DECISION **2017 NSUARB 150**
M08077

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 ST. MARY'S** on behalf of the **SHERBROOKE 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: Steven M. Murphy, MBA, P.Eng., Member

APPEARING: **MUNICIPALITY of the DISTRICT OF ST. MARY'S**

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

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

Marvin MacDonald
Chief Administrative Officer

Marian Fraser
Director of Finance/Treasurer

HEARING DATE: August 2, 2017

UNDERTAKINGS: August 10, 2017

DECISION DATE: **September 18, 2017**

DECISION: **Schedule of Rates and Charges approved, as amended by the Utility.**
Schedule of Rules and Regulations approved, as filed.

I SUMMARY

[1] The Municipality of the District of St. Mary's (Municipality), applied to the Nova Scotia Utility and Review Board (Board) on behalf of the Sherbrooke 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, 2015, and January 1, 2014, respectively.

[2] A rate study (Rate Study) to support the Application, dated April 21, 2017, was prepared by G.A. Isenor Consulting Limited in association with Blaine S. Rooney Consulting Limited and was submitted to the Board on May 17, 2017. Information Requests (IRs) were issued by Board staff on June 7, 2017, and responses were filed on June 23, 2017.

[3] Included with the IR responses was a revised rate study which corrected errors in the original filing. Also submitted was a revised Schedule of Rates for Water and Water Services. A Schedule of Rules and Regulations was also submitted with the IR responses, but it contained no changes from the original application. Subsequent to the filing of IRs, the Applicant submitted a second revised rate study (Revised Rate Study), with an additional correction. As a result of these amendments, the increase in the average bill for the Utility's customers was less than had been originally proposed and advertised for each of fiscal years 2017/18, 2018/19 and 2019/20 (Test Years or Test Period). It is the Revised Rate Study that is referenced in this Decision unless otherwise noted.

[4] For 5/8" meter residential customers, based upon average quarterly consumption, the proposed increase in each of the Test Years is 15.6%, 4.1% and 4.4%, respectively. For all other metered customers, based upon the average quarterly consumption of each meter size, the proposed rate increases are between 11.7% to 21.3% in 2017/18, 3.5% to 5.2% in 2018/19, and 3.3% to 5.8% in 2019/20.

[5] The Utility does not have fire protection capability. Therefore, the Utility does not charge an annual fire protection charge to the Municipality.

[6] A public Hearing was held at the Sherbrooke Council Chambers on August 2, 2017, after due public notice. Gerry Isenor, P. Eng., of G.A. Isenor Consulting Limited and Blaine Rooney, CPA, CA, of Blaine S. Rooney Consulting Limited, represented the Utility. The Utility was also represented by Municipality staff: Marvin MacDonald, Chief Administrative Officer, and Marian Fraser, Director of Finance/Treasurer. There were no formal intervenors in the proceeding. No members of the public requested to speak during the hearing and no letters of comment were received by the Board.

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

II INTRODUCTION

[8] The water source for the Utility is surface water from Sherbrooke Lake. Water is pumped from Sherbrooke Lake to the Sherbrooke Water Treatment Plant. The treatment plant has been in operation since 1999, and had upgrades completed in 2008. The treatment process includes dissolved air flotation, filtration, and chlorination.

[9] The Utility's water distribution system consists of approximately 4 km of 2", 3" and 4" diameter polyvinyl chloride (PVC) mains. Approximately 2.6 km of the existing watermains, which were originally installed in the late 1960's/early 1970s, will be replaced in 2017. The distribution system does not have the capability to provide fire flows, but does contain four hydrants used for watermain flushing purposes.

[10] The Utility currently serves approximately 133 metered customers, of which 119 are residential customers with a 5/8" meter. The Application projects no change in the customer base over each of the Test Years.

[11] In response to IR-9, the Utility noted it performed a system risk assessment in April 2013, and developed a contingency/emergency preparedness plan to mitigate the identified risks. The plan is reviewed and updated annually. The full-time operator and back up staff person are both involved in developing the plan and take formal training as part of the operators' certification programs.

[12] The Utility has a high level of non-revenue water. It estimates the current level of non-revenue water to be roughly 53% of total production. The Utility expects improvement in this measure once the planned replacement of circa 70% of the existing distribution system has been completed in 2017. This replacement project is also intended to address some low water pressures issues within the distribution system.

III REVENUE REQUIREMENTS

a) Operating Expenditures

[13] For the fiscal year ended March 31, 2016, the Utility had an excess of expenditures over revenues of $17,613 and an accumulated deficit of $184,965. If current

rates are left in place, the Utility is projecting the accumulated deficit balance to increase to $234,142 by the end of 2019/20.

[14] The Applicant noted that the proposed rate adjustments are required to address the Utility's projected operating deficit. The Applicant also noted that without rate adjustments, the Utility's accumulated operating deficit will continue to increase.

[15] The Revised Rate Study corrected an error in the depreciation calculation, as well as an error in the amount of external funding related to capital additions. As a result of these corrections, lower rates are proposed for customers in 2017/18 than had been proposed in the original application. With the Revised Rate Study, the proposed increases in 2017/18 rates ranged from 11.7% to 21.3%, compared to 17.7% to 23.7% in the original application. Similarly, as compared to the proposed rates in the original application, the corrections caused very slight decreases in proposed rates for Test Years 2018/19 and 2019/20.

[16] The Rate Study stated that the projected operating expenditures for the Test Years are based on the budget provided by the Utility. In drafting the Utility's operating budget, Municipal Council reviewed the Utility's prior years' actual revenues and expenditures to aid in making operating cost projections for the Test Years. Council also consulted with the Municipality's Superintendent of Public Works. The Rate Study provided reasoning to justify the various projected operating expenses over the Test Years, and further related details were provided in the IR responses.

[17] The Utility lost one significant customer since its last rate application, due to the closing of one of the local schools. This has contributed to a significant reduction in the Utility's revenue and increase in its operating deficit. In addition, the poor condition of the existing distribution system resulted in significant non-revenue water.

[18] In the Utility's previous rate application, the Board noted that water loss was a significant issue for the Utility. In response to IR-7a), the Utility noted that it estimates water loss in 2016 to be approximately 53% of total production, although a small portion of this would be attributable to watermain flushing. The Utility has been able to identify some problem areas and repair leaks in a timely manner. However, this has not materially reduced the level of non-revenue water. The Utility expects that this issue will be largely addressed in the near future as it is currently in the process of replacing circa 70% of the existing distribution system. During the Hearing, Mr. Isenor estimated that the project could result in non-revenue water being reduced to 10% to 15% of total production. Mr. Isenor also estimated that the expected operating costs due to water loss will be reduced by approximately $18,000 per annum once this replacement is completed. This expected operating cost savings over the Test Years has been factored into the Revised Rate Study.

[19] With respect to the allocation of Municipality costs to the Utility, the total wages and benefits associated with the Municipality's Superintendent of Public Works is split 50/50 between the Utility and the Municipality. Maintenance expenses are allocated based on the type of work performed. Minimal other charges for supplies and administration costs are also allocated to the Utility. During the Hearing, the Board noted that there should likely be additional charges from the Municipality allocated to the Utility:

> Mr. Murphy: So, again, moving forward if you're going to look at apportioning operating costs to -- it's called proper cost centres, then there may be other items as well; ---
>
> Mr. MacDonald: Yeah.
>
> Mr. Murphy: --- CAO costs, building costs, things like that you may want to look at as well.
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> Mr. MacDonald: Certainly.
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> [Transcript, pp. 89-90]

[20] Based on the Utility's audited financial statements for the year ended March 31, 2016, pumping expense was budgeted at $14,840 but the actual expense was $32,854. In response to IR-3d), the Utility explained that the reason for the increase was the cost associated with replacement of two sections of pavement that were damaged as a result of water main breaks. During the Hearing, the Board suggested that this type of work would be better classified as transmission and distribution expense rather than pumping expense. The Board also identified several such other operating expenses where items appear to be classified inaccurately, and noted the related expense classifications should be in line with the Water Utility Accounting and Reporting Handbook (Accounting Handbook):

> Mr. Murphy: And I don't think we need it at this point for this rate study but I guess perhaps moving forward if the utility could, you know, account for a portion of those costs in a fashion that better matches with the format laid out in the handbook.
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> Mr. MacDonald: So what -- yeah, so what we need to do is review our cost centres and where to assign these individual costs, and maybe have a review of that and talk to our auditors about that as well.
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> Mr. Murphy: Exactly.
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> [Transcript, p. 83]

Mr. Isenor responded that the suggested changes would indeed make more sense, but pointed out that the impact of the change in classifications would only result in a minor change to the allocation between the Utility's base and commodity charges, and that, given the size of the Utility, rate design is used in determining this allocation.

[21] The Utility explained in response to IR-10f) that the high depreciation expense in the 2015/16 fiscal year was due to a catch-up resulting from improper depreciation accounting in prior periods. The depreciation accounting has been corrected in the Revised Rate Study and is now in line with the Accounting Handbook. Furthermore, the Utility adjusted the annual depreciation amount at the start of the first Test Year to reflect the write-off of the approximately 70% of the existing distribution system that will be replaced in 2017.

[22] The projected depreciation expense in each of the Test Years is generally based upon the depreciation rates as set out in the Accounting Handbook. In cases where the depreciation rates differ from the Accounting Handbook (or no specific guidance is given), the rates are based upon the asset's expected useful life.

[23] In order to avoid rate shock over the Test Period, the Utility requested a phase-in of depreciation expense associated with the significant watermain replacement capital project being completed in the first Test Year. The Utility requested that no depreciation be recognized for this project in the first Test Year, 30% of the depreciation be recognized in the second Test Year, and an additional 20% be recognized in the final Test Year (bringing the total depreciation recognized at that point to 50%). The Utility intends to recognize the remaining 50% of the watermain replacement project depreciation in future years. The Utility also proposed that amortization of the capital cost contribution from others for the watermain replacement project be phased in on the same basis as the depreciation.

[24] During the Hearing, the Board questioned the Applicant about how the Utility specifically intends to phase-in the remaining 50% of the watermain replacement project depreciation beyond the Test Period. The Applicant responded:

> Mr. Isenor: …I would have to future guess some council that I'm going to show up in front of. But, no, there is no plan in mind. What my thinking would be is that the next Rate Study, which might be three or four years from now, that we would look at it again and see how much we could absorb in, what kind of shape they were in, how much they had paid to the depreciation fund ---
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> …
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> Mr. Rooney: The objective would probably be to try and get the other 50 percent on the Rate Study.
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> Mr. Isenor: Yeah, that would be our objective to start out with. … But I can't commit to it.
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> [Transcript, pp. 91-92]

[25] In response to IR-13f), the Utility also stated that its depreciation fund balance will be approximately $45,000 lower at the end of the final Test Year than it would otherwise be if depreciation of the 2017/18 watermain replacement project were not to be phased-in.

Findings

[26] The Board has reviewed the Utility's projected operating expenses and the related explanations for the budgeted amounts. The Board finds the projected operating expenses over the Test Years, as presented in the Revised Rate Study, to be reasonable. The Board reminds the Utility to regularly review and update its budgets to ensure they are adequate to fund the operations of the Utility.

[27] The Board accepts the allocation of operating costs between the Municipality and the Utility, but notes that the Municipality and the Utility should review these allocations on an annual basis to ensure completeness and accuracy. Municipality expenditures associated with the Utility should be fully allocated appropriately so that the Utility can be financially self-sustainable. Similarly, the Board encourages the Utility to

better align the classification of operating expenses with the appropriate categories in the Accounting Handbook.

[28] The annual depreciation expense for each of the Test years, as presented in the Revised Rate Study, is acceptable to the Board.

[29] The proposed phase-in of depreciation associated with the 2017/18 watermain replacement project will result in the Utility's depreciation fund being approximately $45,000 lower at the end of the Test Period than it would have otherwise been if full depreciation of the project were to be included in the first Test Year. However, during questioning from the Board at the Hearing, the Applicant noted that it does not have any large-scale capital projects planned for the intermediate term beyond 2020. Therefore, a temporary shortfall in the Utility's depreciation fund resulting from the proposed depreciation phase-in request should not have a significant effect on funding options for future capital works projects. As a result, the Board accepts the Utility's proposed phase-in of depreciation, and the associated amortization of the capital contribution by others, for the 2017/18 watermain replacement project. The Board encourages the Utility, however, to phase-in the remaining 50% of depreciation as soon as possible following the end of the Test Period.

b) Capital Budget and Funding

[30] The Revised Rate Study included the Utility's capital budget for the Test Years. In the first Test Year, the proposed capital budget totaled $1,725,840, which primarily involves the replacement of approximately 70% of the Utility's existing water distribution system. In the second and third Test Years, the Utility has budgeted no

amount for its capital program. The capital budget is made up of $1,543,789 for distribution mains, $172,051 for services, and $10,000 for the water rate study.

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

	2017/18
Grants from Outside Source Long Term Debt	$1,444,380 $ 281,460
Total	**$1,725,840**

[32] The outside source of funding, which has been secured as a firm commitment, is from the Federal and Provincial Governments' Clean Water and Wastewater Fund (CWWF).

[33] The Utility's depreciation fund balance at the end of the 2016/17 fiscal year, as described in the Revised Rate Study, was $36,268. With the projected reduction in annual depreciation expense from the write-off of assets that are to be replaced in 2017/18, coupled with increases in annual depreciation expense related to capital additions over the Test Period, the Revised Rate Study projects that, with the proposed funding as set out above, the depreciation fund balance will be $158,486 at the end of the Test Years. This projected amount also accounts for the proposed phase-in of the depreciation expenses associated with the 2017/18 capital program. However, during the Hearing, the Utility acknowledged a minor error in the depreciation fund balance calculation. Correcting for this error results in the depreciation fund balance at the end of the Test Period being approximately $1,000 lower than the balance identified in the Revised Rate Study.

[34] In response to questioning by the Board during the Hearing, the Utility filed Undertaking U-1, which verified that the most recent water rate study is eligible for cost

sharing from external funding. Undertaking U-1 also provided corrected worksheets for the Revised Rate Study to reflect this.

[35] During the Hearing, the Board also asked the Utility to reconcile the "Due to Municipality" balance in the Utility's most recent financial statements (for the fiscal year ending March 31, 2016) with the projected balance sheet amounts for the Test Years (as provided in response to IR-2). In Undertaking U-2, the Utility provided the reconciliation and also noted that the balance in the March 31, 2016 financial statements was a combination of $163,193 owed to the capital fund in unfunded depreciation, and $78,359 owed to the Municipality. During the Hearing, Mr. Rooney noted:

> I was just looking, I had the draft March 31st, '17 financial statements and they're still showing due to the -- due to the operating fund is still due to the District of St. Mary's. Yeah, so we may -- probably should talk to the auditors, get the same change made.
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> [Transcript, p. 37]

[36] In Undertaking U-3, the Utility filed updated projected operating and capital fund balance sheets for the Test Period. These confirmed that the requested earnings over the Test Period (discussed in Section c) below) will be used to help fund the current unfunded amount in the depreciation fund.

[37] In the previous rate application, the Board identified water pressure as an issue for the Utility. In response to IR-6, the Utility stated:

> …The Utility feels that the current capital program will address the majority of the low pressure complaints and greatly reduce the volume of water lost due to leakage.
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> [Exhibit S-3, p. 7]

During the Hearing the Board asked if the Utility intends to reinstate the higher pressures previously used by the Utility. Mr. MacDonald responded that the Utility is intending to increase the pressure supplied by the Utility, and that pressure reducing valves (PRVs) will be used in older homes where this could present a problem. Mr. MacDonald further confirmed that the cost of any such required PRVs would be covered by the 2017/18 watermain replacement project cost.

Findings

[38] The Utility's capital budget for the Test Period contains one major project in 2017/18, which was the subject of a separate capital expenditure request and was approved by the Board on March 29, 2017. The proposed capital program should help to address the water pressure and non-revenue water problems the Utility has been experiencing.

[39] The Utility has proposed no capital projects for the final two Test Years. The Board finds this reasonable, as approximately 70% of the Utility's distribution system will be replaced in 2017/18, another significant portion of the distribution system was replaced within the past two years, and the water treatment plant is relatively new.

[40] The Board accepts the Utility's reconciliation of the "Due to Municipality" balances, as presented in Undertaking U-2. However, the Board directs the Utility to address this reconciliation with the Utility's financial auditors, to ensure that it is properly addressed in the Utility's annual audited financial statements.

[41] The Board understands that the Utility has not funded its depreciation fund over the last number of years, as it had not generated enough revenue to do so. The Board recognizes the Utility's renewed effort to fund the depreciation fund going forward.

[42] The Board finds the proposed capital budget and funding to be reasonable, and accepts it as presented in the Revised Rate Study.

c) Non-Operating/Other Revenues and Expenditures

[43] The Utility has no other operating revenues projected in any of the Test Years. However, the Test Years' revenue requirements identified in the Revised Rate Study include projections of non-operating revenues and non-operating expenditures.

[44] Non-operating revenues consist of a small amount of interest annually, and the Sherbrooke Village Operating Grant in an amount of $21,000 annually. During the Hearing, the Board questioned whether the Grant amount is guaranteed each year. The Utility responded that the amount is based on a formula, but that an amount close to $21,000 is a guaranteed commitment.

[45] The Utility currently has no long-term debt payments. However, for each Test Year, the Revised Rate Study projected non-operating expenditures for principal and interest charges related to new debt associated with the Utility's proposed capital program. The total principal payment for the Test Period is projected to be $26,835, while the corresponding total interest expense is projected to be $40,921.

[46] The Utility has also budgeted earnings of $16,000 in each of the final two Test Years. As previously noted, the Utility has included earnings in order to bring down the accumulated deficit balance, which will also provide funds to reduce the balance owing to the depreciation fund. In response to IR-11a), the Utility explained that the proposed earnings in the second and third Test Years were chosen so that the deficit would be reduced in a timely manner (approximately ten years) without placing too much burden on customers due to increased rates.

[47] The Utility's calculated rates of return were updated in Undertaking U-1, to account for some minor errors in the Revised Rate Study. The updated calculated rates

of return (inclusive of proposed earnings) are 0.11%, 2.10% and 2.14%, respectively, in each of the Test Years.

Findings

[48] The Board finds the Utility's projected non-operating revenues and expenditures to be reasonable and accepts them as presented. With respect to earnings specifically, the Board finds the proposed level of earnings in the final two Test Years provides an acceptable means of reducing the Utility's operating deficit without having a substantive impact on rates. The Board orders that the cash flow generated from the proposed earnings be directed to the Utility's depreciation fund before repaying any debt owed to the Municipality.

[49] The Board finds the Utility's calculated rates of return (as presented in Undertaking U-1) are reasonable and accepts them as presented.

d) Allocations of Revenue Requirement

[50] The Utility's entire revenue requirement is recovered from its customers, as there is no fire protection charge.

[51] The Utility currently has approximately 133 customers, which is projected to remain the same throughout the Test Years. The Utility based this estimate on its own recent trends. The Utility has projected a slight reduction in consumption, however, consistent with trends seen in other water utilities throughout the Province.

[52] The allocations of costs used in the Revised Rate Study are consistent with the methodology as set out in the Accounting Handbook, with the exception of the allocation of Transmission and Distribution. In the first Test Year, consistent with the last rate application, Transmission and Distribution has been allocated 50% to base charge

and 50% to commodity charge. However, for rate design purposes, the allocation has been changed to 25% to the base charge and 75% to the delivery charge in the second and third Test Years. This change moves the allocation closer to that as set out in the Accounting Handbook. It also prevents the consumption charge from declining in the final two Test Years, and maintains revenue from the base charge at approximately 50% of total revenue.

Findings

[53] 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.

[54] The Board also approves the customer rates as presented on the Revised Rate Study.

e) Schedule of Rates and Charges

[55] In addition to the rates for water supply to its customers, the Application included two proposed changes to its Schedule of Rates and Charges. These changes, as outlined in responses to IR-21, are for: rates for sprinkler service, which was updated to be consistent with other utilities in the Province; and the charge for non-negotiable cheques, which was updated to include any additional bank fees. These amendments are intended to better reflect the cost to provide the related service and to be more in line with rates charged by other water utilities in Nova Scotia.

Findings

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

[57] 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

[58] The Utility proposed a change to its Schedule of Rules and Regulations. The proposed change added a new Clause: Item 35 – Curb Stop/Control Valve Service Box, which was added to assist in the operation of the Utility. During the Hearing Mr. Isenor explained:

> And in the Schedule of Rules and -- the Rules and Regulations, we only really have one change and that relates to the asking for curb stop; Item number 35, curb stop and control valve service boxes. Asking that they be kept exposed by the customers, and if they don't, if they choose to plant a flower garden on top of it or pave their driveway over it or something else, that when we have to dig it up, that we just want them to pay for the fact that they buried some of our infrastructure in their goings on. So it's a clause that we've added in a few locations where that's becoming more of an issue as people bury things that they're not supposed to.
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> …
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> They're putting in a lot of new services, a lot of new pipes going in; it would be nice to keep them all exposed and available for use.
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> [Transcript, pp. 14-15]

[59] In response to IR-22c), the Utility noted that it intends to establish an active cross connection and backflow prevention program. During the Hearing, the Board questioned the Utility on the timing related to the development of this program. Mr. MacDonald responded:

> Mr. MacDonald: Don't have a timeline in mind but we've been working on is working with customers that we feel there may be a risk for the backflow, and as recently as last week we've had Sherbrooke Village, which do, like, 10 plating prints (sic). They've installed, like, the proper controls for backflow. And we do -- we do have a list of customers that we're approaching and doing it over the next few years.
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> [Transcript, pp. 95-96]

Findings

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

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

[62] The Board is pleased to see that the Utility has begun efforts to develop an active cross connection and backflow program, and encourages the Utility to continue the development of the program, and report back to the Board on its progress during the next rate application.

IV CONCLUSION

[63] The Board has considered the information presented, and approves the Schedule of Rates and Charges for Water and Water Services, as filed in the Revised Rate Study. The effective dates for the approved Schedule of Rates and Charges for Water and Water Service shall be October 1, 2017, April 1, 2018, and April 1, 2019 for each of the Test Years.

[64] The Board approves the Schedule of Rules and Regulations as filed, effective October 1, 2017.

[65] An Order will issue accordingly.

DATED at Halifax, Nova Scotia, this 18th day of September, 2017.

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Steven M. Murphy