

[68] The Revenue Requirement in the Rate Study included projections of other operating revenues, non-operating revenues and non-operating expenditures. The other operating revenue in each of the three Test Years consists of interest on overdue accounts of \$4,000, sprinklers/private hydrants fees of \$800, and other revenue of \$13,500 for special services work such as inspections, connections and disconnections. Bulk water sales of \$20,000 are projected in each of the final two Test Years. The only non-operating revenue budgeted is interest in amounts less than \$2,500 in each of the Test Years.

[69] The Rate Study includes several projected non-operating expenditure items. Debt charges associated with funding the utility's 2019/20 and 2021/22 capital budgets are included. In addition, debt charges associated with the utility's existing debt are included in each of the Test Years. The Applicant explained that the existing debt consists of three issues relating to the Hantsport water treatment plant, Prince Street watermain and distribution main replacements. The existing debt principal payment is budgeted to increase in 2020/21 due to an anticipated refinancing of the outstanding principal balance for the largest loan relating to the water treatment plant. In response to Undertaking U-6, the Applicant explained that in preparing the Rate Study, an error was made in that the two smaller loans were included in the principal balance being refinanced, overstating the budgeted principal amount by approximately \$6,000 in each of the final two Test Years. It further noted that this would likely be offset by the understatement of the estimated interest rate of 4% for the amount being refinanced, which it said appears to be low for a ten-year term.

[70] The non-operating expenditures in the Test Years also include an annual amount of \$10,000 associated with a transfer to a reserve for sludge handling at the Falmouth water treatment plant. The Applicant explained that this is a continuation of current practice, which was previously approved by the Board.

[71] The Rate Study calculates rates of return, using total non-operating expenses as the return, at 1.62%, 1.63% and 1.86%, respectively in each of 2019/20, 2020/21, and 2021/22.

Findings

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

[73] The Board further accepts the non-operating expense related to the proposed debt to fund the Test Years' capital budget, and the transfer to the sludge handling reserve, which the Board previously approved for the Falmouth Water Utility. The Board has considered the utility's explanation for the existing debt amounts, and offsetting overstatement of principal balance being refinanced in 2020/21 and the understatement of the interest rate. The Board accepts the budgeted amounts for the existing debt as presented for each of the Test Years in the Rate Study.

[74] The calculated rates of return are within what the Board considers as reasonable. The Board accepts the return on rate base as calculated in the Rate Study for each of the Test Years.

VI ALLOCATION OF THE REVENUE REQUIREMENT

a) Public Fire Protection

[75] The Rate Study estimates the current combined fire protection charge for the Municipality's three utilities at \$604,438. The Rate Study calculates the percentage allocation of utility plant in service to fire protection as 38.0%, 38.3% and 36.4%, respectively in each of the Test Years, using the methodology in the *Accounting Handbook*. However, using these percentages and the methodology suggested in the *Accounting Handbook* would result in a large decrease in the calculated fire protection charge in 2019/20, followed by an increase in 2020/21, and a further increase to an amount of \$595,789 in 2021/22.

[76] As a decline in the public fire protection charge must be made up through an increase in metered customer rates, the Municipality proposes to retain the fire protection charge at its current level of \$604,438 in 2019/20, use the calculated amount of \$595,789 in 2021/22, and approximately average the two amounts, at \$600,000, in 2020/21. The assumed percentage allocation of utility plant in service used in the calculation of the proposed fire protection charges are 41.6%, 39.7% and 36.4%, respectively in each of the Test Years. Mr. Isenor explained that the proposed fire protection charges prevents the scenario of fire protection rates dropping, and then increasing because of the planned capital works, which impacts customer rates.

[77] The public fire protection charge is to be allocated among the Municipality, the Municipality of the County of Kings and the Glooscap First Nation, based upon the number of hydrants in each area. The Municipality supplied the current number of hydrants in each area and said there are plans to add up to five more hydrants, all within

the Municipality, within the next two years. The Municipality said that all fire hydrants are operational and inspected annually.

Findings

[78] The Board has considered the utility's explanation for the proposed fire protection charges, which have been set in 2019/20 and 2020/21 to moderate changes to customer rates. In 2021/22 the charge is based upon the methodology set out in the *Accounting Handbook*.

[79] Given the potential confusion caused with fluctuating fire protection rates and the resulting impact on customer rates, the Board finds the utility's proposed fire protection charges for each of the Test Years, as presented in the application, to be reasonable.

b) Utility Customers

[80] After the allocation to the fire protection charge, the amalgamated utility recovers the remaining Revenue Requirement from its customers. As discussed above, the Municipality proposed rates for the Test Years which are the same for all customers in the service areas of each of the existing three utilities. The proposed rate increases in the Rate Study are based upon the average consumption of each meter size determined from the data obtained from the three utilities. In the first Test Year, as each of the three utilities currently have dissimilar rates, the proposed standardization of rates results in differing impacts. For a 5/8" meter residential customer, the proposed amendments to an average quarterly water bill are: -22.0% for Hantsport; -1.1% for Three Mile Plains/Wentworth; and 52.4% for Falmouth. This trend continues for the other meter sizes, with proposed amendments ranging from: -31.5% to -14.6% for Hantsport: -6.0% to -1.2% for Three Mile Plains/Wentworth: and 52.4% to 54.3% for Falmouth. In 2020/21

and 2021/22, the proposed increases for a 5/8" meter residential customer for the amalgamated utility are 4.4% and 7.7%, respectively. For all other metered customers, the proposed increases range from 5.2% to 5.6% in 2021/21, and 8.1% to 9.8% in 2021/22.

[81] The Municipality noted that the factors used to allocate the Revenue Requirement to base, customer, delivery, and production charges are consistent with the guidelines set out in the *Accounting Handbook*, except for the allocation of transmission and distribution costs. The Rate Study distributes 25% of these costs to base charges and 75% to delivery charges, compared to the 100% allocation to delivery charges suggested in the *Accounting Handbook*. Mr. Isenor explained that the reason for the proposed allocation is to have approximately 38% to 40% of revenue coming from the base charge. The Municipality filed a calculation of average quarterly bills using the allocations suggested in the *Accounting Handbook* which the Board noted do not differ significantly from those proposed. Mr. Isenor stated that often when water rates increase, customers use less water, and recovering a higher percentage of revenue from base charges reduces the utility's risk of not recovering its Revenue Requirement.

[82] The Rate Study projects annual growth of five 5/8" meter (residential) customers in each of the Test Years. In response to the IRs, the Municipality noted that it has had an increase of 100 customers over the last five years. Given this historical context, the Board questioned if the projected annual growth is low. Mr. Isenor explained that the economy and new construction seems to have settled down, and the Municipality decided to use a conservative approach rather than over-projecting numbers and falling

short of the Revenue Requirement. He confirmed that he is confident in the growth estimate projected in the Rate Study.

[83] Mr. Isenor stated that in preparing the Rate Study, the annual consumption of the three utilities was added, totalling the 409,396 cubic metres shown in the Rate Study for 2018/19. In 2014, the total annual consumption of the three utilities was approximately 466,000 cubic metres. He explained that the reduction is due in part to major water loss issues in the Three Mile Plains/Wentworth area, as discussed above, and a large leak on a property in the Falmouth area, which has recently been fixed. The estimated total utility consumption in the first Test Year of 2019/20 is 435,835 cubic metres. The increase from 2018/19 is due to the consumption from two 6" water meters for the Glooscap First Nation and a new commercial development, Glooscap Landing. The Hantsport Water Utility did not previously include consumption by the Glooscap First Nation in its consumption records because water service was based on a lump sum payment under a separate agreement with the federal government.

[84] The Rate Study includes a 1.5% annual reduction in the water consumption of 5/8" meter customers in each of the Test Years. Mr. Isenor explained that the proposed reduction is based upon a general trend for lower consumption among utilities. In response to the Board's questions, Mr. Isenor reviewed the historical consumption figures and confirmed that, in his opinion, the 1.5% projected decline is representative of the utility's current situation.

[85] For the application, the Rate Study used a combined average consumption for customers using various meter sizes in all the Municipality's water utilities. For a 5/8" meter customer, an average quarterly consumption of 37 cubic meters was used. The

Municipality noted that currently, average quarterly 5/8” meter customer consumption in cubic metres for each of Falmouth, Hantsport and Three Mile Plains/Wentworth is 41, 36 and 36, respectively. In its letter to the Board, Avon Valley emphasized the discrepancy between the consumption volume of 37 cubic metres used to illustrate proposed average quarterly water bills and the Falmouth average of 41 cubic metres. Avon Valley said that the difference results in the average bills shown in the Rate Study being about 10% lower than what an ‘average’ Falmouth customer would see. Mr. Isenor said that the numbers in the Rate Study are a mathematical average for comparison purposes. He added that they should be looked at cautiously, because a large leak recently repaired in Falmouth significantly reduced average 5/8” meter customer consumption for that water utility.

Findings

[86] The Rate Study allocates costs to base, customer, delivery and production charges as set out in the *Accounting Handbook*, except for the allocation of transmission and distribution expense, as noted above, for rate design purposes. The Board accepts the allocations as proposed.

[87] Based upon the information provided, the Board accepts the projected annual growth of five 5/8” metered customers. The Board further accepts the projected 1.5% annual decrease in residential consumption volumes, which is consistent with the downward water consumption trend in most water utilities.

[88] The Board acknowledges that there may be concerns with the use of “average” consumption figures to illustrate proposed rates in an amalgamated utility, consisting of three distinct water systems and usage volumes. However, as is the case with any water utility, there will be a wide range of individual volumes of consumption.

The worksheet referred to in the Rate Study is intended to give a general idea of percentage increases and not actual water bills for each meter size.

[89] As noted above the Board directs the Municipality to phase-in the transition to common rates for the amalgamated water utility, rather than to adopt common rates in the first Test Year.

VII MISCELLANEOUS RATES AND CHARGES

[90] In addition to the rates for water supply to its customers, the application requested approval of several miscellaneous rates and charges. The rates and charges are currently different for each of the three existing utilities and the Municipality proposes to standardize them in the amalgamated utility.

[91] Mr. Isenor noted during the hearing that the approved rates and charges for the Three Mile Plains/Wentworth Water Utility, which had the most recent rate application, were used as the basis for the proposed, standardized rates and charges for the West Hants Water Utility. The Municipality's response to the IRs listed the changes proposed for each of the three utilities, with the only change for the existing Three Mile Plains/Wentworth Water Utility being the new bulk water rate. Mr. Isenor explained that the formula used to determine the proposed bulk water rate is the same as that used by other water utilities in the Province.

Findings

[92] The Board approves the proposed miscellaneous rates and charges, including the new bulk water rate, as set out in a revised filing dated February 15, 2019.

VIII SCHEDULE OF RULES AND REGULATIONS

[93] The application proposed an amalgamated Schedule of Rules and Regulations, using the most recently approved Three Mile Plains/Wentworth Water Utility Schedule of Rule and Regulations as a basis. Due to a number of typos found in the original Rate Study, the Municipality filed a revised Schedule of Rules and Regulations in response to the IRs. The Municipality's response to the IRs outlined the proposed additions and amendments to the rules and regulations of each of the three utilities. Mr. Isenor explained that the proposed changes will standardize the rules and regulations of the amalgamated utility.

[94] The Applicant confirmed that the amendments proposed to Regulation 25 'Service Pipes' will not impact the cost responsibility of customers in each of the current three utilities.

[95] The Applicant provided clarification of the statement in Regulation 8 'Meter Reading', that "the Utility may, at its option, estimate the readings in the alternate quarters based on the actual consumption from the previous quarter". It confirmed that the utilities currently take actual readings every quarter and only estimate when it is necessary, and that the proposed Regulation does not differ from current practice. The Applicant added that it does not anticipate any issues with maintaining this current practice.

Findings

[96] The Board finds that the proposed Schedule of Rules and Regulations for the West Hants Water Utility is reasonable and generally consistent with other utilities. The Board approves the Schedule of Rules and Regulations, as proposed, effective July 1, 2019.

IX CONTINGENCY PLANNING

[97] In response to the IRs, the Municipality provided general information on its efforts related to contingency planning and emergency preparedness. It noted that Emergency Response Plans are currently in place. The Falmouth and Three Mile Plains/Wentworth contingency plans address coordination with other service providers, while Hantsport is currently assessing alternative sources of supply as a contingency measure. The Applicant indicated that it annually reviews both its Emergency Response Plans and source water protection management plans. It added that the proposed amalgamation will not impact the current utilities' risk assessment and emergency preparedness planning as the utilities currently share a common Emergency Response Plan that addresses each separately in a single plan.

[98] The Board reminds the Municipality of the importance of maintaining and updating its contingency and emergency preparedness strategies and the associated communication plans.

X CONCLUSION

[99] The Board has considered the information presented and approves the consolidation of the Municipality's three utilities into the West Hants Water Utility; however, the Board finds that the transition to uniform rates should be phased-in to mitigate the impact that transitioning to common rates will have on customers of the Falmouth Water Utility. The Board directs the Municipality to phase-in the transition to common rates for the amalgamated water utility over the Test Years, rather than adopt common rates in the first Test Year. The Municipality is further directed to provide the

Board with a proposal for phasing-in rates for approval. The Board reserves jurisdiction to review and approve this proposal.

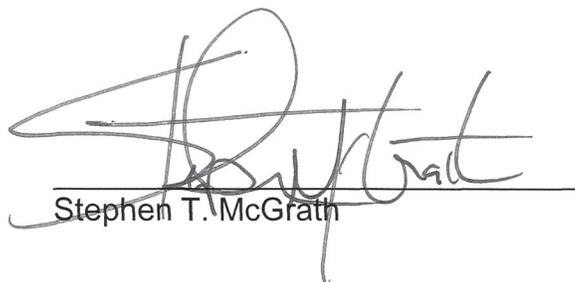
[100] Approval of the Schedules of Rates and Charges for the amalgamated utility is subject to a compliance filing, once the phasing-in of rates during the Test Years has been approved.

[101] The Board approves the Schedule of Rules and Regulations as proposed by the utility.

[102] The consolidation of the Municipality's three utilities and the Schedule of Rules and Regulations approved in this Decision will be effective on July 1, 2019 or such later date as may be set by the Board when the Schedules of Rates and Charges for the amalgamated utility are approved. If, as a result of this Decision and the requirement for subsequent approval of the phasing-in of rates, the Municipality requires additional time to implement new rates, the Board directs the Municipality to identify proposed effective dates for rate changes in its proposal for phasing-in rates.

[103] An Order will issue accordingly, following the approval of the phasing-in of rates and the Schedule of Rates and Charges for the amalgamated utility.

DATED at Halifax, Nova Scotia, this 27th day of May, 2019.



Stephen T. McGrath