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We have completed an audit of the Colorado River Commission of Nevada. This audit is part of the ongoing program of the Legislative Auditor as authorized by the Legislative Commission. The purpose of legislative audits is to improve state government by providing the Legislature, state officials, and Nevada citizens with independent and reliable information about the operations of state agencies, programs, activities, and functions. The results of our audit, including findings, conclusions, recommendations, and the Commission's response, are presented in this report.

We wish to express our appreciation to the management and staff of the Colorado River Commission for their assistance during the audit.

Respectfully presented,

A handwritten signature in black ink, appearing to read "Paul V. Townsend".

Paul V. Townsend, CPA  
Legislative Auditor

April 25, 2006  
Carson City, Nevada

STATE OF NEVADA  
COLORADO RIVER COMMISSION OF NEVADA

AUDIT REPORT

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# EXECUTIVE SUMMARY

## COLORADO RIVER COMMISSION OF NEVADA

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### Background

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The Colorado River Commission of Nevada (CRC) was created by the Nevada Legislature in 1935. The Colorado River Commission is comprised of seven commissioners. Three members are appointed by and are members of the Board of Directors of the Southern Nevada Water Authority. Because three commissioners serve on both boards, a close working relationship has been established between these entities. Primary areas of responsibility include:

- Water – The CRC holds and protects the rights of the State to its share of Colorado River water under federal law and contracts.
- Power – Nevada’s allocation of hydropower from Hoover Dam and certain other projects is purchased from the Federal Government and sold to several entities in southern Nevada. The CRC also provides electric power acquired from other sources to meet the needs of the entities it serves.
- Environment – The CRC is a leading participant in the Lower Colorado River Multi-Species Conservation Program.
- Land – The CRC is authorized to develop and dispose of certain lands in the Fort Mohave Valley near Laughlin, Nevada.

The Colorado River Commission does not receive any state appropriations or federal funds to support its operations. Therefore, customers are assessed an administrative charge to reimburse the CRC for its administrative costs. During fiscal year 2005, the CRC had 43 authorized positions. Expenditures from its administrative account, including all personnel related costs, totaled approximately \$4.3 million during the year.

## **EXECUTIVE SUMMARY**

### **COLORADO RIVER COMMISSION OF NEVADA**

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The Colorado River Commission has been heavily involved in litigation since the western energy crisis in 2000-2001. This legal activity included the buyout of certain long-term power contracts, complaints regarding trading practices, and various disputes between CRC and Nevada Power Company. In February 2005, a Cooperative Accord was reached to settle all outstanding claims between the parties.

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## **Purpose**

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The purpose of this audit was to determine whether the CRC has implemented Risk Management Procedures for its electric energy trading activities. Our audit included a review of trades made by CRC's Energy Services Group from September 2004 through January 2005.

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## **Results in Brief**

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The Colorado River Commission has implemented Risk Management Procedures designed to reduce the risks associated with electric energy trading activities. These procedures were jointly developed by CRC and its major customer, the Southern Nevada Water Authority (SNWA), in response to difficulties encountered during the 2000-2001 western energy crisis. The SNWA adopted these procedures in 2004, and the CRC has agreed to supply power in accordance with these procedures. This cooperative effort has resulted in improved oversight of trading activities. Although procedures are now in place to help minimize risks, we identified certain areas where improvements can be made. These improvements include adopting procedures to cover trades with other entities, ensuring adequate documentation is maintained for all trade review activities performed by staff, and modifying procedures related to conducting credit reviews of entities trading with CRC. In addition, CRC needs to improve the

## EXECUTIVE SUMMARY

### COLORADO RIVER COMMISSION OF NEVADA

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reporting of customer payable and receivable amounts in its financial statements.

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## Principal Findings

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- Although Risk Management Procedures have been established for supplying power to SNWA, the CRC has not adopted procedures covering trades with other entities. During our audit, written policies and procedures were not in place for conducting trades related to contracts assumed by CRC. Ten of 40 trades we tested, totaling approximately \$12 million in purchases and sales, were for contracts assumed by CRC as part of a settlement agreement. Because these trades are not covered by policies and procedures, staff followed the SNWA's Risk Management Procedures for executing and recording these transactions. In addition, procedures will need to be developed to cover future trades with member agencies of the SNWA. CRC staff indicated they plan to provide power to at least one member agency in 2006. (page 13)
- The Risk Management Procedures provide controls over the purchase and sale of electric energy. Key controls established by these procedures include: (1) a Risk Control Committee to provide management oversight, (2) a Front-Middle-Back Office organization structure to provide separation of duties for trade execution, trade review, and risk analysis, and (3) reporting requirements to provide management information. (page 14)
- Our review of 40 trades, totaling approximately \$88 million in purchases and sales, found the CRC to be in substantial compliance with the requirements of the Risk Management Procedures. However, we identified certain areas where improvements can be made. These improvements include ensuring adequate documentation is maintained for all trade

## EXECUTIVE SUMMARY

### COLORADO RIVER COMMISSION OF NEVADA

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review activities performed by staff, and modifying procedures related to conducting credit reviews of counterparties. (page 16)

- The CRC needs to improve its reporting of amounts payable to customers and amounts receivable from customers. For fiscal year 2004, the amount reported as payable to customers on CRC's audited financial statements was understated by at least \$2.6 million. This understatement occurred, in part, because staff did not track a large cash reserve for one customer in a separate account or in an account with other customer reserves and deposits. Instead, the liability to this customer, totaling \$3.8 million as of June 30, 2004, was tracked within CRC's cash account. In addition, little information was disclosed in the notes to the financial statements regarding payables and receivables. Therefore, users of the financial statements may not have sufficient information regarding amounts owed and amounts due from customers. (page 19)

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## Recommendations

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This audit report contains six recommendations. One recommendation relates to ensuring procedures are in place to cover all trading activities, and four recommendations relate to modifying or clarifying Risk Management Procedures. In addition, we made one recommendation to improve the reporting of customer payables and receivables. (page 30)

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## Agency Response

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The Agency, in its response to our report, accepted all six recommendations. (page 25)

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# Introduction

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## Background

The Colorado River Commission of Nevada (CRC) was created by the Nevada Legislature in 1935. The CRC is empowered to receive, manage and protect all of Nevada's water and hydropower resources from the Colorado River. The Colorado River Commission is comprised of seven commissioners. Four members, including the chairman, are appointed by the Governor. Three members are appointed by and are members of the Board of Directors of the Southern Nevada Water Authority (SNWA).

Primary areas of responsibility include:

- Water – The CRC holds and protects the rights of the State to its share of Colorado River water under federal law and contracts. It also represents the State before federal agencies, other states and other countries in a wide range of issues affecting the operation of the river.
- Power – Nevada's allocation of hydropower from Hoover, Parker, and Davis Dams, and certain other projects is purchased by CRC from the Federal Government and sold to several contracting entities in southern Nevada. These entities include three rural associations, one municipal and one investor-owned utility, an industrial complex in Henderson, Nevada, and the SNWA. The CRC also provides electric power acquired from other sources to meet the needs of the entities it serves.
- Environment – The CRC is a leading participant in the Lower Colorado River Multi-Species Conservation Program. The CRC actively participates in programs to develop and implement projects for the conservation and recovery of endangered species within the Lower Colorado River Basin while optimizing power generation and water resource development.
- Land – As a result of legislation passed by the Congress and the State, the CRC has acquired certain lands from the Federal Government in the Fort Mohave Valley near Laughlin, Nevada. The CRC is authorized to develop and dispose of this land in accordance with state laws and local regulations and ordinances.

The Colorado River Commission does not receive any state appropriations or federal funds to support its administrative and operating functions. Activities of the CRC are funded from revenue received from power and water contractors, the sale of certain land, and interest income earned from investments by the State Treasurer. According to Nevada law, power and water must not be sold for less than the actual cost to the

State. Therefore, customers are assessed an administrative charge to reimburse the CRC for its administrative costs. During fiscal year 2005, the CRC recorded approximately \$200 million in expenditures related to purchasing and providing electricity to the entities it serves.

The Colorado River Commission's main office is located in Las Vegas. During fiscal year 2005, the CRC had 43 authorized positions. Expenditures from its administrative account, including travel, operating, technology, cost allocations, and all personnel related costs, totaled approximately \$4.3 million during the year.

### **Close Working Relationship With SNWA**

The CRC has a close working relationship with the Southern Nevada Water Authority. The SNWA is an entity formed by seven local water agencies in 1991 to address southern Nevada's unique water needs on a regional basis. The member agencies are: Big Bend Water District (Laughlin), the cities of Las Vegas, North Las Vegas, Henderson and Boulder City, the Clark County Water Reclamation District and the Las Vegas Valley Water District. The CRC's relationship with SNWA, formalized by the 1993 Legislature, was intended to provide greater oversight of water issues facing Nevada. Since 1993, the working relationship has been further defined by legislation and various agreements.

- 1993 Legislative Session – AB 692 expanded the number of commissioners of CRC to seven members. This expansion was unique because it established greater oversight of southern Nevada water issues and created a close working relationship between CRC and SNWA. This act required three of the seven members be appointed from the board of directors of the Southern Nevada Water Authority. Therefore, these members provide joint oversight to both organizations.
- 1995 Legislative Session – AB 542 transferred the powers and duties of CRC with regard to the Southern Nevada Water System to SNWA. SNWA also assumed all of the obligations and liabilities of CRC with regard to the Southern Nevada Water System. CRC retained its authority to receive, protect, safeguard, and hold in trust for the State of Nevada all water and water rights and other benefits from the Colorado River.
- 2001 Legislative Session – SB 211 provided CRC with authorization to supply electric power to SNWA and its member agencies for their water and wastewater operations without being subject to the jurisdiction of the Public Utilities Commission of Nevada. During our audit, CRC was supplying electric power to SNWA and had tentative plans to provide power to the Las Vegas Valley Water District, a member agency of SNWA.



CRC's working relationship with SNWA was enhanced in June 2004, with the establishment of a new Electric Power Supply Agreement between the two entities. Pursuant to this agreement, CRC is to act as an agent in providing a reliable and cost effective means of meeting the energy supply needs of SNWA. Further, CRC has agreed to conduct all purchase and sale transactions in accordance with SNWA's Energy Risk Management Policy. To help carry out this policy, the two entities have formed an Energy Services Group. This includes 15 full-time staff, 8 CRC employees and 7 SNWA employees.

### **Risks Associated With Electric Power Trading**

Electric power markets are more complex than most commodity markets and involve a variety of risks. One unique characteristic of electric power markets is that electricity cannot be produced and easily stored for later use. Therefore, providers of electricity must constantly balance supply with demand while managing risks involved with trading activities. Risks associated with trading in electric power markets include:

- Price Risk – The risk that the price for electricity will change, making outstanding contracts for the purchase or sale of electricity more or less valuable.
- Credit Risk – The risk of financial loss from the failure of a counterparty to perform according to the terms and conditions of a contract. This would include the failure to make a payment, failure to perform, and filing bankruptcy.
- Regulatory Risk – The risk that changes or decisions by regulatory agencies will adversely impact completion of a trade or other transactions.
- Personnel Risk – The risk associated with human error, negligence, and unapproved or illegal activity.
- Model Risk – The risk that inappropriate models will be used for generating values, market price curves, and commodity positions.

Although a variety of risks exist in the power markets, the exposure to each risk can be managed with appropriate strategies, policies, procedures, and the use of various financial instruments for hedging and valuing transactions. For example, the exposure to credit risk can be minimized by monitoring counterparty credit ratings and establishing trading limits.

### **Western Energy Crisis**

The Colorado River Commission was impacted by the western energy crisis that occurred in 2000-2001. According to the Federal Energy Regulatory Commission, the western energy crisis was centered in California, which had restructured its electricity market in the late 1990s. Problems began in May 2000 after a drought diminished the region's supplies of typically abundant and inexpensive hydropower. The underlying imbalance between supply and demand, along with inadequate infrastructure and flawed market rules, triggered the crisis in California markets, which subsequently spread to other western states. As prices continued to rise, California utilities had to purchase higher priced power but, because of a state rate freeze, were unable to pass along these price increases to customers, thus becoming financially unsound. In the summer of 2000, rolling blackouts occurred in northern California.

The Federal Energy Regulatory Commission, in a March 2003 investigation report, concluded these conditions made possible the market manipulation that prolonged and exacerbated the economic harm caused by the crisis. While Enron Corporation was the focus of complaints about market manipulation, a number of other entities were involved or impacted either directly or indirectly. This included the Colorado River Commission.

### **Western Systems Power Pool**

The CRC became a member of the Western Systems Power Pool (WSPP) in April 2001. The WSPP is a power pool consisting of over 200 suppliers of electricity. All members operate under the terms and conditions of the WSPP Agreement. This membership allows CRC to conduct its power trading activities under a single standard agreement instead of a different agreement with each counterparty. Some of the areas covered by the agreement include: payments, approvals, membership, liability and damages, defaults, creditworthiness, confirmation of transactions, and dispute resolution. Therefore, each counterparty to a trade has a mutual understanding of this power marketing arrangement. The CRC has also agreed to supply power to the SNWA in accordance with the WSPP Agreement.

## **Litigation Regarding CRC Trading Activities**

The Colorado River Commission has been heavily involved in litigation since the western energy crisis in 2000-2001. This legal activity included the buyout of certain long-term power contracts, complaints regarding trading practices, and various disputes between CRC and Nevada Power Company.

### **Buyout of Long-Term Power Contracts**

During the western energy crisis in 2000-2001, CRC purchased long-term power contracts on behalf of Pioneer Americas, LLC (Pioneer), an industrial company located in Henderson, Nevada. Pioneer, which had filed Chapter 11 bankruptcy in 2001, disputed that it had an obligation to honor these contracts. Because the price for energy had dropped significantly from what CRC had committed to pay, the unrealized losses on these contracts was estimated at more than \$100 million.

In February 2003, CRC reached an agreement with Pioneer and the SNWA regarding the long-term power contracts. Under this agreement, SNWA agreed to pay \$53 million to CRC to help cover costs connected with these contracts. In addition, the CRC indicated that approximately \$45 million in funds earned from power trades on behalf of Pioneer would be used to help buy out the contracts and set up a reserve to secure the performance of Pioneer for future trades. Finally, the remaining contracts would be assumed by CRC. A consultant working with CRC staff estimated the residual liability on these contracts was approximately \$4.7 million as of June 2004.

In exchange, Pioneer agreed to assign its rights to hydroelectric power from the Hoover Dam and Parker-Davis Dam to SNWA. Further, CRC agreed to continue to purchase power for Pioneer under a new power supply agreement. In accordance with this agreement, CRC now purchases power for Pioneer at market rates on a short-term basis. In addition, a \$3 million cash reserve was established and held by CRC to secure the full faith and performance of Pioneer for electric power supply.

### **FERC Settlement**

The Federal Energy Regulatory Commission (FERC) issued “show cause” orders on June 25, 2003, to companies alleged to have disrupted western energy markets which involved the Colorado River Commission. One of these orders issued “show cause” instructions to Enron Power Marketing (Enron) and those entities that worked

through alliances and partnerships to engage in manipulative market schemes that had a profound adverse impact on the western power markets. The CRC was one of several market participants alleged to have been involved in partnerships with Enron. Therefore, CRC was required to “show cause” why it was not a participant with Enron in manipulative market schemes.

On October 27, 2004, CRC reached a settlement with FERC regarding its trading practices and association with Enron during the western energy crisis. The settlement was for approximately \$1 million, representing the revenue that CRC received through transactions with Enron in the California markets. The CRC did not admit any wrongdoing with regard to Enron or the western energy crisis.

#### Disputes Between CRC and Nevada Power Company

Various regulatory and legal disputes occurred between CRC and Nevada Power Company since the western energy crisis. These disputes included: 1) allegations of improper trading practices, 2) assertions that the Commission breached various duties under contracts, 3) financial claims related to energy trading imbalances, and 4) allegations of misconduct by a CRC employee. In addition, the CRC claimed financial harm due to Nevada Power Company’s calculation of costs related to providing imbalance services.

Most of these disputes centered around profits earned by CRC when energy imbalances occurred. During the energy crisis, Nevada Power Company provided energy imbalance services and other services to help CRC manage short-term supply and demand for electric energy. According to FERC documents, Nevada Power Company asserted that CRC may have intentionally over-scheduled power which created some false imbalances.

#### Cooperative Accord to Settle Outstanding Claims Among Nevada Utilities

In February 2005, the CRC, SNWA, Nevada Power Company and its parent company Sierra Pacific Resources, reached an accord to settle all outstanding claims and counterclaims between the parties. This includes lawsuits filed in various courts, complaints filed with FERC, and any other claims or causes of action, known or unknown, related to the energy crisis.

The accord is intended to establish a new working relationship between these entities to provide more value in the delivery of essential services to the public. This working relationship includes provisions for the delivery of certain power by Nevada Power Company to SNWA, energy balancing services, and improved communication. As part of the accord, senior management agreed to meet once every 3 months to communicate and coordinate issues among these parties.

The Cooperative Accord, subject to approval by each entity's board, requires other defining agreements. Some or all of the definitive agreements that will memorialize the Accord will be subject to the approval of various parties, including but not limited to the Public Utilities Commission of Nevada.

## **Scope and Objective**

This audit is part of the ongoing program of the Legislative Auditor as authorized by the Legislative Commission, and was made pursuant to the provisions of NRS 218.737 to 218.893. The Legislative Auditor conducts audits as part of the Legislature's oversight responsibility for public programs. The purpose of legislative audits is to improve state government by providing the Legislature, state officials, and Nevada citizens with independent and reliable information about the operations of state agencies, programs, activities, and functions.

This audit focused on electric energy trades made by CRC's Energy Services Group from September 2004 through January 2005. The objective of our audit was to determine whether CRC has implemented Risk Management Procedures for its electric energy trading activities.

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## **Findings and Recommendations**

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The Colorado River Commission (CRC) has implemented Risk Management Procedures designed to reduce the risks associated with electric energy trading activities. These procedures were jointly developed by CRC and its major customer, the Southern Nevada Water Authority (SNWA), in response to difficulties encountered during the 2000-2001 western energy crisis. The SNWA adopted these procedures in 2004, and CRC has agreed to supply power in accordance with these procedures. This cooperative effort has resulted in improved oversight of trading activities. Although procedures are now in place to help minimize risks, we identified certain areas where improvements can be made. These improvements include adopting procedures to cover trades with other entities, ensuring adequate documentation is maintained for all trade review activities performed by staff, and modifying procedures related to conducting credit reviews of entities trading with CRC. In addition, CRC needs to improve the reporting of customers' payable and receivable amounts in its financial statements.

### **Risk Management Procedures for Electric Energy Trading Have Been Established**

In response to difficulties encountered during the 2000-2001 western energy crisis, the CRC has worked toward the establishment of Risk Management Procedures to guide its electric energy trading activities. These procedures provide key controls which are important for minimizing the risks associated with purchasing and selling electric energy. Because of the complex nature of trading in electric energy markets, financial risks cannot be completely eliminated. However, sustained implementation of these procedures will provide reasonable assurance that trades are conducted under adequate oversight and risks are managed in accordance with established tolerance levels.

### **Establishment of Risk Management Procedures for SNWA Trades**

In August 2004, Risk Management Procedures were established governing CRC's trading activities for supplying electric power to SNWA. At that time, SNWA was the only customer that required the purchase of a long-term supply of non-hydroelectric power. These procedures were jointly developed by the two entities and adopted by the SNWA.

During the western energy crisis, the CRC did not have formal policies and procedures in place to guide its trading activities. However, since 2001 the CRC has worked with consultants and the SNWA in establishing written policies and procedures for managing its trading activities.

- In 2001, the CRC hired consultants to evaluate its risk management and electric energy trading practices. Consultants recommended that CRC staff execute their trading and oversight activities using a Front, Middle, and Back office organization model.
- In March 2002, the CRC adopted an Energy Risk Management Policy, Mission Statement, and Objectives.
- In February 2004, the SNWA adopted an Energy Risk Management Policy. This policy required the SNWA, in cooperation with the CRC, to develop Risk Management Procedures to address areas of risk related to energy trading activities.
- In August 2004, SNWA Risk Management Procedures were established. These procedures include trading limits and detailed operating procedures to be implemented by Front, Middle, and Back office personnel.

### **Procedures Are Needed for Trades Involving Other Entities**

Although procedures have been established for supplying power to SNWA, the CRC has not adopted procedures covering trades with other entities. During our audit, written policies and procedures were not in place for conducting trades related to contracts assumed by CRC. In addition, procedures need to be developed to cover future trades with member agencies of the SNWA.

In February 2003, the CRC assumed several energy contracts associated with a settlement with Pioneer Americas, LLC (Pioneer); however, trades involving these contracts are not covered by written procedures. Ten of 40 trades we tested, totaling approximately \$12 million in purchases and sales, related to contracts assumed from Pioneer. According to management, CRC does not currently have written policies and

procedures in place for managing trades associated with the residual Pioneer portfolio. Management also indicated the last remaining Pioneer settlement trades expire in December 2006, at which time all energy transactions will be subject to written risk procedures. Because these trades are not covered by policies and procedures, staff followed the SNWA Risk Management Procedures for executing and recording these transactions.

The CRC will also need to establish policies and procedures for future electric energy trades for the member agencies of SNWA. In 2001, CRC was given the authority to sell power to these entities for their water and wastewater operations without being subject to the jurisdiction of the Public Utilities Commission of Nevada. Although CRC was not selling power to these entities during our audit; staff indicated they plan to provide power to at least one member agency in 2006.

### **Risk Management Procedures Provide Key Controls**

The Risk Management Procedures provide controls over the purchase and sale of electric energy. Key controls established by these procedures include: (1) a Risk Control Committee to provide management oversight, (2) a Front-Middle-Back Office organization structure to provide separation of duties for trade execution, trade review, and risk analysis, and (3) reporting requirements to provide management information.

#### **Risk Control Committee**

Procedures require the establishment of a Risk Control Committee to ensure management oversight of trading activities. During our audit, the Committee included five members, three from SNWA and two from CRC. This Committee is required to meet at least quarterly. The Risk Control Committee is responsible for maintaining the Risk Management Procedures and has full internal authority over all energy-related financial risk taking and risk management activities. This authority includes taking all actions necessary to ensure compliance with procedures and reduce risk exposure.

#### **Front-Middle-Back Office Organization Structure**

Risk Management Procedures require the formation of a Front-Middle-Back Office organization structure to conduct trading activities. This framework is designed to organize trading and risk management activities into independent control offices. These offices provide a series of checks and balances to manage operational risk and provide



management information. In general, the Front Office executes power purchases and sales, the Middle Office performs planning, risk-management and analysis functions, and the Back Office provides accounting and administrative support for the front and middle offices. These offices form the Energy Services Group which include staff from both the CRC and SNWA.

- Front Office – This office is responsible for executing power purchases and sales. An energy portfolio that meets load requirements is required to be managed consistent with Risk Management Procedures. Key controls include procedures requiring traders to execute energy transactions in compliance with established trade limits, counterparty credit limits, and hedge guidelines. In addition, all trades must be done pursuant to the terms of the Western Systems Power Pool Agreement.
- Middle Office – This office performs the planning, risk-management, and analysis functions of the Energy Services Group. This includes reviewing trades for compliance with trade limits and counterparty credit limits. As part of its risk management activities, the Middle Office prepares a variety of reports, economic analyses, and credit reviews. This includes reviewing trades to ensure they fit the needs of the electric energy portfolio. The Middle Office also assists in developing and coordinating long and short range resource plans and energy forecasts.
- Back Office – This office supports the procurement and risk management functions of the Energy Services Group. The Back Office performs a variety of reporting, billing, and accounting tasks. Responsibilities also include the administration of written trade confirmation documents and the review of energy trade data to ensure that energy trades are properly captured and tracked.

#### Management Information and Reporting

Risk Management Procedures require timely reporting of management information, including reporting of violations to the Risk Control Committee. For example, the Middle Office is required to provide the Risk Control Committee with various monthly reports on the electric energy portfolio. In addition, monthly reports on revenues and expenses are provided to the Committee by the Back Office. Furthermore, procedures require the reporting of any violations such as trades exceeding certain trade limits and credit limits.

## **CRC Has Complied With Risk Management Procedures**

The CRC has implemented Risk Management Procedures designed to minimize the risks associated with electric energy trading activities. Our review of 40 trades, totaling approximately \$88 million in purchases and sales, found the CRC to be in substantial compliance with the requirements of these procedures. We also identified certain areas where improvements can be made. These improvements include ensuring adequate documentation is maintained for all trade review activities performed by staff, and modifying procedures related to conducting credit reviews of counterparties.

### **Trade Review Process Can Be Improved**

The process for reviewing electric energy trades can be improved by ensuring adequate documentation is maintained for all review activities performed by staff. We found that staff did not always document who performed certain review procedures and when they were performed. In addition, the confirmation of small trades was not always documented, and the Middle Office responsibility for reviewing trade confirmations was not clear.

Although staff did not document some of their review procedures performed, management oversight occurred for the trades we tested. Documentation was available showing that written trade confirmations were reviewed by CRC and SNWA management, who were also members of the Risk Control Committee. In addition, our testing did not identify any errors or discrepancies related to recording trades, entering data into the computer system, verifying written trade confirmation amounts, and complying with credit limits.

### **Daily Review of Trade System Entries Not Documented by Back Office**

Back Office staff did not document their review of data entered into the computer system. Risk Management Procedures require traders in the Front Office to complete a Deal Sheet for each executed trade and enter the information into the Trade Capture System. These Deal Sheets are distributed to the Middle and Back Offices. By the end of the day, the Back Office is required to validate that all trades completed that day were accurately entered into the system. However, neither the Deal Sheet nor the Trade Capture System reports indicate who performed these procedures or when they were

performed. Therefore, we could not verify this review process occurred by the end of the day.

According to CRC, the Back Office reviews these Deal Sheets against the information that is entered into the Trade Capture System and another report to ensure that each item is correctly entered. Any differences are then addressed and resolved. Because there is no record of the review process, management indicated they intend to modify the Deal Sheet to provide a record of who performed the Back Office review and when the review was performed.

#### Back Office Review of Trade Confirmations Not Documented

The Back Office did not document its review of trade confirmations received from sellers of electric energy. In accordance with the Western Systems Power Pool (WSPP) Agreement, sellers of energy must provide written confirmation of energy transactions of 1 week or more. These trade confirmations are then validated by the Back Office as required by Risk Management Procedures. However, Back Office staff did not document its validation of the 18 purchase confirmations we reviewed.

Although CRC indicated the Back Office uses the Deal Sheets to validate any counterparty trade confirmations it receives, staff did not maintain a record of who performed the validation or when it was performed. According to management, they intend to modify the Deal Sheet to provide a record of who performed the Back Office validation.

#### Confirmation for Small Trades Not Always Documented

Five electric energy trades did not have a written or electronically recorded confirmation of the terms of the transaction. These trades related to the management of the residual Pioneer portfolio assumed by the CRC. All five trades were small transactions (\$16,600 to \$54,400) for periods of less than 1 week. Therefore, electronically recorded confirmation of these short-term trades would be allowable under the WSPP Agreement and Risk Management Procedures.

The WSPP Agreement requires a confirmation for all power trades. Section 32.1 states: The Parties' agreement to transaction specific terms which constitute the Confirmation Agreement shall be made by one of the following methods: (1) provision of pertinent information through written Confirmation Agreements or (2) oral

conversation, provided that such oral conversation is recorded electronically.... In addition, written confirmation shall be required for all transactions of 1 week or more.

Risk Management Procedures require all trades be executed over a recorded phone line whenever possible or via an approved electronic trading platform. Trades may be made over unrecorded phone lines when access to a recorded phone line is not possible so long as the counterparty also leaves the trader a voice message with the details of the trade and the trader has the voice message recorded.

According to CRC staff, some trades may not have been recorded electronically because the telephone recording system was down for maintenance. After we discussed this situation with management, they indicated that procedures should be modified to ensure the confirmation of all trades is documented.

#### Middle Office Trade Confirmation Responsibilities Not Clear

Although procedures require the Middle Office to receive and review trade confirmations, none of the confirmations we tested were submitted to the Middle Office for review. Instead, confirmations were submitted to the Back Office for review.

Procedures required the Middle Office to verify that confirmations are executed in accordance with the WSPP Agreement. After discussing this requirement with CRC, management indicated that procedures should be modified to clarify the existing practice of requiring the Middle Office to review and negotiate new confirmation language only.

According to management, the Middle Office is only responsible for reviewing and negotiating confirmation language for new counterparties. For existing counterparties, the Back Office reviews the confirmation language to ensure that it is consistent with the language that was originally negotiated with the counterparty. Therefore, the review of existing confirmations is more appropriately done by the Back Office.

#### Credit Review Procedures Need Modification

CRC staff have established a practice of limiting trades to short-term transactions of 60 days or less when a credit review has not been completed for a counterparty. Although this practice is a reasonable way to limit risk while providing flexibility to make

trades, it is not in compliance with the Risk Management Procedures. Therefore, procedures should be modified in this area.

Our testing identified three trades that were limited to 60 days or less until credit reviews could be completed. For example, in September 2004, CRC staff initiated a trade with one new counterparty for \$285,200 without conducting a formal credit review required by Risk Management Procedures. Instead, staff conducted a very cursory review and then activated trading for a term of 60 days or less. The formal credit review was completed by staff in February 2005.

According to CRC, several circumstances made it difficult or prevented staff from completing credit reviews in accordance with existing requirements. This included communication difficulties with counterparties and CRC staff taking over the credit review responsibility from its consultant in January 2005. Management indicated they were working on modifications to policies and procedures in this area.

## **Reporting of Customer Payable and Receivable Amounts Needs Improvement**

The CRC needs to improve its reporting of amounts payable to customers and amounts receivable from customers. For fiscal year 2004, the amount reported as payable to customers on CRC's audited financial statements was understated by at least \$2.6 million. In addition, little information was disclosed in the notes to the financial statements regarding payables and receivables. Therefore, users of the financial statements may not have sufficient information regarding amounts owed to customers and amounts due from customers.

The amount reported as payable to customers was understated in CRC's audited financial statements for fiscal year 2004. Although CRC was holding customers' cash deposits and reserves totaling approximately \$4.4 million on June 30, 2004, only \$1.8 million was shown as the balance owed to customers for the Power Marketing Fund. Therefore, the amount payable to customers was understated on the financial statements by at least \$2.6 million.

This understatement occurred, in part, because CRC did not track a large cash reserve owed to one customer in a separate account or in an account with other

customer reserves and deposits. Instead, the liability to this customer, totaling \$3.8 million as of June 30, 2004, was tracked within the cash account. According to information provided by CRC, the amount reported as payable to customers at the end of the year was adjusted without considering the liability to this customer. However, because of the way CRC adjusts its accounting records at year-end, management indicated this liability is netted against other customer receivables.

Improvements can also be made in reporting information on customer payables and receivables in the notes to the audited financial statements. Although CRC has received certificates for excellence in financial reporting from the Government Finance Officers Association, the notes to the financial statements disclose few details in this area. The combined note on payables and receivables for 2004 states, in full:

**All outstanding balances between funds are reported as “due to/from other funds.”**

**All accounts receivable are shown net of any appropriate allowance for doubtful accounts.**

In comparison, other entities such as the SNWA provide significant detail regarding customer payables and receivables in the notes to their audited financial statements. For example, SNWA's note regarding Accounts Payable lists amounts payable for Administration, Treatment Plant, Construction Contracts, and Construction Contract Retention for fiscal years 2003 and 2004. Also included is detail on amounts owed to the Las Vegas Valley Water District. In addition, the note for amounts Due From Member Agencies lists the amount due from each member agency for fiscal years 2003 and 2004. Further, the note for Other Receivables lists amounts due from entities that are not members of SNWA for fiscal years 2003 and 2004.

Because few details are provided on customer payables and receivables, users of CRC's financial statements may not have sufficient information in this area. For example, as of June 30, 2002, the CRC reported \$36.7 million in payables to customers in its Power Marketing Fund. However, notes to the financial statements do not disclose which customers this money was owed to and what created the large customer payable balance. According to the CRC, the large payable balance related to an accumulation of cash generated from electric power trading gains for one company.

## **Recommendations**

1. Develop written policies and procedures to cover all electric energy trading activities.
2. Modify controls to ensure the Back Office documents its review of trade information entered into the Trade Capture System and its review of trade confirmations received.
3. Modify controls for small trades to ensure the confirmation of transactions for less than 1 week is documented.
4. Request a revision to Risk Management Procedures to clarify Middle Office and Back Office responsibility for reviewing trade confirmations.
5. Request a revision to Risk Management Procedures to clarify the practice of limiting trades to short-term transactions when credit reviews cannot be completed timely.
6. Ensure customer deposits and cash reserves are accurately reported in financial statements, and consider disclosing more information on customer payables and receivables when significant balances exist.

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# Appendices

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## Appendix A Audit Methodology

To gain an understanding of the Colorado River Commission, we reviewed state laws and regulations, interviewed management and staff, and reviewed policies and procedures significant to CRC's operations. In addition, we reviewed financial reports, prior audit reports, budgets, news articles, contracts, legal documents, state accounting records, minutes of various legislative committees, and other information describing the activities of CRC. We also reviewed controls over billing, collection, and purchasing activities.

In planning our audit, we documented and assessed controls related to CRC's electric energy trading activities. This included reviewing various policies and procedures established from March 2002 to December 2004. From this review, we identified key controls established by the Risk Management Procedures and documented the CRC's process for conducting trades within a Front-Middle-Back Office organization structure. We also met with representatives of the Energy Services Group to document how the CRC and SNWA have combined their staff to conduct trading activities within this type of organization structure.

To accomplish our audit objective, we randomly selected 40 energy trades that occurred after the establishment of Risk Management Procedures in August 2004. These trades, occurring from September 2004 to January 2005, were tested for compliance with the Risk Management Procedures. Our testing included verifying that key controls were implemented by the Front-Middle-Back Office staff. In addition, we verified that counterparty credit ratings and trade limits were updated when required, and trades were conducted in accordance with established trading limits. Middle Office and Back Office reporting requirements were also tested for compliance. We also reviewed recommendations by consultants to identify whether significant recommendations to improve trading practices were included in the Risk Management Procedures.



Our audit work was conducted from October 2004 through June 2005, in accordance with generally accepted government auditing standards.

In accordance with NRS 218.821, we furnished a copy of our preliminary report to the Executive Director of the Colorado River Commission of Nevada. On April 18, 2006, we met with agency officials to discuss the results of our audit and requested a written response to the preliminary report. That response is contained in Appendix C which begins on page 25.

Contributors to this report included:

Ian J. Allan  
Deputy Legislative Auditor

Rocky J. Cooper, CPA  
Audit Supervisor

David Steele, CPA  
Deputy Legislative Auditor

Stephen M. Wood, CPA  
Chief Deputy Legislative Auditor

## **Appendix B**

### **Prior Audit Recommendations**

As part of our audit, we requested the Colorado River Commission to respond to the status of the recommendations made in our 1997 audit. That audit contained 14 recommendations related to controls over financial and administrative activities. The CRC indicated that these prior recommendations have been implemented. The scope of our current audit did not include these recommendations. Therefore, we did not verify the CRC's implementation of the prior audit recommendations.

**Appendix C**  
**Response From the Colorado River Commission of Nevada**

**KENNY C. GUINN, Governor**  
**RICHARD W. BUNKER, Chairman**  
**JAY D. BINGHAM, Vice Chairman**  
**GEORGE M. CAAN, Executive Director**

STATE OF NEVADA



**ANDREA ANDERSON, Commissioner**  
**MARYBEL BATJER, Commissioner**  
**SHARI BUCK, Commissioner**  
**ACE I. ROBISON, Commissioner**  
**MYRNA WILLIAMS, Commissioner**

**COLORADO RIVER COMMISSION**  
**OF NEVADA**

April 21, 2006

Mr. Paul V. Townsend, CPA, CIA  
Legislative Auditor  
Audit Division  
Legislative Counsel Bureau  
Legislative Building  
401 S. Carson Street  
Carson City, NV 89701-4747

Dear Mr. Townsend:

Thank you for the audit report on the Colorado River Commission. We appreciate the professionalism and courtesy you and your staff have shown us. Enclosed is the completed Response to Audit Recommendations form, and our agency reply follows.

COLORADO RIVER COMMISSION  
AGENCY REPLY

Recommendation 1: Develop written policies and procedures to cover all electric energy trading activities.


As indicated in the narrative component of the audit, the Commission has established a comprehensive risk management policy and the accompanying procedures related to trades done on behalf of the Southern Nevada Water Authority (SNWA). These procedures were developed carefully over time with the assistance of both outside consultants and the management and staff of the SNWA. Commission staff follows these procedures on trades involving other customers as appropriate. However, as indicated in the audit, these procedures have not been formally adopted for other customers or for power contracts assumed by the Commission.

The audit narrative indicates that the Commission anticipates additional new customers will be served pursuant to legislation (Senate Bill 211) enacted in 2001. Under the "SB211" program, energy is procured by the CRC on behalf of the SNWA member agencies. Their electrical loads are sometimes referred to as the "SB211 loads." To accommodate the anticipated addition of new load the following language has been added

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(NSPO Rev. 8-05)

(O) 1102A 

to the SNWA Risk Management Procedures explaining the process for transacting on behalf of those SNWA member agencies that elect to participate in the "SB211" program.

**"A.2 Separation of Books and Inter-Book Transfers**

- a. *Separate books shall be maintained for the SNWA loads and the SB211 loads. For the purpose of purchasing energy and hedging, the net position of the individual books may be combined to arrive at a total energy position. Energy products may be purchased which will satisfy the total energy position of the combined books.*
- b. *The SB211 book shall be hedged through the process of inter-book transfers between the SNWA book and the SB211 book. That is, if the position of the SB211 book is not flat, energy shall be transferred between the SNWA and the SB211 book in either direction at market prices in order to restore the book to a flat position.*
- c. *The Middle Office shall be responsible for evaluating the position of the SB211 book at least once a month and for transferring energy quantities at market prices between the two books."*

The CRC has a separate internal procedure documenting the process for managing the Pioneer portfolio. At the end of 2006, all contracts associated with the residual Pioneer portfolio will expire as well as the internal procedure governing the transactions.

**Recommendation 2: Modify controls to ensure the Back Office documents its review of trade information entered into the Trade Capture System and its review of trade confirmations received.**

The tested risk control procedures called for review of all electric energy trades at various levels. These reviews were conducted as called for under the Procedures; however, the Procedures did not provide specific protocols for documentation of the review. Thus the documentation surrounding a number of trades did not indicate who reviewed the trade or when the review took place. The documentation was available to demonstrate management review of the trades.

The lack of documentation involved the Back Office review and the procedures have been modified to accomplish the recommendation. The following lines have been added to the bottom of the Trader Deal Sheets indicating when Trade Capture System

Mr. Paul V. Townsend  
Legislative Counsel Bureau

April 21, 2006  
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was reviewed and when Counterparty Confirmation was reviewed by Back Office personnel:

*Trade Capture System Review Date:* \_\_\_\_\_ *Initials:* \_\_\_\_\_

*Counterparty Confirm Review Date:* \_\_\_\_\_ *Initials:* \_\_\_\_\_

Recommendation 3: Modify controls for small trades to ensure the confirmation of transactions for less than 1 week is documented.

Existing risk management procedures support the recommendation that all trades, regardless of duration, need to be adequately documented. Per the master trade agreement (the Western States Power Pool Agreement or WSPP), all transactions of one week or longer require a written confirmation agreement between the buyer and the seller. The Commission routinely documents these transactions through written confirmations. For transactions of less than 1 week, the WSPP allows oral agreement to take place over a recorded phone line. The SNWA Risk Management Procedures currently require all trades to be executed over a recorded phone line whenever possible. The trades detailed in the audit as not having adequate confirmation were the result of the failure of the recorded line system. The trade personnel of the Commission did not recognize that the recorder on the trade line was out of service. Had they recognized that the system was not working properly, they could have used alternative procedures for confirmation that did exist in the Procedures. We have reemphasized the importance of the confirmation procedures and to provide additional documentation the Commission will propose adding language to the Risk Management Procedures, requiring written documentation of all short-term trades so that, in the absence of a recorded phone conversation, an alternative source of written documentation is available.

Recommendation 4: Request a revision to Risk Management Procedures to clarify Middle Office and Back Office responsibility for reviewing trade confirmations.

The Risk Management Procedures under audit required the Middle Office to receive and review trade confirmations. While this was the original procedure written into the Procedures, actual operating practice quickly indicated that the proper area for trade confirmation review was the Back Office. The Middle Office area of responsibility involves review and negotiation of confirmation language, not verification of compliance of individual trades with the language. Thus practice evolved into having the Back Office review the trades. The result is that the practice did not comport to the written guidelines. To rectify this situation the following language was added to Section A.4. of

the SNWA Risk Management Procedures to clarify Middle Office and Back Office responsibility for reviewing trade confirmations.

- “h. Counterparty Confirms containing non-standard WSPP, NAESB, or ISDA language or riders will be accepted provided that a) the confirm language is negotiated by the Middle Office prior to deal execution, b) the counterparty agrees that the same confirmation will be used for all subsequent deals and c) the non-standard language has been reviewed by legal personnel.*
- i. The Back Office shall verify that all Counterparty Confirms containing non-standard language contain the same Confirm language previously negotiated by the Middle Office.”*

Recommendation 5: Request a revision to Risk Management Procedures to clarify the practice of limiting trades to short-term transactions when credit reviews cannot be completed timely.

When the Risk Management Procedures were written, we did not adequately anticipate the difficulties we would encounter in obtaining information necessary for thorough credit review. Counterparties are not always fully timely or cooperative with our review requests. This sometimes results in substantial time lapsing before a formal review can be completed and the appropriate counterparty creditworthiness score assigned. Operating practice led us to make the decision to temporarily limit trades with such counterparties to durations of 60 days or less until the review could be accomplished. While we have determined this limitation to be a reasonable practice in providing counterparty flexibility the practice was not a specific part of the Procedures.

The Procedures have been modified to provide for this practice by adding the following language to Section A.9.a. of the SNWA Risk Management Procedures to allow short-term trades with entities pending completion of a thorough credit review.

*“The Middle Office may assign a temporary Credit Rating of 7 to the counterparty pending the completion of a thorough credit review.”*

Pursuant to the credit matrix in the Risk Management Procedures, an internal rating of 7 enables transactions of 60 days or less to occur. An internal rating of 7 is the lowest rating that can be given to an active counterparty.

Mr. Paul V. Townsend  
Legislative Counsel Bureau

April 21, 2006  
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Recommendation 6: Ensure customer deposits and cash reserves are accurately reported in financial statements and consider disclosing more information on customer payables and receivables when significant balances exist.

For the year ended June 30, 2004 the Commission was holding customer cash deposits and reserves totaling approximately \$4.4 million. The cash deposits represented cash collateral posted by Commission customers in support of power purchase transactions. The cash deposits were tracked within the combined cash account of the Commission and reported within the combined cash and cash equivalents line in the assets section of the balance sheet. At year-end, the corresponding liability related to the cash deposits was netted against the amounts receivable from the customers. This accounting treatment resulted in financial statement values showing a net amount owed to the customers of only \$1.8 million.

For the year ended June 30, 2005, the liability for the cash deposits has been detailed in a specific line item in the liability section of the balance sheet entitled "Customer collateral deposits".

The audit finding also addressed potential additional disclosure information that could be included in Commission year end statements as necessary and when material amounts exist. The customers of the Commission have increasingly moved from cash deposits for collateral purposed to the use of letters of credit against which the Commission may draw. In fact only one customer has cash on deposit with the Commission at this time. Thus we anticipate that the materiality of these items will diminish over time. Additional disclosure will be considered and discussed with the external auditors each year and accomplished as circumstances dictate.

Sincerely,



George M. Caan  
Executive Director

DNB/jln

Enclosure

cc: Douglas N. Beatty, Chief, Finance and Administration  
Gail Bates, Energy Services Manager

**Colorado River Commission of Nevada  
Response to Audit Recommendations**

<u>Recommendation Number</u>		<u>Accepted</u>	<u>Rejected</u>
1	Develop written policies and procedures to cover all electric energy trading activities .....	<u>  X  </u>	<u>      </u>
2	Modify controls to ensure the Back Office documents its review of trade information entered into the Trade Capture System and its review of trade confirmations received .....	<u>  X  </u>	<u>      </u>
3	Modify controls for small trades to ensure the confirmation of transactions for less than 1 week is documented.....	<u>  X  </u>	<u>      </u>
4	Request a revision to Risk Management Procedures to clarify Middle Office and Back Office responsibility for reviewing trade confirmations .....	<u>  X  </u>	<u>      </u>
5	Request a revision to Risk Management Procedures to clarify the practice of limiting trades to short-term transactions when credit reviews cannot be completed timely .....	<u>  X  </u>	<u>      </u>
6	Ensure customer deposits and cash reserves are accurately reported in financial statements, and consider disclosing more information on customer payables and receivables when significant balances exist .....	<u>  X  </u>	<u>      </u>
	<b>TOTALS</b>	<b><u>  6  </u></b>	<b><u>  0  </u></b>