Order No. 2420

PROVINCE OF BRITISH COLUMBIA

OFFICE OF THE DEPUTY COMPTROLLER OF WATER RIGHTS

IN THE MATTER OF the *Water Utility Act* and

the *Utilities Commission Act*

and

IN THE MATTER OF

An Application by

EPCOR Water (West) Inc.

For Approval of
2015 to 2017 Revenue Requirements and Rates
and Water Tariff No. 4

BEFORE:

Pieter J. Bekker, Deputy Comptroller of Water Rights
PO Box 9340 STN PROV GOV'T, Victoria, BC V8W 9M1

DECISION AND ORDER

Dated this 26th day of May, 2015

File: 0321094

Whereas:

1. On December 19, 2014 EPCOR Water (West) Inc. ("EWW" or "the Utility") filed its 2015-2017 Revenue Requirements and Rates Application and also requested approval to amend EWW's current water rates on an interim refundable basis effective January 1, 2015 to reflect the proposed 2015 water rates. EWW also proposed other changes to its Water Tariff Terms and Conditions with submission of a proposed Water Tariff No. 4 to be effective January 1, 2015 (collectively, "the Application").

2. On January 12, 2015 by Order 2408, Water Tariff No. 4 was approved on an interim refundable basis that included the proposed 2015 rate increases and rate rider effective January 1, 2015. Appendix A to Order 2408 established a regulatory timetable for the written hearing process.

3. On January 20, 2015 EWW advertised its Application by mailing Notices to all its customers. Persons who wished to actively participate in the proceedings were given until February 18, 2015 to register as interveners and the deadline for submission of comments was February 23, 2015. Five persons registered as interveners (two of which were from the French Creek Residents Association) and sixty-nine other customers submitted comments.

4. The relevant evidence submitted by the Utility, the interveners and other customers in a written public hearing process has been reviewed and considered.

NOW THEREFORE, the Deputy Comptroller Orders, with Reasons for Decision appended, that:

1. **EWW refile the Application by June 16, 2015 to comply with all determinations and directives in the Reasons for Decision and Order 2420 attached hereto as Appendix A and as summarized in the "Summary of Deputy Comptroller Determinations" on pages 43 to 47. The Application, with adjustments as identified in the Reasons for Decision, will be approved following review of the refiling by EWW of the 2015 to 2017 Revenue Requirements and Rates, with supporting schedules, to comply with those directives. Until then, the 2015 rates and Water Tariff No. 4 effective January 1, 2015 are to continue on an interim, refundable basis as approved on January 12, 2015 by Order 2408.**

2. **EWW is to comply with all other determinations and directives in the Reasons for Decision and Order 2420.**

Dated at the City of Victoria, in the Province of British Columbia, this 26th day of May, 2015.

Pieter J. Bekker
Deputy Comptroller of Water Rights

Attachment: Appendix A

Appendix A
to Order 2420

IN THE MATTER OF

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REASONS FOR DECISION AND ORDER

May 26, 2015

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1.0 BACKGROUND

EPCOR Water (West) Inc. ("EWW" or "the Utility") is an investor owned utility that owns and operates the water utility in French Creek, located within the Regional District of Nanaimo, BC. EWW is a corporation incorporated under the British Columbia ("BC") Business Corporations Act and is a wholly owned subsidiary of EPCOR Water Services Inc. ("EWSI"). EWSI is an Alberta corporation and is a wholly owned subsidiary of EPCOR Utilities Inc. ("EUI"), itself an Alberta corporation wholly owned by The City of Edmonton.

EWW provides service to approximately 2,000 metered accounts with an average consumption of 19.4 m^3 of water per residential customer per month (5-year average for residential customers in 2010-2014). Every water service within the Utility's service area is metered. Fire protection service is provided to the customers by means of 153 fire hydrants.

EWW's distribution system comprises two water storage reservoir sites, with a total volume of approximately 4.0 ML, a booster station and 30 km of mainly cement pipe ranging in size from 50 mm to 300 mm in diameter. The Utility is currently operated by four employees – one manager, two operators and one administrative assistant.

Previously, EWW drew water from French Creek, a surface water source, and from underground wells. During 2012-2014, the focus of EWW's capital program was to replace the water supply from French Creek. Now, EWW draws water from 16 active wells in two separate aquifers. Both aquifers provide good quality drinking water but one aquifer has slightly elevated levels of iron and manganese which requires treatment in order to comply with the Guidelines for Canadian Drinking Water Quality ("GCDWQ").

The last Decision with Reasons and Order 2310 was issued on March 20, 2012 on EWW's Application for 2012 to 2014 Revenue Requirements and water rate increases effective January 1, 2012, 2013 and 2014. EWW refiled its Application to comply with the directives in Order 2310, which was approved by Order 2312 on March 28, 2012.

2.0 INTRODUCTION

On December 19, 2014 EWW filed its 2015-2017 Revenue Requirements and Rates Application and proposed Water Tariff No. 4 ("the Application"). EWW proposes to increase water rates effective January 1, 2015, January 1, 2016 and January 1, 2017 to recover forecast Revenue Requirements. As stated in the Application, EWW requests an Order or Orders for the following:

1. Approval to amend its current water rates and rate rider on an interim and refundable basis, effective January 1, 2015 to reflect the 2015 water rates and rate rider applied for in this Application as set out in Schedule B-1 of the Application (the "Interim Rates"). EWW requests that the Interim Rates remain in effect until such time as the Comptroller approves the

final water rates and rider for the 2015-2017 test period. Adjustments for differences between interim and final approved water rates, if any, will be applied to customers' water rates during the remainder of 2015 following final approvals from the Comptroller.

2. Approval on a final basis for water rates for the 2015-2017 test period set out in Schedule B-1 and summarized in Table 1.1-1 below (collectively "Water Rates").

Table 1.1-1
Proposed Water Rates
2015-2017

		A **2015**	B **2016**	C **2017**
1	**Base Rates**			
2	Residential	40.45	45.29	50.70
3	Multi-Residential	36.89	41.30	46.24
4	Commercial	35.24	39.45	44.17
5	**Consumption Rates**			
6	**Residential**			
7	15-75 cubic meters	1.68	1.88	2.11
8	> 75 cubic meters	1.68	1.88	2.11
9	**Multi-Residential**			
10	15-75 cubic meters	1.68	1.88	2.11
11	> 75 cubic meters	1.68	1.88	2.11
12	**Commercial**			
13	15-75 cubic meters	0.84	0.94	1.06
14	> 75 cubic meters	0.84	0.94	1.06
15	**Fire Hydrants (annual)**	509.12	570.01	638.19
16	**Standpipes (annual)**	203.65	228.01	255.28
17	**Availability of Service Charge (annual)**	345.92	387.30	433.62

These proposed rate increases are primarily driven by: (i) increases in operating costs due to labour cost increases of 2.7%; additional one-time costs for studies including a geotechnical study, leak detection program, pressure zone study and a water taste and odour investigation; and increased costs for management oversight, (ii) increases in capital costs primarily associated with higher-than-forecast costs to complete several

wells projects required to provide reliable and safe water supply for EWW's customers and to replace water supply from French Creek in compliance with Vancouver Island Health Authority's ("VIHA") new surface water disinfection policy; and (iii) lower-than-forecast consumption levels and customer counts relative to 2012-2014 forecast.

3. Revisions to the Water Tariff (terms and conditions and price schedules) by which EWW provides water services to its customers.

4. Recovery of the 2012-2014 deferral account balances by means of a monthly Rate Rider for the following deferral accounts:
   - the consumption deferral account;
   - the property taxes deferral account;
   - the interest deferral account; and
   - the hearing cost deferral account.

5. Approval of the proposed monthly Rate Rider.

6. Continuation of the consumption deferral account, property tax deferral account, interest deferral account and hearing cost deferral account for the 2015-2017 test period.

7. Approval of the capital structure (60% debt; 40% equity) and the rate of return on equity of 10.05% for the 2015-2017 test period, and subject to annual adjustment based on the BC benchmark utility return on equity approved by the BC Utilities Commission.

8. Approval of allowance for funds used during construction applied to EWW's capital expenditures.

9. Approval to prospectively change depreciation rates commencing January 1, 2015.

On January 12, 2015 by Order 2408, Water Tariff No. 4 was approved on an interim refundable basis that included the proposed 2015 rate increases and rate rider effective January 1, 2015. Appendix A to Order 2408 established a regulatory timetable for the written hearing process.

EWW advertised its Application by mailing Notices to all its customers. Persons who wished to actively participate in the proceedings were given until February 18, 2015 to register as interveners and the deadline for submission of comments was February 23, 2015. Five persons registered as interveners (two of which were from the French Creek Residents Association) and about 130 objections were received from customers. The main objections related to the large proposed rate increases in 2015, 2016 and 2017 and, as a result, many requested that an oral public hearing be held. The Deputy Comptroller

considered the request and concerns raised and addressed them in a March 13, 2015 "Notice of Continuing Written Hearing Process" that stated in part:
"*Utility Regulation staff and I are aware of these concerns. The technical information requests of the staff have focused on the potential to reduce the proposed rate increases by minimizing projected operating cost projections, avoiding some costs and adjusting the projected capital expenses, all while ensuring safe, reliable service into the future. The provisions of the Water Utility Act require that the rates be set to recover the prudently incurred costs of the Utility.*

I also recognize that an oral public hearing for such a small utility would be costly for ratepayers. The costs of the Utility in participating in such a proceeding would be recoverable through customers' rates on top of any rate increase that I may approve following the information gathering and technical review in the written hearing process.

The many letters of concern filed with this office form part of the written process and will be considered by me in arriving at a decision on the Application. After the written hearing process, a final written Decision and Order with Reasons will be issued and, along with the approved Tariff, will be available for viewing by the Utility's customers either on EWW's website or at its local office.

For these reasons I find that the cost of an oral public hearing and the extra time required are not justified for the level of new technical information that is likely to come from including an oral component in the written process."

Accordingly, the written hearing process continued with the Utility providing further information in response to Information Requests. All evidence, including relevant submissions from the Utility, its customers, and Intervenors has been taken into consideration.

The issue to be decided by me is whether to accept, set aside or vary the proposed Tariff changes and forecast Revenue Requirements for the fiscal years ending December 31, 2015, 2016 and 2017.

3.0 CAPITAL PROGRAMS

EWW continues to focus on identifying system upgrades to improve water quality, enhance system reliability and safety, meet regulatory requirements and improve customer service. EWW's capital programs address System Reliability Risks, Regulatory Risks, and/or Adequate Asset Protection and Safety.

3.1 2012-2014 Capital Programs

During 2012-2014, the focus of EWW's capital program was primarily to address supply issues associated with upgrading aging well infrastructure, replacing water supply from French Creek, developing sufficient supply to reliably meet existing customer demand

and preparing for expected future demands. EWW's well program included development and completion of seven new wells, drilled in 2011. EWW also completed a number of other capital projects including the addition of standby generators at both the Drew Road and the Church Road reservoirs, implementation of a new billing system, the addition of annual capital maintenance programs which included the meter replacement program and developer funded projects such as a new filter at the Drew Road Water Treatment Plant, new meter service connections and water main upgrades.

Due to the large cost overruns on the Well program, five non-critical capital projects were deferred consisting of projects funded by both rate base and developer contributions. The following capital projects were deferred to 2015-2017 or cancelled:

- **Well Replacement Project** – At the time of preparing the 2012-2014 RRA, it was expected that an eighth well would need to be drilled to replace the unsuccessful wells. However, due to the anticipated high production rate from well RWn2, this project has been cancelled.
- **Well Rehabilitation** – project to extend useful life of aging well infrastructure was deferred to 2015-2017
- **Closure of the Imperial and Lornedunn Wells** – deferred to 2015-2017
- **Residential Service Replacement Program (Dalmatian Drive Upgrades)** – deferred to 2015-2017
- **Church Road Complex Upgrades** - deferred to 2015-2017
- **Exploratory Borehole Project** – cancelled due to lower than expected customer growth and higher than expected capacity from new wells
- **Drew Road Water Treatment Plant Upgrades** – deferred to 2015-2017 and adjusted scope of this project, now identified as Drew Road Pump Station Upgrades. (EWW Application, p. 22 & Lornedunn well)

3.1.1 Prudence of Well expenditures in 2012-2014

EWW's well program included development and completion of seven new wells, drilled in 2011. Two of these wells are in service but awaiting capacity approval from the Comptroller. Two wells did not meet the successful criteria and have been converted to monitoring wells (approved by the Comptroller in Order 2310) and three wells have not been completed and are currently pending source water approval from VIHA and capacity approval from the Comptroller. During 2012-2014, EWW found that significant and unexpected work was required to complete and tie in these new wells.

In 2012, when EWW determined that the degree of additional work and associated costs for completing its well program was beyond the amounts forecast in the 2012-2014 RRA, it identified certain non-critical projects that could be postponed to the next test period (2015-2017). This would maintain the total capital program costs within a reasonable range of the approved amounts for the 2012-2014 test period. Five non-critical capital projects were deferred.

Given the greater than expected production capacity of RWn2 along with four other

successful wells drilled in 2011, these five wells are expected to ensure the reliable source of supply for EWW's customers, to discontinue drawing water from French Creek to meet VIHA requirements and for expected customer growth in French Creek.

EWW explained its challenges in completing the well program in the Application: *"As EWW noted in its 2012-2014 RRA, development of these groundwater wells has proven to be challenging. EWW's 2012-2014 RRA included a contingency of 10% on well project cost forecasts for the 2012 to 2014 test period. Due to the high degree of uncertainty associated with developing groundwater wells, unanticipated costs have proven to be beyond this 10% contingency level. These unanticipated costs relate to additional work in the areas of compliance with environmental regulations associated with draining into fish-bearing streams under BC Water Act Regulations and the Canadian Fisheries Act, site access issues, and the significant additional work required to meet VIHA requirements for source water approval. These costs to meet VIHA requirements involved unique complications experienced with certain well projects including difficulties with neighboring wells, well screening and water quality testing. For every potential well site, access became a very expensive issue due to access road preparation and forest clearing near highways and/or near established neighborhoods. Environmental regulations required that the water that was produced and used during drilling had to be discharged via nearby creeks. In order to comply with the relevant regulations, EWW had to contract a registered biologist to complete an assessment and to prepare an action report to be used during the drilling and pumping testing. As a result, EWW had to install, for each of the phases, kilometers of pipe to avoid flooding certain areas along the highway and to control the discharged water flow. In addition, EWW had to provide full time monitoring of this water discharge during drilling and pumping tests to ensure compliance. The water was sampled three times a day and turbidity and/or chlorination levels were measured and recorded. All this data was then submitted to an environmental company as proof of EWW's compliance. None of these costs were anticipated at the time of preparing the 2012-2014 RRA, and therefore these unanticipated costs caused each of the well projects to exceed the approved amounts."* (EWW Application pp. 27-28)

Based on work completed to date, EWW revised its forecast of total well program costs from a forecast of $2.4 million in the 2012-2014 RRA to $4.8 million. EWW's forecast of well program costs, net of developer contributions, has increased to $2.5 million from the $0.9 million estimated in the 2012-2014 RRA. While the additional expenditures were beyond EWW's forecasts in the 2012-2014 RRA, EWW considers these expenditures to be prudent, reasonable and necessary to properly develop and tie in wells of sufficient capacity; to meet American Water Works Association ("AWWA") guidelines for screening/testing; to comply with environmental regulations associated with draining into fish-bearing streams under the *Fisheries Act,* RSC, 1985, c. F-14 and the regulations to the *Water Act*, RSBC 1996, c 483 ; and to address concerns of nearby landowners.

The very large cost overruns for the well program were pursued in information requests. EWW defends the prudence of the additional costs as follows:

"These additional costs were caused by the following unique complications which, due to their nature and the inherent risk associated with the development of underground wells, particularly with well adjacent to the ocean, were not anticipated:
· one of the wells (TWs1) hit 3 aquifers necessitating the purchase of a custom built water screen to correctly seal off between each aquifer;
· costs associated with site access including installation of culverts, leveling, construction of vehicle access and tree removal;
· need to repair existing non-conforming wells;
· requirement to drill additional monitoring wells along with additional monitoring costs;
· requirement to move power lines;
· requirement to divert or remove pumping water during well drilling and pump testing;
· two of the seven wells drilled were unsuccessful; and
· need to drill wells larger than anticipated in order to ensure sufficient capacity and operational efficiency."

And

"EWW was not able to anticipate the additional costs late in 2011 at the time of preparing its 2012-2014 RRA because of the following factors:
· The previous rate application for 2012-2014 was prepared before the full extent of the issues and associated cost implications were known. At the time of preparing the 2012-2014 Application, wells were just recently drilled. Significant additional work followed shortly after filing the 2012-2014 Application including casing and pump-testing in 2012, civil work in 2012-2013 and tie-ins 2013-2014 to present.
· Insufficient contingencies were included in the previous application:
o No contingencies had been identified for the potential outcome of wells that would not yield sufficient production.
o Insufficient contingencies were provided to address two major issues with the well drilling program:
§ Increased size of the wells to yield sufficient capacity to replace French Creek source water; and
§ Environmental issues associated with pump-tests and well-drilling.
· EWW had limited experience in developing budgets for this type of work."
(CWR-EWW-2.1 & 2.2)

Deputy Comptroller Determinations

The Deputy Comptroller is very concerned with the inability of EWW to have forecast the costs of the well program with any accuracy. EWW will be expected to greatly improve its forecasting ability in future applications. That being said, the nature of a prudency review in the context of regulated utility practice must consider not only the size of the cost overruns but also the circumstances leading to those cost overruns. In this case it is recognized that the subject wells were necessary and were approved. The new capacity will allow EWW to comply with VIHA requirements. The extenuating circumstances were substantial. There is no indication that EWW intentionally drove up costs, or undertook work above what was required to meet the requirements of the

various regulatory bodies having an interest in these projects.

The Deputy Comptroller does not find a level of cost overruns related to the well program that would warrant punitive action, but EWW will be expected to substantially improve its forecasting ability for future capital additions. EWW should rely on advice and training from EWSI that should be provided within the existing Inter-corporate cost allocations of EWSI.

3.2 Capital Programs Planned for 2015-2017

EWW's planned capital projects for the 2015-2017 test period are detailed in the Application and the Master Plan. Recognizing the large rate increases over the last test period and the proposed large rate increases through this test period, a significant focus in the information request process was placed on establishing if any of the capital projects could be delayed or cancelled without jeopardizing water quality or availability to reliably meet customer needs.

3.2.1 Well Tie-Ins

The three wells currently waiting source water approval from VIHA (RWs1, TWs1, and ACs1) will need to be tied into the system. The work remaining to be completed after regulatory approval from VIHA and the Comptroller includes mechanical infrastructure, electrical installation and costs to BC Hydro, rehabilitation of non-conforming neighboring wells, lab testing, and additional engineering work. A portion of these costs are developer-funded and relate to additional supply for new customers. The cost estimates were provided by EPCOR Water Services. (EWW Application, p. 36-37 & Master Plan Appendix D pp. 75-77) EWW considers it to be an unacceptable public safety and insurance risk to delay these well tie-ins (CWR-EWW-1)

FCRA questioned the need for a 20% contingency in the budget when EWW considers "that the majority of the costs are known for completed work." EWW responded that the contingency was for possible additional work to gain VIHA approvals and for costs of construction. (FCRA-EWW-15) In its Final Submission, FCRA argues that a contingency factor of 20% is unreasonable and that 5% is ample for work remaining to be completed. (FCRA Final Submission, p. 6)

In its Reply Argument, EWW maintains that a 20% contingency allowance in its forecast for its wells program is reasonable and rejects the FCRA's suggestion that a 5% contingency allowance for the well tie- in projects "is ample for work remaining to be completed." (EWW Reply Argument, p.7)

EWW also states: "*EWW strongly disagrees with the FCRA's request that the*

Comptroller "require allocations to be returned to apportionments originally approved in RRW 2012-2014. This request disregards the evidence of provided in Appendix D, and would violate the regulatory construct that developers pay only for new development." (EWW Reply Argument, p. 6)

Deputy Comptroller Determinations

Recognizing the experience of EPCOR Water Services and the fact that most remaining costs are for known construction activities, the Deputy Comptroller finds that a contingency of 10% should be applied to the Well tie-in projects' budgets for revenue requirement purposes during the 2015-2017 test period. EWW's revised cost apportionment between rate base funding and Developer funding is accepted.

3.2.2 Drew Road Pump Station Upgrades

This project consists of various necessary upgrades to the water treatment plant and pump station. The project is required to improve safety and efficiency and to accommodate the additional water supply wells that have been constructed. This project includes additional ventilation, additional SCADA work, installation of variable frequency drives and isolation valves, increasing plant discharge header to 150 mm diameter, elimination of pressure reducing piping, security and fencing, repairs and replacement of piping. The project was deferred from the 2012-2014 test period and involved some changes in scope, reducing project costs from $499 thousand (developer funded) to $268 thousand (rate base funded). The 2014 Master Plan reflects KWL's assessment of the condition and nature of the assets being replaced, showing that the majority of the work on this project is required to provide service to existing customers, rather than to support customer growth, as had been assumed in the 2012-2014 RRA. (EWW Application, pp. 36-37) EWW considers it to be an unacceptable risk to delay this work. (CWR-EWW-1)

EWW clarified in its information responses that it included the cost of variable frequency drives (VFDs) on three pumps in its forecast to allow for maximum system flexibility. It may be possible to use only two VFDs but this cannot be determined until the design phase. If, during the design phase, it appears that a soft start motor can be substituted for a VFD without sacrificing overall system performance EWW will do so.

EWW also clarified that the project should be 9% developer funded and 91% rate base funded. EWW proposes to update this in its refiling. (CWR-EWW-31)

Deputy Comptroller Determinations

The Drew Road Pump Station upgrades are accepted. EWW is to adjust the rate base funding for this project to 91% as identified and is to consider a soft start motor in place of one or two of the VFD motors during final project design.

3.2.3 Dalmation Drive

EWW identified 50 service connections along the Dalmatian Drive that are disintegrating due to corrosion and service line pitting. Possible reasons behind this pipe pitting are the type of service line and soil condition. Four of the services have already been replaced. The project consists of replacing the existing corroded and pitted water service lines with new PE service lines. (EWW Application, p. 37) Delaying this project is considered a moderate risk but EWW also notes that repairing the leaks on an as needed basis would not be cost effective if more than one break per year occurs. (CWR-EWW-1 & 9.2) In its Final Argument, EWW states that: "*Failure to replace these service connections will result in continuing water losses and will impose a financial burden on future customers.*"

Deputy Comptroller Determinations

In an effort to moderate the impact of the proposed rate increases, the Deputy Comptroller believes it reasonable to delay this project. During this test period EWW can monitor the number of failures to verify if the corrosion is consistent along the full length of Dalmation Drive or if the adverse soil conditions are more localized.

3.2.4 Well decommissioning

Section 9 of the *Ground Water Protection Regulation* states that a well must be closed if it has not been used in 10 years. The Oceanside 1, Imperial and Lornedunn wells are no longer in use and EWW plans to decommission these wells. The Imperial and Lornedunn wells have not been in use since 2007 and are required by the BC Ground Water Regulations to be closed during this test period. The Oceanside well has not been in use for two years and is considered to be a higher complexity and more costly closure. EWW originally forecast $85 thousand to complete this project in 2013. However, in 2012 EWW determined that it would be prudent to defer this project as the scope of wells projects became evident. This project is forecast to be completed over two years and includes three wells. This project is forecast to cost $91 thousand. (EWW Application, p. 37) EWW considers that it is unacceptable to delay this project due to non-compliance with BC Groundwater Regulations. (CWR-EWW-1)

Deputy Comptroller Determinations

In order to meet the BC Ground Water Regulations, both the Imperial and Lornedunn wells are to be closed by 2017. As these wells are considered far less complex closures, an approved cost of $25 thousand per well is accepted. The Oceanside well closure is to be deferred until the following RRA, at which point a detailed standalone closure cost is to be provided for closure in 2018.

3.2.5 Well Rehabilitation

Recommendations from BC Groundwater Consulting Services Ltd. (hydro-geologist) indicate that wells should be rehabilitated every five to 10 years to extend their useful life. Well rehabilitation provides the following benefits: restores lost capacity; extends the working life of the well asset; allows for inspection of down-hole components such as well pump, motor, check valve, and instrumentation, and allows for replacement / rebuild on a structured basis; and may provide information on additional work that is required. This project allows for rehabilitation of three wells during this three year Test period. Forecast project costs have been reduced from $145 thousand to $81 thousand due to only rehabilitating three wells instead of five. (EWW Application, p.37)

In response to FCRA's suggestion that the well rehabilitation project should be spread over two rate periods to lessen the impact on the proposed rates, EWW states that: *"EWW disagrees with this suggestion, because, as was clearly presented in Appendix D, wells should be rehabilitated every 5-10 years to extend their useful life. The FCRA seems to suggest that because of the three new wells being tied-in in the next test period, no wells should be rehabilitated because present system capacity will be fully met. EWW never suggested that the well rehabilitation project was necessary to add capacity to the system, but rather to maintain existing capacity. The FCRA also suggests that because this project was deferred in the last test period, it would be appropriate to defer it further. EWW disagrees with this assertion. As stated above, wells should be rehabilitated every 5-10 years. This project has already been delayed, and any further delay will unnecessarily degrade these assets. For these reasons, EWW submits that well rehabilitation is a prudent capital expense in that it will assist to extend the working life of the existing wells. Well rehabilitation is an important part of the EWW's prudent management of its assets. Additionally, this process serves to restore lost capacity, allows for inspection of down-hole components and allows for replacement/rebuild on a structured basis. Without proper rehabilitation, it is possible that total supply capacity will erode more quickly than anticipated with the result that new wells will have to be drilled sooner than expected. EWW maintains that this project is necessary for the prudent operation of the utility and submits that it warrants Comptroller approval."* (EWW Final Reply, pp. 2-3)

Deputy Comptroller Determinations

The Deputy Comptroller agrees with EWW that maintaining the integrity of its wells is an important capital maintenance activity. The project is approved.

3.2.6 System Balancing Storage Control

To improve system fire flows, pressure, and redundancy, EWW recommends that the butterfly valve under French Creek normally remain open. A study to review the existing system instrumentation and operating logic is required to allow the butterfly valve to remain open while ensuring that sufficient fire storage at the Drew Road Reservoirs is

maintained. The cost of this project is estimated at $27 thousand. (EWW Application, p. 38)

FCRA questions the need for the butterfly valve and study on the basis of the new wells and topography of Wembly road. (FCRA Final Submission, p. 1)

EWW responds that the valve needs to be left open to balance the flow between the different sides of the system; however, the master planning review determined that there are some times when the valve needs to be closed to ensure proper storage levels are maintained in the reservoirs of each side of the system. Manual operation of this valve does not allow for automatic response in the case of fire flows. (EWW Reply Argument, p. 4)

Deputy Comptroller Determinations

The enhanced system operation from an automated butterfly valve makes this project desirable to complete during this test period.

3.2.7 Church Road Complex Upgrades

This project consists of various upgrades to the Church Road Complex site at a cost of $67,000. The upgrades include a magnetic flow meter located on the well supply outlet to measure ground water supply production and additional booster pump station controls. Installation of the magnetic flow meter on the well supply line will provide information required for ongoing well capacity analysis. (EWW Application, p. 38) EWW considers it to be an unacceptable system risk to delay this project because, without this project, improved system operation, efficiency and well capacity monitoring will not be achieved. (CWR-EWW-1)

Deputy Comptroller Determinations

The need for this project has been justified.

3.2.8 Church Road Reservoir Upgrades

This project consists of the installation of flexible liners for Church Road Reservoir #3 and #4. The existing concrete reservoirs at Church Road have been cracking over the years such that water pooling on the top of the reservoirs can leak inside. In the past, Xypex grout products have been used every few years to mitigate leaks. Installing the liners will provide a more durable, long term solution. (EWW Application, p. 38)

When asked about the possibility of delaying this project, EWW responded that: "*The consequence of deferring this project is the possible intrusion of contaminants into the reservoir. This represents an unacceptable asset risk with failure leading to regulatory action or public health issues if the water supply is contaminated. For comparative risks of project deferrals, including this project, please see CWR-EWW-01. Continuing with*

the interim solution of using the Xypex grout is not a viable option. The membrane requires replacement. Replacing it now is much less costly than replacing it following its failure. Failure also could result in additional structural integrity problems if the system is not completely sealed. Consequently, deferring this project carries a high level of risk as outlined in CWR-EWW-01." (CWR-EWW-13.2)

Deputy Comptroller Determinations

Avoiding water contamination is a paramount objective. The project is approved.

3.2.9 Ongoing Capital Maintenance Programs

Over the next three years, EWW plans to increase its hydrants by six hydrants per year to improve the hydrant coverage toward the design guidelines. In addition, 400-500 meters still require replacement because they are near or have reached their 20 year life cycle. EWW proposes to replace 100 meters per year over the next three years. (EWW Application, p. 38) In response to CWR-EWW-14.1, EWW confirms that the costs related to fire hydrants are not recovered through the rates charged to residential, multi-residential or commercial customers. Also, in its Reply Argument, EWW notes that the costs associated with the additional hydrants are fully allocated to fire protection services and will result in hydrant rate increases charged to the Regional district of Nanaimo.

FCRA took issue with the proposed pace of meter replacements believing it more reasonable to spread this expense over two or more rate periods to defray the cost impact. (FCRA Final Submission, p. 2) EWW replies that "*if the industry practice of replacement on a 20-year cycle is accepted, it necessarily follows that failure to adopt this practice will result in a high level risk that meters will fail.*" (EWW Reply Argument, p. 5)

Deputy Comptroller Determinations

The addition of six hydrants per year is approved. EWW is to confirm in its refiling that these costs have not been included into the rate calculation of residential, multi-residential or commercial customers.

The meter replacement program is approved provided EWW confirms that it will not result in any meters being replaced before the 20 year life, unless a meter is found to be faulty. In doing such, EWW shall maintain a database of customer meters containing the date of original meter installation, meter replacement date and whether the meter was replaced due to fault or age. This database shall be available for review by the Deputy Comptroller upon request.

3.2.10 2015-2017 Capital/Construction cost escalator

EWW used a capital/construction cost escalation factor for determining its capital costs during the test period. EWW's consultant, Dr. Ryan derived the capital/construction cost

escalator from the Conference Board of Canada forecasts of the Implicit Price Deflator, Business Gross Fixed Capital Formation, Non-Residential Structure, for B.C. The construction cost escalation factor is higher than CPI, recognizing the tightening labour and contractor markets and rising material costs in BC. The escalation factors are 3.9% in 2015, 3.9% in 2016, and 3.6% in 2017. (EWW Application p. 43)

In response to CWR-EWW-16, EWW states that it is not aware of any construction cost escalator provided by the BC Ministry of Finance in its Budget and Fiscal Plan 2015/16 to 2017/18 to compare with Dr. Ryan's estimate.

FCRA expresses concern with Dr. Ryan's escalators as a result of the reduction in interest rates and collapse of oil prices. (FCRA Final Submission para. 66)

Deputy Comptroller Determinations

The Deputy Comptroller considers that the reduction in oil and gas activity in Alberta and BC will likely have a moderating impact on the capital/construction cost escalators for the types of capital work planned by EWW during the test period. Dr. Ryan's evidence is now somewhat dated but there is little other evidence available for the Deputy Comptroller to consider. **In these circumstances, the Deputy Comptroller concludes that a very small reduction in the capital/construction cost escalator to 3.5% in each year is appropriate for the test period.**

4.0 2015-2017 SALES FORECAST

The total sales volume forecasts are a product of customer count and consumption per customer forecasts. EWW developed a forecast of consumption per customer and customer counts for the purpose of determining its sales forecast for the 2015-2017 test period. Any variances between the forecast consumption and customer counts and the actual consumption and customer counts are proposed to be reconciled through the Consumption Deferral Account.

EWW's customer growth forecast was primarily based on historical growth trends, consultations with local area developers and information obtained from development applications. Currently, there is one 54 parcel development pending approval, anticipated in 2015. Assuming this development is approved, EWW forecasts 14 new lots for each of the test years for a total of 42 new residential customers. This growth rate is consistent with the customer growth over the last five years (2010 – 2014). EWW is not forecasting any customer growth for multi-residential or commercial customers, as EWW is not aware of any such developments planned for the test period.

The forecast growth in the number of fire hydrants is six new hydrants per year.

As a base for the 2015 consumption forecast for the residential customer class, EWW used a five-year average for residential consumption per customer. The use of a five-year average is intended to normalize the impacts from the year-over-year variations in weather to reflect the appropriate starting point as the basis for the 2015 consumption forecast.

Water consumption over the 2015-2017 test period was determined based on the customer count forecast and the average consumption per customer. (EWW Application, pp. 39-41)

Table 4.1.3-1
EWW Consumption by Rate Class
2012-2017
(Cubic meters)

		A	B	C	D	E	F
		2012A	**2013A**	**2014F**	**2015F**	**2016F**	**2017F**
1	Residential	400,889	366,144	390,128	402,398	405,650	408,903
2	Multi-Residential	57,140	48,308	53,485	50,789	50,789	50,789
3	Commercial	52,514	48,965	60,713	56,396	56,396	56,396
4	**TOTAL CONSUMPTION**	**510,543**	**463,417**	**504,326**	**509,583**	**512,835**	**516,088**

The FCRA queried EWW on the use of a 5 year average consumption for the sales forecast. EWW notes the significant volatility in sales due to weather and agrees that there is a long term trend to declining consumption. The Utility provided updated actual sales for 2014 of 19.3 cubic meters per month which is significantly higher than 2013 and very close to the test period forecast of 19.4 cubic meters per month. (FCRA-EWW-22)

Deputy Comptroller Determinations

The Sales forecast is accepted. The Consumption Deferral Account will continue to true up any variations in customer counts and consumption between that forecast and actuals.

5.0 OPERATING COSTS

5.1 System Operations

Since 2012, EWW has continued with its assessment of the system's condition to identify upgrades necessary to operate and maintain the Utility to meet leading water utility standards. EWW has successfully completed a number of system upgrades and operational improvements to improve water quality, enhance system reliability and safety, meet regulatory requirements and improve customer service, including no longer relying on water supply from French Creek.

During the 2015-2017 test period, EWW plans to continue with existing operational programs including its quality assurance program and annual quality assurance audits; annual reporting to VIHA on the Utility's operating performance and water quality; well

performance monitoring to ensure the sustainability of its water supply; annual UDF program; annual updating of Emergency Response Plans; quarterly newsletters, operational updates and water conservation information provided to customers; and regular communication with its CAP. In addition to these continuing operational programs, EWW is planning a number of new operational initiatives for the 2015-2017 test period including a leak detection program, a model validation and rezoning study, a geotechnical study of the Drew Road reservoirs, a limited scope taste and odour study, and an update to the Master Plan. (EWW Application pp.19-20)

Recognizing the large rate increases that have occurred in the last test period and the large increases proposed for this test period, the need for these programs was pursued in information requests. In particular, CWR-EWW-1.0 asks EWW to evaluate the actions it could take to lessen the proposed rate increases. Other information requests deal with each proposed program.

5.1.1 The leak detection Program ($35,000)

In 2006, 60% of the water system was leak tested. The remaining 40% was not amenable to testing because of insufficient access to the infrastructure. The Master Plan states that it is not economically viable to reduce leakage much further but EWW notes that in some years leaks are in excess of the 15% maximum recommended by AWWA. EWW acknowledges that "*It is possible that closer monitoring could be done during this rate period and the project deferred, however, reducing water losses reduces operating costs and adds to system capacities, which reduces the need for capital upgrades. Deferring this project would result in a moderate level of risk – primarily financial to the customers in future test periods.*" (CRW-EWW-7.0)

FCRA requests that this program not be approved. (FCRA Final Submission, para.46) EWW responds in its Reply Argument that leak detection is the least expensive way of adding effective capacity, it saves costs on chemicals, and it reduces stress on wells and other components during high usage periods. The Master Plan also notes that EWW's current leakage of 16% is above the national average of 13%. As EWW stated in its Final Comments, deferring this project would simply put the financial burden on its future customers.

Deputy Comptroller Determinations

The Deputy Comptroller is not convinced that this leak detection program should proceed at this time when proposed rate increases are so large. EWW is to undertake the closer monitoring of leakage that it suggests and reconsider the leak detection program in the next test period.

5.1.2 Model Validation and Rezoning Study ($30,000)

This project includes a study to complete water model validation including a field hydrant flow testing program. EWW considers it to be an unacceptable level of risk to

delay this work due to public safety and fire flow risk from inadequate fireflows throughout the system. In response to FCRA-EWW-10, EWW maintains that the need for the study relates to existing system deficiencies and should not be funded by developers.

"FCRA submits that with volume flows having drastically improved with the new wells in-service and the wells to be tied-in, there are no volume issues and therefore sustainability of pressures even in peak periods has also improved. If there is any degradation in the New Wembley Road Area Pressure Zone due to the 54 unit development that has been approved but not yet broken ground, then any studies or hard costs must be covered by contributed funds. We request the Comptroller to direct that this project be terminated." (FCRA Final Submission, para. 47)

It is noteworthy that EWW also plans to install six new hydrants per year at a cost of $5,800/ hydrant. (Appendix D, p. 85)

Deputy Comptroller Determinations

The Deputy Comptroller considers that the Model Validation and Rezoning Study can be delayed until there is substantial growth to be added to the system or during the next Master Plan update, whichever comes first. This will allow consideration of the impacts of the new wells after being brought into service, the impacts of the new hydrants, and the location and flow requirements of the growth projects. If the need for capacity additions is the result of a developer sponsored project, then it is presumed that the capital cost of those capacity additions would be funded by the developer.

5.1.3 Geotechnical study of the Drew Road reservoirs ($20,000)

In 2016, EWW proposes retaining a geotechnical engineering consultant to conduct a geotechnical study on the Drew Road reservoirs. The purpose of this investigation is to examine the aging reservoirs and to determine the extent of the leakage from the reservoirs, and provide mitigation options. EWW also proposes to conduct a study to review the existing system instrumentation and operating logic to allow the butterfly valve to remain open while ensuring that sufficient fire storage at the Drew Road Reservoirs is maintained. Completion of this project is required prior to the installation of a new fire pump at the Drew Road reservoir recommended for the next test period. (EWW Application p. 20)

EWW considers it to be an unacceptable level of risk to delay or cancel this work because without this project, the Drew Road reservoirs will continue to leak and the extent of repairs required will be unknown. Reservoirs need assessment to avoid potential catastrophic failure during current or future test periods.

Deputy Comptroller Determinations

This geotechnical study on the Drew Road reservoirs is approved as requested.

5.1.4 Taste and Odour study ($25,000)

As a result of feedback from the December 2014 Community Advisory Panel ("CAP") meeting, EWW included $25 thousand for a limited scope taste and odour study in the operating budget in 2015.

EWW was asked to justify this study when four in five survey customers had indicated satisfaction with each aspect of their tap water. *"EWW interpreted the Leger survey to mean that most of the French Creek customers are satisfied with the quality of their tap water, including taste and odour. However, at the meeting on December 10, 2014 with the Community Advisory Panel, some members reported complaints about the water quality – particularly the taste and odour. Two members reported that they and many other members of the community had complaints about the taste and odour. EWW responded to this feedback by proposing to conduct an additional water quality study during the 2015-2017 timeframe. Often in operating distribution systems, there are pockets of customers who complain of taste and odour issues. The first step in addressing these complaints is to conduct a study before making changes to operating protocols or implementing capital treatment upgrades. Since all customers expect the same quality, including taste and odour, the study cost would be borne by all customers not just those affected by the taste and odour.*
If the water has taste or odour issues, customers will not be satisfied. As a result, and given the complaints by members of the Community Advisory Panel, EWW does believe that the study is warranted. However, given that odour and taste issues, if they exist, have no effect on the safe and efficient operation of the utility, EWW is not opposed to deferring this study." (CWR-EWW-26.1)

In its information request FCRA suggests EWW simply visit each of the two CAP members and sample the water at their homes. (FCRA-EWW-11) In its Final Submission, FCRA suggests this project be eliminated rather than deferred. (FCRA Final Submission para. 49)

Deputy Comptroller Determinations

The Deputy Comptroller agrees with FCRA that this project should be cancelled and that EWW staff visit the two CAP members to verify their odour and taste concerns.

5.1.5 Master Plan Update ($26,000)

In 2017, EWW plans to retain the services of an engineering firm to update its system Master Plan prior to the next RRA. EWW also plans on completing a model validation and rezoning study on the Wembley Road area pressure zone in order to verify results and assist in scoping and prioritizing fire flow and pressure improvement projects. This will also assist in the preparation for the recommended upgrades to the Wembley Road

area pressure zone for fire flow improvements recommended by KWL in the Master Plan for the next test period. (EWW Application, p. 21)

Since EWW is experiencing minimal growth and now is completing wells to meet future capacity, the Utility was asked why would there be need to update the Master plan so frequently or to hire external resources to do so. It responded: *"An update to the Master Plan in 2017, before the start of the next test period, will ensure that EWW's capital plan for the next test period is prudent and that safe and reliable water service will continue. Further, given that the 2014 Water System Master Plan was the first Master Plan for the French Creek Utility, an update in three years is recommended. As outlined in CWR-EWW-01, deferring the Master Plan out of the current test period would result in a moderate level of risk; a lack of planning can result in increased capital and operating costs in future test periods."* (CWR-EWW-8.1)

FCRA submits that: *"The last report produced prior to the KWL Master Plan was by Koers and Associates in 2004. The system was then owned by Breakwater Enterprises and there were considerable deficiencies which have since been corrected. FCRA sought engineering advice on this issue and has been advised that a report of this nature and scope should not need to be updated or revisited for a water utility earlier than 8 to 10 years. It should be recognized that EWW has owned this system since 2006 and the Master Plan prepared in 2014 was 8 years after the purchase and some 10 years after the Koers report. FCRA believes that updating the Master Plan on a 3 year cycle is unreasonable, represents excessive cost for customers and should be eliminated from this rate period."* (FCRA Final Submission, para. 50)

EWW maintains that updating the Master Plan before the beginning of the next test period will provide a prudent plan to ensure that EWW will be able to continue to provide safe and reliable water service to its customers. Without an update of its Master Plan to guide its capital expenditures for the upcoming test period, EWW may not have sufficient information to determine system upgrade requirements and there is risk that capital expenditures will be higher or lower than necessary to provide safe and reliable water services. (EWW Reply Argument, p. 12) EWW considers it to be a moderate level of risk to delay the update.

Deputy Comptroller Determinations

A Master Plan incorporates both short term and long term goals, and should be seen as a long term guidance document and not a short term planning tool. Once short term goals have been completed, or removed for other reasons, it is expected that long term goals move to the forefront. If factors such as growth far beyond what was forecasted or the recommendations of a study in the short term goals results in a priority shift of long term goals or new short term goals being added, it is expected that the utility can manage such reassessments and prioritizing without undertaking a new Master Plan. Technical memorandums should be used to provide interim updates to the Master Plan, including revised cost estimates for major projects. Recognizing the very limited growth expected

during the test period, there should be no need to update the Master Plan after only three years. **The Master Plan update is to be deferred to a future test period and the cost is to be removed from this test period operating costs.**

5.2 Operating Costs

EWW Operating costs for the 2015-2017 test period were forecast with reference to EWW's 2012 and 2013 actuals and 2014 forecast operating costs. A cost forecast for the 2015 test year was prepared by first using a combination of a "bottom up" approach and a cost trend analysis. The 2015 forecast operating costs were then adjusted, on a cost category by cost category basis, to take into account the impacts of forecast capital-related expenditures (i.e., both capital projects and changes in operating activities) that were forecast to occur in each of the subsequent test years to arrive at forecast costs for those years. Forecast costs for the 2015-2017 test period were prepared in 2015 dollars. Escalation factors were then applied to determine EWW's forecast operating expense for each of the future 2015-2017 test years. (EWW Application, p. 44)

Revised Table 5.0-1 and Financial Schedule 2.2 of the information response to CWR-EWW-17 provide the 2012 actual, 2013 actual, 2014 decision and 2014 actuals and forecast operating costs of EWW over the 2015-2017 test period. These forecast costs include the leak detection program, the model validation and rezoning study, the geotechnical study of the Drew Road reservoirs, the limited scope taste and odour study, and the update to the Master Plan which have been addressed in the previous section of this Decision, as well as salary transfers related to overhead capitalization to capital projects. The final operating costs will need to be adjusted for the operating and capital determinations in this Decision.

Table 5.0-1
Operating Costs
2012-2017
($ thousands)

	A	B	C	D	E	F	G	H	I
Cost Category	**2012**	**2012A**	**2013D**	**2013**	**2014D**	**2014A**	**2015**	**2016**	**2017F**
1 Salaries and Benefits	367	377	371	434	405	423	485	498	517
2 Power and Other Utilities	60	57	66	56	69	60	66	68	71
3 Chemicals	41	21	48	25	52	29	33	33	34
4 Operations and Maintenance	149	27	209	163	179	185	278	185	228
5 Property Taxes	34	35	35	35	36	34	36	37	38
6 **Subtotal**	**651**	**517**	**729**	**713**	**741**	**731**	**898**	**821**	**888**
7 Inter-Corporate Service Charges	167	167	172	172	179	179	195	199	203
8 **Total Operating Costs**	**818**	**684**	**901**	**885**	**920**	**910**	**1,093**	**1,020**	**1,091**

5.2.1 Salaries and Benefits

The following two issues related to salaries and benefits were pursued in information requests.

First, EWW was asked to explain "a $60 thousand increase in labour and salaries primarily due to management and oversight services provided to EWW by EWSI senior management that were inadvertently omitted from the 2012-2014 Decision amounts". EWW explains that: *"The Director, Municipal Operations provides oversight and leadership for EWW staff to ensure the operations meet EPCOR's work and product quality standards and conform to company policies and procedures. Many programs (safety, environmental management, risk reduction, asset management) are provided by EWSI to EWW and it is senior management's responsibility to ensure that these programs are adapted to the various sites and implemented throughout the BC region of the company. The costs for senior management oversight would remain materially the same whether some of the capital works were deferred or cancelled."* (CWR-EWW-18.2)

The second issue relates to the escalation in salaries and wages. This issue is difficult to follow because of the overheads capitalized and overtime included in net salaries and wages. To understand this issue better, EWW was asked to create a table of gross salaries and wages of EWW employees only and explain the escalations during the past test period. EWW states that: *"The gross salaries and benefits for EWW employees and the number of employees for each of the years from 2011 through 2014 are shown in the table below. Based on the information below, gross salaries and benefits have increased by an average rate of 1.8% which was below the allowed wage and salary escalator of 2.0% per the 2012-2014 RRA. The large volatility during this time period is primarily due to changes in management staff and the amount of overtime incurred by EWW staff. The fact that the employee group in EWW is very small makes such changes more volatile."* (CWR-EWW-18.3)

Gross Salaries and Benefits / EWW Employees
2011-2014
($ thousands)

		A **2011D**	B **2012A**	C **2013A**	D **2014A**
1	Labour ,Salary & Benefits (per Table	442	420	445	437
2	Less: Overtime, Incentive & Other	(47)	(65)	(65)	(39)
3	**Gross Salaries and Benefits**	**395**	**355**	**380**	**398**
4	**Full**-time Equivalent Employees	**3.95**	**3.84**	**3.57**	**3.82**
5	**Gross Salaries and Benefits** / FTE's	**100**	**92**	**107**	**104**
6	**Percentage increase / (decrease)**		**(7.7%**	**15.4%**	**(2.3%**

**Note: Gross salaries and benefits include labour and salary, benefits and incentive. Full- time Equivalent Employees is a measure of the time spent by individual employees in a specific business unit, then aggregated. For example, an employee who performs 90% of their work at EWW would be referred to as 0.90 FTE.*

In its Reply Argument, EWW responds to FCRA concerns related to escalating salaries and benefits. The Utility further explains that there were one-time adjustments related to: management reorganization in BC Operations, adjustments to management oversight charges for 2014, and an adjustment to employee vacation entitlement. These one-time adjustments were specific to 2014 only and were not expected to recur in 2015. (EWW Reply Argument, p. 10)

Deputy Comptroller Determinations

The Deputy Comptroller accepts the EWW 2015 forecast of salaries and wages but has some concern that the $60,000 charge from EWSI for management oversight seems very large for such a small utility. EWW and EWSI should seek to reduce this charge before the next rate period, or provide detailed information on the actual work performed to justify a continuance of that level of management oversight.

5.2.2 Operations and Maintenance

In response to concerns for the large increase in forecast telecommunications costs in 2015, EWW proposes to reduce the telecommunications costs to $23 thousand in 2015, escalated in 2016 and 2017 in Financial Schedule 2.2 in its refiling. (CWR-EWW-19.1)

EWW also explains its contractors and consultants forecasts in CWR-EWW-19.3. These costs will also need to be revised in EWW's refiling for the adjustments ordered by the Deputy Comptroller to the leak detection program, model validation and rezoning study, limited scope taste and odour study, and update to the Master Plan.

Deputy Comptroller Determinations

Operations and maintenance costs are to be reduced for the lower telecommunications costs and reduced use of contractors and consultants.

5.2.3 Other Operating Cost Categories

There are no issues with respect to the 2015 base year forecasts of power and other utilities, chemicals, and property taxes

5.2.4 Inter-Corporate charges

EWW obtains certain services from EUI and EWSI (referred to as inter-corporate service) to enable EWW to carry on business as the owner and operator of the Utility.

EWW believes that this structure allows EWW to focus on its core business of water operations and meeting customer needs while reducing administrative and shared-services costs compared to that of a stand-alone utility. EWW benefits from the experience and expertise that resides within other members of the EPCOR group and from economies of scale and scope that arise from the EPCOR group's inter-corporate services approach to its business operations.

The inter-corporate services are provided pursuant to an inter-corporate services agreement between EWW and EWSI. In return for these services, EWW pays inter-corporate service charges to EWSI in accordance with the terms of the agreement. The inter-corporate service charges are either directly assigned to EWW or determined based on an allocation methodology. Direct assigned inter-corporate charges for support services provided by EWSI are included in EWW's operating costs if those costs are incurred solely for the benefit of EWW rather than being a shared service cost. (EWW Application pp. 45-46)

The Inter-corporate service charges methodologies of EPCOR have been reviewed previously by the Alberta Utilities Commission and by the Deputy Comptroller for both EWW and EWR. EWW confirms that inter-corporate service charges are allocated to EWW and EWR in a two-stage process, first from EUI to EWSI, then from EWSI to its subsidiaries, including EWW and EWR. EUI uses the same methodology and allocators to allocate costs to its subsidiaries, including EWSI. EWSI, in turn, uses consistent methodologies and allocators to allocate EUI costs to EWSI's subsidiaries.

EWSI reviews its inter-corporate cost allocation process annually, ensuring that the impacts of organization refinements, regulatory decisions and other pertinent factors are incorporated into the intercorporate cost allocation models. Accordingly, there are some minor differences between the allocators used for EWR, which reflect the allocation model in effect for the 2013 fiscal year, and those of EWW, which are based on the 2014 cost allocation model.

EWW was also asked to demonstrate that the total inter-corporate service charges of approximately $200,000/yr. are less than EWW might face on a stand-alone basis. EWW states that:

> *"The ability of EUI and EWSI to provide centralized services enables EWW to achieve a level of administrative support and service expertise that would not ordinarily be available to a small stand-alone entity. These inter-corporate services are provided in detail in Appendices F-2 and F-3 to the application. Inter-corporate services replace many functions that would otherwise be required to be performed either in-house or outsourced. For many inter-corporate services, EWW benefits from EUI's and EWSI's economies of scale; EWW is able to obtain these services at a cost lower than the cost of providing them internally or acquiring them externally. EWW notes that, in aggregate, EWW's inter-corporate service costs amount to the costs of less than one and one-half staff, which EWW considers to be significantly less than the number of staff EWW would require to provide these same inter-corporate services on a stand-alone basis."*

Some key examples of the inter-corporate services provided by EUI to EWW and the associated costs are also discussed in the information response. (CWR-EWW-21.4)

FCRA objects to the magnitude of the inter-corporate charges in its Final Submission.

"We are disturbed by the continuing escalation of charges to EWW for services deemed necessary and which are not/have not been provided by consultants through numerous project reports even though considerable funds are expended for that purpose. RRA 2015-2017 will see an increased cost of $79,000 for the entire period over RRA 2012-2014 which amounts to an increase of 15.3%. If $60,000 for EWSI senior management and perhaps the unexplained $17,000 in benefits as discussed in para 40 and 42 above is placed in this category where it should be, the impact is substantially worse. Impact with $60,000 included – $139,000 now 26.9%, with $17,000 also included - $156,000 now 30.2%.
We wonder what this senior management person is being paid and what portion is EWSI attempting to charge EWW considering the large amount ie $60,000. We also question if this charge is fair, why same is occurring many years after EWW purchased this utility and what benefit there is to EWW customers. The high level of these inter-corporate service charges are not acceptable and must be reduced." (FCRA Final Submission, p. 3)

EWW responds:

"The FCRA states that there will be an increased cost for inter-corporate services of $79,000 for the new test period. EWW assumes that the FCRA derived this number by adding the inter-corporate services charges for 2015, 2016 and 2017 ($598 thousand) and compared that to the total for 2012, 2013 and 2014 ($518 thousand). The increase in inter-corporate service charges in the upcoming test period reflect the addition of asset usage fees, which were explained in Section 5.6 of the Application:

The $16 thousand increase in corporate service charges from the 2014 forecast to the 2015 forecast is primarily due to a $21 thousand charge for corporate asset usage fee. In error, this charge was not previously allocated to EWW. EWW should have been charged this fee as it benefits from the services which the corporate asset usage fee covers.

Apart from the addition of the corporate asset usage fee in the 2015 forecast, the escalation in inter-corporate services charges is the 2% escalator. In response to CWR-EWW- 21.2, EWW confirmed that all other EPCOR utilities are allocated corporate asset usage fees.

The FCRA also suggests that the $60 thousand for management oversight and $17 thousand for benefits should be included in the inter-corporate services charges. EWW disagrees with this assessment as explained in section 3.1 above.

The FCRA further states that the "high level of these inter-corporate service charges are not acceptable and must be reduced." The FCRA does not state what the inter-corporate service charges should be reduced to and on what basis this should be done. In fact, in response to CWR- EWW-21.4, EWW demonstrated that for the inter-corporate service charges of approximately $200 thousand each year, EWW receives a level of administrative support and service expertise that would

ordinarily not be available to a small stand-alone utility. EWW went on to demonstrate some key examples of the services it receives as part of the inter-corporate service charges, and how these could not be received at this cost on a stand-alone basis." (EWW Reply Argument, pp. 13-14)

Deputy Comptroller Determinations

The Deputy Comptroller believes that there are two primary considerations when evaluating the inter-corporate service charges from EWW's parent companies.

The first consideration goes to the validity of the corporate allocations. In this regard the allocators have been reviewed by both the AUC and the Deputy Comptroller and have been found to be reasonable. Further, the allocations are applied on the same basis to the many subsidiary companies so there is no discrimination towards EWW, and the allocated costs are proportionately shared to achieve economies of scale and scope.

The second consideration is to ensure that those charges are less than EWW would incur on a stand-alone basis. EWW has adequately responded in the information requests to demonstrate that EWW would not likely replace the many services at a comparable cost.

It should also be noted that EWW's customers also benefit from EPCOR's ownership in acquiring debt at favourable interest rates and avoiding some taxes that a private company would face.

The inter-corporate service charges are approved.

5.3 Cost Escalators

EWW's forecasts of operating costs over the 2015-2017 test period were developed in 2015 dollars. These forecasts were then escalated by applying an appropriate escalation factor depending on the type of cost. EWW retained Dr. David Ryan, professor of economics, who has previously provided expert evidence supporting escalation factors for EPCOR's other regulatory applications, to provide estimates of appropriate escalation factors for wages and salaries and capital/construction costs. Dr. Ryan's written evidence entitled, "Forecast Values of Escalators for 2014 – 2017" dated September 2013 (the "2014-2017 Escalators Report") was prepared for the EPCOR White Rock Water Inc. 2014-2017 Revenue Requirement and Rates Application. EWW submits that this report is also applicable to this Application because it reflects the BC labour market and construction costs for the years 2015-2017. (EWW Application pp. 42-43)

Escalation Factors

	Source	A 2015	B 2016	C 2017
1 Wages and Salaries	2014-2017 Escalators Report		2.7%	2.7%
2 Power	10 Year Plan for BC Hydro		3.0%	3.4%
3 Other Operating Costs	BC Ministry of Finance Feb 2014 Budget Update – 2014/15 – 2016/17		2.0%	2.0%
4 Capital/Construction	2014-2017 Escalators Report	3.9%	3.9%	3.6%
5 Consumer Price Index	BC Ministry of Finance Budget and Fiscal Plan 2014/15 – 2016/17, page 73		2.0%	2.0%

EWW provided further information in its responses to information requests to suggest that Dr. Ryan's cost escalators remain appropriate, even after the recent collapse in oil prices and drop in the Bank of Canada lending rate.

5.3.1 Wages and Salaries cost escalator

EWW's proposed cost escalator of 2.7% in 2016 and 2.7% in 2017 appears high in light of the latest update of CPI escalator forecasts from the BC Ministry of Finance February 17, 2015 Budget and Fiscal Plan 2015/16 to 2017/18 as shown in EWW's IR response CWR-EWW-16. It forecasts Consumer Price inflation in BC to be 1.6% in 2015, 1.9% in 2016 and 2.0 % thereafter in the medium term. The Canadian rate of inflation is assumed to match BC's rate in 2015, then increase to 2.0 per cent annually from 2016 to 2019.

Deputy Comptroller Determinations

The Deputy Comptroller directs that, for revenue requirement purposes, the test period escalator for EWW's salaries and benefits is to remain at 2%/year.

5.3.2 Power Cost Escalator

It should be noted that the Power cost escalator for BC hydro is now 4.5% for 2016 and 3.6% for 2017. EWW proposes to make this correction to the power cost escalators in Financial Schedule 2.1 in its refiling. (CWR-EWW-29.0).

Deputy Comptroller Determinations

Power cost escalators should be corrected to 4.5% for 2016 and 3.6% for 2017.

5.3.3 Other Operating Costs

Cost escalators for Other Operating Costs should be reduced to match the updated forecast CPI in BC as stated in EWW's IR response CWR-EWW-16 and above.

Deputy Comptroller Determinations

Cost escalators for Other Operating Costs for the test period are to be set at 1.6% for 2015, 1.9% in 2016 and 2.0% for 2017.

6.0 DEFERRAL ACCOUNTS AND RATE RIDERS

The Utility explained the 2012 to 2014 Deferral Accounts and proposed rate riders for the 2015 to 2017 test period to recover same and proposed continuance of the deferral accounts in the 2015 to 2017 test period as follows:

6.1 Deferral Account Balances for 2012-2014

Order 2310 approved four deferral accounts for the 2012-2014 test period: (i) consumption deferral account; (ii) property taxes deferral account; (iii) interest deferral account; and (iv) hearing cost deferral account. By that same Order, the income tax deferral account was discontinued.

The calculation of each deferral account balance for the years 2012, 2013 and 2014 is shown in Financial Schedules 3.1 and 3.2 and a summary is shown in Table 6.1-1.

Table 6.1-1
Deferral Account Balances and Disposition through 2015-2017 Rate Riders
2012-2017
($ thousands)

	Deferral Account Balances And Disposition	A 2012 A	B 2013 A	C 2014 D	D 2014 F	E 2015 F	F 2016 F	G 2017 F
1	**Deferral Accounts**							
2	Balance, Beginning of Year	**173**	**244**	**40**	**310**	**349**	**244**	**133**
3	Current Year Deferrals							
4	Consumption	120	117	-	96	-	-	-
5	Property Taxes	1	0	-	(2)	-	-	-
6	Interest	(9)	(14)	-	(20)	-	-	-
7	Hearing Costs	6	13					
8	Current Year Deferrals	117	116		75	-	-	-
9	Amounts Refunded through (Recovered from) Rate Rider	(46)	(50)	(40)	(36)	(105)	(111)	(118)
10	**Balance, End of Year**	**244**	**310**	**-**	**349**	**244**	**133**	**16**
11	**Carrying Charges**							
12	Balance, Beginning of Year	**19**	**22**	**9**	**29**	**48**	**27**	**6**
13	Current Year Carrying Charges							
14	Mid-Year Deferral Account Balance	209	277	20	330	297	189	75
15	Weighted Average Cost of Debt	6.38 %	6.01 %	6.47 %	5.89 %	5.88 %	5.92 %	5.94 %
16	Current Year Carrying Charges	13	17	1	19	17	11	4
17	Amounts Refunded through (Recovered from) Rate Rider	(10)	(10)	(10)		(39)	(33)	(26)
18	**Balance, End of Year**	**22**	**29**	**-**	**48**	**27**	**6**	**(16)**
19	**Disposition of Deferral Accounts**							
20	Deferral Accounts	**244**	**310**	**-**	**349**	**244**	**133**	**16**
21	Carrying Charges	**22**	**29**	**-**	**48**	**27**	**6**	**(16)**
22	**Total**	**266**	**339**	**-**	**397**	**271**	**139**	**-**

For the 2012-2014 test period, the differences in the deferral account balances results in a net collection from customers of $349 thousand at December 31, 2014 (line 10 of Table 6.1-1). This balance is primarily driven by lower than forecast consumption. Explanations of the 2012-2014 deferral account balances are provided in EWW's 2012 and 2013 Results, which were provided as Appendices G2 and G3 of the Application.

Each of the deferral accounts as well as the requirement for an additional rate rider adjustment is explained as follows.

6.1.1 Consumption Deferral Account

A consumption deferral account was continued for the test period 2012-2014 to record the difference in revenues based on forecast consumption volumes approved by the Comptroller in Order 2310 and revenue based on actual consumption volumes. During 2012-2014, EWW's actual consumption volumes were lower than the amounts approved in Order 2310. These differences result in a balance owing to EWW of $333 thousand in the consumption deferral account as at December 31, 2014.

The lower than forecast consumption during the 2012-2014 test period was primarily driven by two factors: (i) residential customer growth was lower than forecast; and (ii) consumption per customer was lower than forecast for residential customers. Actual residential customer growth for the 2012-2014 period averaged 1.2% per year compared to the approved average growth rate of 2.9% per year.

Actual consumption volumes per customer for the 2012-2014 test period were lower than forecast in the residential customer category. In the 2012-2014 Revenue Requirement and Rates Application, EWW had assumed that consumption per customer would be equal to the five-year historical average. Actual results have shown that consumption per customer volumes in the 2012-2014 test period were lower than forecast on average by 8.07% for the residential class, 17.60% for the commercial class, and higher than forecast on average by 15.74% for the multi-residential class. EWW attributes this general decline in consumption levels to increased use of water efficient appliances, consumption-based water rates with individual metering, demographic shifts, smaller households and changing societal attitudes toward water consumption.

6.1.2 Property Taxes Deferral Account

EWW continued its property taxes deferral account for the period 2012-2014 to record the difference between forecast property taxes approved by the Comptroller in Order 2310 and actual property taxes. During 2012-2014, EWW's actual property taxes were very similar to the amounts approved in Order 2310. These differences result in a balance owing to EWW customers of approximately $1 thousand in the property taxes deferral account as at December 31, 2014.

6.1.3 Interest Deferral Account

EWW continued its interest deferral account for the period 2012-2014 to record the Hearing Cost Deferral Account.

EWW established a hearing cost deferral account to record expenses incurred in relation to the 2012-2014 Revenue Requirement and Rates Application. These expenses include legal fees, stakeholder consultation and other expenses incurred by EWW as well as any

stakeholder costs approved by the Comptroller for recovery in relation to the regulatory proceeding. During 2012-2014, EWW's actual hearing costs resulted in a balance owing to EWW of $19 thousand in the hearing cost deferral account as at December 31, 2014.

6.1.4 Hearing Cost Deferral Account

EWW established a hearing cost deferral account to record expenses incurred in relation to the 2012-2014 Revenue Requirement and Rates Application. These expenses include legal fees, stakeholder consultation and other expenses incurred by EWW as well as any stakeholder costs approved by the Comptroller for recovery in relation to the regulatory proceeding. During 2012-2014, EWW's actual hearing costs resulted in a balance owing to EWW of $19 thousand in the hearing cost deferral account as at December 31, 2014.

6.2 Disposition of Charges through 2015-2017 Rate Rider

For the 2015-2017 test period, EWW proposes that the total net balance of $349 thousand in the four deferral accounts as at December 31, 2014, including applicable carrying costs, be recovered from customers through a rate rider for the years 2015 through 2017. EWW has adopted standard utility practices whereby it excludes deferral accounts from the revenue requirement, and utilizes a rate rider for recovery or refund of balances. Carrying costs are applied based on EWW's cost of debt.

In determining the appropriate time period in which to discharge the deferral account balances, EWW considered the following objectives: (i) recover operating costs as close as possible to the period in which they are incurred; (ii) provide for relatively stable rates; and (iii) minimize the risk and cost to the utility of carrying deferral accounts. In this Application, EWW proposes to recover the deferral account balances over the years 2015, 2016 and 2017.

Financial Schedule 4.0 of the Application provided the calculation of the proposed rate riders effective January 1, 2015 to December 31, 2017 for each rate class.

6.3 Deferral Accounts for the 2015-2017 Test Period

In this Application, EWW proposes to continue the four previously approved deferral accounts for the 2015-2017 test period: (i) consumption deferral account; (ii) property taxes deferral account; (iii) interest deferral account; and (iv) hearing cost deferral account. EWW proposes to continue to calculate and include carrying costs in its deferral account balances for the 2015-2017 test period. EWW plans to provide a status report on the deferral accounts as part of its annual compliance reporting to the Comptroller. (EWW Application, pp. 56-60)

Deputy Comptroller Determinations

EWW has adequately explained and detailed its actual costs and variances from approved amounts for 2012-2014 to support recovery of the deferral account balances at December 31, 2014 through rate riders in 2015 to 2017. They are approved. However, EWW should first update its Table 6.1-1 to include actual 2014 amounts with adjustments to be made in its Application refiling.

The Deputy Comptroller accepts the continuation of the four deferral accounts (CDA, PTDA, IDA and HCDA) for the 2015 to 2017 test period with carrying costs as proposed.

7.0 ACCOUNTING ISSUES

7.1 Accounting Policies – AFUDC

EWW, in Section 4.2 (page 41) of the Application, explained its accounting policies and requests approval for Allowance for Funds Used During Construction (AFUDC) to recover its financing costs for assets under construction. In the past EWW used Interest During Construction (IDC). EWW states in paragraphs 100 to 103:

Since January 1, 2011, EUI has prepared its corporate financial information in accordance with International Financial Reporting Standards ("IFRS") as required for Canadian publicly accountable enterprises. While EWSI and EWW have implemented IFRS to support the public external financial reporting requirements of its parent company EUI, there are certain IFRS requirements which are not consistent with the accounting treatment historically applied for rate-making and rate-regulated reporting requirements (referred to herein as "regulatory accounting").

The most significant difference between IFRS and regulatory accounting relates to property, plant and equipment, deferral accounts and financial statement disclosure. For example, IFRS does not permit the recording of regulatory deferral accounts but this is accepted practice by rate regulated utilities and their regulators. Consequently, following the implementation of IFRS, EWW now maintains two complete sets of ledgers, one for external IFRS reporting and one for regulatory reporting.

EWW prepared its 2015 – 2017 forecast financial information in accordance with regulatory accounting, which is the previously approved regulatory treatment of assets, liabilities, revenues and expenses. These accounting standards are consistent with those applied by EUI's other rate-regulated utilities for purposes of preparing regulatory applications.

In this Application, EWW is applying for Allowance for Funds Used During Construction ("AFUDC"). AFUDC is the amount that a rate-regulated enterprise may be allowed to earn, if approved by its regulator, to recover its cost of financing assets under construction. This regulatory treatment, used by most regulated utilities in Canada, is equal to the average cost of Construction Work in Progress ("CWIP"), times a financing

rate, being the weighted average cost of capital. In the past, due to its small size, EWW applied for Interest During Construction ("IDC"), as this was consistent with IFRS treatment and because few, if any, capital projects had any significant CWIP that carried over a year. However, commencing in 2015, EWW is proposing to apply AFUDC to be consistent with both common regulatory practice and with EUI's other rate-regulated subsidiaries. The primary difference between the AFUDC and IDC is IDC only considers the cost of debt, while AFUDC considers the weighted cost of both debt and equity. Like IDC, AFUDC is included in the cost of related assets and recovered in future periods through the depreciation charge.

EWW, in its Information Request Response on March 9, 2015, CWR – EWW-15.0, confirmed that a change in accounting treatment from IDC to AFUDC to recover its cost of financing assets under construction was reviewed in detail for EPCOR White Rock Water Inc. and approved by the Deputy Comptroller.

Deputy Comptroller Determinations

EWW has adequately justified its request to use AFUDC starting in January 2015 and it is therefore approved.

7.2 Depreciation and Amortization

In Section 4.7 of the Application (page 46), EWW proposes to adopt the depreciation rates approved by the Comptroller for EPCOR White Rock Water Inc. in Order 2394 as stated in paragraphs 104 to 106:

Utility assets are depreciated over the shorter of the assets' physical, technological, commercial or legal lives. The depreciation rates used by EWW in each year are provided in Financial Schedule 2.5.

EWW conducted a review of its depreciation rates with reference to the recommended depreciation rates issued by the Comptroller in the "Financial Guidelines for Certificate of Public Convenience and Necessity Application", dated May 2010 (Schedule A).

In its review, EWW compared the Comptroller-recommended depreciation rates with the rate previously used for EWW and with those of other EPCOR-owned utilities. Based on these reviews, EWW is proposing to adopt the depreciation rates approved by the Comptroller for EPCOR White Rock Water Inc. in Order 2394 commencing on January 1, 2015.

In Section 7.2 of the Application (paragraph 107), the Utility provided its actual and forecast depreciation expense from 2012 to 2017 as follows:

EWW's depreciation expense is summarized in Table 7.2-1 below. The detailed calculation of EWW's depreciation expense is provided in Financial Schedule 2.5. EWW's utility assets continue to be depreciated over the shortest of the assets' physical, technological, commercial or legal lives. As explained in Section 4.7, EWW conducted a

review of its depreciation rates, and compared the Comptroller recommended depreciation rates with those previously used by EWW and is proposing to adopt the depreciation rates recommended by the Comptroller commencing on January 1, 2015 with the exceptions of reservoirs and equipment.

Table 7.2-1
Depreciation
2012-2017
($ thousands)

	Cost Category	A 2012A	B 2013A	C 2014F	D 2015F	E 2016F	F 2017 F
1	Depreciation	145	182	224	246	298	333
2	CIAC Amortization	(54)	(50)	(61)	(109)	(133)	(152)
3	Write-offs and adjustments	4	1	12			
4	Net Depreciation	95	132	175	137	165	181

In its response to the Comptroller's Information Request to further explain why depreciation rates for reservoirs and equipment are to be different from the Comptroller recommended rates, the Utility responded in CWR-EWW-20.0 as follows:

Utility assets are depreciated over the shorter of the assets' physical, technological, commercial or legal lives. In connection with the EWR 2014-2017 RRA, a review of depreciation rates was completed. In this review, EWR consulted with KWL asking them to assess if the recommended depreciation rates are reasonable. EWR also compared the Comptroller-recommended depreciation rates with the rates previously used for EWR and with those of other EPCOR-owned utilities. Given the similarities between White Rock and French Creek, it was considered the same recommendation be applied to EWW as EWR. As a result, the Comptroller's recommendations were accepted for all but two asset classes. The actual lives for concrete reservoirs and office and stores equipment are shorter than the lives recommended by the Comptroller.

The Comptroller recommends 75 years for concrete reservoirs and 20 years for office and stores equipment. EWW's recommends 60 years for concrete reservoirs and 15 years for office and stores equipment. As EWW's reservoir was developer funded, there is no impact to EWW's rate base as a result of these changes.

Deputy Comptroller Determinations

EWW has adequately explained its change in depreciation rates and forecast depreciation expenses for the 2015 to 2017 test period and they are approved after adjustments are made with the required Application refiling for reductions in forecast capital projects.

7.3 Annual Financial Results

EWW submitted its 2011, 2012 and 2013 Results for the French Creek Operations (Appendixes G-1 to G-3 of the Application), which each year included 10 schedules comparing Decision to Actual financial results. It did not include those Results when it filed its Water Utility Annual Reports to the Secretary to the Comptroller of Water Rights.

Deputy Comptroller Determinations

EWW should be submitting these Results to the Secretary to the Comptroller annually with its usual Water Utility Annual Reports. **EWW is to file its Annual Results for the French Creek Operations with its Water Utility Annual Reports to the Secretary to the Comptroller of Water Rights commencing with the 2014 fiscal year.**

7.4 Working Capital

EWW, in Section 7.3 of the Application forecast working capital as follows:
Forecast working capital requirements are based on the expected timing of EWW's cash flows and represent 45 days of operating expenses. A summary of EWW's working capital allowance is provided in Table 7.3-1 below. The detailed calculation of EWW's working capital is shown in Financial Schedule 2.6.

Table 7.3-1
Working Capital Allowance
2012-2017
($ thousands)

	Cost Category	A 2012A	B 2013A	C 2014F	D 2015F	E 2016F	F 2017F
1	Total Operating Expenses	684	884	950	1,092	1,020	1,091
2	Less: Municipal Taxes	(35)	(35)	(34)	(37)	(37)	(38)
3	Total Eligible Expenses	649	849	916	1,057	983	1,053
4	Total Working Capital Allowance (Line 3 x 45/365)	80	105	113	130	121	129

Deputy Comptroller Determination:

EWW's forecast working capital allowance is reasonable as it bills customers quarterly in arrears. **However, EWW is to amend its forecast working capital allowance in its Application refiling for the 2015 to 2017 test period after making required adjustments to Operating Expenses.**

8.0 RETURN ON RATE BASE

8.1 Capital Structure

For the 2015-2017 test period, EWW is proposing to continue its common equity ratio of 40% equity and 60% long term debt provided from its parent company, EUI. This capital structure is the same as approved for EPCOR White Rock Water Inc. (EWR) after a detailed review of expert evidence from Ms. McShane.

Deputy Comptroller Determination

The proposed capital structure of 40% common equity and 60% deemed intercorporate debt is approved.

8.2 Rate of Return on Equity

EWW applied for a 130 basis points equity risk premium, as approved by the Comptroller in Order 2310, above the ROE for 2014 set by the BCUC for the low risk benchmark utility. The BCUC approved a ROE of 8.75% for the benchmark BC utility for 2014 on May 10, 2013. On January 10, 2014, the BCUC issued Letter L-1-142 confirming that the Benchmark ROE for 2014 remains at 8.75%.

The BCUC also approved reinstituting an Automatic Adjustment Mechanism ("AAM") to set the ROE for the benchmark BC utility commencing in 2014. The AAM will change the allowed ROE for the benchmark BC utility by 50% of the change in the forecast long-term Government of Canada bond yield and 50% of the change in the spread between long-term A-rated utility and Government of Canada bond yields. The BCUC has confirmed that the AAM will operate for 2015 but the AAM will not be triggered until the actual long-term Government of Canada bond yield equals or exceeds 3.8%. If the BCUC adjusts the benchmark ROE for 2015, EWW proposes to update its ROE in its refiling accordingly. If the BCUC continues its use of the AAM beyond 2015 and adjusts the benchmark ROE for 2016 or 2017, EWW proposes that its ROE be adjusted accordingly, and EWW will refile its rate schedules with the Comptroller for approval. (EWW Application, pp. 65-66)

Recognizing that it would be too costly for EWW to prepare expert ROE evidence for such a small utility, EWW was asked to compare the proposed EWW ROE premium of 130 bp with that approved for EWR and identify any reasons why EWW should be awarded a different ROE premium. EWW responded in CWR-EWW-23. as follows:

"*For purposes of its 2014-2017 revenue requirement and rates application, EPCOR White Rock Water Inc. (EWR) filed evidence prepared by cost of capital expert, Foster and Associates Inc., for EWR which proposed an equity risk premium of 1.5% above the BCUC benchmark return on equity (ROE) and common equity ratio of 45% based on the evidence which determined EWR's business risks were higher than when it was last*

assessed. The expert evidence took into account the impact on business risks associated with EWR's Total Water Quality Management Project planned for the 2014-2017 period. Under Order 2394, the Comptroller approved a 1.0% equity risk premium for EWR and 40% common equity ratio."

EWW proposes that maintaining the 1.3% equity risk premium BCUC benchmark ROE, approved by the Comptroller under Order No. 2310 for the 2012-2014 test period, is reasonable and appropriate because there have not been any notable changes in the business risks of the Utility since the 2012-2014 period. EWW elected not to update the cost of capital evidence because, in EWW's opinion, there have been no notable changes in business risks of the Utility and because EWW considered that the costs required to update the cost of capital evidence are not warranted given the small size of the Utility.

The equity risk premium of 1.3% proposed for EWW is 30 basis points (0.3%) higher than the equity risk premium of 1.0% approved for EWR for the 2014-2017 period. This

is a reasonable reflection of the higher business risks for EWW compared to EWR. A higher equity risk premium for French Creek is reasonable and appropriate given that it is a smaller utility in terms of customer base and less diversified in terms of customer load than EWR. Table CWR-EWW-23.1 provides the number of customers, employees, revenues and rate base for EWW compared to EWR and compared to the Benchmark BC Utility.

Table CWR-EWW-23.1
Comparison of EWW to EWR and the Benchmark BC Utility[1]

		A EWW	B EWR	C Benchmark BC Utility[2]
1	Customer Count	2,166	9,992	841,491
2	Employees	4	7	1,550
3	Revenues	$1,270,947	$2,419,069	$1,266,000,000
4	Rate Base	$4,178,223	$4,836,451	$2,725,000,000

While EWW faces similar business risks to EWR generally, EWW faces additional risk related to its smaller size as compared EWR as the very small size of EWW magnifies the risks of its operations. EWW's customer base is less than one quarter of EWR's customer base. Negative events have a much greater impact on the entire system for small utilities and small utilities are more dependent on individual customers for cost recovery. With the lack of economic diversity in the service area, limited growth prospects and concentration of assets, a small utility has less ability to diversify its risks; negative events are likely to have greater impact on the earnings or viability of a smaller company. The impact of small size has frequently been exhibited in lower debt ratings for companies whose financial parameters are stronger than their larger peers.

In addition to the size difference, compared to EWR, EWW faces the additional business risk associated with the requirement to pre-fund capital projects costs associated with

new capacity additions and then recover these costs through the Deferred Capacity Trust Fund (DCTF). In anticipation of additional development in its service territory, EWW has spent approximately $2.3M over the 2012-2014 period on developing new supply sources and building distribution system capacity to accommodate new customers. Through the DCTF, these costs should be paid for by developer contributions based on the additional customer connections. However, expected customer growth has not occurred due to a downturn in the economic conditions since 2008 and the net DCTF balance of $0.9M at December 31, 2014 remains unfunded. While EWW earns interest on the unfunded balance in the DCTF, EWW is not allowed a return on these costs. There is also a significant risk to EWW of not recovering these costs through developer contributions in a reasonable timeframe if customer growth does not develop in the EPCOR's service territory. This situation compounds the business risks for EWW relative those of EWR which does not face the same supply issues as EWR and does not have a DCTF." (CWR-EWW-23.1)

EWW repeats its main points in its Final Argument. In its Final Submission FCRA concludes that "*We do not believe the Comptroller should allow any premium above the benchmark rate and that 8.75% is a satisfactory and fair return for EWW*". (FCRA Final Submission, para. 60)

EWW responds to the FCRA in its Reply Argument. "*In support of its position that EWW's return on equity should match the British Columbia Utility Commission ("BCUC") low risk utility benchmark return, the FCRA argues that "the size of our utility is irrelevant in this regard and EWW actually has no risk" and goes on to identify five reasons for its argument. EWW disputes these claims and notes that including a risk premium for small sized utilities has been accepted by other regulators in determining a utility's cost of capital. Contrary to the FCRA's suggestion, the BCUC has accepted that the small size of a utility does increase the level of business risk faced by that utility and this higher risk is recognized in a risk premium above the benchmark rate of return.*" (EWW Reply Argument p. 14) *EWW* also states that "*The FCRA's claim that EWW is "guaranteed a profit" is misleading and false. While EWW is allowed to include a fair return on its investment (as determined by the regulator) in its proposed water rates, the actual returns earned by EWW are dependent on EWW's actual performance and could be significantly lower than the forecast allowed returns if actual costs are higher than expected. Given the three year timeframe (2015-2017) over which EWW is required to forecast costs, there is a risk of incurring higher actual costs relative to the amounts forecast at the time of preparing its Application.*" (EWW Reply Argument p. 15)

Deputy Comptroller Determinations

Although EWW argues that EWW is a more risky utility than EWR, the Deputy Comptroller sees many similarities within the two utilities. They are both small utilities with sizeable rate base and significant upcoming investment. Customer additions are low and overall sales are flat. They have the same deferral accounts that significantly diminish earnings volatility. Even though actual consumption and customer growth over

the 2012 to 2014 test period was much lower than approved forecast, EWW is able to recover those costs through rate riders during the 2015 to 2017 test period as discussed in Section 6 above. Both utilities have the same ownership.

With respect to the Deferred Capacity Trust Fund (DCTF), EWW has the opportunity to apply to increase the DCTF amounts payable by developers. EWW stated in its March 29, 2012 application to increase the Contributions in Aid to Future Construction Charge (CIAC) in its Tariff from $6,700 to $8,500 per unit that it would, in conjunction with its next revenue requirements application, update its forecast deposits and withdrawals in the DCTF and apply for future updates to the CIAC charge as required. Order 2327 dated June 26, 2012 approved the application and ordered EWW to fund any short-term shortfalls in the DCTF based on the practice approved by the Comptroller in Order 2221. In this current Revenue Requirements and Rates Application, EWW stated that it will file an application to update the CIAC charge in 2015. EWW also stated that in its IR responses FCRA-EWW-03 and FCRA-EWW-13. In the latter, EWW clarified that the DCTF balance at December 31, 2014 was negative $900,000 ($1.1M receivable less $.2M in the DCTF account). The Utility then stated:
" *EWW has forecast a 54 parcel development will be approved in 2015. The funds from this development have not been received by EWW; therefore the new DCTF does not include any amount for this development. EWW has also forecast that $486K and $1,443K in developer fund projects will be placed into service in 2015 and 2016 respectively with the net DCTF balance to increasing to negative $2.7M by the end of the 2015-2017 test period, based on receiving funding for 54 lots at the current Contribution in Aid of Construction (CIAC) rate of $8,500. EWW will submit a separate application to the Comptroller for adjustments to the CIAC charges*".

In light of the above, EWW can and should apply for a separate application to increase its CIAC Tariff schedule as soon as possible with an updated seven year DCTF schedule beginning in 2015. The expected 54 lot extension should be subject to the expected increased CIAC with funds to be deposited into the DCTF or used to reduce the negative balance in the fund, after Comptroller approval. **EWW is to submit an Application to amend its CIAC Tariff schedule with an updated seven year DCTF schedule on or before June 30, 2015 with a request for an interim, refundable rate effective the date of the Application or effective July 1, 2015.**

The determination of an awarded ROE is very much a matter of judgment and there has not been expert evidence lead in this hearing. **The Deputy Comptroller considers that the ROE premium over the BCUC low risk benchmark energy utility is to be 100 bp.**

EWW's proposals regarding the BCUC AAM and ROE rate changes during the test period are accepted.

8.3 Cost of Debt

EWW reflects new debt issuances from EUI through deemed inter-company loans. The cost of inter-company debt for EWW is determined to be equal to the long-term cost of debt applicable to its parent company, EUI (rated A(low) by DBRS and BBB+ by Standard & Poor's) plus an EWW risk premium (based on a BBB rated company) and a transaction premium. The cost of inter-company debt and use of the BBB rating to determine EWW's risk premium was approved as part of the 2012-2014 Revenue Requirement and Rates Application. (EWW Application, p. 66)

EWW provides an illustrative example of the forecast cost of new debt during the test period and notes that EWW proposes to continue the interest rate deferral account for the 2015-2017 test period to reflect the differences between forecast and actual interest rates.

EWW was asked to calculate the deemed debt cost for a new issue as if it had been issued on Feb. 1, 2015. (CWR-EWW-24.5) That calculation shows a deemed rate of 4.01% which is well below the Application forecast costs of 5.84%, 6.17% and 6.61% during the test period years.

FCRA does not take issue with the proposed deemed new debt costs in its Final Submission.

Deputy Comptroller Determinations

The continuance of the mechanism to calculate the actual deemed debt funding interest rate at the time of issuance is approved. The resultant rates are well below what EWW could likely achieve on a standalone basis and are therefore beneficial to EWW's customers. The continuance of the interest rate deferral account will carry any differences between the forecast new debt issuance cost and the actual deemed issuances for future true up. With this in mind, the Deputy comptroller notes that the Feb. 1, 2015 calculation of a deemed debt issuance is well below the rates forecast by EWW over the test period years that were based on October 2013 bond yields and spreads. **The forecast 20 year debt rate for new funding during the test period years is to be revised to 5.0% throughout the test period and any actual differences will flow to the interest deferral account.**

9.0 WATER TARIFF TERMS AND CONDITIONS

EWW proposes to make two changes to the Terms and Conditions of its Tariff to add clarity for customers and to be consistent with the practices of the Comptroller. EWW proposes to amend Schedule G to add language that clarifies the applicability of the Availability of Service charge. The additional language also allows EWW to impose an interest charge for arrears and clarifies the availability of refunds. Related to this proposed change is the addition of a definition of "Single Family Residential Equivalent" as a new defined term within the Terms and Conditions.

EWW has also revised its Price Schedules to reflect the proposed Water Rates of the Application. (EWW Application, p. 68)

EWW was asked to explain the derivation of the Rent Charge per annum. The utility responded that: "*Rent Charge per annum is calculated on the basis of 70% of the minimum annual charge (15 cubic meters) for residential unit customers. In response to this inquiry, EWW reviewed its calculations for rent charges and noted an error. EWW proposes to adjust these charges in its re-filing ...*" (CWR-EWW-25.1)

Deputy Comptroller Determinations:

The Water Tariff changes will be accepted following a review of the refiling with the corrected charges from CWR-EWW-25.1 and other adjustments to the Tariff rate schedules as a result of these Reasons for Decision and Order.

10.0 ISSUES OUT OF SCOPE IN THIS PROCEEDING

In the Comptroller's staff Information Request No. 1, the Utility was asked to comment on the New Building Canada Fund – Small Community Fund (NBCF-SCF) as follows:

"The NBCF-SCF allows for private utilities (including for-profit) to apply for funding of new infrastructure for drinking water infrastructure. This includes for up to 25% funding (combined from provincial and Federal grants) on for-profit systems. Please comment if EPCOR is planning to seek the support of a resolution from the Regional District and apply for funding through this program for any of the 2015-2017 capital projects."

The Utility responded in CWR-EWW-32 **"***EWW appreciates the information forwarded on the New Building Canada Fund program and will investigate this program as a potential source of funding for EWW's capital projects***".**

Subsequently, it was discovered by Utility Regulation staff that if an application is successful in obtaining program funding, the ownership of the infrastructure and associated assets must be transferred to the sponsoring local government as stated in the circular below from the Ministry of Community Sport and Cultural Development.

BRITISH COLUMBIA

Ministry of Community, Sport and Cultural Development

Local Government Infrastructure and Finance Branch
PO Box 9838 Stn Prov Govt
(4th Floor - 800 Johnson Street)
Victoria BC V8W 9T1

CIRCULAR

Circular No. 14:16
ARCS File #: 195-20

October 24, 2014

To: All Chief Administrative Officers

Re: First Intake New Building Canada Fund – Small Communities Fund

The first intake of the Canada-British Columbia New Building Canada Fund – Small Communities Fund (NBCF-SCF) was announced Thursday, October 16, 2014. Applications are now available online at: www.gov.bc.ca/smallcommunitiesfund

The deadline for submitting project applications online is February 18, 2015. For this intake municipalities may submit only **one** application for funding and regional districts may submit only **one** application per community within their jurisdiction. A community, for the purpose of application to the program, is considered to be a settlement area within a regional district electoral area. A community's boundaries may also coincide with an existing or proposed service area boundary.

Communities with populations less than 100,000 are eligible to apply. Non-governmental organizations may submit applications, but before doing so, must obtain a resolution from the local government council or board in support of their application. Applications from non-governmental organizations, such as improvement districts or water utilities, for water and wastewater projects must be made by the local government in which the project is located. If the application is successful in obtaining program funding, the ownership of the infrastructure and associated assets must be transferred to the sponsoring local government. Projects that have already passed referendum supporting transfer will be given priority over those that have not.

For a complete list of eligible applicants and project categories please see the provincial program guide.

The 2014/15 intake will include all project categories of projects, denoted by the Ministry responsible:

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Accordingly, as long as the Utility remains a nongovernmental organization, it will not be able to obtain any such grant funding.

11.0 REFILING OF APPLICATION

Based on the various determinations made in these Reasons for Decision, EWR will need to refile its forecast 2015-2017 Revenue Requirements and Rates, with supporting schedules, to comply with all the directives of the Deputy Comptroller and other corrections EWW has noted in its information responses.

Deputy Comptroller Determinations

EWW is to refile the Application by June 16, 2015 to comply with all determinations and directives in these Reasons for Decision and Order 2420 as summarized in the "Summary of Deputy Comptroller Determinations" below. The Application, with adjustments as identified in these Reasons for Decision, will be approved following review of the refiling by EWW of the 2015 to 2017 Revenue Requirements and Rates, with supporting schedules, to comply with those directives. Until then, the 2015 rates and Water Tariff No. 3 effective January 1, 2015 are to continue on an interim, refundable basis as approved on January 9, 2015 by Order 2408.

SUMMARY OF DEPUTY COMPTROLLER DETERMINATIONS

1. **Prudence of Well expenditures in 2012-2014: The Deputy Comptroller does not find a level of cost overruns related to the well program that would warrant punitive action, but EWW will be expected to substantially improve its forecasting ability for future capital additions. EWW should rely on advice and training from EWSI that should be provided within the existing Inter-corporate cost allocations of EWSI.**

2. **Well Tie-ins: Recognizing the experience of EPCOR Water Services and the fact that most remaining costs are for known construction activities, the Deputy Comptroller finds that a contingency of 10% should be applied to the Well tie-in projects' budgets for revenue requirement purposes during the 2015-2017 test period. EWW's revised cost apportionment between rate base funding and Developer funding is accepted.**

3. **The Drew Road Pump Station upgrades are accepted. EWW is to adjust the rate base funding for this project to 91% as identified and is to consider a soft start motor in place of one or two of the VFD motors during final project design.**

4. **Dalmation Drive: In an effort to moderate the impact of the proposed rate increases, the Deputy Comptroller believes it reasonable to delay this project. During this test period EWW can monitor the number of failures to verify if the corrosion is consistent along the full length of Dalmation Drive or if the adverse soil conditions are more localized.**

5. **Well decommissioning: In order to meet the BC Ground Water Regulations, both the Imperial and Lornedunn well are to be closed by 2017. As these wells are considered far less complex closures, an approved cost of $25 thousand per well is accepted. The Oceanside well closure is to be deferred until the following RRA, at which point a detailed standalone closure cost is to be provided for closure in 2018.**

6. **Well Rehabilitation: The Deputy Comptroller agrees with EWW that maintaining the integrity of its wells is an important capital maintenance activity. The project is approved.**

7. **System Balancing Storage Control: The enhanced system operation from an automated butterfly valve makes this project desirable to complete during this Test period.**

8. **Church Road Complex Upgrades: The need for this project has been justified.**

9. **Church Road Reservoir Upgrades: Avoiding water contamination is a paramount objective. The project is approved.**

10. **Ongoing Capital Maintenance Programs: The addition of six hydrants per year is approved. EWW is to confirm in its refilling that these costs have not been included into the rate calculation of residential, multi-residential or commercial customers.**
    The meter replacement program is approved provided EWW confirms that it will not result in any meters being replaced before the 20 year life, unless a meter is found to be faulty. In doing such, EWW shall maintain a database of customer meters containing the date of original meter installation, meter replacement date and whether the meter was replaced due to fault or age. This database shall be available for review by the Deputy Comptroller upon request.

11. **2015-2017 Sales Forecast: The Sales forecast is accepted. The Consumption Deferral Account will continue to true up any variations in customer counts and consumption between that forecast and actuals.**

12. **The Leak Detection Program: The Deputy Comptroller is not convinced that this leak detection program should proceed at this time when proposed rate increases are so large.**

13. **Model Validation and Rezoning Study: The Deputy Comptroller considers that the Model Validation and Rezoning Study can be delayed until there is substantial growth to be added to the system or during the next Master Plan update, whichever comes first.**

14. **The Geotechnical Study on the Drew Road reservoirs is approved as requested.**

15. **Taste and Odour Study: The Deputy Comptroller agrees with FCRA that this project should be cancelled and that EWW staff visit the two CAP members to verify their odour and taste concerns.**

16. **The Master Plan update cost is to be removed from the test period operating costs.**

17. **The Deputy Comptroller accepts the EWW 2015 forecast of salaries and wages but has some concern that the $60,000 charge from EWSI for management oversight seems very large for such a small utility. EWW and EWSI should seek to reduce this charge before the next rate period, or provide detailed information on the actual work performed to justify a continuance of that level of management oversight.**

18. **Operations and maintenance costs are to be reduced for the lower telecommunications costs and reduced use of contractors and consultants.**

19. **The inter-corporate service charges are approved.**

20. **The Deputy Comptroller directs that, for revenue requirement purposes, the test period escalator for EWW's salaries and benefits is to remain at 2%/year.**

21. **Power cost escalators should be corrected to 4.5% for 2016 and 3.6% for 2017.**

22. **Cost escalators for Other Operating Costs for the test period are to be set at 1.6% for 2015, 1.9% in 2016 and 2.0% for 2017.**

23. **In these circumstances, the Deputy Comptroller concludes that a very small reduction in the capital/construction cost escalator to 3.5% in each year is appropriate for the test period.**

24. **EWW has adequately explained and detailed its actual costs and variances from approved amounts for 2012-2014 to support recovery of the deferral account balances at December 31, 2014 through rate riders in 2015 to 2017. They are approved. However, EWW should first update its Table 6.1-1 to include actual 2014 amounts with adjustments to be made in its Application refiling. The Deputy Comptroller accepts the continuation of the four deferral accounts (CDA, PTDA, IDA and HCDA) for the 2015 to 2017 test period with carrying costs as proposed.**

25. EWW has adequately justified its request to use AFUDC starting in January 2015 and it is therefore approved.

26. EWW has adequately explained its change in depreciation rates and forecast depreciation expenses for the 2015 to 2017 test period and they are approved after adjustments are made with the required Application refiling for reductions in forecast capital projects.

27. EWW's forecast working capital allowance is reasonable as it bills customers quarterly in arrears. However, EWW is to amend its forecast working capital allowance in its Application refiling for the 2015 to 2017 test period after making required adjustments to Operating Expenses.

28. The proposed capital structure of 40% common equity and 60% deemed intercorporate debt is approved.

29. EWW is to submit an Application to amend its CIAC Tariff schedule with an updated seven year DCTF schedule on or before June 30, 2015 with a request for an interim, refundable rate effective the date of the Application or effective July 1, 2015.

30. The Deputy Comptroller considers that the ROE premium over the BCUC low risk benchmark energy utility is to be 100 bp.

31. EWW's proposals regarding the BCUC AAM and ROE rate changes during the test period are accepted.

32. The continuance of the mechanism to calculate the actual deemed debt funding interest rate at the time of issuance is approved.

33. The forecast 20 year debt rate for new funding during the test period years is to be revised to 5.0% throughout the test period and any actual differences will flow to the interest deferral account.

34. The Water Tariff changes will be accepted following review of the refiling with the corrected charges from CWR-EWW-25.1 and other corrections to be made as stated by EWW in its other IR responses.

35. **EWW is to refile the Application by June 16, 2015 to comply with all determinations and directives in these Reasons for Decision and Order 2420. The Application, with adjustments as identified in these Reasons for Decision, will be approved following review of the refiling by EWW of the 2015 to 2017 Revenue Requirements and Rates, with supporting schedules, to comply with those directives. Until then, the 2015 rates and Water Tariff No. 3 effective January 1, 2015 are to continue on an interim, refundable basis as approved on January 9, 2015 by Order 2408.**

Dated at the City of Victoria, in the Province of British Columbia, this 26th day of May, 2015.

Pieter J. Bekker
Deputy Comptroller of Water Rights