



## **NORTH RED DEER RIVER WATER SERVICES COMMISSION**

### **Regular Meeting**

**June 19, 2017 @ 8:30 AM**

**LACOMBE CITY HALL**

### **AGENDA**

1. Call to Order
2. Adoption of Agenda
3. Adoption of Minutes
  - a. April 10, 2017 - Regular Meeting (*attached*)
4. Presentation
5. Reports
  - a. Operations (*attached*)
  - b. Administrator (*attached*)
    - i) Monthly Report
    - ii) Financial - May 2017
  - c. Chair
6. Correspondence
  - a. Alberta Indigenous Relations – First Nation Participation in Regional Water System
7. Old Business
8. New Business
  - a. Bylaw 3.1 A bylaw to Amend Water Rate Bylaw #3
  - b. SCADA Review RFP – Tender Award
9. In Camera
10. Next Meeting Date: September 25, 2017 (proposed)
11. Adjournment

**NORTH RED DEER RIVER WATER SERVICES COMMISSION**  
**ANNUAL MEETING MINUTES**  
**April 10, 2017**

**In Attendance:** Mayor Steve Christie, City of Lacombe  
Mayor Rick Bonnett, Town of Ponoka  
Mayor Melodie Stol, Town of Blackfalds  
Councillor Ken Wigmore, Lacombe County  
Councillor Mark Matejka, Ponoka County  
Michael Minchin, NRDRWSC Administrator  
Jennifer Peterson, Administrator Assistant

**Others Present:** Albert Flooman, CAO Town of Ponoka  
Myron Thompson, CAO Town of Blackfalds  
Tim Timmons, Manager of Corporate Services, Lacombe County  
Chris Huston, Utilities Manager, City of Lacombe  
Jordan Thompson, Engineering Manager, City of Lacombe

**Guests:** Dan Luymes, BDO Canada LLP  
Ryan Wachter, BDO Canada LLP

**1. Call to Order:**

*Chair Christie called the meeting to order at 9:01 am.*

**2. Adoption of the Agenda:**

*"Under Adoption of Minutes, correct the date to read - November 28, 2016"*

*MOVED by Mayor Bonnett that the agenda for April 10, 2017, be adopted as amended.*

*CARRIED*

**3. Adoption of the Minutes:**

*MOVED by Mayor Stol that the minutes for November 28, 2016, be adopted as presented.*

*CARRIED*

**4. Presentation**

**A. 2016 Audit Financial Statement**

Mr. Wachter of BDO *Canada* LLP, reviewed the Auditor's Report of the 2016 Audited Financial Statements.

In summary:

- Reported a “clean audit”
- Noted the accumulated surplus has been allocated to Capital and Rate Stabilization reserves.
- Water sales were less than budgeted.
- Expenses were less than budgeted.

*MOVED by Councillor Wigmore to accept the Audited Statements as presented.*

*CARRIED*

*At 9:09am Dan Luymes and Ryan Wachter of BDO Canada, left the meeting.*

**B. 2017 Appointment of Auditors**

Mr. Minchin shared with the Commission that BDO prices have not changed for the past two years and that they were able to meet the demands of moving up the presentation date by two weeks. The Commission is entering into the fourth year of a 5 year contact. He recommended that the Commission continues with the service from BDO.

*MOVED by Mayor Stol to appoint BDO Canada LLP as the 2017 Auditors for the North Red Deer River Water Services Commission.*

*CARRIED*

## **5. Reports**

Mr. Huston discussed the recent operation activities.

In summary:

- The Alberta One-Call locate requests are on target.
- Operations responded to call outs regarding communication lost at Wolf Creek, Red Deer Treatment Plant and the main vault.
- Computer and software have been ordered to replace the monitoring computer at the Red Deer Treatment Plant.

Mr. Thompson discussed the recent engineering activities.

In summary:

- Due to the wastewater line construction, a number of crossing agreements were needed to be entered into with the North Red Deer Regional Wastewater Services Commission.
- The Wastewater Commission has asked for temporary workspace within the water's easement. It has been granted.
- The Town of Blackfalds is relocating an intersection and will be relocating a portion of a lateral waterline in that location. All costs will be covered by the Town of Blackfalds.

- A Request for Proposal (RFP) will be issued for a SCADA Assessment and Recommendations. Included in the RFP will be to ask for the best solution of communication between Operations', Red Deer Treatment Plants and the vaults.

### Administrator Report

Mr. Minchin presented the Administrator's report.

In summary:

- The Commission has received approval from the Minister of Municipal Affairs for water sales to the City of Red Deer for five years. The Agreement has been fully executed. Waiting to commence water sales to Central Park of Red Deer.
- Lateral line within the Town of Blackfalds will be relocated. Blackfalds will be bearing the full cost.
- The Province has provided a checklist that the Commission will need to complete with regards to and request for sale of the line to Red Deer. A letter has been sent to Red Deer on what they will need to complete. The Commission will need to return a portion of the grant back to the Province on the part of line that is sold to Red Deer. The amount to be returned has not yet been finalized.

Mr. Minchin presented the financial report.

In summary:

- There is no true-up for 2016. The variance was only 3%. True-up is not paid until a 10% variance is met.
- Water is tracking slower than last year. The summer months are normally where the bulk of the water is sold.

### Chairman's Report

The Chair has nothing to report at this time.

*MOVED by Councillor Matejka to accept as information.*

*CARRIED*

## **6. Correspondence/Information**

### City of Red Deer letter – 2016 True-up per the Water Supply Agreement

A copy of the letter was provided to the Commission as information.

Minister of Municipal Affairs – Ministerial Order MSL 003/17

A copy of the Order was shared with the Commission.

*MOVED by Councillor Wigmore to accept as information.*

*CARRIED*

## **7. Old Business:**

## **8. New Business:**

### Allocation of 2016 Surplus

For the calendar year 2016, there was a surplus of \$557,969. The Commission received a True-up of \$348,357 for 2015 which is included in the surplus amount. Mr. Minchin recommended that the surplus and true-up be transferred to reserves as outlined.

*MOVED by Councillor Wigmore that the Board approve the following transfers to reserve:*

- 1. That an amount equal to the annual amortization for 2016 be allocated to the Capital Reserves; and*
- 2. That an amount equal to \$37,590 be transferred to the Operating Reserve; and*
- 3. That \$520,379 be transferred to the Rate Stabilization Reserve*

*Further, that the Board direct Administration to update the 5 year Operating Projections to incorporate the additional true up revenue.*

*CARRIED*

### 2017-2021 Budget Projections

Mr. Minchin presented the final draft of the 2017 – 2021 Budget Projections update.

*MOVED by Councillor Matejka to accept as information.*

*CARRIED*

## **9. IN Camera**

## **10. Next Meeting:**

Monday, June 19, 2017 at 8:30 am, City of Lacombe Council Chambers.

**11. Adjournment:**

*MOVED by Mayor Bonnett to adjourn this Meeting at 9:35 am.*

*CARRIED*

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Chairperson

---

Administrator

DRAFT

# M E M O R A N D U M



## North Red Deer River Water Services Commission

5432 56<sup>th</sup> Avenue  
Lacombe, Alberta T4L 1E9

Phone: (403) 782-6666  
Direct Line: (403) 782-1268  
Fax: (403) 782-5655

jthompson@lacombe.ca

June 19<sup>th</sup>, 2017

Attn: NRDRWSC

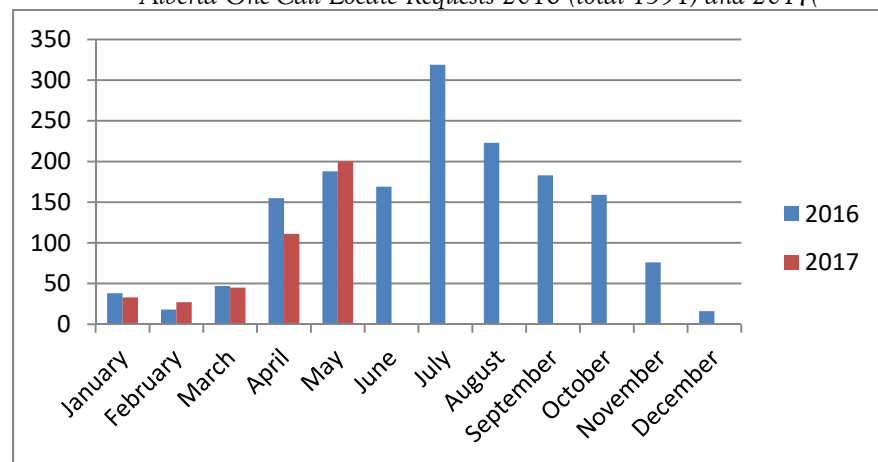
**Re: Operational Report since April 10<sup>th</sup>, 2017.**

Since the last update provided to members of the Commission, the City of Lacombe has dealt with the following:

### GENERAL INFORMATION

- Alberta One-Call Locate Requests:
  - April - 111 locates
  - May - 200 locates

*Alberta One-Call Locate Requests 2016 (total 1591) and 2017(*



### Repair response charges:

- May 3 - Loss of signal at 39<sup>th</sup> Ave, operators found UPS dead, changed batteries and reset modem. Restored communication.
- May 24 - Loss of signal at the main vault, operator reset modem and restored communication.
- Various calls from Urban Dirt Works and Red Deer regarding Central Park, to date the reservoir is not active. For the past few months they have been busy flushing the line to the reservoir. The Commissions water meter is installed at the site and is operational.

### Call-Out:

- May 24 - Red Deer Treatment Plant called operator at 4:35pm - all sites have lost communication - big storm has rolled through central Alberta and knocked out most of the sites. Once storm has passed, see which sites start coming back online. All sites except Broadway and PH'B' are back online, reset modems at each site to restore communication.

### General Information:

- Completed the SCADA Assessment RFP (Attached) and recommend Commission to award Stantec the contract to proceed.
- NRDRWSC Operator proposal to purchase line locating equipment that would be able to locate tracer wire and ID marker balls for \$7,485 (attached information).

If you have any questions or comments regarding the operations described above please don't hesitate to call or email me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jordan Thompson', with a stylized, sweeping flourish extending to the right.

Jordan Thompson, CET, PMP  
Engineering Services Manager





**North Red Deer  
Regional Water  
Services  
Commission**

5432 56<sup>th</sup> Avenue  
Lacombe, Alberta  
T4L 1E9

**Memorandum**

**TO:** Commission Board Members

**FROM:** Michael Minchin, Administrator

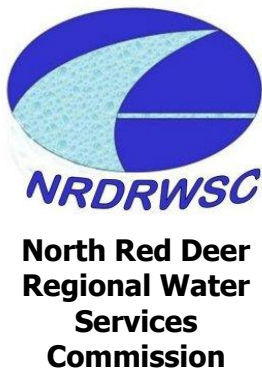
**DATE:** June 15, 2017

**RE:** Administrator's Report – 2<sup>nd</sup> Qtr 2017

REF: 47/117  
(2017)

The following is a summary of items Administration has been working on since the Board's last meeting:

1. The Commission began delivering water to the City of Red Deer for the Central Park subdivision toward the end of April. Administration will be seeking the Board's approval of a 2017 water rate for the City later on in the agenda.
2. Administration received direction from the Province on the information necessary for the department to consider a request to sell a portion of the water line.
3. Administration is still trying to arrange a meeting with the City of Red Deer to determine the impact the sale of the line would have on rates charged to the Commission.
4. Financial statements and Financial Information Returns were filed with the Province.
5. The Commission completed the necessary crossing and proximity agreements for the North Red Deer Regional Wastewater Commission. Staff continue to supervise construction of the waste water line particularly the work located near the line east of Lacombe.



5432 56<sup>th</sup> Avenue  
Lacombe, Alberta T4L 1E9

## Memorandum

**TO:** Commission Board Members  
**FROM:** Michael Minchin, Administrator  
**DATE:** June 15, 2017

**RE:** May 2017 Variance Report

REF: 13/860  
2017

Attached is the 2017 variance report as of May 31<sup>st</sup> for the regional water commission.

Water sales are right on budget so far this year with peak summer months just beginning. Red Deer began accepting delivery of water in April but billing has not yet taken place.

Expenses remain in line with expectations. No extraordinary expenses have been incurred. As expected the largest purchase to date is the purchase of water from the City of Red Deer.

# CITY OF LACOMBE

## GL Department Report



GL5330

Page : 1

Date : Jun 15, 2017

Time : 10:50 pm

Year : 2017

Period : 5

Budget : FINAL BUDGET

Account No.	Description	Current	Year To Date	Budget	Variance	% Used
<b>REGIONAL WATER REPORTING</b>						
<b>6 REGIONAL WATER COMMISSION</b>						
<b>1 REVENUES</b>						
<b>47 Regional Water Revenues</b>						
06-1-47-35110	Water Sales - City of Lacombe	-240,624	-1,032,732	-2,569,249	-1,536,517	40
06-1-47-35120	Water Sales - Town of Ponoka	-131,954	-563,902	-1,438,011	-874,110	39
06-1-47-35130	Water Sales - Town of Blackfalds	-154,274	-623,439	-1,553,427	-929,988	40
06-1-47-35140	Water Sales - Ponoka County	-1,626	-9,951	-18,981	-9,029	52
06-1-47-35150	Water Sales - City of Red Deer	0	0	-37,400	-37,400	
06-1-47-42200	Line Crossing Fee	-250	-1,000	-1,000	0	100
06-1-47-55100	Interest Revenue	-4,882	-23,170	-43,511	-20,341	53
06-1-47-55500	Rebates & Dividends	0	0	-30	-30	
06-1-47-85140	Lacombe County Contribution	0	0	-70,195	-70,195	
06-1-47-85150	Ponoka County Contribution	0	0	-70,195	-70,195	
06-1-47-92100	Transfer from Reserves	0	0	-158,000	-158,000	
<b>47 Regional Water Revenues</b>		<b>-533,610</b>	<b>-2,254,194</b>	<b>-5,959,999</b>	<b>-3,705,805</b>	<b>38</b>
<b>1 REVENUES</b>		<b>-533,610</b>	<b>-2,254,194</b>	<b>-5,959,999</b>	<b>-3,705,805</b>	<b>38</b>
<b>2 EXPENSES</b>						
<b>47 Regional Water Operating Expenditures</b>						
06-2-47-11110	Board Wages-City of Lacombe	0	350	1,400	1,050	25
06-2-47-11120	Board Wages-Town of Ponoka	0	150	600	450	25
06-2-47-11130	Board Wages-Town of Blackfalds	0	150	600	450	25
06-2-47-11140	Board Wages-Lacombe County	0	0	600	600	
06-2-47-11150	Board Wages-Ponoka County	0	150	600	450	25
06-2-47-21100	Board Travel Expenses	11	11	0	-11	
06-2-47-21120	Board Travel -Town of Ponoka	0	30	250	220	12
06-2-47-21130	Board Travel-Town of Blackfalds	0	15	250	235	6
06-2-47-21140	Board Travel-Lacombe County	0	0	250	250	
06-2-47-21150	Board Travel-Ponoka County	0	30	250	220	12
06-2-47-21400	Membership Fees	0	114	300	186	38
06-2-47-21500	Postage & Freight	0	0	50	50	
06-2-47-21700	Telephone - Office	25	126	400	274	31
06-2-47-21701	Telephone - Operations	670	3,345	8,072	4,727	41
06-2-47-23000	Management Fees	4,644	23,220	55,728	32,508	42
06-2-47-23100	Accounting and Auditor Fees	0	471	8,000	7,529	6
06-2-47-23200	Legal Fees	0	0	500	500	
06-2-47-23900	Other Professional Services	624	2,660	46,800	44,140	6
06-2-47-25300	Equipment Repair & Maintenance	1,215	2,246	7,500	5,254	30
06-2-47-25301	SCADA Maintenance	722	2,888	8,300	5,412	35
06-2-47-27400	Insurance & Bond Premiums	0	3,254	3,889	635	84
06-2-47-34200	Administration	866	4,330	10,392	6,062	42
06-2-47-35100	Purchase of Water	359,591	1,472,820	3,863,404	2,390,584	38
06-2-47-35200	Operations	10,576	43,123	121,300	78,177	36
06-2-47-51000	Miscellaneous Expenses	0	200	250	50	80
06-2-47-51100	Meeting Supplies	0	0	50	50	
06-2-47-51400	Office Supplies	0	32	150	118	21
06-2-47-52400	General Materials & Supplies	143	573	500	-73	115
06-2-47-54400	Utilities-Electricity	243	1,194	3,500	2,306	34
06-2-47-56400	Valves	0	0	5,000	5,000	
06-2-47-81400	Bank Charges & Interest	0	5	25	20	21
06-2-47-83100	Debenture Interest	0	32,313	601,086	568,773	5
06-2-47-83200	Debenture Principal	0	34,449	673,815	639,366	5

CITY OF LACOMBE  
GL Department Report



GL5330

Page : 2

Date : Jun 15, 2017

Time : 10:50 pm

Year : 2017

Period : 5

Budget : FINAL BUDGET

Account No.	Description	Current	Year To Date	Budget	Variance	% Used
<b>REGIONAL WATER REPORTING</b>						
06-2-47-99000	Amortization	0	0	465,610	465,610	
	<b>47 Regional Water Operating Ex</b>	<b>379,329</b>	<b>1,628,249</b>	<b>5,889,421</b>	<b>4,261,172</b>	<b>28</b>
	<b>2 EXPENSES</b>	<b>379,329</b>	<b>1,628,249</b>	<b>5,889,421</b>	<b>4,261,172</b>	<b>28</b>
	<b>Surplus/(Deficit)</b>	<b>-154,281</b>	<b>-625,945</b>	<b>-70,579</b>	<b>555,366</b>	<b>887</b>
	<b>6 REGIONAL WATER COMMISSION</b>	<b>-154,281</b>	<b>-625,945</b>	<b>-70,579</b>	<b>555,366</b>	<b>887</b>
<b>REGIONAL WATER REPORTING Total</b>		<b>-154,281</b>	<b>-625,945</b>	<b>-70,579</b>	<b>555,366</b>	<b>887</b>

May 24, 2017

Mr. Steve Christie  
Chairperson  
North Red Deer River Water Services Commission  
5432 - 56 Avenue  
Lacombe, Alberta  
T4L 1E9

Dear Mr. Christie:

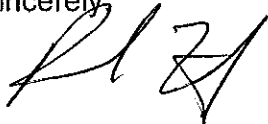
In Budget 2017, the Government of Alberta announced its commitment to working with First Nations, the federal government, municipalities, and water commissions to ensure First Nation communities have reliable access to clean and safe drinking water. As part of this work, I am pleased to inform you that the province is committing \$100 million over four years to support First Nations access to regional water systems.

This funding will be used to expand regional water system infrastructure to reserve boundaries and link in to federally-funded water distribution infrastructure on reserve. The initiative is voluntary and opportunity driven. Eligible projects will be funded based on community need, location of regional water systems in proximity to First Nation communities and federal investment in corresponding infrastructure on reserve. To learn more about this initiative, I have attached a one page summary of the program for your information.

This initiative represents an important step towards Alberta's commitment to ensure First Nation communities have reliable access to clean and safe drinking water. The Ministry of Indigenous Relations will serve as the lead for this initiative, while the Ministry of Transportation will act as the project manager, ensuring the scope of the action agreed to through engagement is operationalized.

If you have any questions regarding the regional system tie-in initiative, please contact my department's project lead, Darlene Bouvier at 780-427-0363 or [darlene.bouvier@gov.ab.ca](mailto:darlene.bouvier@gov.ab.ca).

Sincerely,



Richard Feehan  
Minister of Indigenous Relations

Attachment

.../2

# First Nations Participation in Regional Water Systems

**\$100 million in new funding over four years to support integration of regional drinking water systems with federally-supported water systems on reserve.**

## **OVERVIEW**

The Government of Alberta will collaborate with First Nations and the Government of Canada to increase First Nations participation in regional water systems; where practical and feasible.

By increasing First Nations access to regional water systems, the Government of Alberta will help to ensure that First Nation communities in Alberta have reliable access to clean and safe drinking water.

## **WHAT PROJECTS ARE ELIGIBLE?**

Where a First Nation has agreed to tie-in to a regional water system, Alberta will fund the construction of water pipeline infrastructure between a regional system hub and a reserve border.

## **HOW ARE PROJECTS SELECTED?**

The initiative is opportunity-driven, rather than application based.

The Government of Alberta will work with First Nations, the Government of Canada and water commissions to identify and support opportunities for First Nations to access regional water systems.

Eligible projects will be funded based on the following considerations:

1. **Community need**
2. **Location of regional water systems** in proximity to First Nation communities
3. **Federal investment** in corresponding infrastructure on reserve

*For more information contact  
Darlene Bouvier  
780-427-0363  
[darlene.bouvier@gov.ab.ca](mailto:darlene.bouvier@gov.ab.ca)*





**North Red Deer  
Regional Water  
Services  
Commission**

5432 56<sup>th</sup> Avenue  
Lacombe, Alberta T4L 1E9

## Memorandum

**TO:** Commission Board Members

**FROM:** Michael Minchin, Administrator

**DATE:** June 16, 2017

**RE:** Commission Bylaw #3.1 – Water Rate

REF: 47/200  
(17)

### Purpose

To present for the Board's consideration Bylaw #3.1, a bylaw to amend the Commission's Water Rate Bylaw #3.

### Background

In April of this year, the City of Red Deer began to receive delivery of water from the Commission for its Central Park Subdivision. This delivery of services necessitates a change to the Commission's Water Rate Bylaw to establish a rate for the City of Red Deer. As a non-member customer, the rate established for the City differs from the member rate in that it is based on standards established by the Alberta Utilities Commission and American Water and Wastewater Association. The member rate is based on a cash model.

### Issue Analysis

Section of 602.07(1)(b) of the Act states that a Commission shall pass a bylaw governing the fees to be charged by the commission for services provided to its customers or any class of customers.

The Commission's Bylaw #1 establishes the administration of the Commission, including how the annual rate is to be established. Bylaw #1 does not actually establish the rate itself. Bylaw 3 established the rate for members beginning in 2016.

Bylaw 3.1 would amend the original Bylaw 3 to incorporate a separate rate for non-member customers. Bylaw 3.1 also changes the name of Bylaw 3 to simply refer to the Bylaw as the Commission Water Rate Bylaw.

Under Bylaw 3.1, the rate to be charged by the Commission to the City of Red Deer would be \$1.899 per cubic meter which is slightly below the Commission's rate for members. The difference is due to the methodology used in the calculation of rates.

A copy of the rate calculation is included in this presentation.

Unlike a municipal council, the Board may pass a bylaw in one meeting by simple majority vote.

#### Financial Implications

Based on the 2017 budget, water sales from the City for Red Deer would be approximately \$40,000. Water volumes to date suggest that the final numbers for the year could be higher.

#### Attachment

1. Bylaw 3.1 – A Bylaw to Amend Commission Bylaw 3
2. Working Copy of Updated Commission Bylaw 3
3. 2017 Rate Calculation for Non-Member Customers

#### Recommendation

Administration is recommending that the Commission give all three readings to Bylaw 3.1 at its June 19, 2017 meeting.



# **NORTH RED DEER RIVER WATER SERVICES COMMISSION**

## **BYLAW 3.1**

### **BEING A BY-LAW OF THE BOARD OF DIRECTORS OF THE NORTH RED DEER RIVER WATER SERVICES COMMISSION TO AMEND COMMISSION BYLAW 3, THE 2016 WATER RATE BYLAW**

**WHEREAS** the North Red Deer Water Services Commission has been established by the Lieutenant Governor in Council under Alberta Regulation 105/2004 made pursuant to Part 15.1 of the Municipal Government Act, RSA 2000, c. M-26; and

**WHEREAS** the Board of Directors of the North Red Deer Water Services Commission has been duly appointed pursuant to section 602.04(3)(b) of the said Act and the Board of Directors now wishes to make a Bylaw pursuant to section 602.07(1)(b) of the said Act establishing the per unit rate to be charged for the sale of water to its member municipalities and customers;

**WHEREAS** the Board of Directors of the North Red Deer Water Services Commission approved Commission Bylaw 3 in 2016 to establish an annual utility rate and the Board wishes to amend this Bylaw to incorporate a separate annual utility rate for non-member customers:

**NOW THEREFORE** the Board enacts the following:

1. Commission Bylaw 3 is hereby amended in the following manner:

a. Section 2 is deleted in its entirety and replaced with the following:

***“2. This bylaw may be referred to as the “Commission Water Rate Bylaw.”***

b. Section 3.1 is added immediately after clause:

***“3.1 The rate to be charged for the sale of potable water to customers by the Commission is hereby set at \$1.899 per cubic meter of measured water effective for water delivered to customers in 2017 and beyond.”***

c. Section 4 is amended by adding the words ***“and Customer”*** immediately after the words ***“Municipal Members”*** and ***“each member.”***

d. Section 5 is amended by adding the words ***“and customers”*** immediately after the words ***“members”***.

e. Section 6 is deleted in its entirety and replaced with the following:

**“6. This Bylaw shall come into force on final adoption by the Commission Board.”**

Read a first time      day of

Read a second time this      day of

Read a third time and adopted this day of

\_\_\_\_\_  
CHAIR

\_\_\_\_\_  
MANAGER

# **NORTH RED DEER RIVER WATER SERVICES COMMISSION**

## **BYLAW 3** **CONSOLIDATED VERSION**

### **BEING A BY-LAW OF THE BOARD OF DIRECTORS OF THE NORTH RED DEER RIVER WATER SERVICES COMMISSION TO ESTABLISH THE ANNUAL WATER CHARGE FOR MEMBER MUNICIPALITIES AND CUSTOMERS**

**WHEREAS** the North Red Deer Water Services Commission has been established by the Lieutenant Governor in Council under Alberta Regulation 105/2004 made pursuant to Part 15.1 of the Municipal Government Act, RSA 2000, c. M-26; and

**WHEREAS** the Board of Directors of the North Red Deer Water Services Commission has been duly appointed pursuant to section 602.04(3)(b) of the said Act and the Board of Directors now wishes to make a Bylaw pursuant to section 602.07(1)(b) of the said Act establishing the per unit rate to be charged for the sale of water to its member municipalities and customers;

**NOW THEREFORE** the Board enacts the following:

**1 Definitions**

- a. "Board" means the Board of Directors of the Commission;
- b. "Commission" means the North Red Deer River Water Services Commission;
- c. "Customer" means a person, corporation or municipality who the Commission provide water services to and who is not a Member; and
- d. "Member(s)" means those members set out in the Regulation

~~2 This bylaw may be referred to as the "2016 Water Rate Bylaw."~~

**2. This bylaw may be referred to as the "Commission Water Rate Bylaw."**

**3 The rate to be charged for the sale of potable water to members by the Commission is hereby set at \$2.03 per cubic meter of measured water.**

**3.1 The rate to be charged for the sale of potable water to customers by the Commission is hereby set at \$1.899 per cubic meter of measured water effective for water delivered to customers in 2017 and beyond.**

- 4 Municipal Member **and Customer** consumption shall be measured on a monthly basis by the Commission and the Commission shall invoice each member **and customer** for consumption times the rate established by this Bylaw.
- 5 Payment by the members **and customers** shall be due within 30 days from date of the invoice provided by the Commission.
- ~~6 This bylaw shall come into force on January 1, 2016.~~
- 6. This Bylaw shall come into force on final adoption by the Commission Board.**

Read a first time this 7 day of December, 2015

Read a second time this 7 day of December, 2015

Read a third time and adopted this 7 day of December, 2015

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CHAIR

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MANAGER

# North Red Deer River Water Services Commission



FINAL  
City of Red Deer Water Rate Report  
for 2017

Prepared by Michael Minchin  
June 16, 2017

## 2017 Customer Water Pricing Model

	<u>Volume (m3)</u>	<u>2017 System Operating Rev Req.</u>	<u>2017 City of Red Deer Rate</u>	<u>2017 City of Red Deer Rev Req.</u>
<b>1. Water Volume Requirements</b>				
a) Regional Water (Annual Sales)	2,748,605			
b) City of Red Deer (Projected Sales)	<u>20,000</u>			
c) Gross Volume Sales	2,768,605			
<b>2. Net Cash Operating Expenses (Schedule "A")</b>				
a) Administration		84,284	0.030	608.86
b) Water Treatment (Commission)		3,863,404	-	-
c) Water Treatment (City) - <b>Additional</b>		27,909	1.395	27,908.67
d) Water Transmission		<u>201,222</u>	<u>0.073</u>	<u>1,453.60</u>
d) Subtotal		4,176,819	1.499	29,971.12
<b>3. Non-Cash Expenses (Schedule "B")</b>				
a) Amortization - Capital Assets		465,610	0.168	3,363.50
b) Amortization - No Cost Capital Contribution		<u>(231,891)</u>	<u>(0.084)</u>	<u>(1,675.14)</u>
c) Subtotal		233,720	0.084	1,688.36
<b>4. Return (Schedule "B")</b>				
a) Return -Capital Assets		<u>920,588</u>	<u>0.333</u>	<u>6,650.19</u>
b) Subtotal		920,588	0.333	6,650.19
<b>5. Other Revenue (Schedule "B")</b>				
a) Interest and Other Non-member revenue		<u>(44,541)</u>	<u>(0.016)</u>	<u>(321.76)</u>
b) Subtotal		(44,541)	(0.016)	(321.76)
<b>6. Subtotal Revenue Requirements</b>			<u>1.899</u>	<u>37,987.92</u>

## Schedule "A" Cash Non Cash Operating Expenses

ACCOUNT CODE	GL DESCRIPTION	2007 ACTUAL	2008 ACTUAL	2009 ACTUAL	2010 ACTUAL	2011 ACTUAL	2012 ACTUAL	2013 ACTUAL	2014 ACTUAL	2015 ACTUAL	2016 ACTUAL	2017 BUDGET
<b>ADMINISTRATION</b>												
06-2-47-11100	Wages	57,996	-	-	-	-	-	-	-	-	-	-
06-2-47-11110	Board Wages-City of Lacombe	2,775	2,050	1,300	1,850	2,100	1,750	1,750	1,400	1,400	1,750	1,400
06-2-47-11120	Board Wages-Town of Ponoka	1,000	775	750	900	900	750	750	600	600	750	600
06-2-47-11130	Board Wages-Town of Blackfalds	875	750	600	900	900	750	750	600	600	750	600
06-2-47-11140	Board Wages-Lacombe County	625	750	750	750	600	-	-	-	-	-	600
06-2-47-11150	Board Wages-Ponoka County	250	500	600	750	300	450	300	600	300	750	600
06-2-47-13000	Payroll Benefits	-	362	341	109	-	-	-	-	-	-	-
06-2-47-21100	Board Travel	140	-	-	-	-	-	-	-	-	-	-
06-2-47-21110	Board Travel-City of Lacombe	-	-	-	-	-	-	-	-	-	-	-
06-2-47-21120	Board Travel -Town of Ponoka	179	215	156	188	193	162	126	111	109	143	250
06-2-47-21130	Board Travel-Town of Blackfalds	98	86	58	87	75	45	74	59	59	74	250
06-2-47-21140	Board Travel-Lacombe County	245	302	250	252	69	-	-	-	-	-	250
06-2-47-21150	Board Travel-Ponoka County	104	214	209	226	109	164	59	59	30	89	250
06-2-47-21170	Travel - Administration	3,359	2,820	2,765	1,430	-	-	-	205	100	11	-
06-2-47-21400	Membership Fees	90	90	90	90	93	195	195	195	196	377	300
06-2-47-21500	Postage & Freight	27	131	-	-	-	44	-	50	-	50	50
06-2-47-21600	Staff & Volunteer Appreciation	-	-	148	700	339	200	435	200	-	-	-
06-2-47-21700	Telephone - Office	399	401	266	180	-	253	301	301	301	307	400
06-2-47-22100	Advertising & Promotion	1,534	713	845	945	-	-	-	-	-	-	-
06-2-47-23000	Management Fees	31,490	33,450	36,288	39,551	42,260	44,730	47,440	50,286	52,316	54,595	55,728
06-2-47-23100	Accounting and Auditor Fees	4,325	16,400	8,500	8,500	8,625	8,750	10,605	8,052	8,031	8,243	8,000
06-2-47-23200	Legal Fees	1,808	-	100	-	400	125	-	-	-	300	500
06-2-47-26200	Building Rent	7,200	1,200	1,200	600	-	-	-	-	-	-	-
06-2-47-27400	Insurance & Bond Premiums	4,204	4,621	4,796	4,376	4,350	4,331	4,480	4,386	4,157	3,903	3,889
06-2-47-34200	Administration	-	6,000	6,000	6,000	6,163	6,469	8,003	9,382	9,760	10,183	10,392
06-2-47-51100	Meeting Supplies	-	-	-	14	58	97	50	18	25	15	50
06-2-47-51400	Office Supplies	304	683	440	195	-	-	20	-	-	120	150
06-2-47-51500	Computer Services	4,536	3,577	3,694	2,250	-	-	-	-	-	-	-
06-2-47-84100	Bank Charges & Interest	21	46	-	-	21	79	-	-	20	20	25
	Subtotal	123,584	76,136	70,146	70,843	67,555	69,344	75,338	76,504	78,004	82,430	84,284
<b>TREATMENT</b>												
06-2-47-35100	Purchase of Water	1,675,303	2,279,540	2,100,706	2,369,297	2,710,912	2,907,659	3,166,327	3,369,086	3,597,885	3,510,318	3,863,404
	Subtotal	1,675,303	2,279,540	2,100,706	2,369,297	2,710,912	2,907,659	3,166,327	3,369,086	3,597,885	3,510,318	3,863,404
<b>TRANSMISSION</b>												
06-2-47-21180	Travel - Operations	-	-	594	-	-	-	-	-	-	-	-
06-2-47-21701	Telephone - Operations	9,171	9,692	9,889	8,870	8,327	8,399	8,487	8,397	8,447	8,080	8,072
06-2-47-23900	Other Professional Services	7,389	2,666	3,889	179,456	6,468	6,489	12,445	49,820	41,712	10,100	46,800
06-2-47-25300	Equipment Repair & Maintenance	6,236	7,319	1,335	1,230	12,542	5,374	7,724	38,809	17,497	861	7,500
06-2-47-25301	SCADA Maintenance	-	6,419	13,878	15,729	10,764	10,764	10,764	10,764	11,481	9,014	8,300

## Schedule "A" Cash Non Cash Operating Expenses

ACCOUNT CODE	GL DESCRIPTION	2007 ACTUAL	2008 ACTUAL	2009 ACTUAL	2010 ACTUAL	2011 ACTUAL	2012 ACTUAL	2013 ACTUAL	2014 ACTUAL	2015 ACTUAL	2016 ACTUAL	2017 BUDGET
06-2-47-26300	Equipment Rentals	-	-	-	160	398	-	-	-	-	-	-
06-2-47-35200	Operations	9,911	90,873	89,917	91,001	82,664	83,546	93,139	111,125	111,314	101,860	121,300
06-2-47-51000	Miscellaneous Expenses	-	-	-	-	-	-	364	322	264	-	250
06-2-47-51200	Safety Gear	180	190	222	-	-	-	-	-	-	-	-
06-2-47-52400	General Materials & Supplies	205	887	10	119	537	253	186	385	490	295	500
06-2-47-54400	Utilities-Electricity	4,898	3,945	4,375	2,944	3,975	4,246	4,096	3,829	3,525	2,732	3,500
06-2-47-56400	Valves	-	-	-	3,853	342	(2,851)	5,717	6,028	12,701	2,877	5,000
	Subtotal	<u>37,990</u>	<u>121,991</u>	<u>124,109</u>	<u>303,362</u>	<u>126,017</u>	<u>116,220</u>	<u>142,922</u>	<u>229,479</u>	<u>207,431</u>	<u>135,819</u>	<u>201,222</u>
<b>NON OPERATING AND NON CASH EXPENSES</b>												
06-2-47-76100	Transfer to Operating Res	208,568	-	-	-	207,949	-	-	-	-	-	-
06-2-47-76200	Transfer to Capital Reserve	-	-	-	-	207,949	-	-	-	-	-	-
06-2-47-83100	Debenture Interest	841,912	822,423	801,789	780,436	757,651	729,322	714,143	683,614	656,651	628,458	601,086
06-2-47-83200	Debenture Principal	431,399	451,072	471,641	493,149	515,637	539,151	563,737	589,444	616,323	644,428	673,815
06-2-47-92700	Uncollectable Trade Accounts	9,335	-	-	-	-	-	-	-	-	-	-
06-2-47-99000	Amortization	-	-	462,350	465,610	465,610	465,610	465,610	465,610	465,610	465,610	465,610
	Subtotal	<u>1,491,214</u>	<u>1,273,495</u>	<u>1,735,780</u>	<u>1,739,195</u>	<u>2,154,796</u>	<u>1,734,083</u>	<u>1,743,490</u>	<u>1,738,668</u>	<u>1,738,584</u>	<u>1,738,496</u>	<u>1,740,511</u>
	Total Eligible Operating Costs	1,836,877	2,477,667	2,294,961	2,743,502	2,904,484	3,093,223	3,384,587	3,675,069	3,883,320	3,728,567	4,148,910
	Non-Eligible Costs	<u>1,491,214</u>	<u>1,273,495</u>	<u>1,735,780</u>	<u>1,739,195</u>	<u>2,154,796</u>	<u>1,734,083</u>	<u>1,743,490</u>	<u>1,738,668</u>	<u>1,738,584</u>	<u>1,738,496</u>	<u>1,740,511</u>
	Total Budget Costs	3,328,091	3,751,162	4,030,741	4,482,697	5,059,280	4,827,306	5,128,077	5,413,737	5,621,904	5,467,064	5,889,421



[illegible]

## Schedule "C" - Regional Water Rate Comparison (Excludes City of Red Deer)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL	BUDGET
<b>1. Current Rates</b>											
a) Water Sales (\$)	3,154,131	3,737,495	4,191,224	4,022,842	4,448,028	4,890,880	5,142,826	5,522,603	5,760,181	5,485,677	5,617,068
b) Volume Sold (excl water loss)	<u>2,426,254</u>	<u>2,661,263</u>	<u>2,508,111</u>	<u>2,366,377</u>	<u>2,381,393</u>	<u>2,460,881</u>	<u>2,539,074</u>	<u>2,720,494</u>	<u>2,837,528</u>	<u>2,702,304</u>	<u>2,768,605</u>
c) Rate per unit	<u>1.300</u>	<u>1.404</u>	<u>1.671</u>	<u>1.700</u>	<u>1.868</u>	<u>1.987</u>	<u>2.025</u>	<u>2.030</u>	<u>2.030</u>	<u>2.030</u>	<u>2.029</u>
<b>2. Cost Recovery (Utility Model) - Member Pricing</b>											
a) Water Sales (\$)	2,811,072	3,437,093	3,268,849	3,725,434	3,883,989	4,065,155	4,339,611	4,215,153	4,484,669	4,335,323	5,118,287
b) Volume Sold (excl water loss)	<u>2,426,254</u>	<u>2,661,263</u>	<u>2,508,111</u>	<u>2,366,377</u>	<u>2,381,393</u>	<u>2,460,881</u>	<u>2,539,074</u>	<u>2,720,494</u>	<u>2,837,528</u>	<u>2,702,304</u>	<u>2,768,605</u>
c) Rate per unit	<u>1.159</u>	<u>1.292</u>	<u>1.303</u>	<u>1.574</u>	<u>1.631</u>	<u>1.652</u>	<u>1.709</u>	<u>1.549</u>	<u>1.580</u>	<u>1.604</u>	<u>1.849</u>

## Appendix "A1"- Capital Asset Amortization

	Land	Right of Way	WIP Transmission	Transmission Lines	WIP Distribution	Blackfalds Distribution Line	Ponoka County Distriution Line	WIP Pumps & Structures	Pumps & Lifts Stations	Structures	Other	Total
Useful Life				75		75	75		45	45		
Amortization	0.00%	0.00%	0.00%	1.33%	0.00%	1.33%	1.33%	0.00%	2.22%	2.22%		
2003												
Opening	-	-	-	-	-	-	-	-	-	-	-	-
Additions	-	-	-	-	-	-	-	-	-	-	-	-
Retirements												-
Closing	-	-	-	-	-	-	-	-	-	-	-	-
2004												
Opening	-	-	-	-	-	-	-	-	-	-	-	-
Additions	-	-	-	-	-	-	-	-	-	-	-	-
Retirements												-
Closing	-	-	-	-	-	-	-	-	-	-	-	-
2005												
Opening	-	-	-	-	-	-	-	-	-	-	-	-
Additions	-	-	-	-	-	-	-	-	-	-	-	-
Retirements												-
Closing	-	-	-	-	-	-	-	-	-	-	-	-
2006												
Opening	-	-	-	-	-	-	-	-	-	-	-	-
Additions	-	-	-	226,217.97	-	-	-	-	2,398.93	-	-	228,616.90
Retirements												-
Closing	-	-	-	226,217.97	-	-	-	-	2,398.93	-	-	228,616.90
2007												
Opening	-	-	-	226,217.97	-	-	-	-	2,398.93	-	-	228,616.90
Additions	-	-	-	453,363.99	-	-	-	-	4,797.87	-	-	458,161.86
Retirements												-
Closing	-	-	-	679,581.96	-	-	-	-	7,196.80	-	-	686,778.76
2008												
Opening	-	-	-	679,581.96	-	-	-	-	7,196.80	-	-	686,778.76
Additions	-	-	-	454,292.05	-	-	-	-	4,797.87	-	-	459,089.92
Retirements												-
Closing	-	-	-	1,133,874.01	-	-	-	-	11,994.67	-	-	1,145,868.68
2009												
Opening	-	-	-	1,133,874.01	-	-	-	-	11,994.67	-	-	1,145,868.68
Additions	-	-	-	454,292.05	-	784.09	2,475.99	-	4,797.87	-	-	462,350.00
Retirements												-
Closing	-	-	-	1,588,166.06	-	784.09	2,475.99	-	16,792.54	-	-	1,608,218.68
2010												
Opening	-	-	-	1,588,166.06	-	784.09	2,475.99	-	16,792.54	-	-	1,608,218.68
Additions	-	-	-	454,292.05	-	1,568.18	4,951.98	-	4,797.87	-	-	465,610.08
Retirements												-
Closing	-	-	-	2,042,458.11	-	2,352.28	7,427.97	-	21,590.41	-	-	2,073,828.77
2011												
Opening	-	-	-	2,042,458.11	-	2,352.28	7,427.97	-	21,590.41	-	-	2,073,828.77
Additions	-	-	-	454,292.05	-	1,568.18	4,951.98	-	4,797.87	-	-	465,610.08
Retirements												-
Closing	-	-	-	2,496,750.16	-	3,920.46	12,379.95	-	26,388.28	-	-	2,539,438.85
2012												
Opening	-	-	-	2,496,750.16	-	3,920.46	12,379.95	-	26,388.28	-	-	2,539,438.85
Additions	-	-	-	454,292.05	-	1,568.18	4,951.98	-	4,797.87	-	-	465,610.08
Retirements												-
Closing	-	-	-	2,951,042.21	-	5,488.65	17,331.93	-	31,186.15	-	-	3,005,048.94
2013												
Opening	-	-	-	2,951,042.21	-	5,488.65	17,331.93	-	31,186.15	-	-	3,005,048.94
Additions	-	-	-	454,292.05	-	1,568.18	4,951.98	-	4,797.87	-	-	465,610.08
Retirements												-
Closing	-	-	-	3,405,334.27	-	7,056.83	22,283.91	-	35,984.02	-	-	3,470,659.02

## Appendix "A1"- Capital Asset Amortization

	Land	Right of Way	WIP Transmission	Transmission Lines	WIP Distribution	Blackfalds Distribution Line	Ponoka County Distriution Line	WIP Pumps & Structures	Pumps & Lifts Stations	Structures	Other	Total
Useful Life Amortization	0.00%	0.00%	0.00%	75 1.33%	0.00%	75 1.33%	75 1.33%	0.00%	45 2.22%	45 2.22%		
2014 Opening	-	-	-	3,405,334.27	-	7,056.83	22,283.91	-	35,984.02	-	-	3,470,659.02
Additions	-	-	-	454,292.05	-	1,568.18	4,951.98	-	4,797.87	-	-	465,610.08
Retirements												-
Closing	-	-	-	3,859,626.32	-	8,625.02	27,235.89	-	40,781.89	-	-	3,936,269.10
2015 Opening	-	-	-	3,859,626.32	-	8,625.02	27,235.89	-	40,781.89	-	-	3,936,269.10
Additions	-	-	-	454,292.05	-	1,568.18	4,951.98	-	4,797.87	-	-	465,610.08
Retirements												-
Closing	-	-	-	4,313,918.37	-	10,193.20	32,187.86	-	45,579.75	-	-	4,401,879.19
2016 Opening	-	-	-	4,313,918.37	-	10,193.20	32,187.86	-	45,579.75	-	-	4,401,879.19
Additions	-	-	-	454,292.05	-	1,568.18	4,951.98	-	4,797.87	-	-	465,610.08
Retirements												-
Closing	-	-	-	4,768,210.42	-	11,761.39	37,139.84	-	50,377.62	-	-	4,867,489.27
2017 Opening	-	-	-	4,768,210.42	-	11,761.39	37,139.84	-	50,377.62	-	-	4,867,489.27
Additions	-	-	-	454,292.05	-	1,568.18	4,951.98	-	4,797.87	-	-	465,610.08
Retirements												-
Closing	-	-	-	5,222,502.47	-	13,329.57	42,091.82	-	55,175.49	-	-	5,333,099.35

## Appendix "A2" - Capital Assets

	Land	Right of Way	WIP Transmission	Transmission Lines	WIP Distribution	Blackfalds Distribution Line	Ponoka County Distriution Line	WIP Pumps & Structures	Pumps & Lifts Stations	Structures	Other	Total
Useful Life				75		75	75		45	45		
Amortization	0.00%	0.00%	0.00%	1.33%	0.00%	1.33%	1.33%	0.00%	2.22%	2.22%		
2003												
Opening	-	-	-	-	-	-	-	-	-	-	-	-
Additions		38,759.77	193,360.73									232,120.50
Retirements												-
Closing	-	38,759.77	193,360.73	-	-	-	-	-	-	-	-	232,120.50
2004												
Opening	-	38,759.77	193,360.73	-	-	-	-	-	-	-	-	232,120.50
Additions		433,755.59	346,492.57					145,000.00				925,248.16
Retirements												-
Closing	-	472,515.36	539,853.30	-	-	-	-	145,000.00	-	-	-	1,157,368.66
2005												
Opening	-	472,515.36	539,853.30	-	-	-	-	145,000.00	-	-	-	1,157,368.66
Additions		1,010,359.31	31,838,004.13					70,904.10				32,919,267.54
Retirements												-
Closing	-	1,482,874.67	32,377,857.43	-	-	-	-	215,904.10	-	-	-	34,076,636.20
2006												
Opening	-	1,482,874.67	32,377,857.43	-	-	-	-	215,904.10	-	-	-	34,076,636.20
Additions		294,449.00		33,932,694.99					215,904.10			34,443,048.09
Retirements			32,377,857.43					215,904.10				32,593,761.53
Closing	-	1,777,323.67	-	33,932,694.99	-	-	-	-	215,904.10	-	-	35,925,922.76
2007												
Opening	-	1,777,323.67	-	33,932,694.99	-	-	-	-	215,904.10	-	-	35,925,922.76
Additions		44,368.76		139,208.84	19,970.00							203,547.60
Retirements												-
Closing	-	1,821,692.43	-	34,071,903.83	19,970.00	-	-	-	215,904.10	-	-	36,129,470.36
2008												
Opening	-	1,821,692.43	-	34,071,903.83	19,970.00	-	-	-	215,904.10	-	-	36,129,470.36
Additions					372,044.98							372,044.98
Retirements												-
Closing	-	1,821,692.43	-	34,071,903.83	392,014.98	-	-	-	215,904.10	-	-	36,501,515.34
2009												
Opening	-	1,821,692.43	-	34,071,903.83	392,014.98	-	-	-	215,904.10	-	-	36,501,515.34
Additions						117,613.85	371,398.44					489,012.29
Retirements					392,014.98							392,014.98
Closing	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65
2010												
Opening	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65
Additions												-
Retirements												-
Closing	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65
2011												
Opening	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65
Additions												-
Retirements												-
Closing	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65
2012												
Opening	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65
Additions												-
Retirements												-
Closing	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65
2013												
Opening	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65
Additions												-
Retirements												-
Closing	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65

## Appendix "A2" - Capital Assets

	Land	Right of Way	WIP Transmission	Transmission Lines	WIP Distribution	Blackfalds Distribution Line	Ponoka County Distriution Line	WIP Pumps & Structures	Pumps & Lifts Stations	Structures	Other	Total
Useful Life				75		75	75		45	45		
Amortization	0.00%	0.00%	0.00%	1.33%	0.00%	1.33%	1.33%	0.00%	2.22%	2.22%		
2014 Opening	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65
Additions												-
Retirements												-
Closing	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65
2015 Opening	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65
Additions												-
Retirements												-
Closing	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65
2016 Opening	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65
Additions												-
Retirements												-
Closing	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65
2017 Opening	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65
Additions												-
Retirements												-
Closing	-	1,821,692.43	-	34,071,903.83	-	117,613.85	371,398.44	-	215,904.10	-	-	36,598,512.65

## Appendix "B1" - No Cost Capital Amortization

	Provincial Grants	Federal Grants	Customer Contributions	Member Contributions	Other	Total
Useful Life	75	75	75	75	75	
Amortization	1.33%	1.33%	1.33%	1.33%	1.33%	
2003						
Opening	-	-	-	-	-	-
Additions						-
Retirements						-
Closing	-	-	-	-	-	-
2004						
Opening	-	-	-	-	-	-
Additions						-
Retirements						-
Closing	-	-	-	-	-	-
2005						
Opening	-	-	-	-	-	-
Additions						-
Retirements						-
Closing	-	-	-	-	-	-
2006						
Opening	-	-	-	-	-	-
Additions	105,631.60	-	-	-	-	105,631.60
Retirements						-
Closing	105,631.60	-	-	-	-	105,631.60
2007						
Opening	105,631.60	-	-	-	-	105,631.60
Additions	218,713.55	-	-	-	-	218,713.55
Retirements						-
Closing	324,345.15	-	-	-	-	324,345.15
2008						
Opening	324,345.15	-	-	-	-	324,345.15
Additions	229,027.23	-	-	-	-	229,027.23
Retirements						-
Closing	553,372.38	-	-	-	-	553,372.38
2009						
Opening	553,372.38	-	-	-	-	553,372.38
Additions	231,890.54	-	-	-	-	231,890.54
Retirements						-
Closing	785,262.92	-	-	-	-	785,262.92
2010						
Opening	785,262.92	-	-	-	-	785,262.92
Additions	231,890.54	-	-	-	-	231,890.54
Retirements						-
Closing	1,017,153.46	-	-	-	-	1,017,153.46

## Appendix "B1" - No Cost Capital Amortization

	Provincial Grants	Federal Grants	Customer Contributions	Member Contributions	Other	Total
Useful Life	75	75	75	75	75	
Amortization	1.33%	1.33%	1.33%	1.33%	1.33%	
2011 Opening	1,017,153.46	-	-	-	-	1,017,153.46
Additions	231,890.54	-	-	-	-	231,890.54
Retirements						-
Closing	1,249,044.00	-	-	-	-	1,249,044.00
2012 Opening	1,249,044.00	-	-	-	-	1,249,044.00
Additions	231,890.54	-	-	-	-	231,890.54
Retirements						-
Closing	1,480,934.54	-	-	-	-	1,480,934.54
2013 Opening	1,480,934.54	-	-	-	-	1,480,934.54
Additions	231,890.54	-	-	-	-	231,890.54
Retirements						-
Closing	1,712,825.08	-	-	-	-	1,712,825.08
2014 Opening	1,712,825.08	-	-	-	-	1,712,825.08
Additions	231,890.54	-	-	-	-	231,890.54
Retirements						-
Closing	1,944,715.62	-	-	-	-	1,944,715.62
2015 Opening	1,944,715.62	-	-	-	-	1,944,715.62
Additions	231,890.54	-	-	-	-	231,890.54
Retirements						-
Closing	2,176,606.16	-	-	-	-	2,176,606.16
2016 Opening	2,176,606.16	-	-	-	-	2,176,606.16
Additions	231,890.54	-	-	-	-	231,890.54
Retirements						-
Closing	2,408,496.70	-	-	-	-	2,408,496.70
2017 Opening	2,408,496.70	-	-	-	-	2,408,496.70
Additions	231,890.54	-	-	-	-	231,890.54
Retirements						-
Closing	2,640,387.24	-	-	-	-	2,640,387.24



## Appendix "B2" - No Cost Capital

	Provincial Grants	Federal Grants	Customer Contributions	Member Contributions	Other	Total
Useful Life	75	75	75	75	75	
Amortization	1.33%	1.33%	1.33%	1.33%	1.33%	
2003						
Opening	-	-	-	-	-	-
Additions	4,070,935.00					4,070,935.00
Retirements						-
Closing	4,070,935.00	-	-	-	-	4,070,935.00
2004 Opening	4,070,935.00	-	-	-	-	4,070,935.00
Additions	73,804.27					73,804.27
Retirements						-
Closing	4,144,739.27	-	-	-	-	4,144,739.27
2005 Opening	4,144,739.27	-	-	-	-	4,144,739.27
Additions	6,200,000.00					6,200,000.00
Retirements						-
Closing	10,344,739.27	-	-	-	-	10,344,739.27
2006 Opening	10,344,739.27	-	-	-	-	10,344,739.27
Additions	5,500,000.00					5,500,000.00
Retirements						-
Closing	15,844,739.27	-	-	-	-	15,844,739.27
2007 Opening	15,844,739.27	-	-	-	-	15,844,739.27
Additions	1,117,554.53					1,117,554.53
Retirements						-
Closing	16,962,293.80	-	-	-	-	16,962,293.80
2008 Opening	16,962,293.80	-	-	-	-	16,962,293.80
Additions	429,496.71					429,496.71
Retirements						-
Closing	17,391,790.51	-	-	-	-	17,391,790.51
2009 Opening	17,391,790.51	-	-	-	-	17,391,790.51
Additions						-
Retirements						-
Closing	17,391,790.51	-	-	-	-	17,391,790.51
2010 Opening	17,391,790.51	-	-	-	-	17,391,790.51
Additions						-
Retirements						-
Closing	17,391,790.51	-	-	-	-	17,391,790.51

## Appendix "B2" - No Cost Capital

	Provincial Grants	Federal Grants	Customer Contributions	Member Contributions	Other	Total
Useful Life	75	75	75	75	75	
Amortization	1.33%	1.33%	1.33%	1.33%	1.33%	
2011 Opening	17,391,790.51	-	-	-	-	17,391,790.51
Additions						-
Retirements						-
Closing	17,391,790.51	-	-	-	-	17,391,790.51
2012 Opening	17,391,790.51	-	-	-	-	17,391,790.51
Additions						-
Retirements						-
Closing	17,391,790.51	-	-	-	-	17,391,790.51
2013 Opening	17,391,790.51	-	-	-	-	17,391,790.51
Additions						-
Retirements						-
Closing	17,391,790.51	-	-	-	-	17,391,790.51
2014 Opening	17,391,790.51	-	-	-	-	17,391,790.51
Additions						-
Retirements						-
Closing	17,391,790.51	-	-	-	-	17,391,790.51
2015 Opening	17,391,790.51	-	-	-	-	17,391,790.51
Additions						-
Retirements						-
Closing	17,391,790.51	-	-	-	-	17,391,790.51
2016 Opening	17,391,790.51	-	-	-	-	17,391,790.51
Additions						-
Retirements						-
Closing	17,391,790.51	-	-	-	-	17,391,790.51
2017 Opening	17,391,790.51	-	-	-	-	17,391,790.51
Additions						-
Retirements						-
Closing	17,391,790.51	-	-	-	-	17,391,790.51

## Appendix "C1" - Capital Return on Investment

	Year	Mid Year Capitalization	Capital Ratio Including NCC	Capital Ratio Excluding NCC	Rate Base	Cost Rate	Return
1) Long Term Debt (Schedule "C4")	2007	18,788,567	52.48%	95.81%	18,788,567	4.51%	847,216
Equity ( AUC Approved Rate)		<u>822,513</u>	<u>2.30%</u>	<u>4.19%</u>	<u>822,513</u>	<u>9.00%</u>	<u>74,026</u>
Subtotal		19,611,080	54.78%	100.00%	19,611,080	4.70%	921,242
Less No Cost Capital (Schedule "C3")		<u>16,188,528</u>	<u>45.22%</u>		<u>16,188,528</u>	<u>0.00%</u>	<u>-</u>
Total Capital (Schedule "C2")		35,799,608	100.00%		35,799,608	2.57%	921,242
2) Long Term Debt (Schedule "C4")	2008	18,356,061	51.40%	96.76%	18,356,061	4.51%	827,714
Equity ( AUC Approved Rate)		<u>614,633</u>	<u>1.72%</u>	<u>3.24%</u>	<u>614,633</u>	<u>9.00%</u>	<u>55,317</u>
Subtotal		18,970,694	53.13%	100.00%	18,970,694	4.65%	883,031
Less No Cost Capital (Schedule "C3")		<u>16,738,183</u>	<u>46.87%</u>		<u>16,738,183</u>	<u>0.00%</u>	<u>-</u>
Total Capital (Schedule "C2")		35,708,878	100.00%		35,708,878	2.47%	883,031
3) Long Term Debt (Schedule "C4")	2009	17,903,832	50.49%	95.55%	17,903,832	4.51%	807,322
Equity ( AUC Approved Rate)		<u>833,535</u>	<u>2.35%</u>	<u>4.45%</u>	<u>833,535</u>	<u>9.00%</u>	<u>75,018</u>
Subtotal		18,737,368	52.84%	100.00%	18,737,368	4.71%	882,340
Less No Cost Capital (Schedule "C3")		<u>16,722,473</u>	<u>47.16%</u>		<u>16,722,473</u>	<u>0.00%</u>	<u>-</u>
Total Capital (Schedule "C2")		35,459,840	100.00%		35,459,840	2.49%	882,340
4) Long Term Debt (Schedule "C4")	2010	17,430,982	49.66%	93.67%	17,430,982	4.51%	786,000
Equity ( AUC Approved Rate)		<u>1,178,862</u>	<u>3.36%</u>	<u>6.33%</u>	<u>1,178,862</u>	<u>9.00%</u>	<u>106,098</u>
Subtotal		18,609,844	53.02%	100.00%	18,609,844	4.79%	892,098
Less No Cost Capital (Schedule "C3")		<u>16,490,582</u>	<u>46.98%</u>		<u>16,490,582</u>	<u>0.00%</u>	<u>-</u>
Total Capital (Schedule "C2")		35,100,427	100.00%		35,100,427	2.54%	892,098
5) Long Term Debt (Schedule "C4")	2011	16,936,570	48.87%	92.07%	16,936,570	4.51%	763,706
Equity ( AUC Approved Rate)		<u>1,459,678</u>	<u>4.21%</u>	<u>7.93%</u>	<u>1,459,678</u>	<u>8.75%</u>	<u>127,722</u>
Subtotal		18,396,248	53.08%	100.00%	18,396,248	4.85%	891,428
Less No Cost Capital (Schedule "C3")		<u>16,258,692</u>	<u>46.92%</u>		<u>16,258,692</u>	<u>0.00%</u>	<u>-</u>
Total Capital (Schedule "C2")		34,654,939	100.00%		34,654,939	2.57%	891,428
6) Long Term Debt (Schedule "C4")	2012	16,419,612	47.99%	90.29%	16,419,612	4.51%	740,396
Equity ( AUC Approved Rate)		<u>1,766,508</u>	<u>5.16%</u>	<u>9.71%</u>	<u>1,766,508</u>	<u>8.75%</u>	<u>154,569</u>
Subtotal		18,186,120	53.16%	100.00%	18,186,120	4.92%	894,965
Less No Cost Capital (Schedule "C3")		<u>16,026,801</u>	<u>46.84%</u>		<u>16,026,801</u>	<u>0.00%</u>	<u>-</u>
Total Capital (Schedule "C2")		34,212,922	100.00%		34,212,922	2.62%	894,965
7) Long Term Debt (Schedule "C4")	2013	15,879,081	47.00%	88.27%	15,879,081	4.51%	716,022
Equity ( AUC Approved Rate)		<u>2,109,740</u>	<u>6.24%</u>	<u>11.73%</u>	<u>2,109,740</u>	<u>8.30%</u>	<u>175,108</u>
Subtotal		17,988,821	53.25%	100.00%	17,988,821	4.95%	891,131
Less No Cost Capital (Schedule "C3")		<u>15,794,911</u>	<u>46.75%</u>		<u>15,794,911</u>	<u>0.00%</u>	<u>-</u>
Total Capital (Schedule "C2")		33,783,732	100.00%		33,783,732	2.64%	891,131
8) Long Term Debt (Schedule "C4")	2014	15,313,902	45.91%	86.07%	15,313,902	4.51%	690,537
Equity ( AUC Approved Rate)		<u>2,477,510</u>	<u>7.43%</u>	<u>13.93%</u>	<u>2,477,510</u>	<u>8.30%</u>	<u>205,633</u>
Subtotal		17,791,412	53.34%	100.00%	17,791,412	5.04%	896,171
Less No Cost Capital (Schedule "C3")		<u>15,563,020</u>	<u>46.66%</u>		<u>15,563,020</u>	<u>0.00%</u>	<u>-</u>
Total Capital (Schedule "C2")		33,354,432	100.00%		33,354,432	2.69%	896,171

## Appendix "C1" - Capital Return on Investment

	Year	Mid Year Capitalization	Capital Ratio Including NCC	Capital Ratio Excluding NCC	Rate Base	Cost Rate	Return
9) Long Term Debt (Schedule "C4")	2015	14,722,950	44.73%	83.73%	14,722,950	4.51%	663,890
Equity ( AUC Approved Rate)		<u>2,860,774</u>	<u>8.69%</u>	<u>16.27%</u>	<u>2,860,774</u>	<u>8.30%</u>	<u>237,444</u>
Subtotal		17,583,724	53.42%	100.00%	17,583,724	5.13%	901,334
Less No Cost Capital (Schedule "C3")		<u>15,331,130</u>	<u>46.58%</u>		<u>15,331,130</u>	<u>0.00%</u>	<u>-</u>
Total Capital (Schedule "C2")		32,914,854	100.00%		32,914,854	2.74%	901,334
10) Long Term Debt (Schedule "C4")	2016	14,105,051	43.49%	81.39%	14,105,051	4.51%	636,028
Equity ( AUC Approved Rate)		<u>3,225,609</u>	<u>9.95%</u>	<u>18.61%</u>	<u>3,225,609</u>	<u>8.30%</u>	<u>267,726</u>
Subtotal		17,330,660	53.44%	100.00%	17,330,660	5.21%	903,753
Less No Cost Capital (Schedule "C3")		<u>15,099,239</u>	<u>46.56%</u>		<u>15,099,239</u>	<u>0.00%</u>	<u>-</u>
Total Capital (Schedule "C2")		32,429,899	100.00%		32,429,899	2.79%	903,753
11) Long Term Debt (Schedule "C4")	2017	13,458,976	42.04%	78.48%	13,458,976	4.51%	606,895
Equity ( AUC Approved Rate)		<u>3,690,508</u>	<u>11.53%</u>	<u>21.52%</u>	<u>3,690,508</u>	<u>8.50%</u>	<u>313,693</u>
Subtotal		17,149,484	53.56%	100.00%	17,149,484	5.37%	920,588
Less No Cost Capital (Schedule "C3")		<u>14,867,349</u>	<u>46.44%</u>		<u>14,867,349</u>	<u>0.00%</u>	<u>-</u>
Total Capital (Schedule "C2")		32,016,832	100.00%		32,016,832	2.88%	920,588

## Appendix "C2" - Asset Rate Base

	2007 ACTUAL	2008 ACTUAL	2009 ACTUAL	2010 ACTUAL	2011 ACTUAL	2012 ACTUAL	2013 ACTUAL	2014 ACTUAL	2015 ACTUAL	2016 ACTUAL	2017 BUDGET
<b>1. Gross Assets in Service (Schedule "A2")</b>											
a) Opening Balance	35,925,923	36,129,470	36,501,515	36,598,513	36,598,513	36,598,513	36,598,513	36,598,513	36,598,513	36,598,513	36,598,513
b) Additions	203,548	372,045	489,012	-	-	-	-	-	-	-	-
c) Retirements	-	-	392,015	-	-	-	-	-	-	-	-
d) Closing Balance	36,129,470	36,501,515	36,598,513	36,598,513	36,598,513	36,598,513	36,598,513	36,598,513	36,598,513	36,598,513	36,598,513
<b>2. Accumulated Amortization (Schedule "A1")</b>											
a) Opening Balance	228,617	686,779	1,145,869	1,608,219	2,073,829	2,539,439	3,005,049	3,470,659	3,936,269	4,401,879	4,867,489
b) Additions	458,162	459,090	462,350	465,610	465,610	465,610	465,610	465,610	465,610	465,610	465,610
c) Retirements	-	-	-	-	-	-	-	-	-	-	-
d) Closing Balance	686,779	1,145,869	1,608,219	2,073,829	2,539,439	3,005,049	3,470,659	3,936,269	4,401,879	4,867,489	5,333,099
<b>3. Net Assets in Services</b>											
a) Opening Balance	35,697,306	35,442,692	35,355,647	34,990,294	34,524,684	34,059,074	33,593,464	33,127,854	32,662,244	32,196,633	31,731,023
b) Closing Balance	<u>35,442,692</u>	<u>35,355,647</u>	<u>34,990,294</u>	<u>34,524,684</u>	<u>34,059,074</u>	<u>33,593,464</u>	<u>33,127,854</u>	<u>32,662,244</u>	<u>32,196,633</u>	<u>31,731,023</u>	<u>31,265,413</u>
c) Total	<u>71,139,997</u>	<u>70,798,338</u>	<u>70,345,941</u>	<u>69,514,978</u>	<u>68,583,758</u>	<u>67,652,538</u>	<u>66,721,317</u>	<u>65,790,097</u>	<u>64,858,877</u>	<u>63,927,657</u>	<u>62,996,437</u>
d) Mid Year Balance	35,569,999	35,399,169	35,172,970	34,757,489	34,291,879	33,826,269	33,360,659	32,895,049	32,429,439	31,963,828	31,498,218
<b>4. Necessary Working Capital</b>											
a) Cash Expenses (Eligible) - Schedule "A"	1,836,877	2,477,667	2,294,961	2,743,502	2,904,484	3,093,223	3,384,587	3,675,069	3,883,320	3,728,567	4,148,910
b) 45 day Working Capital (1/8 of expenses)	229,610	309,708	286,870	342,938	363,061	386,653	423,073	459,384	485,415	466,071	518,614
c) Prepaid Expenses	-	-	-	-	-	-	-	-	-	-	-
d) O&M Inventory	-	-	-	-	-	-	-	-	-	-	-
e) Necessary Working Capital (b+c+d)	<u>229,610</u>	<u>309,708</u>	<u>286,870</u>	<u>342,938</u>	<u>363,061</u>	<u>386,653</u>	<u>423,073</u>	<u>459,384</u>	<u>485,415</u>	<u>466,071</u>	<u>518,614</u>
<b>5. Utility Rate Based @ Mid Year</b>	<u>35,799,608</u>	<u>35,708,878</u>	<u>35,459,840</u>	<u>35,100,427</u>	<u>34,654,939</u>	<u>34,212,922</u>	<u>33,783,732</u>	<u>33,354,432</u>	<u>32,914,854</u>	<u>32,429,899</u>	<u>32,016,832</u>

## Appendix "C3" - No Cost Capital Rate Base

	2007 ACTUAL	2008 ACTUAL	2009 ACTUAL	2010 ACTUAL	2011 ACTUAL	2012 ACTUAL	2013 ACTUAL	2014 ACTUAL	2015 ACTUAL	2016 PROJECTED	2017 BUDGET
<b>1. No-Cost Capital Total (Schedule "B2")</b>											
a) Opening Balance	15,844,739	16,962,294	17,391,791	17,391,791	17,391,791	17,391,791	17,391,791	17,391,791	17,391,791	17,391,791	17,391,791
b) Additions	1,117,555	429,497	-	-	-	-	-	-	-	-	-
c) Retirements	-	-	-	-	-	-	-	-	-	-	-
d) Closing Balance	16,962,294	17,391,791	17,391,791	17,391,791	17,391,791	17,391,791	17,391,791	17,391,791	17,391,791	17,391,791	17,391,791
<b>2. Accumulated Amortization (Schedule "B1")</b>											
a) Opening Balance	105,632	324,345	553,372	785,263	1,017,153	1,249,044	1,480,935	1,712,825	1,944,716	2,176,606	2,408,497
b) Additions	218,714	229,027	231,891	231,891	231,891	231,891	231,891	231,891	231,891	231,891	231,891
c) Retirements	-	-	-	-	-	-	-	-	-	-	-
d) Closing Balance	324,345	553,372	785,263	1,017,153	1,249,044	1,480,935	1,712,825	1,944,716	2,176,606	2,408,497	2,640,387
<b>3. Net No-Cost Capital</b>											
a) Opening Balance	15,739,108	16,637,949	16,838,418	16,606,528	16,374,637	16,142,747	15,910,856	15,678,965	15,447,075	15,215,184	14,983,294
b) Closing Balance	<u>16,637,949</u>	<u>16,838,418</u>	<u>16,606,528</u>	<u>16,374,637</u>	<u>16,142,747</u>	<u>15,910,856</u>	<u>15,678,965</u>	<u>15,447,075</u>	<u>15,215,184</u>	<u>14,983,294</u>	<u>14,751,403</u>
c) Total	<u>32,377,056</u>	<u>33,476,367</u>	<u>33,444,946</u>	<u>32,981,165</u>	<u>32,517,384</u>	<u>32,053,602</u>	<u>31,589,821</u>	<u>31,126,040</u>	<u>30,662,259</u>	<u>30,198,478</u>	<u>29,734,697</u>
d) Mid Year Balance	16,188,528	16,738,183	16,722,473	16,490,582	16,258,692	16,026,801	15,794,911	15,563,020	15,331,130	15,099,239	14,867,349
<b>4. Net No Cost Capital at Mid Year</b>	<u>16,188,528</u>	<u>16,738,183</u>	<u>16,722,473</u>	<u>16,490,582</u>	<u>16,258,692</u>	<u>16,026,801</u>	<u>15,794,911</u>	<u>15,563,020</u>	<u>15,331,130</u>	<u>15,099,239</u>	<u>14,867,349</u>

[illegible]

## Appendix "D1" - Debenture 1

## Debenture #1

LOAN DATA		TABLE DATA	
Loan amount:	\$ 2,000,000.00	Table starts at date:	
Annual interest rate:	4.460%	or at payment number:	1
Term in years:	25		
Payments per year:	2		
First payment due:	15-Mar-06		

## PERIODIC PAYMENT

Entered payment:	The table uses the calculated periodic payment amount
Calculated payment:	\$66,762.18 unless you enter a value for "Entered payment".

## CALCULATIONS

Use payment of:	\$66,762.18	Beginning balance at payment 1:	2,000,000.00
1st payment in table:	1	Cumulative interest prior to payment 1:	90,194.58
Table			

No.	Payment Date	Beginning Balance	Interest	Principal	Total Payment	Ending Balance	Cumulative Interest
	15-Mar-06	2,000,000.00	-	-		2,000,000.00	-
	15-Sep-06	2,000,000.00	90,194.58	-	90,194.58	2,000,000.00	90,194.58
1	15-Mar-07	2,000,000.00	44,600.00	22,162.18	66,762.18	1,977,837.82	134,794.58
2	15-Sep-07	1,977,837.82	44,105.78	22,656.40	66,762.18	1,955,181.42	178,900.36
3	15-Mar-08	1,955,181.42	43,600.55	23,161.63	66,762.18	1,932,019.79	222,500.91
4	15-Sep-08	1,932,019.79	43,084.04	23,678.14	66,762.18	1,908,341.65	265,584.95
5	15-Mar-09	1,908,341.65	42,556.02	24,206.16	66,762.18	1,884,135.49	308,140.97
6	15-Sep-09	1,884,135.49	42,016.22	24,745.96	66,762.18	1,859,389.53	350,157.19
7	15-Mar-10	1,859,389.53	41,464.39	25,297.79	66,762.18	1,834,091.74	391,621.58
8	15-Sep-10	1,834,091.74	40,900.25	25,861.93	66,762.18	1,808,229.81	432,521.83
9	15-Mar-11	1,808,229.81	40,323.52	26,438.66	66,762.18	1,781,791.15	472,845.35
10	15-Sep-11	1,781,791.15	39,733.94	27,028.24	66,762.18	1,754,762.91	512,579.29
11	15-Mar-12	1,754,762.91	39,131.21	27,630.97	66,762.18	1,727,131.94	551,710.50
12	15-Sep-12	1,727,131.94	38,515.04	28,247.14	66,762.18	1,698,884.80	590,225.54
13	15-Mar-13	1,698,884.80	37,885.13	28,877.05	66,762.18	1,670,007.75	628,110.67
14	15-Sep-13	1,670,007.75	37,241.17	29,521.01	66,762.18	1,640,486.74	665,351.84
15	15-Mar-14	1,640,486.74	36,582.85	30,179.33	66,762.18	1,610,307.41	701,934.69
16	15-Sep-14	1,610,307.41	35,909.86	30,852.32	66,762.18	1,579,455.09	737,844.55
17	15-Mar-15	1,579,455.09	35,221.85	31,540.33	66,762.18	1,547,914.76	773,066.40
18	15-Sep-15	1,547,914.76	34,518.50	32,243.68	66,762.18	1,515,671.08	807,584.90
19	15-Mar-16	1,515,671.08	33,799.47	32,962.71	66,762.18	1,482,708.37	841,384.37
20	15-Sep-16	1,482,708.37	33,064.40	33,697.78	66,762.18	1,449,010.59	874,448.77
21	15-Mar-17	1,449,010.59	32,312.94	34,449.24	66,762.18	1,414,561.35	906,761.71
22	15-Sep-17	1,414,561.35	31,544.72	35,217.46	66,762.18	1,379,343.89	938,306.43
23	15-Mar-18	1,379,343.89	30,759.37	36,002.81	66,762.18	1,343,341.08	969,065.80
24	15-Sep-18	1,343,341.08	29,956.51	36,805.67	66,762.18	1,306,535.41	999,022.31
25	15-Mar-19	1,306,535.41	29,135.74	37,626.44	66,762.18	1,268,908.97	1,028,158.05
26	15-Sep-19	1,268,908.97	28,296.67	38,465.51	66,762.18	1,230,443.46	1,056,454.72
27	15-Mar-20	1,230,443.46	27,438.89	39,323.29	66,762.18	1,191,120.17	1,083,893.61
28	15-Sep-20	1,191,120.17	26,561.98	40,200.20	66,762.18	1,150,919.97	1,110,455.59
29	15-Mar-21	1,150,919.97	25,665.52	41,096.66	66,762.18	1,109,823.31	1,136,121.11
30	15-Sep-21	1,109,823.31	24,749.06	42,013.12	66,762.18	1,067,810.19	1,160,870.17
31	15-Mar-22	1,067,810.19	23,812.17	42,950.01	66,762.18	1,024,860.18	1,184,682.34
32	15-Sep-22	1,024,860.18	22,854.38	43,907.80	66,762.18	980,952.38	1,207,536.72
33	15-Mar-23	980,952.38	21,875.24	44,886.94	66,762.18	936,065.44	1,229,411.96
34	15-Sep-23	936,065.44	20,874.26	45,887.92	66,762.18	890,177.52	1,250,286.22



## Appendix "D1" - Debenture 1

## Debenture #1

LOAN DATA		TABLE DATA	
Loan amount:	\$ 2,000,000.00	Table starts at date:	
Annual interest rate:	4.460%	or at payment number:	1
Term in years:	25		
Payments per year:	2		
First payment due:	15-Mar-06		
PERIODIC PAYMENT			
Entered payment:		The table uses the calculated periodic payment amount unless you enter a value for "Entered payment".	
Calculated payment:	\$66,762.18		
CALCULATIONS			
Use payment of:	\$66,762.18	Beginning balance at payment 1:	2,000,000.00
1st payment in table:	1	Cumulative interest prior to payment 1:	90,194.58
Table			

No.	Payment Date	Beginning Balance	Interest	Principal	Total Payment	Ending Balance	Cumulative Interest
35	15-Mar-24	890,177.52	19,850.96	46,911.22	66,762.18	843,266.30	1,270,137.18
36	15-Sep-24	843,266.30	18,804.84	47,957.34	66,762.18	795,308.96	1,288,942.02
37	15-Mar-25	795,308.96	17,735.39	49,026.79	66,762.18	746,282.17	1,306,677.41
38	15-Sep-25	746,282.17	16,642.09	50,120.09	66,762.18	696,162.08	1,323,319.50
39	15-Mar-26	696,162.08	15,524.41	51,237.77	66,762.18	644,924.31	1,338,843.91
40	15-Sep-26	644,924.31	14,381.81	52,380.37	66,762.18	592,543.94	1,353,225.72
41	15-Mar-27	592,543.94	13,213.73	53,548.45	66,762.18	538,995.49	1,366,439.45
42	15-Sep-27	538,995.49	12,019.60	54,742.58	66,762.18	484,252.91	1,378,459.05
43	15-Mar-28	484,252.91	10,798.84	55,963.34	66,762.18	428,289.57	1,389,257.89
44	15-Sep-28	428,289.57	9,550.86	57,211.32	66,762.18	371,078.25	1,398,808.75
45	15-Mar-29	371,078.25	8,275.05	58,487.13	66,762.18	312,591.12	1,407,083.80
46	15-Sep-29	312,591.12	6,970.78	59,791.40	66,762.18	252,799.72	1,414,054.58
47	15-Mar-30	252,799.72	5,637.43	61,124.75	66,762.18	191,674.97	1,419,692.01
48	15-Sep-30	191,674.97	4,274.35	62,487.83	66,762.18	129,187.14	1,423,966.36
49	15-Mar-31	129,187.14	2,880.87	63,881.31	66,762.18	65,305.83	1,426,847.23
50	15-Sep-31	65,305.83	1,456.32	65,305.83	66,762.15	0.00	1,428,303.55
			1,428,303.55	2,000,000.00	3,428,303.55		

## Appendix "D2" - Debenture 2

## Debenture #2

LOAN DATA		TABLE DATA	
Loan amount:	\$ 17,000,000.00	Table starts at date:	
Annual interest rate:	4.515%	or at payment number:	1
Term in years:	25		
Payments per year:	2		
First payment due:	15-Dec-05		
PERIODIC PAYMENT			
Entered payment:	The table uses the calculated periodic payment amount		
Calculated payment:	\$570,688.44	unless you enter a value for "Entered payment".	
CALCULATIONS			
Use payment of:	\$570,688.44	Beginning balance at payment 1:	17,000,000.00
1st payment in table:	1	Cumulative interest prior to payment 1:	776,213.72
Table			

No.	Payment Date	Beginning Balance	Interest	Principal	Total Payment	Ending Balance	Cumulative Interest
	15-Mar-06	17,000,000.00	-	-		17,000,000.00	-
	15-Sep-06	17,000,000.00	776,213.72	-	776,213.72	17,000,000.00	776,213.72
1	15-Mar-07	17,000,000.00	383,775.00	186,913.44	570,688.44	16,813,086.56	1,159,988.72
2	15-Sep-07	16,813,086.56	379,555.43	191,133.01	570,688.44	16,621,953.55	1,539,544.15
3	15-Mar-08	16,621,953.55	375,240.60	195,447.84	570,688.44	16,426,505.71	1,914,784.75
4	15-Sep-08	16,426,505.71	370,828.37	199,860.08	570,688.45	16,226,645.63	2,285,613.12
5	15-Mar-09	16,226,645.63	366,316.53	204,371.92	570,688.45	16,022,273.71	2,651,929.65
6	15-Sep-09	16,022,273.71	361,702.83	208,985.61	570,688.44	15,813,288.10	3,013,632.48
7	15-Mar-10	15,813,288.10	356,984.98	213,703.46	570,688.44	15,599,584.64	3,370,617.46
8	15-Sep-10	15,599,584.64	352,160.62	218,527.82	570,688.44	15,381,056.82	3,722,778.08
9	15-Mar-11	15,381,056.82	347,227.36	223,461.08	570,688.44	15,157,595.74	4,070,005.44
10	15-Sep-11	15,157,595.74	342,182.72	228,505.72	570,688.44	14,929,090.02	4,412,188.16
11	15-Mar-12	14,929,090.02	337,024.21	233,664.23	570,688.44	14,695,425.79	4,749,212.37
12	15-Sep-12	14,695,425.79	331,749.24	238,939.20	570,688.44	14,456,486.59	5,080,961.61
13	15-Mar-13	14,456,486.59	326,355.17	244,333.27	570,688.44	14,212,153.32	5,407,316.78
14	15-Sep-13	14,212,153.32	320,839.36	249,849.08	570,688.44	13,962,304.24	5,728,156.14
15	15-Mar-14	13,962,304.24	315,199.02	255,489.42	570,688.44	13,706,814.82	6,043,355.16
16	15-Sep-14	13,706,814.82	309,431.33	261,257.11	570,688.44	13,445,557.71	6,352,786.49
17	15-Mar-15	13,445,557.71	303,533.47	267,154.98	570,688.45	13,178,402.73	6,656,319.96
18	15-Sep-15	13,178,402.73	297,502.44	273,186.00	570,688.44	12,905,216.73	6,953,822.40
19	15-Mar-16	12,905,216.73	291,335.27	279,353.17	570,688.44	12,625,863.56	7,245,157.67
20	15-Sep-16	12,625,863.56	285,028.87	285,659.57	570,688.44	12,340,203.99	7,530,186.54
21	15-Mar-17	12,340,203.99	278,580.11	292,108.34	570,688.45	12,048,095.65	7,808,766.65
22	15-Sep-17	12,048,095.65	271,985.76	298,702.68	570,688.44	11,749,392.97	8,080,752.41
23	15-Mar-18	11,749,392.97	265,242.55	305,445.89	570,688.44	11,443,947.08	8,345,994.96
24	15-Sep-18	11,443,947.08	258,347.11	312,341.34	570,688.45	11,131,605.74	8,604,342.07
25	15-Mar-19	11,131,605.74	251,296.00	319,392.44	570,688.44	10,812,213.30	8,855,638.07
26	15-Sep-19	10,812,213.30	244,085.72	326,602.73	570,688.45	10,485,610.57	9,099,723.79
27	15-Mar-20	10,485,610.57	236,712.66	333,975.78	570,688.44	10,151,634.79	9,336,436.45
28	15-Sep-20	10,151,634.79	229,173.16	341,515.29	570,688.45	9,810,119.50	9,565,609.61
29	15-Mar-21	9,810,119.50	221,463.45	349,224.99	570,688.44	9,460,894.51	9,787,073.06
30	15-Sep-21	9,460,894.51	213,579.68	357,108.75	570,688.43	9,103,785.76	10,000,652.74
31	15-Mar-22	9,103,785.76	205,517.95	365,170.48	570,688.43	8,738,615.28	10,206,170.69
32	15-Sep-22	8,738,615.28	197,274.24	373,414.20	570,688.44	8,365,201.08	10,403,444.93
33	15-Mar-23	8,365,201.08	188,844.41	381,844.03	570,688.44	7,983,357.05	10,592,289.34
34	15-Sep-23	7,983,357.05	180,224.29	390,464.16	570,688.45	7,592,892.89	10,772,513.63

## Appendix "D2" - Debenture 2

## Debenture #2

LOAN DATA		TABLE DATA	
Loan amount:	\$ 17,000,000.00	Table starts at date:	
Annual interest rate:	4.515%	or at payment number:	1
Term in years:	25		
Payments per year:	2		
First payment due:	15-Dec-05		
PERIODIC PAYMENT			
Entered payment:		The table uses the calculated periodic payment amount	
Calculated payment:	\$570,688.44	unless you enter a value for "Entered payment".	
CALCULATIONS			
Use payment of:	\$570,688.44	Beginning balance at payment 1:	17,000,000.00
1st payment in table:	1	Cumulative interest prior to payment 1:	776,213.72
Table			

No.	Payment Date	Beginning Balance	Interest	Principal	Total Payment	Ending Balance	Cumulative Interest
35	15-Mar-24	7,592,892.89	171,409.56	399,278.88	570,688.44	7,193,614.01	10,943,923.19
36	15-Sep-24	7,193,614.01	162,395.84	408,292.60	570,688.44	6,785,321.41	11,106,319.03
37	15-Mar-25	6,785,321.41	153,178.63	417,509.81	570,688.44	6,367,811.60	11,259,497.66
38	15-Sep-25	6,367,811.60	143,753.35	426,935.09	570,688.44	5,940,876.51	11,403,251.01
39	15-Mar-26	5,940,876.51	134,115.29	436,573.15	570,688.44	5,504,303.36	11,537,366.30
40	15-Sep-26	5,504,303.36	124,259.65	446,428.79	570,688.44	5,057,874.57	11,661,625.95
41	15-Mar-27	5,057,874.57	114,181.52	456,506.92	570,688.44	4,601,367.65	11,775,807.47
42	15-Sep-27	4,601,367.65	103,875.87	466,812.58	570,688.45	4,134,555.07	11,879,683.34
43	15-Mar-28	4,134,555.07	93,337.58	477,350.86	570,688.44	3,657,204.21	11,973,020.92
44	15-Sep-28	3,657,204.21	82,561.40	488,127.05	570,688.45	3,169,077.16	12,055,582.32
45	15-Mar-29	3,169,077.16	71,541.92	499,146.52	570,688.44	2,669,930.64	12,127,124.24
46	15-Sep-29	2,669,930.64	60,273.68	510,414.76	570,688.44	2,159,515.88	12,187,397.92
47	15-Mar-30	2,159,515.88	48,751.07	521,937.36	570,688.43	1,637,578.52	12,236,148.99
48	15-Sep-30	1,637,578.52	36,968.34	533,720.11	570,688.45	1,103,858.41	12,273,117.33
49	15-Mar-31	1,103,858.41	24,919.60	545,768.84	570,688.44	558,089.57	12,298,036.93
50	15-Sep-31	558,089.57	12,598.87	558,089.57	570,688.44	0.00	12,310,635.80
			12,310,635.80	17,000,000.00	29,310,635.80		



**North Red Deer  
River Water  
Services  
Commission**

5432 56<sup>th</sup> Avenue  
Lacombe, Alberta T4L 1E9

## Memorandum

**TO:** Commission Board Members

**FROM:** Michael Minchin, Administrator

**DATE:** June 16, 2017

**RE:** Contract Award – SCADA Assessment  
Review

REF: 47/154  
(2017)

### **PURPOSE:**

To present for the Boards consideration, a recommended proposal for the assessment of the Commission's Supervisory Control and Data Acquisition (SCADA) systems.

### **BACKGROUND:**

The system that monitors the regional water line, reservoir levels and pumps was installed at the time of construction. Those systems are now obsolete and some components are beginning to fail. Although repairs are still possible, ongoing support is limited.

In the 2017 operating budget, the Board approved funding for an assessment of the Commission's existing system with the intent of completing a design and budget for the ultimate replacement of the existing system.

A request for proposal (RFP) was issued on May 11, 2017 and closed on May 25, 2017.

The Proposals were to cover the following scope of work:

- Assess the 10 year old SCADA system;
- Recommend option(s) for upgrading the system;
- Costs for the proposed upgrades
- Site visits are recommended and will be coordinated with interested providers;
- Provide a final report showing the state of the system, options to upgrade and costs associated with these upgrades.

### **ISSUE ANALYSIS:**

The Commission received 5 proposals before the May 25, 2017 deadline.

The proposals were evaluated by staff based on the following criteria:

• Cost	40%
• Philosophy and Proposed Execution	30%
• Experience on similar projects	20%
• References & Schedule	<u>10%</u>
Total	100%

Based on these criteria the 5 submissions received the following score:

<u>Vendor</u>	<u>Score</u>
AWL Global	56
Eramosa	<b>96</b>
MPE	<b>95</b>
Stantec	<b>96</b>
Quintessential	87

The two highest scored proposals have slightly different costs. The Eramosa proposal came in with a cost of \$11,000 while Stantec's proposal was \$15,390. The next highest scored proposal was MPE with a cost of \$12,000.

Stantec's and MPE's proposals work on an 8 week schedule and both proposal to look at a number of SCADA's systems. Eramosa's proposal is on a 12 week schedule and only includes evaluation of one SCADA system.

Stantec has the most familiarity with the Commission's SCADA and communication systems. However Administration could support any of the three proposals.

#### **FINANCIAL IMPLICATIONS:**

The budget for the project is pegged at \$30,000.

#### **LEGISLATIVE AUTHORITY:**

- n/a

#### **ALTERNATIVES:**

1. Award the proposal to Stantec, the preferred vendor.
2. Award the proposal to the Eramosa, next highest scored proponent and the lowest cost proponent of the top 3.
3. Award the proposal to MPE which had the next highest score and lower cost than the preferred vendor.

#### **ATTACHMENTS:**

n/a

#### **ACTION/RECOMMENDATION:**

THAT the Board award the 2017 SCADA assessment contract to Stantec Consulting subject to the cost and timelines outlined in their proposal.