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Commissioner



TEXAS LOTTERY COMMISSION

Anthony J. Sadberry, Executive Director

Philip D. Sanderson, Charitable Bingo Operations Director

August 15, 2007

Mr. Michael Apperley
Assistant State Auditor
State Auditor's Office
P.O. Box 12067
Austin, Texas 78711-2067

Via Fax: 512.936.9400 and Hand Delivery

Dear Mr. Apperley,

As a matter of courtesy, I am informing you of the staff recommendation regarding Incomplete Lottery Ticket Transactions. This item is scheduled to be presented to the Commission, at its meeting, on Wednesday, August 22, 2007. Enclosed is a copy of the main body of the Committee Report.

We appreciate the assistance and attention you have given this agency in regard to this matter. We are respectful of the authority of your office and value your judgment and would appreciate any comments you might have prior to the Commission meeting on August 22nd. We invite you to attend the meeting should you wish to address the Commission regarding this matter.

Sincerely,

Anthony J. Sadberry
Executive Director

mbs

Attachments

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INTEROFFICE MEMO

Anthony J. Sadberry, Executive Director

Philip D. Sanderson, Director Charitable Bingo Operations

To: Anthony J. Sadberry, Executive Director

From: Incomplete (Retry) Transactions Committee:

**Catherine Melvin, Internal Audit Director
Katheryn Pyka, Controller
Michael Anger, Lottery Operations Director
Edward Rogers, Retailer Services Manager
Robert Tirloni, Products Manager
Gary Grief, Deputy Executive Director**

Date: August 9, 2007

Re: Policy Recommendation for Incomplete (Retry) Transactions related to State Auditor's Office Report No. 06-046 Issued July 2006

Incomplete transactions are inherent in many of the business transactions conducted in today's technology dependent telecommunications environment. The successful functioning of this technology may be impacted by the following:

- Telecommunications protocols where data or device instructions are transmitted from one device to another.
- Electrical power failures.
- Software controlled or managed hardware such as servers or point of sale devices (i.e. cash registers, ATMs, or ticket sales terminals).
- Mechanical devices such as printers or scanners either remote from or integrated into the software controlled hardware.
- Devices that depend on user maintained supplies required for transactions to be fully processed. Examples are paper stock for receipts or tickets and ink for printers.

The following are a few real world situations where important transactions may not be successfully completed due to malfunctions or maintenance failures:

- An ATM transaction may be interrupted due to power or communications failures such that a withdrawal from an account may be recorded on a banking central system with the confirmation from the central system back to the ATM being interrupted. This would result in a debit transaction being recorded against the account while the ATM did not receive the required instruction to dispense cash to the user.

- A point of sale device such as a cash register at a grocery store may be shut down by a power failure. The user is unable to complete the check out process, pay for the items already scanned or receive a receipt. Because the power failure has impacted the entire store, the customer does not have any option to complete the purchase of the products they wish to buy.

Lottery ticket sales systems using the most current technology available have similar technological, mechanical and supply issues that may impact the ability of the systems to successfully complete transactions. Some examples of incomplete transactions would include the following:

- A retailer terminal loses power after sending a wager to the lottery operator system but before the confirmation and authorization to print from the lottery operator system reaches the retailer terminal. The power failure would result in a wager being recorded on the central system but no physical ticket being printed.
- A retailer terminal that is printing multiple transactions runs out of on-line ticket stock. This would result in wager(s) being recorded on the central system but no physical ticket(s) being printed.
- A retailer terminal printer malfunctions and does not feed the paper stock through the printer mechanism. This would result in a wager being recorded on the central system but no physical ticket being printed.
- A retailer terminal user may interrupt the terminal production of a series of tickets by unplugging the terminal or opening the terminal. This would result in wager(s) being recorded on the central system but no physical ticket(s) being printed. The reason for this interruption could be the result of a customer ordering a large number of quick pick tickets, the retailer starting to generate the tickets and the customer indicating they are not able to pay for the tickets requested.

These are some of the most common examples of incomplete transactions but other failures or combinations of failures could result in incomplete transactions where a wager is recorded on the lottery operator system but a ticket may not be produced and sold to a player. The nature of these transactions eliminates opportunities to identify them as incomplete transactions.

A subset of incomplete transactions exists that are known as retry transactions. As noted in the July 2006 State Auditor's Office Audit Report on Lotto Texas Activities at the Texas Lottery Commission, incomplete transactions (known internally as retry transactions) were created 0.000044 percent of the time during the sample period of the audit with the majority occurring at draw break for the particular on-line game being played. None of these transactions were high-tier transactions. Retry transactions occur when a wager transaction is registered in the lottery operator's central computer system and processed as a valid wager. However, the actual ticket potentially may not have printed and the sale at the retail location potentially not completed. At the time of the State Auditor's Office (SAO) review of this issue, the understanding of both the SAO and the agency was that tickets of this nature never resulted in a printed ticket. However, recent supplemental information provided by GTECH, the Lottery Operator for the agency, indicates that GTECH can provide no assurance using available technology that tickets are never printed as a result of a retry transaction. In fact, GTECH has stated that, for purposes of prize pools and payouts, lottery best practices include the assumption that a ticket is printed unless there is certainty that it did not. Furthermore, achieving this certainty is impossible.

These transactions, while infrequent, are caused by severely degraded or dropped communication in the path between the terminal and central system. When this occurs, the host successfully receives and logs the transaction but the response to the terminal is potentially unsuccessful. The result is that a transaction is logged on the host, but the terminal may not print a ticket until the communication connectivity issue is resolved. The terminal continues in a 'retry' mode to complete confirmation of the transaction and receive authorization to generate the ticket during the communication interruption. This may continue for an extended period depending on the cause and how quickly it can be resolved. Retry transactions may span draw break and/or calendar days

and are only recorded by the central system upon reestablishment of the connectivity between the terminal and the central system.

The Lottery Operator computer system was configured several years ago to monitor for and identify these retry transactions and record them in a report generated during overnight processing by the Lottery Operator. The Lottery Operator monitors this report and overnight Lottery Operator personnel manually review the number combinations associated with retry transaction wagers against the numbers selected for the respective on-line game drawing. If the transaction involves a combination that matches the numbers drawn for a high-tier (\$600 or more) prize, the Lottery Operator is directed by contract, as recently amended in Contract Amendment #8, to notify the Lottery Operations Director and the Internal Audit Director.

By contract, the retry transaction report is required to be made available to Lottery personnel via the report system by the start time of daily on-line ticket sales (currently 6 a.m.). Lottery personnel take two actions related to the report. They manually review the number combinations associated with retry transaction wagers against the numbers selected for the respective on-line game drawing to verify the Lottery Operator's review. By procedure, Lottery personnel identify and report high-tier winning combinations, should they occur, and take action to credit those retailers that had retry transactions associated with their accounts. This verification and crediting function is performed each business day but after on-line sales and validations have begun at 6 a.m.

It is important to note that the identification of retry transactions is limited. The lottery operator system only identifies retry transactions when the communication connection between the lottery operator central system and the retailer terminal are re-established. The retailer terminal continues in a 'retry' mode until it receives confirmation of a wager by the lottery operator central system. Should there be a disruption of power to the terminal, a pending retry transaction is lost and is not identified by the central system. However, as recently reported by GTECH, the retry transaction report cannot, with any certainty, be used to identify tickets that are not printed.

Staff Recommendation:

In light of the inability of current technology to confirm either the printing of a ticket or the failure of a ticket to print related to a retry transaction, it is the staff's recommendation that all incomplete transactions, including retry transactions, be handled in a uniform manner, consistent with the assumption that the ticket printed, and considered an unclaimed prizes if not claimed within the statutory deadline.

The staff also recommends the following actions:

- Amend the Lottery Operator contract to remove Section Q of Amendment 8 to the contract related to Incomplete (Retry) Transactions. Section Q required the Lottery Operator to provide a report that identifies retry transactions. Due to the inability to rely on the data in this report, the agency will cease the crediting of retailer accounts.
- Notify the SAO of the new information recently provided by GTECH that available technology provides no assurance that tickets are not printed during retry transactions. Indicate to the SAO that this information changes the agency's position on this matter including the agency's position on the SAO recommendation related to retry transactions.
- Require the Lottery Operator to implement a telecommunications "buffer" that, according to GTECH, should reduce the number of retry transactions that occur by approximately 50%. Implementing this buffer will require an administrative rule change related to the draw break for all on-line games.
- Continue to stay abreast of technological advancements that may improve the agency's position in the future related to retry transactions.

While no current solution exists to resolve incomplete retry transactions, the staff believes that this recommendation is consistent with the mission of the Commission to operate a lottery that has the highest standards of security and integrity and upholds the commission's core values of Integrity and Responsibility and Customer Responsiveness.

Attachments: SAO Report No. 06-046 Lotto Texas Activities at the Texas Lottery Commission (Chapter 6)
Amendment #8 of the Contract for Lottery Operations and Services (Section Q)
GTECH-Global Technology Group—Host and Terminal Printing Consensus Report
Legal Analysis Retry Transactions (related to treatment as unclaimed prizes)
Legal Analysis Retry Transaction Buffer Analysis

From: Mike Apperley [<mailto:MApperley@sao.state.tx.us>]
Sent: Thursday, August 16, 2007 9:01 AM
To: Sadberry, Anthony
Subject: Retry Transactions

Mr. Sadberry,
I received your letter this morning. I appreciate the opportunity to review and provide comments. Your approach looks well thought out and I have no issues with it. I would suggest that you ensure that a description of the process for handling retry transactions is easily available to the players and retailers. I would suggest posting them on the Lottery's website.

Again, I appreciate the opportunity to review and comment on your approach.

Mike

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