Treasury Board and Finance

Summary

Department

The Department of Treasury Board and Finance has implemented our recommendation to review all user access to business data to ensure that unauthorized changes are prevented and appropriate incident monitoring exists to ensure systems issues are promptly resolved—see page 146.

ATB Financial

We repeat one recommendation to ATB Financial to confirm the key controls in the new banking system are implemented and operate effectively—see page 148.

We have one new recommendation to ATB Financial to establish processes to monitor its compliance with the Payment Card Industry's requirements—see page 154.

We report that ATB Financial has implemented six recommendations related to:
- interest rate risk controls—see page 149
- updating investment and derivative policies—see page 149
- evaluating and updating its tools related to treasury information systems—see page 149
- expanding the role of the middle office to monitor interest rate risk and ensuring they have resources to monitor foreign exchange activities—see page 150
- internal controls over fair value calculations of securities and derivatives—see page 150
- IT governance and control—see page 150

We have also concluded there have been changed circumstances related to our internal controls recommendation to ATB from October 2009—see page 150.

Alberta Capital Finance Authority

We report that Alberta Capital Finance Authority has implemented our recommendation to secure additional skilled resources to help implement new required financial accounting standards and to ensure the cost-effective preparation and management review of its annual financial statements—see page 151.

Alberta Investment Management Corporation

We made one new recommendation to Alberta Investment Management Corporation to obtain third-party statements for all investments not held by external custodians and reconcile these statements to its records—see page 151.

We report that AIMCo has implemented two other recommendations related to:
- introducing a process to prepare the organization for internal control certification—see page 152
- strengthening information technology change management controls—see page 153

Alberta Gaming and Liquor Commission

We made one new recommendation to the Alberta Gaming and Liquor Commission to obtain sufficient information to comply with International Financial Reporting Standards disclosure requirements in its annual financial statements—see page 153.

We also report that AGLC has implemented our recommendation to develop an information technology risk and control framework—see page 154.

For outstanding previous recommendations to the organizations that form the Ministry, please see our outstanding recommendations list on page 159.

Findings and recommendations

Department

Matters from prior-year audits

User access—implemented

Our audit findings

The Department of Finance implemented our *October 2008 Report* recommendation (page 272) to review all user access to business data to ensure that unauthorized changes are prevented and appropriate incident monitoring exists to ensure systems issues are promptly resolved.

The Department:

- implemented user access monitoring through regular reviews and approvals
- implemented a network monitoring for files and folders
- ensured that network administrators were not accessing files and folders unless authorized

ATB Financial

Matters from prior-year audits

ATB implemented a new banking and accounting system in September 2011. This system replaced the legacy banking and accounting systems that were in use since the mid-1980s. The project transformed ATB's banking system, financial reporting system, and internet and telephone banking applications. ATB also re-engineered some of its business processes to take advantage of the new banking system's functionality. When the system went live in September 2011, ATB had spent approximately $360 million on the project.

What we examined

We assessed management's progress towards implementing our *November 2011 Report* recommendation that ATB Financial confirm that the key controls in the new banking system, as identified in its risk and control matrices, are implemented and operate effectively.

As part of our audit of ATB's March 31, 2012 financial statements, we updated our understanding of, and tested, the business processes and internal controls that we rely on to express an opinion on ATB's financial statements. We also audited the key manual processes that ATB had put in place to prepare its financial statements because certain processes in the new banking system were not working as they should.

Our audit work covered activities within ATB's new banking system up to May 2012.

Why it is important to Albertans

ATB provides financial services to over 635,000 customers in approximately 242 communities and has over $31 billion in assets. ATB's profits belong to all Albertans, along with the risk of loss because the Government of Alberta provides a deposit guarantee to all ATB depositors. Because of the deposit guarantee of $25 billion at March 31, 2012, Albertans have a significant stake in ATB's financial success and how well ATB manages its financial risks. Therefore, it is critical ATB's management and its Board of Directors have processes in place to satisfy themselves that key internal controls are well-designed, implemented and operating effectively.

What we found

Internal controls in the new banking system

In response to our *November 2011 Report* recommendation, ATB committed to testing the operating effectiveness of the key controls in the new banking system within six to nine months after go-live. Since we made our recommendation, ATB has walked through the processes supporting the key controls in the new banking system, performed some transaction testing and has voluntarily begun a program to comply with Canadian Securities Administrators' standards around internal controls over financial reporting. However as of May 2012, the testing of the operating effectiveness of the controls has not occurred.

Therefore, we have repeated our recommendation. We believe this is too long for ATB to operate post go-live without confirmation that key internal controls in the new banking system are operating effectively. Management is now targeting to complete its assessment of the operating effectiveness of the key controls in the new banking system by August 2013.

Findings from our financial statement audit

When the new banking system went live in September 2011, there were certain processes that impacted ATB's financial reporting that were not working as intended. ATB is working on fixing these items. To prepare its financial statements and run its business, ATB had to put in place manual or alternative processes to deal with these items. Because of this, ATB is not yet fully optimizing the benefits from the functionality and capabilities of the new banking and accounting system. We highlight below some of the key areas that have been affected.

The general ledger is not complete and accurate without manual adjustments

We observed that not all transactional data from the banking service module is being accurately and completely flowed through to the general ledger. ATB uses the data in its general ledger to prepare its financial statements. The banking services module contains customer loan and deposit balances and transactional data. Management had to manually adjust the general ledger to the balances in the banking services module because certain transactions are not able to flow through properly. The main cause of this issue was the components of the system (the bank analyzer module and an associated technical data layer [ETL module]) that sits in between the banking services module and the general ledger was not configured properly.

Management is working on a project plan, which is expected to be finalized in December 2012, to upgrade and reconfigure the bank analyzer and ETL modules. The remediation project is expected to take between 12 and 18 months to complete.

Until the project is complete, management will continue to need to manually adjust the general ledger. This method is an inefficient way to create financial statements and is more prone to error. For example, in the third quarter of 2012 management used a query to measure interest expense. The wrong query was used initially resulting in interest expense being incorrect by $9 million. This error delayed the release of the third quarter financial statements while management reviewed and fixed the data query.

ATB is not yet optimizing the integration between its banking and accounting system because of the configuration problems that require ATB to use inefficient and potentially ineffective manual processes.

Need for timely and accurate information

ATB needs timely and accurate information to run its business. The business case for the new banking system stated that management would receive better reporting than they had with the old banking system. Management is not getting timely and accurate information from its new banking system in several key areas. Although the new system has the potential to provide better information, a lot of these reports that management needs to use were not accurate or did not work properly. Management is still designing and testing some of the reports that lines of business need to run their day-to-day activities.

Loan impairment improperly identified

The process for identifying impaired loans in the new banking system is not working properly. The new banking system is putting loans into an impaired status that should not be impaired. This has required management to perform a time-intensive process to examine all loans to determine if they are truly impaired.

Segregation of duties not configured properly

Our audit work also identified that employees can access and post banking transactions to their own bank account. The access controls in the new banking system have not been configured properly to prevent this from happening. The potential for inappropriate transactions increases if employees can access and post transactions to their own bank accounts and if the monitoring controls are not in place.

New banking system internal controls

Background

In our *November 2011 Report* (page 102), we recommended that ATB Financial confirm that the key controls in the new banking system, as identified in its risk and control matrices, are implemented and operate effectively.

We are repeating this recommendation because management's new targeted completion date of August 2013 is too long to wait to obtain confirmation that the key internal controls in the new banking system are operating effectively.

Recommendation: New banking system internal controls—repeated

30 RECOMMENDATION

We again recommend that ATB Financial confirm that the key controls in the new banking system, as identified in the risk and control matrices, are implemented and operate effectively.

Criteria: the standards for our audit

ATB should have effective processes to enable the CEO and CFO to assert to the Audit Committee that key internal controls in the new banking system are well-designed, implemented and operating effectively.

Our audit finding

Key finding

ATB is taking too long to ensure that controls are operating effectively in the new banking system.

Management agreed with our 2011 recommendation and committed to completing the testing of operating effectiveness of the key controls in the new banking system within six to nine months after go-live. Since go-live, ATB has walked through the processes supporting the key controls in the new banking system, performed some transaction testing and has voluntarily begun a program to comply with Canadian Securities Administrators' standards around internal controls over financial reporting. However, as of May 2012, the testing of the operating effectiveness of the controls has not occurred.

The planned completion date of an operating effectiveness assessment is now August 2013. In our view this is too long and puts ATB at risk if its internal controls are ineffective for this extended period of time.

Implications and risks if recommendation not implemented

Management and the Audit Committee are relying on key controls that have not yet been confirmed to be implemented and operating effectively.

Matters from the current audit

Payment Card Industry

Background

ATB is an issuer and provider of MasterCard credit cards. MasterCard and other credit card companies formed the Payment Card Industry Security Standards Council (PCI) to ensure entities issue credit cards and acquire payments securely. This group established 12 data security standards to protect credit card issuers against unauthorized use and fraud with credit cards.[1]

The standards identify technical and operational requirements to protect cardholder data. They apply to all entities involved in payment card processing—including merchants, processors, acquirers, issuers and service providers, as well as all other entities that store, process or transmit cardholder data.

[1] Payment Card Industry (PCI) Security Standard Council, 2012

The 12 standards are minimum requirements for protecting cardholder data; individual entities add controls and practices to further mitigate risks.

MasterCard, as a member of PCI, can set its own financial and other penalties for non-compliance with the standards—including revoking the right to issue cards or use the MasterCard name.

Recommendation: Payment Card Industry

31 RECOMMENDATION

We recommend that ATB Financial put in place processes to monitor its compliance with the Payment Card Industry's requirements.

Criteria: the standards for our audit

ATB should have processes in place to monitor its compliance with the payment card industry's security standards.

Our audit finding

Key finding

ATB cannot demonstrate it is in compliance with PCI requirements.

ATB is unable to demonstrate that it complies with PCI's 12 data security standards. ATB has started a working group to complete a gap analysis on ATB's existing practices and PCI's requirements.

Implications and risks if recommendation not implemented

If ATB is found to be in non-compliance with PCI's data security standards, it could be assessed financial penalties, lose reputation as a credit card provider, and lose its ability to be a MasterCard issuer and acquirer.

Matters from prior-year audits

Interest rate risk controls—implemented

Our audit findings

ATB implemented our *October 2008 Report* recommendation (page 136) to introduce controls to ensure consistent measurement of interest rate risk by:

- creating individual user login accounts for access to the system that calculates interest rate risk exposure
- designing a checklist to ensure that data and assumptions have been entered correctly into the interest rate risk system
- reconciling balance sheet data to the interest rate risk system to ensure the completeness and accuracy of data used

Treasury policies—implemented

Our audit findings

ATB implemented our *October 2008 Report* recommendation (page 139) to implement updated investment and derivative policies for changes arising from its recent review of those policies and to review the financial risk management policy.

ATB did this by improving its treasury related policies and ensuring they are updated and approved on a regular basis. Specifically, it:

- made distinct policies for corporate and client derivatives
- rectified the weaknesses we noted in the policies
- outlined the roles and responsibilities of management, the Asset Liability Committee and the Board of Directors

Treasury information systems—implemented

Our audit findings

ATB implemented our *October 2008 Report* recommendation (page 138) to:

- evaluate its current treasury information systems against its business requirements
- develop and implement a treasury information technology plan to upgrade its tools

Management developed a roadmap for its treasury systems and this was approved by ATB's Asset Liability Committee. ATB evaluated its various treasury system options, including a treasury module from the vendor of its new banking system. ATB determined its best option was to upgrade its existing derivative and investment system and then have it feed directly into the new banking system.

Role and use of middle office—implemented

Our audit findings

ATB implemented our *October 2008 Report* recommendation (page 137) to:

- expand the role of its middle office (now Market Risk) area to include responsibilities for monitoring interest rate risk
- ensure that middle office has the necessary resources to monitor foreign exchange activities and fulfill its other responsibilities

ATB did this by moving the responsibility to monitor interest rate risk to the Market Risk area. It also ensured that sufficient resources are available for Market Risk to monitor interest rate and foreign exchange risks.

Internal controls over fair value calculations of securities and derivatives—implemented

Our audit findings

ATB implemented our *October 2008 Report* recommendation (page 274) repeated in our *October 2010 Report* (page 153), to improve controls over the calculations of fair value for its derivatives and securities. It did this by creating a process to compare its derivative valuations against valuations done by a third-party and investigating any significant differences.

ATB also improved its internal controls by minimizing the amount of manual inputs into its information system. The system now obtains direct feeds from third-party data providers.

IT Governance—implemented

In our *October 2009 Report* (page 222), we recommended that ATB improve the efficiency and effectiveness of its computing environment by developing a process to ensure all ATB business units adopt and follow an organization-wide information technology governance and control framework.

Our audit findings

ATB implemented this recommendation by creating an IT governance and control framework that is being followed within its computing environment.

Internal Controls—changed circumstances

Background

In our *October 2009 Report* (page 221), we recommended that the Core project Strategic Steering Committee receive the appropriate assurance from the project leadership team that the organization's control objectives have been satisfied before the user acceptance testing phase of the project is complete.

In our *November 2011 Report* (page 102), we made a new recommendation to ATB to confirm that the key controls in the new banking system are implemented and operate effectively. Management told us that they would test the operating effectiveness of the banking systems internal controls within six to nine months after the go-live date of the banking system.

Therefore, we will no longer follow up our *October 2009 Report* recommendation.

Alberta Capital Finance Authority
Matters from prior-year audits
Additional skilled resources required—implemented

Background

In our *April 2009 Report* (page 103), we recommended that management secure additional skilled resources to help implement new required financial accounting standards and to ensure the cost-effective preparation and management review of its annual financial statements.

ACFA underwent significant changes to its financial reporting framework in 2011, moving from part V of the Canadian Institute of Chartered Accountants Handbook to standards issued by Public Sector Accounting Board. In the same period, the president retired and was replaced. The previous president was a designated accountant who carried out some of the key financial reporting functions. The new president does not have an accounting background, requiring ACFA to make other arrangements to prepare its financial statements.

Our audit findings

ACFA responded to these transitional changes by making arrangements with the Department of Finance to provide additional accounting support, as well as hiring a designated accountant. These actions, along with significant audit involvement, helped ensure ACFA was able to transition to the new standards and meet its tight year-end reporting timeline. As this transition is a one-time event, we expect that management will be able to meet its financial reporting needs with less audit involvement in the future.

Alberta Investment Management Corporation
Matters from the current audit
Securities reconciliation

Background

On a daily basis, AIMCo reconciles the investments recorded in its records for equity and fixed income investments to the records of external custodians, to ensure that there are no unrecorded investments. Differences between AIMCo's records and those of custodians are reported on a "Reconcilable Differences Report." Most, but not all, investments are held by external custodians.

Recommendation: Securities reconciliation

32 RECOMMENDATION

We recommend that Alberta Investment Management Corporation obtain third-party statements for all investments not held by external custodians and reconcile its records to those statements.

Criteria: the standards for our audit

AIMCo should follow up on all investments listed on the "Reconcilable Difference Report" to ensure that the investments are accurately recorded.

Our audit findings

Key findings

- Some identified differences were not followed up on.
- An investee issued stock dividends in each of the last two years that were not recorded by AIMCo.

We reviewed the Reconcilable Differences Report at September 30, 2011 and identified several instances where AIMCo did not follow up on investments that were not reconciled to external custodian records.

We obtained copies of third-party statements for the largest unreconciled investment and found that the investee company had issued stock dividends in each of the last two years, which had not been recorded by AIMCo. As a result, the fair value of the investment was understated by $14.8 million at December 31, 2011 and a total of $14.8 million in investment income had not been recorded for the two-year period ending December 31, 2011. AIMCo corrected the error as of December 31, 2011.

Implications and risks if recommendation not implemented

All investments held by AIMCo may not be accurately recorded in its records if they are not regularly reconciled to external custodians and third-party statements.

Matters from prior-year audits

Getting ready for internal control certification—implemented

Background

In our October *2008 Report* (no. 32—page 282), we recommended that AIMCo introduce a process to get the organization ready for internal control certification by:

- ensuring that the strategic plan of the organization includes internal control certification
- developing a top-down, risk-based process for internal control design
- selecting an appropriate internal control risk assessment framework
- considering sub-certification processes, whereby direct reports to the CEO, COO and CFO provide formal certification on their areas of responsibility
- ensuring that the management compensation systems incorporate the requirement for good internal control
- using a phased approach for assessing the design and operating effectiveness of internal controls

Our audit findings

In 2009, management developed a plan to get AIMCo ready for internal control certification. Internal control certification was a business plan goal in 2009, 2010 and 2011–2012. AIMCo planned to obtain external service auditor control certification, in accordance with the requirements of CICA Handbook Section 5970, rather than internal sub-certification.[2] The organization would follow a phased approach, first obtaining Type 1 certification to assess whether suitable controls were in place to address key risks and if the identified controls were suitably designed. The next phase would be to obtain Type 2 certification to assess whether the identified controls were operating effectively throughout a suitable period.

The plan was supported by senior management and members of the AIMCo Board.

In 2009, AIMCo reviewed and documented its internal controls. It developed and implemented new controls where it found the existing controls to need improvement. Management engaged external service auditors to provide an opinion on whether the controls were suitably designed and were working on December 15, 2009.[3] The service auditor's report included a discussion of weaknesses in AIMCo's control design.

In 2010, AIMCo took action to remediate the control weaknesses identified by the service auditors. Early in 2011, AIMCo believed it was ready for Type 2 certification and engaged the service auditors to provide an opinion on whether controls were operating effectively from June 1 to November 30, 2011.

[2] The opinion was prepared in accordance with the assurance standards of Section 5970 of the Canadian Institute of Chartered Accountants Handbook, which has two variants. CICA 5970 Type 1 reports only on suitability of control design at a point in time. Type 2 reports on design suitability and operating effectiveness over six months.

[3] The opinion was prepared in accordance with the assurance standards of Section 5970 of the Canadian Institute of Chartered Accountants Handbook.

The service auditors concluded that the controls identified by AIMCo were in place at November 30, 2011, were suitably designed and operating effectively from June 1 to November 30, 2011, except for one control related to securities lending. The ineffective securities lending control did not have a material impact on investment cost, fair value or income reported for investment participants.

We believe that the actions taken by management and the favorable opinion provided by the service auditors are sufficient evidence to conclude that the recommendation is implemented.

Change management—implemented

Our audit findings

In our *October 2010 Report* (page 158), we recommended that AIMCo strengthen its IT change management controls to ensure that it adequately assesses the risks of changes and does not make changes outside of its change management process.

AIMCo implemented this recommendation by introducing a change management system that assigns risk levels to changes and tracks those changes through to completion.

Alberta Gaming and Liquor Commission

Improve the quality of employee benefits note disclosure in the financial statements

Background

AGLC participates in three defined benefit pension plans.[4] The plans are Public Service Pension Plan, Management Employee Pension Plan and Supplemental Retirement Plans for Public Service Managers. These multi-employer plans provide retirement benefits to employees of participating employers, which include the Government of Alberta, universities, public colleges, provincial corporations and government boards, agencies and commissions.

Before 2011–2012, AGLC prepared financial statements using Canadian generally accepted accounting principles (GAAP). AGLC accounted for its participation in the multi-employer plans as if they were defined contribution plans. The employer contributions to those plans were recorded as expenses under salaries and employee benefits in the statement of operations.

In 2012, AGLC prepared its financial statements for the first time in accordance with IFRS. The IFRS criteria for accounting for defined benefit plans differ from Canadian GAAP criteria. IFRS requires AGLC to account for its participation in the three multi-employer plans as defined benefit plans unless there is not enough information available.

[4] A defined benefit plan provides plan members with a predetermined level of pension income when they retire—the exact level depends on variables such as income and years of plan membership—and employer sponsors tend to assume a large proportion of the risk of meeting that benefit. This contrasts with defined contribution plans, where the employer and employee contributions are defined (often as a fixed percentage of employee income), and employees typically assume most of the risk in achieving a certain level of pension income. For defined contribution plans, benefits are determined as a function of accumulated contributions.

In practice, defined benefit plans present a more complex level of accounting because organizations must use actuarial techniques and assumptions to measure the pension obligation and the associated expenses. The actuarial valuation involves assumptions about factors such as discount rates, expected rates of return on assets, future salary increases, mortality rates and future pension increases. The IFRS accounting standard for employee benefits requires organizations to account for its proportionate share of multi-employer pension plans' defined benefit obligations, plan assets and associated costs when sufficient information is available. The explanatory notes and disclosures are integral to a complete set of financial statements, as they help readers interpret the financial information.

At March 31, 2012, AGLC's balance sheet recorded $40.7 million as the obligation for its proportionate share of net defined benefit obligations for three multi-employer plans. AGLC hired an actuary to measure its proportionate share of pension obligations under the three plans. In addition, throughout the IFRS transition, AGLC management sought advice from a consultant to help management make key decisions on IFRS policy choices, interpret and apply the new standards.

Recommendation: Improve quality of employee benefits note disclosure in financial statements

33 RECOMMENDATION

We recommend that management of the Alberta Gaming and Liquor Commission obtain sufficient information to ensure compliance with International Financial Reporting Standards for disclosures in the employee benefit plans note in its annual financial statements.

Criteria: the standards for our audit

AGLC's financial statements and supporting notes should be prepared with complete disclosures to comply with IFRS.

Our audit findings

Key findings

- Employee benefits note did not meet all the requirements of the IFRS standard.
- AGLC's actuary did not have enough time to gather information for financial statement disclosures.

Although AGLC correctly measured and recorded its pension obligations using defined benefit accounting principles, it did not include all the disclosures required under the employee benefits standard. Management asserted that they did not have the necessary information to present disclosures in accordance with IFRS because their actuary did not have enough time to prepare the final actuarial assessments. They informed the readers of their March 31, 2012 financial statements of the deficiencies in the disclosures for employee benefits.

Based on advice from their consultant, management's initial conclusion was to continue to use defined contribution accounting for the multi-employer pension plans. Their view was that IFRS permits the use of defined contribution accounting where insufficient information was available to apply defined benefit accounting. Management supported their position with a letter from the plans' pension administrator that stated that they cannot provide the necessary information. We disagreed with this conclusion and held the view that AGLC could have estimated its proportionate share of plans with the help of an actuary. We found that other organizations participating in the same multi-employer plans had found ways to calculate their share of the pension obligations.

At the closeout stage of the audit, management revised their conclusion and hired the pension plans' actuary to measure AGLC's proportionate share of the plans using defined benefit accounting standards. The actuary calculated the proportionate share of the pension obligations, but did not have enough time to complete the detailed assessment needed to allow AGLC management to prepare IFRS-compliant notes for its Board-approved financial statements.

The key deficiencies in AGLC's note on the multi-employer pension plans were as follows:

- Although the value of the pension expense was disclosed, management was unable to properly allocate expense amounts between the current year pension expenses and the loss on pension liability reflected in Other Comprehensive Income (Loss) within the Statement of Operations because management did not have the proper information sourced from actuarial assessments to compute the current year pension expense using defined benefit accounting standards. AGLC did not have information to calculate and disclose the elements that constitute the pension expense such as current service cost, interest cost, expected return on plan assets and actuarial gains and losses. On an overall basis, the Statement of Operations reflected the aggregate costs associated with the multi-employer pension plans.
- Disclosures missing for each pension plan were:
    - change in the present value of the defined benefit obligations from beginning to end of the reporting year, categorized by current service cost, interest expense, re-measurement gains or losses, and benefit payments
    - change in the fair value of the plans' assets from the beginning to end of the reporting year, categorized by employer contributions, interest income, re-measurement gains or losses, and benefit payments
    - net pension liability representing the difference between AGLC's defined benefit obligations and its share of the fair value of the plans' assets

Implications and risks if recommendation not implemented

Without complete disclosures, users of AGLC's financial statements may not understand the risks and exposures surrounding the multi-employer pension plans.

Matters from prior-year audits

IT control framework and risk assessment—implemented

Background

In our *October 2008 Report* (pages 52 and 351), we reported that Alberta Gaming and Liquor Commission should develop an information technology risk and control framework, to identify and mitigate IT risks and improve its controls over information technology. AGLC was one of nine organizations that received this recommendation, along with the Ministry of Service Alberta.

In 2011, AGLC expanded the scope of its IT risk and control framework plans to include two preliminary steps:

- improving IT service delivery
- enhancing and modernizing its IT capabilities

Although this expanded scope delayed the original plans and timeline, AGLC decided that these improvements were critical to the success of its framework.

Our audit findings

We followed up on the progress AGLC made this year to further design and implement a formalized risk and control framework. AGLC adopted COBIT[5] as its risk and control standard and adopted some components of the COSO[6] risk management framework.

Management did the following key tasks this year, to further design and implement the IT risk and control framework:

- prepared an IT risk strategy to define a framework scope, methodology, expected outcomes, timeline and resource requirements
- hired an external consultant with expertise in risk management planning, to assist with the framework's development
- defined an IT risk registry that is linked to the enterprise risk framework through business impact statements
- conducted a risk assessment on each risk in the registry, identifying likelihood, risk level (high, medium or low), inherent risk or residual risk and mitigating controls
- identified the COBIT control procedures for each IT risk defined in the risk registry
- designed and implemented IT policies and control procedures for high risk IT areas such as change management, user access and IT security
- involved business, IT and internal audit representatives in the framework development process—Workshops were used to validate risks, define mitigating controls and assess business impacts.

Overall, AGLC has designed and implemented a comprehensive IT risk and control framework. We verified that AGLC has implemented key controls to mitigate high risk IT services; therefore, we assessed this recommendation as implemented.

5 Control Objectives for Information and Related Technology (COBIT)
6 Committee of Sponsoring Organizations of the Treadway Commission (COSO), www.coso.org