



OFFICE OF THE CITY AUDITOR
COLORADO SPRINGS, COLORADO

15-05
Colorado Springs
Utilities
Interest Rate
Hedging Program

February 2015



OFFICE OF THE CITY AUDITOR COLORADO SPRINGS, COLORADO

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15-05 Colorado Springs Utilities Interest Rate Hedging Program

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Purpose

The purpose of this audit was to review Colorado Springs Utilities Interest Rate Hedging program including compliance with policies, program objectives, and reporting to governance.

Highlights

We concluded that the hedging program complied with established, properly approved policies. The interest hedging program, to date, has been more expensive than it would have been to issue conventional fixed rate bonds. The unanticipated expense was largely due to market conditions. The program experienced increased support costs resulting from the 2008 economic crisis and the declining interest rate environment. However, at the time decisions were made, the program locked in lower rates than conventional fixed rate bonds. The full program cost will not be known until the end of the bond term, which was from 15 to 21 years.

Reporting to governance complied with established policies and procedures, but could be improved to clearly communicate program results to objectives.

From 2004 to 2007, Colorado Springs Utilities entered into interest rate swap transactions totaling \$728.6 million. The related variable rate bonds were issued from 2004 through 2012.

Colorado Springs Utilities has managed the debt portfolio to reduce the risk of increases in liquidity fees and collateral postings. In May 2012, Colorado Springs Utilities successfully negotiated agreements resulting in return of \$39.2 million in collateral postings.

Management Response

Management generally agrees with our recommendation. More information can be found in management's response in the attached report.

Recommendations

1) Report program performance to governance at least annually, including all support costs.

For future swap programs, ensure program objectives are clearly defined and communicated.

Opportunity for Improvement

1) Consider developing guidance for allowable time between swap agreement and related debt issuance.

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Office of the City Auditor
Colorado Springs Utilities Interest Rate Hedging Program

Report Details 1

 Purpose and Scope 1

 Conclusion..... 1

 Background 1

 Commendable Practices 4

Observations, Recommendations and Responses..... 5

 Observation 1 - Program results were not comprehensively communicated..... 5

Opportunities for Improvement..... 7

 Opportunity 1 - Consider developing limitations of time between swap agreement and related debt issue 7

Attachments 9

 Appendix A..... 9



Office of the City Auditor

Colorado Springs Utilities Interest Rate Hedging Program

REPORT DETAILS

PURPOSE AND SCOPE

The purpose of this audit was to review Colorado Springs Utilities Interest Rate Hedging program. The review included compliance with policy, program objectives, and reporting to governance.

CONCLUSION

We found Colorado Springs Utilities generally had the appropriate policies and procedures in place to comply with best practice guidance for derivatives (interest rate hedging program) management. In accordance with municipal advisor rules, Colorado Springs Utilities engaged a financial advisor who was skilled in derivative market practices and was limited in his role. Ongoing monitoring by the Risk Management Committee and reporting to Utilities Board was performed. However, reports to governance should be enhanced to include an annual analysis of program performance, including all support costs. For future interest rate swap programs, objectives should be clearly defined and communicated to assist the Board in their oversight role.

BACKGROUND

In 2003, Colorado Springs Utilities initiated a Long-Term Financing Plan in response to the future capital needs of the organization. Historically, Colorado Springs Utilities had issued primarily 30-year fixed rate bonds. Debt outstanding at the time totaled \$1.02 billion with debt service of \$66 million per year. The debt consisted of 87% fixed rate and 13% variable rate bonds.

The projected future capital needs for 2003 through 2012 were \$3 billion or approximately \$300 million annually, including \$600 million for the Southern Delivery System. Under the 2003 Long-Term Financing Plan, an estimated \$1.7 billion would be funded with debt. Annual debt service was projected to increase from \$66.0 million to approximately \$185.8 million in 2015. Budgeted debt service for 2014 was \$143.3 million.

When the 2003 Long-Term Financing Plan was developed, Colorado Springs Utilities debt policy did not allow for the use of derivative transactions such as interest rate swaps. Since debt rates were at historically low levels, the plan concluded that Utilities should evaluate savings available in the market utilizing synthetic fixed rate structures such as interest rate swaps and locking in a portion of the planned debt issuance for 2004 through 2006.

From 2004 to 2007, Colorado Springs Utilities entered into derivative transactions including forward interest rate swaps totaling \$728.6 million. These agreements did not become effective until the actual related variable rate bonds were issued from 2004 through 2012. When the swap agreements originated, the synthetic fixed rate was less than available traditional fixed debt rates.



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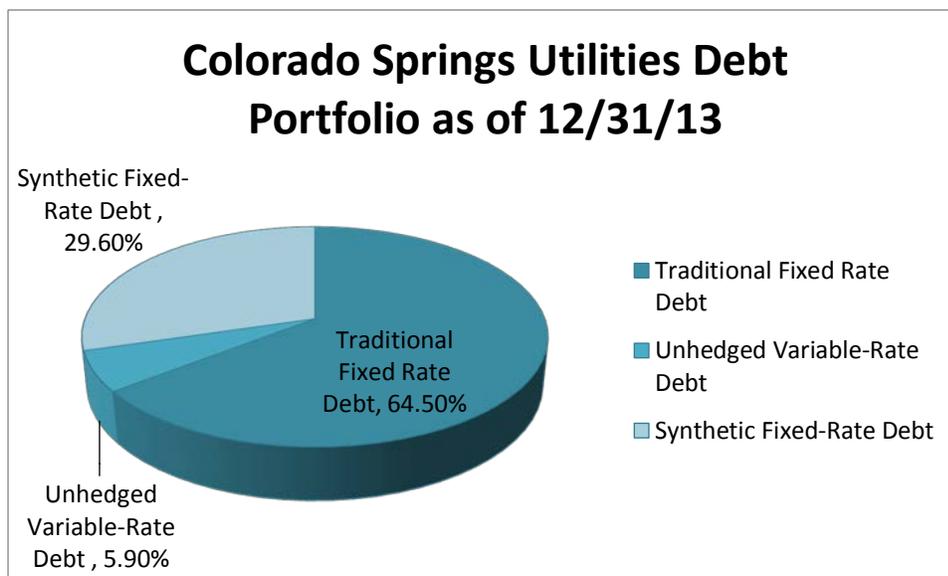
In April, 2004, City Council approved ordinance 04-67 delegating to Colorado Springs Utilities officers the authority to enter into interest rate derivative agreements such as swaps. The forward starting swap agreements obligated Colorado Springs Utilities to issue variable rate debt several years in the future. At the point that the debt was issued, City Council approval was obtained to issue debt required under the swap agreements.

Any termination of an interest rate swap agreement would require the approval of the Utilities officers and City Council. Depending on market conditions, termination of interest rate swap agreements could require termination fees, which could be significant.

As a result of the 2008 financial crisis when market interest rates fell below the swap rate, Colorado Springs Utilities was required to post collateral per the terms of the debt agreement. These postings ranged from \$10.7 to over \$114 million in a period of 5 years, depending on the market value of the swap. As of December 2014, Colorado Springs Utilities had \$24.5 million collateral posted with counterparties. Additionally, costs to support variable rate debt issued under swap agreements, such as liquidity and remarketing agreements, increased significantly. Support costs were approximately 20 basis points of the debt outstanding in 2004, increasing to 60-70 basis points in 2012.

Colorado Springs Utilities has taken steps to manage the debt portfolio by minimizing exposure to increased liquidity costs. In May 2012, Colorado Springs Utilities negotiated agreements with new counterparties resulting in the return of \$39.2 million in collateral postings.

Since 2007, Colorado Springs Utilities has not entered into any new interest rate swaps. As of December 31, 2013, the debt structure of Colorado Springs Utilities was:



Source: 2013 Audited Financial Statement Note 5



Office of the City Auditor Colorado Springs Utilities Interest Rate Hedging Program

Interest Rate Swaps

An interest rate swap is a contractual arrangement between two parties, (e.g., Colorado Springs Utilities and a qualified swap counterparty) designed to limit the risk of rising interest rates. One party agrees to pay the other the difference between a fixed interest rate and the prevailing variable interest rates. A bond is issued with a “variable or floating rate” and then the issuer enters into an interest rate swap transaction (with an investment bank) converting the variable rate into a fixed rate. This obligation is called *synthetic fixed rate debt*. The objective is to achieve a lower interest rate than would have been available using a standard fixed-rate bond.

Consequently, if interest rates increased over time, a “hedge” would exist against increased variable rate interest payments to bondholders. However, if interest rates decreased, the stated swap interest rate remains the same, but costs would increase because the issuer would have to post collateral, reducing operational liquidity, as the market value of the swap declined.

A synthetic fixed rate bond exposes the issuer to risks that are not present in traditional fixed rate bonds. The inherent risks involved in swaps include the impact they may have on the issuer’s cash flow (liquidity) and a potential impact on agency credit ratings.

A listing of Colorado Springs Utilities swaps can be viewed at Appendix A.

Benchmarking Derivative Use

We noted that several large public power agencies also utilized interest rate swap agreements. However, per our discussions with public power and government representatives, as well as Colorado Springs Utilities management, benchmarking Colorado Springs Utilities with other utilities would not result in a meaningful comparison due to the differing debt portfolios and timing of capital needs.

Available Guidance for Derivatives Management

The Government Finance Officers Association (GFOA) Advisory on Using Debt-Related Derivatives advises using caution in derivatives use along with minimizing exposure to potential losses and risks. To mitigate these risks, both the Government Finance Officers Association (GFOA) and the Committee of Sponsoring Organizations of the Treadway Commission (COSO) guidance includes the following best practices:

Develop a comprehensive derivative policy,

- Ensure individuals that manage swaps have appropriate knowledge and expertise.
- Monitor swap activity on an ongoing basis by governance, and
- Board of Director oversight of derivatives management as a component of an effective control environment.



Office of the City Auditor Colorado Springs Utilities Interest Rate Hedging Program

For more information please see guidance documents at:

www.coso.org/IC-Issues-Derivatives-Usage_Summary.htm

www.gfoa.org/using-debt-related-derivatives-and-developing-derivatives-policy

COMMENDABLE PRACTICES

Colorado Springs Utilities debt management activities in recent years have reduced exposure to liquidity costs of the swap program, including:

- Reduced number of liquidity providers and staggered agreement terms
- Completed two swap novation transactions that replaced two counterparties with stronger-rated counterparties. This change resulted in the return of \$39.2 million of collateral or restricted cash. The return of cash increased liquidity and improved the Days Cash on Hand metric by 23 days.



Office of the City Auditor Colorado Springs Utilities Interest Rate Hedging Program

OBSERVATIONS, RECOMMENDATIONS AND RESPONSES

OBSERVATION 1 - PROGRAM RESULTS WERE NOT COMPREHENSIVELY COMMUNICATED

Established governance reporting policies and procedures were followed for the interest rate swap program. We also noted other best practice elements were in place. However,

- reporting did not include program performance against objectives, and
- support costs were not included in the calculation of the effective interest rate.

The stated high level objectives of the interest rate hedging program per the 2003 Long-Term Financing Plan were to minimize debt cost, maintain quality credit ratings, balance risks with benefits, and maintain flexibility.

Under the 2004 ordinance, authority was delegated to Colorado Springs Utilities officers to determine financial terms and execute interest rate derivatives agreements.

Colorado Springs Utilities entered into swap agreements from 2003 through 2007. Reports were provided to governance twice yearly in compliance with the Executive Limitations policy. Although the Executive Limitations reports complied with policy, the 2006-2013 reports did not include performance against program objectives.

In March 2014, Colorado Springs Utilities management provided an overview and history of the swap program to Utilities Board Finance Committee members. The presentation also included high level interest rate hedging program objectives, activity, and results. In our review of the related analysis, we noted that ongoing support costs such as liquidity and remarketing agreements were not included in program costs. If support costs were included, the program (use of interest rate swaps) to date did not meet the objective of reducing debt costs.

AUDITOR RECOMMENDATION

Colorado Springs Utilities should,

- report performance to governance at least annually, including all support costs, and
- for future swap programs, ensure program objectives are clearly defined and communicated.

COLORADO SPRINGS UTILITIES RESPONSE

Colorado Springs Utilities agrees to report to governance at least annually the financial performance of the swap portfolio including all support costs. While we feel that we are in compliance with all required governance reporting, we agree to report the financial performance of the SWAP portfolio at the request of the board. There is currently no formal avenue in place to provide this reporting, however we will work with the board to determine how and when they would like to see such reporting. If a



Office of the City Auditor
Colorado Springs Utilities Interest Rate Hedging Program

decision is made to enter into a new swap program we will clearly define and communicate objectives and reporting requirements to governance. The expected completion date is October 1, 2015.



OPPORTUNITIES FOR IMPROVEMENT

OPPORTUNITY 1 - CONSIDER DEVELOPING LIMITATIONS OF TIME BETWEEN SWAP AGREEMENT AND RELATED DEBT ISSUE

Colorado Springs Utilities entered into forward swaps 12 to 60 months in advance of the related variable debt bond issue. There was no stated policy specifying the allowable time between the swap agreement date and the related bond issue. The Financial Risk Management policy states, however, a thorough analysis was required in identifying and evaluating all elements of risk.

Auditors reviewed interest rates at the time the bonds were issued compared to the synthetic interest rate of the attached swaps. Four of the five forward starting swaps (which became effective 36 months or more after the date of the swap) had higher interest rates than what would have been attained with a traditional fixed rate bond at the effective date. Two of these agreements were swaptions, in which Colorado Springs Utilities received an advance premium payment in exchange for higher interest rates on the variable debt.

Swap	Date of Swap Agreement	Date Swap Became Effective	Synthetic Fixed Rate	Estimated Traditional Fixed Rate at Time of Debt Issuance	Difference in Rates	Swaps Forward Months
2006A	8/2003	8/2006	4.48%	4.62%	-0.14%	36 mos
2007B*	9/2004	10/2007	5.13%	4.54%	0.59%	36 mos
2009C*	9/2004	10/2009	5.48%	3.80%	1.68%	60 mos
2010C	8/2007	9/2010	3.88%	3.54%	0.31%	36 mos
2012A	8/2007	3/2012	4.02%	3.08%	0.94%	55 mos

*Swaptions – Colorado Springs Utilities received \$5,178,000 and \$7,371,000 in January 2005 for the 2007B and 2009C swaps, giving the counterparty the option to exercise the swap.

Source : George K. Baum & Company, Financial Advisor to Colorado Springs Utilities

AUDITOR RECOMMENDATION

Colorado Springs Utilities should consider developing policy related to the allowable time between the forward swap agreement and related debt issuance. Limiting the time to 18 months might increase the probability of meeting the program objectives.



Office of the City Auditor
Colorado Springs Utilities Interest Rate Hedging Program

COLORADO SPRINGS UTILITIES RESPONSE

Colorado Springs Utilities agrees with this recommendation. We will revise our financial risk management policy to include a time limit between a swap agreement and the related debt issuance. The expected completion date is October 1, 2015.



Office of the City Auditor

Colorado Springs Utilities Interest Rate Hedging Program

ATTACHMENTS

APPENDIX A

Associated Bond	Swap Agreement Date	Effective Date	Terms	Estimated Conventional Fixed Rate at Time of Swap	Original Notional Amount
2004A Refunding Bond	08/2003	08/2004	4.112%	4.44%	\$117,450,000
2006A Refunding Bond	08/2003	08/2006	4.481%	4.51%	\$60,625,000
2005A Revenue Bond	06/2004	09/2005	4.710%	4.92%	\$100,000,000
2006B Revenue Bond	06/2004	09/2006	4.119%	4.51%	\$75,000,000
2007B Refunding Bond	09/2004	10/2007	5.295%**	4.58%	\$87,275,000
2007A Revenue Bond	06/2005	09/2007	3.198%	4.61%	\$75,000,000
2008 A Revenue Bond	08/2006	09/2008	4.269%	4.66%	\$50,000,000
2009C New Money Bond	09/2004	10/2009	5.475%	4.58%	\$63,250,000
2010C New Money Bond	08/2007	10/2010	3.881%	4.91%	\$50,000,000
2012A New Money Bond	08/2007	03/2012	4.0242%	4.91%	\$50,000,000
TOTAL					\$728,600,000

Sources: Colorado Springs Utilities Audited Financial Statements, George K Baum and Company, financial advisors to Colorado Springs Utilities

*Swaptions – Colorado Springs Utilities received \$5,178,000 and \$7,371,000 in January 2005 for the 2007B and 2009C swaps, giving the counterparty the option to exercise the swap.

**2007B Bond was novated in 2012 changing the interest rate from 5.13% when the swap agreement made to 5.295%

CITY COUNCIL'S OFFICE OF THE CITY AUDITOR

About our Office

The mission of the Office of the City Auditor is to provide City Council with an independent, objective and comprehensive auditing program for operations of the City. Our auditing program includes:

- Evaluating the adequacy of financial controls, records and operations
- Evaluating the effectiveness and efficiency of organizational operations
- Providing Council, management and employees objective analysis, appraisals, and recommendations for improving systems and activities

The Office of the City Auditor is responsible for auditing the systems used by the City of Colorado Springs and its enterprises, including Colorado Springs Utilities. We perform a variety of audits for these entities, including financial audits, performance audits, contract audits, construction audits, and information system audits. We also perform follow-up on a periodic basis to monitor and ensure management actions have been effectively implemented.

Authorization and Organizational Placement

Our audits are conducted under the authority of Chapter 1, Article 2, Part 7 of the Colorado Springs City Code, and more specifically parts 703, 705 and 706 of the Code. The Office of the City Auditor is structured in a manner to provide organizational independence from the entities it audits. This independence is accomplished by the City Auditor being appointed by and reporting directly to the City Council.

Audit Standards

The audit was conducted in a manner that conforms with the International Standards for the Professional Practice of Internal Auditing, a part of the Professional Practices Framework promulgated by the Institute of Internal Auditors.

The audit included interviews with appropriate personnel and such tests of records and other supporting documentation as deemed necessary in the circumstances. We reviewed the internal control structure and compliance tests. Sufficient competent evidential matter was gathered to support our conclusions.