



LOUISIANA LEGISLATIVE AUDITOR
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May 4, 2012

The Honorable Charles E. “Chuck” Kleckley,
Speaker of the House of Representatives
State Capitol Building
Post Office Box 94062
Baton Rouge, Louisiana 70804-9062

Re: House Resolution No. 106

Dear Representative Kleckley:

The Louisiana Legislative Auditor compiled the following information in response to House Resolution No. 106 (HR 106). The resolution requested the legislative auditor to investigate certain issues pertaining to the Crescent City Connection Division (CCCD), a division of the Louisiana Department of Transportation and Development (DOTD). We developed the following objectives to address the issues presented in HR 106:

- Were CCCD revenues used to pay for operating costs of the LA-1 toll bridge?
- Were capital outlay contracts for ferry repairs and maintenance properly procured?
- Were capital and operating expenditures for ferry repairs and maintenance reasonable and necessary?

Background

CCCD operates six ferries that provide service to the general public at three ferry crossings on the Mississippi River - Gretna to Canal Street, Algiers Point to Canal Street, and Lower Algiers to Chalmette. The three ferry crossings have operated continuously since 1969. One of the ferries transports passengers only, while the other five ferries transport passengers and vehicles.

CCCD's Fiscal Year (FY) 2012 operating budget for ferry operations is nearly \$9 million, funded with tolls collected on CCCD's bridges and ferries. The bridge tolls are scheduled to expire on December 31, 2012.

Were CCCD revenues used to pay for operating costs of the LA-1 toll bridge?

LA-1 toll bridge operating costs totaling \$168,399 were paid for with CCCD bridge and ferry toll revenues. DOTD pays CCCD costs and LA-1 costs from its operating account and then requests reimbursement from CCCD for CCCD's costs. Since CCCD and the LA-1 toll bridge share certain monthly costs, DOTD splits those shared costs based on an allocation of staff hours. However, \$168,399 of the LA-1 costs was misallocated to CCCD and should not have been reimbursed by CCCD to DOTD.

Payroll and Other Costs. According to a report by DOTD's internal auditor, the following LA-1 toll bridge costs totaling \$98,645 were incorrectly allocated to CCCD from January 2004 through December 2010. DOTD paid CCCD back for these costs in April 2011.

LA-1 Costs	Amount Charged to CCCD
P-card transactions	\$397
Travel expenses	2,110
Payroll costs	55,915
Fringe benefits	40,223
Total	\$98,645

Legal Fees. Before the internal auditor's report, DOTD identified \$59,631 in legal fees for the LA-1 toll bridge that were incorrectly allocated to CCCD. DOTD paid CCCD back for these costs in December 2010. The legislative auditor followed up on the misallocation and found an additional \$3,208 in legal fees for LA-1 that were incorrectly allocated to CCCD. DOTD paid CCCD back for these costs in January 2011.

Furniture. The shared cost list provided by CCCD for the period July 1, 2009, through December 31, 2009, included \$26,598 in furniture purchases for CCCD headquarters, but these costs were not shared with LA-1. According to a CCCD representative, it is unclear why the furniture was not shared. The person who prepared the allocation is no longer employed at CCCD. Also, the items purchased each cost less than \$1,000 and are not inventoried. The shared cost list indicates the furniture was purchased for the training room, human resources, IT, the director of business, and the executive director of tolls. Therefore, it appears that the furniture was used for both CCCD and LA-1 operations and the costs should have been shared. Using CCCD's allocation method for other operating costs, \$6,915 of the \$26,598 in furniture purchases should have been allocated to LA-1. DOTD paid CCCD back for these costs in May 2012.

Were capital outlay contracts for ferry repairs and maintenance properly procured?

CCCD did not always comply with DOTD's procurement requirements when contracting for ferry repairs and maintenance. For FY 2009 through FY 2011, CCCD provided us with 41 contracts totaling \$2,433,398 and 13 related plan changes totaling \$364,080, for a total contract amount of \$2,797,478. The value of a contract determines the manner in which it must be procured and the documentation required as shown in the table on the following page.

Required Procurement Method	No. of Contracts	Original Contract Amount	No. of Plan Changes	Plan Change Amount	Total Contract Amount
Requisition or purchase order (contract value < \$5,000)	7	\$17,808	5	\$66,799	\$84,607
DOTD's policy for bidding projects less than \$50,000 (contract value \$5,000 to \$50,000)	27	638,819	4	56,353	695,172
DOTD's letter bid and contract guidelines (contract value \$50,000 to \$500,000)	6	1,196,362	4	240,928	1,437,290
DOTD's electronic bidding system (contract value > \$500,000)	1	580,409	0	0	580,409
Total	41	\$2,433,398	13	\$364,080	\$2,797,478

We analyzed the 41 contracts and 13 related plan changes and identified instances where CCCD did not execute contracts before the commencement of work, approved plan changes that significantly increased the contract amount, and did not always maintain the required documentation.

Contracts Executed After Work Began. In January 2011, DOTD became aware of anomalies regarding CCCD contracts. It appeared that the CCCD Staff Engineer was allowing work to be done without contracts. The CCCD Staff Engineer is responsible for ensuring that all CCCD contracts are properly and timely executed, change orders and task orders are properly approved before work is commenced, money has been allocated for task orders before work is commenced, and contracted work is properly performed. During its investigation, DOTD identified eight ferry contracts totaling \$248,448 that were signed after work commenced and two projects totaling \$630,319 for which contracts were not executed. The CCCD Staff Engineer was terminated in April 2011.

DOTD executed contracts on the two projects totaling \$630,319 as a result of its investigation. One project totaling \$580,409 was for emergency repairs to the Armiger ferry, and the other project totaling \$49,910 was for bow thruster repairs on the Stumpf ferry.

According to a memo from the CCCD Staff Engineer to DOTD's Assistant Secretary of Operations, the repairs to the Armiger ferry were needed because the engine room had been flooded to about five feet; two propulsion engines had been submerged; two generators and their engines had been submerged; and miscellaneous other electrical and mechanical devices had been submerged. The estimated cost was approximately \$450,000, and the project was to be funded by the Office of Risk Management (ORM). DOTD approved the project as an emergency; therefore, most of DOTD's procurement requirements were waived. The only required documentation is confirmation of the emergency, an executed contract, and a final inspection. As stated previously, there was no executed contract at the time of DOTD's investigation. Also, the memo indicated that ORM would pay for the project, but we could not locate documentation of a claim filed with ORM. CCCD approved full payment of the contractor's invoice in August 2011.

We identified 11 additional contracts totaling \$443,889 that were executed after work began. Also, we could not determine whether the work began after the contract date for four other contracts totaling \$125,926 because the commencement date was not available.

Plan Changes Significantly Increased Total Contract Amount. For three contracts valued less than \$5,000 and procured by requisition or purchase order, the plan changes increased the total contract amounts over \$5,000. One contract dated June 17, 2009, for \$800 was to disassemble and inspect the lower gear box on the Z-drive thruster of the Porterie ferry. The first plan change dated the next day for \$4,985 was to disassemble the upper and lower housing and replace with a spare from CCCD. The second plan change dated 13 days later for \$41,979 was to replace the lower gear box with a refurbished unit. Both plan changes were approved by the CCCD Staff Engineer and the CCCD Assistant Director, who are no longer employed with CCCD.

A second contract for \$800 was to dismantle and inspect a port side thruster on the Porterie ferry. The signed and dated contract was not available. The plan change dated September 18, 2009, for \$16,043 was to furnish a refurbished lower gear box. The plan change was approved by the CCCD Staff Engineer and the CCCD Assistant Director. The total contract amount increased from \$800 to \$16,843.

A third contract dated May 26, 2011, for \$3,520 was to dismantle and inspect a thruster unit on the Thomas Jefferson ferry. The plan change for \$1,896 was to furnish a new thrust plate. The signed and dated plan change was not available. The total contract amount increased from \$3,520 to \$5,416.

For one contract valued between \$5,000 and \$50,000 and procured by DOTD policy, the plan change increased the total contract amount over \$50,000. The contract dated September 16, 2010, for \$17,797 was to inspect and repair the main starboard thruster on the Porterie ferry. The plan change for \$37,068 was to furnish a lower gear set. The signed and dated plan change was not available. The total contract amount increased from \$17,797 to \$54,865.

Other. Our analysis of the 41 contracts and 13 related change orders noted the following additional exceptions:

- We could not locate evidence that CCCD solicited bids for four contracts totaling \$670,278 that were subject to DOTD's letter bid and contract guidelines.
- Eleven contracts totaling \$749,501 were executed after the notices to proceed were sent.
- Capital expenditures exceeded the approved contract amount by \$8,731 for three contracts.
- CCCD's files contained incomplete documentation such as award letters, winning proposals and/or invoices, retainage bonds, vendor affidavits, notices to proceed, and final acceptance letters.

Were capital and operating expenditures for ferry repairs and maintenance reasonable and necessary?

Although capital outlay contracts for ferry repairs were not always properly procured, ferry repairs and maintenance expenditures do not appear unreasonable or unnecessary based on the supporting documentation provided. For FY 2009 through FY 2011, CCCD provided invoices for operating expenditures totaling \$3,464,782 and capital expenditures totaling \$2,214,205 for a total invoice amount of \$5,678,987. We analyzed the invoices and supporting documentation and categorized the expenditures as follows:

Expenditure Type	Amount
Fuel	\$2,390,403
USCG dry-docking	1,293,459
Engines and generators	815,783
Stern thrusters (Z-drives)	431,778
Parts and supplies	397,858
Bow thrusters	290,633

Expenditure Type	Amount
Other*	\$42,348
Lifeboats	16,725
Total	\$5,678,987
*Miscellaneous expenditures costing less than \$5,000.	

The costs for operating and maintaining a ferry can vary based on whether the ferry transports passengers only or passengers and vehicles, age and weight, fuel consumption, type of main propulsion, and date of last U.S. Coast Guard (USCG) dry-docking.

Fuel Consumption. Fuel costs are 69% of the ferries’ total operating costs for FY 2009 through FY 2011. Although the frequency of trips made by the six ferries did not vary significantly, the price of diesel fuel steadily rose from a low of \$1.29 in 2009 to a high of \$3.41 in 2011.

Main Propulsion. The main propulsion unit on four of the ferries is a conventional rudder. The other two ferries each have two stern thrusters (Z-drives) for main propulsion. A Z-drive is a type of marine propulsion unit that can rotate 360 degrees, allowing for rapid changes in thrust direction and thus vessel direction. This eliminates the need for a conventional rudder. The Z-drive is unique in that it uses a mechanical device to drive the propellers rather than an electrical motor.

The ferry captains favor the Z-drives’ maneuverability but indicated they frequently need repairs or servicing, especially since they are used in the muddy waters of the Mississippi River. For example, the river silt erodes the outer seals, causing the seals to fail and water to get in and mix with the gear oil. Problems with a main propulsion unit will cause a ferry to be taken out of service until repaired.

Four of the ferries also have a bow thruster to assist with navigation. In addition, each ferry has two generator engines and four of the ferries each have an emergency generator.

Propulsion, Navigation, and Generators				
Ferry	Main Propulsion	Bow Thruster ¹	Generator Engine	Emergency Generator
Armiger	Conventional rudder ²	None	Two	None
Levy	Conventional rudder	One, electric motor	Two	One
Porterie	Two Z-drives, ³ diesel engines	One, diesel engine	Two	One
St. John	Conventional rudder	None	Two	One

Propulsion, Navigation, and Generators				
Ferry	Main Propulsion	Bow Thruster ¹	Generator Engine	Emergency Generator
Stumpf	Conventional rudder	One, electric motor	Two	None
Thomas Jefferson	Two Z-drives, diesel engines	One, diesel engine	Two	One

¹ A bow thruster moves the ferry sideways.
² A conventional rudder moves the ferry forward and backward.
³ A Z-drive moves the ferry 360 degrees.

USCG Dry-docking. All ferries must be dry-docked at least once every five years for a USCG inspection. Major repairs, overhauls, or improvements are usually incorporated into this process to minimize expenditures and out-of-service time.

We would like to express our appreciation to the management and staff of DOTD and CCCD for their assistance during our work. I hope this information will benefit you in your legislative decision-making process.

Sincerely,



Daryl G. Purpera, CPA, CFE
Legislative Auditor

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