

West Virginia Lottery Sports Wagering and Interactive Gaming

Minimum Internal Control Standards (MICS)

These controls are being issued at this time to provide preliminary guidance to our casinos regarding the required environment for sports wagering and interactive gaming. We believe these controls will require modification over time as we implement the gaming environment at each casino. We will issue modified controls as appropriate.

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Section 1 Minimum Accounting and Internal Control Procedures

Section 1.1 Accounting Records

- (a) The Casino licensee shall maintain complete, accurate, and legible records of all transactions pertaining to the revenues and sports wagering and interactive gaming activities.
- (b) General accounting records shall be maintained on a double entry system of accounting with transactions recorded on the accrual basis in accordance with GAAP. Detailed, supporting, subsidiary records sufficient to meet the requirements of (c) below shall also be maintained in accordance with the requirements of this chapter.
 - 1. The Lottery shall periodically prescribe a uniform chart of accounts and accounting classification in order to insure consistency, comparability, and effective disclosure of financial information.
 - i. The chart of accounts shall provide the classifications necessary to prepare the standard financial statements required.

- ii. The prescribed chart of accounts shall be the minimum level of detail to be maintained for each accounting classification by the Licensee.
- iii. The Licensee shall not use other than the prescribed chart of accounts but may, with the permission of the Lottery, expand the level of detail for some or all accounting classifications and/or alter the account numbering system. In such instances, the Licensee shall provide to the Lottery, upon request, a cross-reference from the Licensee's to the prescribed chart of accounts.
- (c) The detailed, supporting, and subsidiary records shall include, but not necessarily be limited to:
 - 1. Detailed records identifying revenues, expenses, assets, liabilities, and equity for each casino licensee;
 - 2. Records of all patron checks initially accepted by the Licensee, deposited by the Licensee, returned to the Licensee as "uncollected," and ultimately written-off as uncollectible.
 - 3. Records supporting the accumulation of the costs and number of persons, by category of service, for regulated complimentary services.
 - 4. Journal entries prepared by the casino licensee and by its independent accountants;
 - 5. Records of all investments in property, and equipment. The records should identify the investments made;
 - 6. Records of all loans and other amounts payable by the casino licensee.
 - 7. Records provided for in the system of internal accounting controls submitted to the Lottery.
 - 8. A record of all investments, advances, loans, and accounts receivable balances due the casino licensee:
 - 9. Tax work papers used in preparation of any state or federal tax return;
 - 10. Records to comply with all federal financial record keeping requirements of Title 31 Code of Federal Regulations, part 103;
 - 11. Work papers supporting the daily reconciliation of cash accountability; and
 - 12. Other records that the Lottery requires to be maintained.
- (d) If the casino licensee fails to maintain the records used by it to calculate the adjusted gross receipts from the operation of sports wagering and interactive gaming, the Lottery may

compute and determine the amount upon the basis of an audit conducted by the Lottery using available information.

(e) Adjusted Gross receipts computations shall be computed as follows:

1) Sports Wagering:

- a. For sports wagering, adjusted gross receipts means the total of all wagers received less voided wagers and less amounts paid out for winning wagers.
- b. The accounting department shall determine the daily retail adjusted gross receipts amount by comparing a win report from the sports wagering system to the reconciliation of the sports wagering drawers. The daily mobile adjusted gross receipts shall be determined by comparing the reports for patron accounts and the gaming system. The wagering operator shall be required to report sports wagering revenue as the higher amount unless otherwise authorized by the Lottery Commission.

2) Interactive Gaming:

- a. For interactive gaming, adjusted gross receipts means the net of the total amounts wagered and total amounts won plus tournament entry fees, rake, or vigorish, and amounts due to or from an interactive gaming network..
- b. The accounting department shall determine the daily adjusted gross receipts amount by the reports for patron accounts and the gaming system. The wagering operator shall be required to report interactive wagering revenue as the higher amount unless otherwise authorized by the Lottery Commission.
- (f) A casino licensee may not deduct from adjusted gross receipts computations the unpaid balance of a credit instrument.

Section 1.2 The licensee's organization structure

(a) Each casino licensee shall maintain an organizational structure which meets the following criteria designed to preserve the integrity of the casino operation. Provided the criteria of this section are met, each casino licensee shall be permitted to tailor its organizational structure to meet the needs of its own particular management style. The proposed table of organization of

each casino licensee shall be approved by the West Virginia Lottery and shall provide for the following criteria:

- 1. A system of personnel and chain of command which permits management and supervisory personnel to be held accountable for actions or omissions within their area of responsibility;
- 2. The segregation of incompatible functions so that no employee is in a position both to commit an error or perpetrate a fraud and to conceal the error or fraud in the normal course of his or her duties;
- 3. Primary and secondary supervisory positions which permit the authorization or supervision of necessary transactions at all relevant times; and
- 4. Areas of responsibility which are not so extensive as to be impractical for one person to monitor.
- (b) In addition to satisfying the requirements of Section (a) above, each casino licensee's organizational structure shall include, at a minimum, the following departments and supervisory positions. Each of these departments and supervisors shall be required to cooperate with, yet perform independently of all other departments and supervisors. Mandatory departments are as follows:

1. Casino Accounting Department

- i. Each casino licensee shall have in its accounting department one or more individuals responsible for and dedicated to verifying financial transactions, and reviewing and controlling accounting forms and data. This function, which is sometimes referred to as "casino income or revenue audit", shall be independent of the transactions under review. Among other things, this function shall include, but not be limited to, a daily audit of the sports wagering and interactive gaming documentation, a daily audit of the casino cage accountability, a daily audit of the coin vault accountability, document control and signature verification.
- ii. The Casino Accounting Department shall be supervised by a casino key employee holding a license endorsed with the position of accounting officer.

2. Cashiers Cage

i. Each casino licensee shall maintain a Cashiers Cage supervised by a casino key employee holding a license endorsed with the position of accounting officer. The

supervisor of the Cashiers Cage shall report to the supervisor of the Casino Accounting Department and shall be responsible for the control and supervision of cage cashiers and change persons. The cashiers' cage may be separated into independent operations for table games and slot machines and sports wagering and interactive gaming.

- ii. The Cashiers Cage shall be responsible for, without limitation, the following:
 - (1) The custody of coin, currency, patron checks, gaming chips and plaques, and documents and records normally associated with the operation of a cashiers' cage;
 - (2) The approval, exchange, and redemption of patron checks received for the purposes of gaming;
 - (3) The receipt, distribution, and redemption of gaming chips and plaques, and
 - (4) Such other functions normally associated with the operation of a cashiers' cage.

3. Surveillance Department

- i. Each casino licensee shall have a Surveillance Department that is responsible for the covert monitoring of:
 - (1) The conduct and operation of sports wagering and interactive gaming;
 - (2) The conduct and operation of the cashiers' cage;
 - (3) The movement of cash, chips, tokens and any other casino assets.
 - (4) Detection of cheating, theft, embezzlement, and other illegal activities in the casino;
 - (5) Detection of the presence in the gaming room of any person who is required to be excluded; and
 - (6) Video recording of illegal or unusual activities monitored.
- ii. The Surveillance Department shall be independent of all aspects of casino operations and shall be supervised by a casino key employee holding a license endorsed with the position of Director of Surveillance. The Director of Surveillance shall report to the property general manager, or to the license holder, or to a corporate executive outside the immediate property management team, or to another independent reporting line as approved by the Lottery.

- iii. The personnel of the Surveillance Department shall at all times be employees of the casino licensee.
- iv. Casino licensees shall not outsource the Surveillance function to any third party.

4. Security Department

- i. Each casino licensee shall have a Security Department that is responsible for the overall security of the facility including, without limitation, the following:
 - (1) The physical safety of patrons and employees in the casino;
 - (2) The physical safeguarding of assets transported to, from, or through the casino;
 - (3) The protection of patrons, employees and casino property from illegal activity;
 - (4) The recordation of any and all unusual occurrences including the date, time, nature of the incident, persons involved in the incident, and the assigned Security Department personnel.
 - (5) The identification and removal of any person who is required to be excluded pursuant to Title 179 Series 9 and Series 10.
- ii. The Security Department shall be supervised by a casino key employee holding a license endorsed with the position of Director of Security.
- iii. The personnel of the Security Department shall be prohibited from carrying firearms.
- iv. The personnel of the Security Department who participate in any aspect of the gaming operation shall at all times be employees of the casino licensee.
- v. Nothing in this subsection shall prohibit the casino licensee from utilizing outside vendors for hotel security functions.

5. Sports Wagering and Interactive Gaming Departments

- i. Each casino licensee shall have a Sports wagering and interactive gaming Department responsible for the conduct of the sports wagering and interactive gaming in accordance with the established rules, as well as the minimum internal control standards.
- ii. The Sports wagering and interactive gaming Departments shall be supervised by a management-level employee who ensures that there is sufficient supervision,

knowledge and training within the department to provide for the proper and fair conduct of the games.

- iii. The Sports Pool Manager of the Sports Wagering Department shall be a casino key employee.
- iv. The Interactive Gaming Manager of the interactive gaming Department shall be a casino key employee.

6. Internal Audit Function

- i. Each casino licensee shall maintain an Internal Audit Function either through a separate on-site department, or through the use of Corporate Internal Audit or through the outsourcing of this function. The Internal Audit Function shall be responsible for, without limitation, the following:
 - (1) Reviewing and appraising the adequacy of internal controls.
 - (2) Ensuring compliance with internal controls through observations, interviews and review of accounting documentation.
 - (3) Reporting instances of non-compliance with the system of internal controls.
 - (4) Reporting of any material weaknesses in the system of internal controls.
 - (5) Recommending improvements in the system of internal controls.
- ii. The personnel of the Internal Audit Function shall be independent of the areas subject to audit.
- iii. If maintained in-house, the Internal Audit Function shall be supervised by a casino key employee having a license endorsed with the position of accounting officer.
- iv. The Internal Audit Function shall maintain its independence through an organizational reporting line that is outside the management of the gaming operation. The director of the function shall report directly to the license holder, the general manager of the property, a corporate executive outside the property, or to an independent audit committee.
- v. The method by which the casino licensee fulfills its requirements with respect to the Internal Audit Function shall be described in the casino licensee's written table of organization.

- vi. Documentation (e.g., checklists, programs, reports, etc.) shall be prepared to evidence all internal audit work performed as it relates to the requirements in this section, including all instances of noncompliance.
- vii. The Internal Audit Function shall operate with audit programs, which, at a minimum, address the minimum internal control standards. Additionally, the function shall properly document the work performed, the conclusions reached, and the resolution of all exceptions. All such working papers and documentation shall be retained for a minimum of five years.
- viii. Reports documenting audits performed shall be maintained for a minimum of five years and shall be made available to the West Virginia Lottery upon request. Such audit reports shall include the following information:
 - (1) Audit objectives;
 - (2) Audit procedures and scope;
 - (3) Findings and conclusions;
 - (4) Recommendations, if applicable; and
 - (5) Management's response.
- ix. All material exceptions resulting from internal audit work shall be investigated and resolved with the results of such being documented and retained for a minimum of five years.
- x. Internal audit findings shall be reported to management.
- xi. Management shall be required to respond to internal audit findings stating corrective measures to be taken to avoid recurrence of the audit exception. Such management responses shall be included in the internal audit report that will be delivered to management, the audit committee, the West Virginia Lottery upon request, or any other entity designated by the casino licensee.
- 7. Management Information Systems (MIS) Department
 - i. Each casino licensee shall maintain an MIS Department which shall be responsible for the quality, reliability, and accuracy of all computer systems used in the operation.
 - ii. The MIS Department shall be responsible for, without limitation, the specification of appropriate computer software, hardware, and procedures for security, physical integrity, business continuity, and maintenance of:

- iii. Access codes and other data-related security controls used to ensure appropriately limited access to computers and the system-wide reliability of data;
- iv. Computer tapes, disks, or other electronic storage media containing data relevant to casino operations; and
- v. Computer hardware, communications equipment and software used in the conduct of casino operations.
- vi. The MIS Department shall be supervised by a casino key employee holding a license endorsed with the position of administrative officer.

8. Credit Department

- i. A credit department supervised by a person referred to herein as a credit manager. In lieu of a credit manager, the chief accounting officer may supervise the credit department. The credit department shall be responsible for the credit function including, without limitation, the following:
 - (1) The verification of patron credit references;
 - (2) The establishment of patron credit limits; and
 - (3) The maintenance, review and update of the patron's credit files.

Section 1.2.1 Personnel assigned to the operation and conduct of Sports Wagering and Interactive Gaming

Each casino licensee shall be required to employ the personnel herein described in the operation of its casino, regardless of the position titles assigned to such personnel by the casino licensee in its approved organizational chart. Functions described in this section shall be performed only by persons having the appropriate knowledge and skill, as well as, holding the appropriate license required by the casino licensee's approved organizational chart to perform such functions, or by persons holding the appropriate license required by the casino licensee's approved organizational chart to supervise persons performing such functions.

- 1. Each casino licensee shall at all times maintain a level of staffing that ensures the proper operation and effective supervision of all authorized games and in the casino.
- 2. Each casino licensee shall be required to employ a person referred to herein as a sports pool manager. The sports pool manager shall be a key employee of the casino licensee, or a qualified employee of a licensed management services provider that is

operating under a contract with a casino licensee, responsible for the operations of sports wagering and final approval of all odds established on any wager made pursuant to this chapter.

- (a) The following personnel, at a minimum, shall be used to operate the sports wagering in an establishment:
 - 1. Ticket Writer
 - 2. Sports Wagering Shift Supervisor
 - 3. Sports Pool Manager
- (b) Sports wagering employees shall hold an occupational license in accordance with the Rule.
- (c) Sports wagering employees that hold occupational licenses shall not perform any functions that are not included in their job descriptions submitted to and approved by the Lottery casino audit department.
- 3. Each casino licensee shall be required to employ a person referred to herein as an interactive gaming manager. The interactive gaming manager shall be a key employee of the casino licensee, or a qualified employee of a licensed management services provider that is operating under a contract with a casino licensee, responsible for the operations of interactive gaming.

Section 1.3 Forms, records and documents

- (a) All information required by this chapter to be placed on any form, record, or document and in stored data shall be recorded on such form, record, or document and in stored data in ink or other permanent form.
- (b) Whenever duplicate or triplicate copies are required of a form, record, or document:
 - 1. For manual forms, the original, duplicate, and triplicate copies shall be color coded. The forms shall have the name of the recipient originally receiving a copy preprinted on the bottom of that copy so as to differentiate one from the other;
 - 2. If the casino licensee prepares more copies than required by this chapter and the forms, records, and documents are required to be inserted in a locked dispenser, the last copy

shall remain in a continuous unbroken form in a locked dispenser, the key to which shall be controlled by the Accounting Department; and

- 3. Whenever under this chapter forms or serial numbers are required to be accounted for or copies of forms are required to be compared for agreement and exceptions are noted, such exceptions shall be reported immediately in writing to the internal audit department, and the Lottery for investigation.
- 4. Serial numbers on manual forms shall be printed on the form by the manufacturer; and
- 5. Computerized forms shall be sequentially numbered by the computer system and have the name of the recipient printed on the bottom of the form.
- (c) Unless otherwise specified in this chapter or exempted by the Lottery, all forms, records, documents, and stored data required to be prepared, maintained, and controlled by this chapter shall:
 - 1. Be in a form prescribed or authorized by the Lottery; and
 - 2. Have the name of the establishment and the title of the form, record, document, and stored data imprinted or preprinted thereon or therein.
- (d) The Accounting Department shall be responsible for receipt, control and issuance of all pre-numbered forms. Appropriate documentation shall be maintained to account for the forms.
- (e) Whenever a pre-numbered form is voided, the original and all copies shall be marked "void "and the person voiding the form shall record their signature on the voided form.
- (f) Nothing in this section shall be construed as prohibiting or discouraging a casino licensee from preparing more copies of any form, record, or document than that prescribed by this section.

Section 1.4 The layout and physical characteristics of the sports wagering and interactive gaming area

- (a) Each casino licensse shall submit their sports wagering and interactive gaming Area floorplan to the Lottery for approval. The floorplan shall include the surveillance camera coverage and the money routes.
- (b) The floorplan shall also include the location of any sports wagering kiosks, that shall be located on the gaming floor.

Section 1.5 Check Cashing Standards

- (a) Each casino licensee shall establish procedures for cashing patrons' checks and personal checks shall not be cashed in an amount greater than \$2,000.00 in any given gaming day. This does not pertain to third party check cashing services.
- (b) Nothing in this subsection shall prohibit the use of a check cashing service by a casino licensee provided that all the guidelines of the check cashing service are followed and the related internal control procedures are approved by the Lottery Commission.
- (c) The following patron checks shall be cashed in accordance with procedures specified in (d) below:
 - 1. Personal checks;
 - 2. Cashier's checks;
 - 3. Money orders;
 - 4. Credit card and debit advance checks;
 - 5. Traveler's checks:
 - 6. Drafts;
 - 7. Wire transfer service checks approved by the West Virginia Lottery; and
 - 8. Casino licensee issued checks.
- (d) All checks specified in (c) above shall be cashed by a cashier with no incompatible functions who shall:
 - 1. Examine the patron's picture identification (i.e., driver's license or other government-issued photo identification);
 - 2. Compare the signature on the identification credential to the signature on the check for agreement (if not in agreement, the cashier shall not cash the check);
 - 3. Record the patron's driver's license number or other government issued photo identification credential;
 - 4. Immediately stamp the check "for deposit only";
 - 5. Time and date stamp the check;
 - 6. Initial the check; and
 - 7. Count out in full public view and view of the surveillance camera the funds in an amount equal to the amount for which the check is drawn.

- (e) In addition to the requirements of section (d), if the check sought to be cashed is a personal check, the cashier shall also:
 - 1. Determine whether the patron's available credit is sufficient to cover the amount of the personal check;
 - 2. Refuse to cash the personal check if the patron has a balance outstanding to the casino licensee, due to checks previously cashed by the casino licensee, for more than 30 day's; and
 - 3. Hold a personal check against established credit lines for the earlier of seven days or the date that the check cleared the financial institution upon which it was drawn.
- (f) Only checks made payable to the presenting patron shall be cashed by the Casino licensee. No third-party checks shall be cashed.
- (g) The failure to deposit for collection a check, specified in (c) above, by the next banking day following receipt shall be considered an extension of credit.
- (h) Patron buy-back of checks accepted by the casino licensee shall not be permitted. Payment of an insufficient funds check shall not be considered a buy-back.

Section 1.6 Returned Checks

- (a) All returned checks which are the responsibility of the casino licensee shall be documented on a returned check log by a department independent of the casino licensee cage department and who is not acting in an incompatible function.
- (b) Procedures shall be established for collecting and recording checks returned to the casino licensee. A casino licensee may re-deposit a returned check if there are reasonable expectations the check will be honored.
- (c) A continuous record of all returned checks which are the responsibility of the casino licensee shall be maintained. The returned check log shall contain the following information:
 - 1. Original date of the check;
 - 2. Name and address of the drawer of the check;
 - 3. Amount of the check;
 - 4. Check number:
 - 5. Date the check was dishonored; and
 - 6. Date and amount(s) of any collections received on the check after being

returned by a bank.

- (d) Credit lines of patrons whose personal checks have returned and remain unpaid shall be suspended.
 - 1. Notification of return checks shall be communicated in writing to the casino cage, credit department, and any other department that is deemed appropriate to credit procedures.

Section 1.7 Collection of past due accounts

- (a) Statements shall be sent to patrons, by accounting department employees with no incompatible functions, immediately upon receipt of a returned check, or immediately upon receipt of a returned check for a second time, if the check was immediately redeposited. The statements shall contain the following:
 - 1. Name and address of drawer;
 - 2. Date of the check:
 - 3. Amount of check; and
 - 4. Dates and amounts of any collections received on the check(s) after being returned by the bank.
- (b) Patrons sent statements shall be advised of a return address and department to which replies shall be sent.
- (c) Employees with no incompatible functions shall receive directly and shall initially record all collections.
- (d) Copies of statements and other documents supporting collection efforts shall be maintained and controlled by accounting department employees.
- (e) A record of all collection efforts shall be recorded and maintained by the collection area within the accounting department.

Section 1.8 Write-off of past due accounts

(a) After reasonable collection efforts, returned checks may be considered uncollectible for accounting purposes and charged to the casino licensee's allowance for uncollectible patrons' checks. Any patron's indebtedness may only be considered uncollectible for accounting purposes and charged to the allowance for uncollectible patrons' checks account after the following information has been included in the patron's credit file:

- 1. Documentation of the casino licensee's collection department efforts to collect the patron's outstanding checks and the reason why such collection efforts were unsuccessful; or
- 2. A letter from an attorney representing the casino documenting the efforts to collect the patron's outstanding checks and the reasons why such collection efforts were unsuccessful or were not pursued further.
- (b) Listings of uncollectible checks shall be approved in writing by, at a minimum, the chief executive officer or the chief gaming executive, a casino key employee and the controller or the person to whom the controller directly reports.
- (c) With the exception of the chief executive officer, the chief financial officer, and chief gaming executive, none of the foregoing persons shall also have the authority to approve credit. All such uncollectible checks and listings shall be maintained and controlled by accounting department employees. A continuous trial balance of all uncollectible checks shall be maintained by employees of the accounting department. The continuous trial balance shall be adjusted for any subsequent collections

Section 1.9 The procedures for the acceptance, accounting for and redemption of patron's cash deposits

- (a) Whenever a patron requests a casino licensee to hold his or her cash, cash equivalent, gaming check, slot tokens or prize tokens, for subsequent use, the patron shall deliver the cash, cash equivalent, gaming check, slot tokens or prize tokens to a general cashier who, after converting any of those non-cash items into cash, shall deposit the cash for credit to the patron cash deposit account established for that patron pursuant to this section.
- (b) A file for each patron shall be prepared manually or by computer prior to the acceptance of a cash deposit from a patron by a general cage cashier and such file shall include, at a minimum, the following:
 - 1. The name of the patron;
 - 2. The date and amount of each cash deposit initially accepted from the patron;
 - The date and amount of each check initially accepted from the patron, as a draw against a cash deposit;
 - 4. The date and amount of each cash deposit redemption.

- (c) All information recorded on the customer deposit file shall be in accordance with the casino licensee's system of internal accounting controls submitted to the Lottery.
- (d) A general cashier accepting a deposit shall prepare a Customer Deposit Form and other necessary documentation evidencing such receipt.
- (e) Customer Deposit Forms shall be serially pre-numbered, each series of Customer Deposit Forms shall be used in sequential order and the series number of all Customer Deposit Forms shall be accounted for by employees with no incompatible function. All original and duplicate void Customer Deposit Forms shall be marked "VOID" and shall require the signature of the preparer.
- (f) For establishments in which Customer Deposit Forms are manually prepared, a prenumbered two-part form, at a minimum, shall be used.
- (g) For establishments in which Customer Deposit Forms are computer-prepared, each series of Customer Deposit Forms shall be a two-part form, at a minimum, and shall be inserted in a printer that will: simultaneously print an original and duplicate and store, in machine-readable form, all information printed on the original and duplicate. The stored data shall not be susceptible to change or removal by any personnel after preparation of a Customer Deposit Form.
- (h) On the original and duplicate of the Customer Deposit Form, or in stored data, the general cashier shall record, at a minimum, the following information:
 - 1. The name of the patron making the deposit.
 - 2. The total amount being deposited (numerical total and written amount);
 - 3. The date of deposit;
 - 4. The signature of the general cashier or, if computer prepared, the identification code of the general cashier; and
 - 5. Nature of the amount received (cash, cash equivalent, slot tokens, prize tokens, wire transfer, or electronic fund transfer).
- (i) After preparation of the Customer Deposit Form the general cashier shall obtain the patron's signature on the duplicate copy and shall distribute the copies in the following manner:
 - 1. Original given to the patron as evidence of the amount placed on deposit with the casino licensee:

- 2. Duplicate copy forwarded along with any other necessary documentation to the main bank cashier who shall maintain the documents.
- (j) A patron shall be allowed to use the deposit by supplying information required by the casino licensee to verify his or her identification.
 - 1. The general cashier shall ascertain, from the cashiers' cage, the amount of the patron deposit available and request the amount the patron wishes to use against this balance. The general cashier shall prepare a Customer Deposit Withdrawal Form.
 - 2. Distribution of the Customer Deposit Withdrawal Forms shall comply with Section 1.15.
- (k) The patron's deposit balance shall be immediately reduced by amounts equal to the Customer Deposit Withdrawal Form issued at the cage.
- (1) A patron may obtain a refund of any unused portion of his or her funds on deposit by:
 - 1. Sending the casino licensee a signed written request for a refund together with a signed original Customer Deposit Form; or
 - 2. Appearing personally at the cashiers' cage, requesting the refund and returning an original Customer Deposit Form.
- (m) Once an original Customer Deposit Form is presented at a cashiers' cage, a general cashier shall:
 - 1. Verify the unused balance with the main bank cashier;
 - 2. If the patron has presented the request in person, require the patron to sign the original of the Customer Deposit Form; and
 - 3. Prepare necessary documentation evidencing such refund, which documentation may include a Customer Deposit Withdrawal Form or any other document which contains the following information:
 - i. Date and shift of preparation;
 - ii. Amount refunded;
 - iii. Type of refund made (cash, check, wire transfer, or electronic fund transfer) and whether the refund was requested in person or in writing;
 - iv. Patron's name; and
 - v. Signature of the general cashier preparing such documentation.

- (n) The general cashier shall forward each original Customer Deposit Form tendered by the patron pursuant to (l) above, along with any other necessary documentation, to the main bank cashier, who shall compare the patron's signature on the original Customer Deposit Form and any attached written signed request required by (1)1 above to the patron's signature on the duplicate Customer Deposit Form and on the original Customer Deposit Withdrawal Form. The main bank cashier shall sign the original Customer Deposit Form if the signatures are in agreement, notify the general cashier of the results of the comparison and maintain the original Customer Deposit Form and the documentation supporting the signature verification. (o) If the patron has requested the return of his or her original Customer Deposit Withdrawals, the main bank cashier shall, return each of the patron's original Customer Deposit Withdrawal Forms to the general cashier. After the main bank cashier has notified the general cashier that the signatures contained in (n) above are a match, the general cashier shall then refund the unused balance of the deposit to the patron and, if applicable, return the original Customer Deposit Withdrawal Form to the patron. The general cashier shall maintain any necessary documentation to support the signature verification and to evidence such refund.
- (p) A log of all customer deposits received and returned, shall be prepared manually or by a computer on a daily basis, by main bank cashiers and such log shall include, at a minimum, the following:
 - 1. The balance of the Customer Deposits on hand in the cashier's cage at the beginning of each shift;
 - 2. For Customer Deposits received and refunded;
 - i. The date of the Customer Deposit or refund;
 - ii. Customer Deposit Number;
 - iii. The name of the patron; and
 - iv. The amount of the Customer Deposit or refund.
 - 3. The balance of the Customer Deposits on hand in the cashier's cage at the end of each shift.
- (q) The balance of the Customer Deposits on hand in the cashiers cage at the end of each shift shall be recorded as an outstanding liability and accounted for by the main bank cashier.

Section 1.10 Cage and Vault Accountability Standards

- (a) The cage shall consist of at a minimum, a Main Bank, Chip Bank and Check Bank. The Main Bank shall provide the operating inventory to general (window) cashiers/ticket writers for sports wagering. If the casino licensee elects to use a Satellite Cage, the same standards shall apply.
- (b) The casino licensee shall provide the Lottery with the start and end time of each cage shift. The times shall not be changed without prior Lottery approval.
- (c) Whenever a sports wagering ticket writer exchanges funds with the Main Bank, the ticket writer shall prepare a two part Even Exchange form. The form shall include at a minimum the following:
 - 1. Date of preparation;
 - 2. Window location;
 - 3. Separate areas designating which items are being sent to/received from the Main Bank;
 - 4. Type of items exchanged;
 - 5. Total of the items being exchanged;
 - 6. Signature of the ticket writer preparing the form requesting the exchange;
 - 7. Signature of the cashier completing the exchange; and
 - 8. If the exchange is not within the cage between a ticket writer and the Main Bank, the exchange shall be transported by a representative of the Security Department who shall sign the form upon receipt of the items to be transported.
- (d) Any variances shall be recorded on a Cashier Variance log. If the variance exceeds \$500, the variance shall be reported to the Lottery and investigated by the casino licensee. The variance shall be reported in writing via email to on site West Virginia Lottery Table Games Auditing and Security Departments within two (2) hours of the end of shift paperwork being signed. The findings of the investigation shall be forwarded to the Lottery. (e) If the casino licensee elects to use a separate vault, the vault shall be subject to the same

Section 1.11 The procedures for unclaimed winnings

accountability and reconciliation procedures as the cage.

- I. For Mobile Wagering Accounts (includes both sports wagering and interactive gaming):
 - a. Refer to Chapter 36 Article 8, Uniform Unclaimed Property Act of the West Virginia State Code. If the West Virginia Uniform Property Act does not apply, refer to the relevant state or federal law for unclaimed property.

II. For Retail Wagering:

- (a) Any winnings whether property or cash, which are due and payable to a known patron, and which remain unclaimed, shall be held in safekeeping for the benefit of such known patron.
- (b) In circumstances where the winnings have not been provided to the known patron, the casino licensee shall prepare a Winner Receipt form. The form shall be a two part, serially pre-numbered form and contain the following:
 - 1. The date and time the sports wagering outcome was known;
 - 2. The wager terminal upon which the win occurred including the following:
 - i. Wagering terminal number;
 - ii. Location; and
 - iii. Winning combination.
 - 3. The two part receipt form shall be distributed as follows:
 - i. The original to the cashier responsible for maintaining safekeeping balances, by the preparer;
 - ii. The duplicate shall immediately be presented to the winning patron who shall be required to present the duplicate receipt before being paid the winning amount due.
- (c) The Lottery shall use, or require the casino licensee, to use its best efforts to deliver the winnings to the patron. Documentation shall be maintained of all efforts to provide the patron with the unclaimed winnings. Documentation shall be, but not limited to, letters of correspondence, telephone calls, or other means of communication used in the attempt to provide the winnings to the patron.
- (d) Winning patrons shall collect winnings by presenting, at the cashier's cage, the duplicate copy of the receipt form, signed in the presence of the cashier. The cashier shall obtain the

original receipt from safekeeping and compare the signature on the original to the signature on the duplicate receipt form. The cashier shall sign the original receipt form attesting that signatures on the original and duplicate receipt forms agree and distribute the winnings to the patron.

- (e) The original receipt form shall be retained by the cashier as evidence of the disbursement from the cashier's funds. The duplicate receipt form shall be placed in a box for distribution to accounting by security or someone who did not participate in the transaction.
- (f) Winnings of known patrons held in safekeeping for 12 months or longer shall revert to the benefit of the casino licensee after reasonable efforts to distribute the winnings to the known patron, as determined from review of documentation maintained.
- (g) For winnings wherein the identity of the patron is not known, the Lottery shall require the casino licensee to use its best efforts to learn the identity of the patron. If the identity of the patron is determined, the casino licensee shall comply with sections (a) through (f) above.
- (h) Where the patron identity cannot be determined after three months from the time winnings were payable, the winnings shall revert to the benefit of the casino licensee.

Section 1.12 Complimentary Services

- (a) Each casino licensee shall establish and the casino licensee shall comply with procedures for the authorization, issuance, recording and monitoring complimentary services or items, including cash and non-cash gifts. Such procedures must be approved by the Lottery and shall include, but shall not be limited to, the procedures by which the casino licensee delegates to its employees the authority to approve the issuance of complimentary services and items, and the procedures by which conditions or limits, if any, which may apply to such authority are established and modified (including limits based on relationships between the authorizer and recipient), and shall further include effective provisions for audit purposes.
- (b) On a daily basis the Casino licensee shall record, the name of each person provided with complimentary services or items, the category of service or item provided, the value, as calculated in accordance with (d) below, of the services or items provided to such person, and the person authorizing the issuance of such services or items. Upon request, a copy of this daily report shall be submitted to the Lottery. Excepted from this requirement are the individual names of persons authorizing or receiving:

- 1. Each non-cash complimentary service or item that has a value, as calculated in accordance with (d) below, of \$150.00 or less; and
- 2. Each complimentary cash gift of \$100.00 or less.
- (c) The internal audit or accounting departments shall review the reports required in paragraph (b) of this section at least monthly. These reports shall be made available to the, Lottery, audit committee, and other entity designated by the Lottery, upon request.
- (d) All complimentary services or items shall be valued and recorded as follows:
 - 1. At full retail price normally charged by the Casino licensee if the complimentary service or item is provided directly to patrons in the normal course of the Casino licensee's business (such as rooms, food or beverages);
 - 2. At an amount based upon the actual cost to the Casino licensee of providing such service or item, if the complimentary service or item is not offered for sale to patrons in the normal course of a Casino licensee's business;
 - 3. At an amount based upon the actual cost to the Casino licensee of having a third party, not affiliated with the Casino licensee, provide a service or item directly or indirectly to patrons by the third party; and
 - 4. A complimentary service or item provided directly or indirectly to a patron on behalf of a Casino licensee by a third party who is affiliated with the Casino licensee shall be recorded by the Casino licensee in accordance with the provisions of this section as if the affiliated third party were the Casino licensee.
- (e) Complimentary cash gifts shall include, without limitation:
 - 1. Public relations payments made for the purpose of resolving complaints by or disputes with casino patrons;
 - 2. Travel or walk money payments made for the purpose of enabling a patron to return home;
 - 3. Cash complimentaries issued to patrons as a result of actual gaming activity; and
 - 4. Coupons issued and redeemed as part of a promotion program.
- (f) The Casino licensee shall accumulate on a quarterly basis both the dollar amount of and number of persons provided with each category of complimentary services or items.
 - 1. A quarterly report shall be filed with the Lottery regarding the complimentary services or items provided.

- 2. The complimentary services or items shall, at a minimum, be separated into categories for rooms, food, beverage, travel, cash gift, non-cash gift, and other services or items.
- (g) Where complimentary cash gifts have a value of \$1,000 or more or non-cash gifts have of value of \$2,500 or more, the Casino licensee shall also:
 - 1. Record the address of the recipient; and
 - 2. Verify the identity of the recipient by:
 - i. An examination of an identification credential that also contains a photograph or physical description of the recipient that is consistent with the actual appearance of the patron; or
 - ii. Obtaining the patron's signature and comparing it and the patron's physical appearance to the signature and general physical description in a patron signature file; or
 - iii. An authorized employee attesting to the patron's identity; and
 - 3. Record the method of verification.
- (h) All complimentary cash gifts shall be disbursed directly to the patron by a cashier at the cashiers' cage after receipt of appropriate documentation or in any other manner approved by the Lottery.
- (i) No Casino licensee shall permit any employee to authorize the issuance of complimentary cash or non-cash gift with a value of \$10,000.00 or more unless the employee is licensed and functioning as a key employee and the authorization is cosigned by a second employee licensed and functioning as a key employee.
- (j) Each Casino licensee shall submit to the Lottery a report listing the name of each person who has received \$10,000 or more in complimentary cash and non-cash gifts within any five-day period during the preceding month end. Such report shall be filed by the last business day of the following month and shall include the total amount of complimentary cash or non-cash gifts provided to each person.

Section 1.13 The procedures for the acceptance of wire and electronic transfers

- (a) A wire transfer or electronic funds transfer can be accepted from or on behalf of a patron for the following:
 - 1. Establish a patron customer deposit account in accordance with Section 1.9;

- 2. The redemption or partial redemption of a marker in accordance with Title 179 Part 9; and
- 3. The payment or partial payment of a returned marker in accordance with Title 179 Part 9.
- (b) Wire transfers or electronic funds transfers shall only be accepted at the cage and the funds shall be deposited in the casino's operating account. The cage shall require its bank to notify the cage that a wire transfer has occurred and shall require that the bank notify them by telephone, direct hard copy notification sent by the bank or direct computer access. If direct computer access is the method of notification, the cage shall print the screen.
- (c) Upon notification from the bank that a wire transfer or electronic funds transfer has occurred, the cage employee receiving the notification shall record the following information in a transfer log:
 - 1. A sequential number generated by the cage;
 - 2. Type of transfer (wire or electronic)
 - 3. Date and time of notification;
 - 4. Name and casino licensee number of employee who received notification of the transfer;
 - 5. Amount of funds in number and words:
 - 6. The name and casino account number of the patron for who the funds were accepted;
 - 7. The name and address or the American Banking Association (ABA) routing number of the financial institution from which the funds were transferred;
 - 8. The account number or the name on the account from which the funds were transferred, or the federal reference number for the wire transfer, which consists of the date of the transfer and a unique transaction number for that transfer;
 - 9. The method of notification as required by (b) above;
 - 10. The signature and license number of a cage supervisor who shall verify with the bank that a transfer has occurred, and who is not the employee in (4) above. The supervisor shall record in the log the method of verification.
- (d) After the cage supervisor has verified the receipt of the transfer, and when the reason for the transfer as listed in (a) above has been determined, a cage supervisor shall prepare a two part Wire/Electronic Transfer form which shall include the following information:

- 1. The name of the patron;
- 2. The wire transfer or electronic fund transfer number;
- 3. The type of transfer, (wire transfer or electronic fund transfer);
- 4. The date of the wire transfer or electronic fund transfer;
- 5. The actual amount of funds received stated in numbers and words;
- 6. The purpose for the transfer (cash deposit; redemption; payment of returned marker);
- 7. The signature of the preparer on both copies; and
- 8. The signature on both copies of either:
 - i. The check bank cashier, if the funds are to be used for a marker redemption or the payment of a returned marker; or
 - ii. The general cashier, if the funds are to be used for a cash deposit.
- (e) After obtaining the signatures, the cage supervisor shall transmit the duplicate copy and any supporting documentation to the accounting department, and forward the original Wire/Electronic Transfer Acknowledgment Form to:
 - 1. The Check bank cashier, if the funds are to be used for marker redemption or the payment of a returned marker, who shall:
 - i. Post the amount of the funds to the patron's credit account;
 - ii. If appropriate, return the redeemed marker to the patron;
 - iii. Forward to the accounting department the original Wire/Electronic Fund Transfer Acknowledgment Form for comparison to the duplicate; and
 - iv. Forward to the accounting department the redemption copy of any marker redeemed; or
 - 2. The general cashier, if the funds are to be used to establish a cash deposit, who shall:
 - i. Prepare a customer deposit file in accordance with Section 1.15;
 - ii. Prepare a customer deposit form in accordance with the Section 1.15. Prior to the release to the patron of any funds credited to a cash deposit file by means of a wire transfer or electronic fund transfer, the general cashier shall verify that the patron is the patron recorded on the Wire/Electronic Fund Transfer Acknowledgment Form; and,
 - iii. Forward to the accounting department the original Wire/Electronic Fund Transfer Acknowledgment Form for comparison to the duplicate.

- (f) If, at the expiration of seven business days after the acceptance and deposit into its operating account of a wire transfer or electronic fund transfer from or on behalf of a patron, a casino licensee is unable to determine the purpose for the wire transfer or electronic fund transfer, the casino licensee shall, on the next business day, take all steps necessary to return by wire transfer or electronic fund transfer the amount initially accepted on behalf of the patron to that patron at the financial institution and to the account number from which the funds were debited. This reversal of the wire transfer or electronic fund transfer shall be recorded in the log.
- (g) At the end of the month, a copy of the log shall be forwarded to the accounting department and reconciled with all Wire/Electronic Fund Transfer Acknowledgment Forms prepared during that month.

Section 1.14 Information Technology Standards

- Note 1: These minimum internal controls standards are developed to complement and extend the West Virginia Lottery sports wagering and interactive gaming Rule 179CSR9 and Rule 179CSR10.
- Note 2: Pursuant to W.Va. Code of State Rules § 179 CSR9 and W.Va. Code of State Rules § 179 CSR 10, sports wagering and interactive gaming is limited to land based sports wagering and mobile sports wagering and interactive gaming at the four racing casinos and the Historic Resort at the Greenbrier as well as to include mobile gaming using software licensed to and controlled by each of these five casinos.
- Note 3: Unless otherwise specified, all Information Technology for sports wagering and interactive gaming MICS apply to a sports wagering and interactive gaming application, the underlying database, operating system, and network layer.
- Note 4: An operator of sports wagering and interactive gaming must specify in their written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 which functions (if any) are performed by a

service provider. Operators remain responsible for the proper design and operational effectiveness of all required minimum internal control standards, regardless of who is performing the function.

- Note 5: For these MICS, a system password is acceptable as the "signature" of the employee authorizing a transaction through the sports wagering and interactive gaming system. An "electronic signature" is allowed only when being used as part of a Commission-authorized sports wagering and interactive gaming system. The "electronic signature" is to be linked with an electronic document which identifies the individual entering the "signature". An "electronic signature" may also be attached to some biometric measurement. For instance, fingerprints or iris patterns are common biometric measurements.
- Note 6: As used in these MICS, "Sports wagering and interactive gaming account" has the same meaning as "wagering account" as defined in W.Va. Code of State Rules § 179-9-5, as applicable.
- Note 7: Unless specifically identified as being related to mobile gaming, these controls apply to both land based sports wagering and mobile gaming used for sports wagering and interactive gaming.

Information Technology for Sports Wagering and Interactive Gaming

Note 1: Gaming Laboratories International LLC (GLI) has issued a technical bulletin regarding standards and requirements for event wagering systems known as GLI-33 and technical bulletin GLI-19 for interactive gaming. Those bulletins, including any revisions in the future, unless specifically excluded in whole or part, will be considered an integral part of the minimum internal control standards for sports wagering and interactive gaming as approved by the West Virginia Lottery Commission. Any supplier of hardware or software related to sports wagering and interactive gaming must provide internal control documentation, credentials and

associated access to a production equivalent test environment with a request that it be evaluated in accordance with this technical standard to a West Virginia Lottery Commission approved independent testing laboratory. That laboratory will provide a certificate of compliance evidencing the certification to this Standard as well as to the laws and regulations provided by the West Virginia Lottery Commission. The Commission shall have the power to approve a supplier given equivalent certification of the identical hardware/software system by another jurisdiction.

Note 2: GLI-33 will not be applicable for sports wagering and GLI-19 will not be applicable for interactive gaming if a hardware/software platform is licensed based on testing done in other jursidictions by the WV Lottery's approved independent testing laboratories or based on testing performed by the New Jersey Division of Gaming Enforcement (NJDGE).

Note 3: All interactive gaming system components pertaining to the platform, remote gaming server, games, and the RNG hardware/software shall be tested and certified by an independent testing laboratory approved by the Commission to comply with **GLI-19 and GLI-33** as applicable.

Note 4: Definitions. The following terminology and respective definitions are used in these MICS unless the context requires otherwise:

"Accredited regulatory jurisdiction" means a foreign regulatory agency designated by the Lottery as a jurisdiction through which the Lottery, in its discretion, can recognize and accept decisions made by the accredited regulatory jurisdiction, in whole or in part, in any matter including but not limited to the granting, revocation or suspension of a license and the approval of any gaming system.

"Accredited sports integrity entity" means any organization or association recognized by the Lottery for purposes of exchanging information regarding unusual or suspicious activity or exclusion/exclusion removal requests relating to sports wagering transactions.

"Artificial player software" is software that allows an authorized player, operator, or mobile gaming service provider to interact with the mobile gaming system to automatically

place wagers and make game decisions without human intervention.

"Authentication" is the process of verifying the identity of an individual, computer, software, or other entity.

"Authorized interactive game" means any game authorized by the Commission for use with an interactive gaming system.

"Authorized player software" is software downloaded to an authorized player system connected to an mobile gaming system in order to conduct mobile gaming and related activities such as establishing an mobile gaming account. This does not include commercially available off-the-shelf software such as a web browser.

"Authorized player system" is the collective hardware and software used to execute authorized player software for the purposes of conducting mobile gaming and related activities.

This may include commercially available off -the-shelf software such as a web browser.

"Backup system log" is an event log, a job log or an activity file created by the program or batch process that performs backups of application and data files. These event logs, job logs or activity files usually provide detail on the type of backup performed, success or failure of the operation, and a list of errors.

"Contest" means an authorized interactive game competition among players for cash, cash equivalents or prizes.

"Critical components" are hardware, software or other components required to be present and operational in order for the mobile gaming system to properly operate.

"Default accounts" are user accounts with predefined access levels usually created by default at installation for operating systems, databases, and applications. These accounts tend to be used for training purposes.

"Funds on game" means the sum of pending wagers and funds transferred to a game not yet wagered less pending wins.

"Game server" means the server that contains game software and control programs.

"Game Session" is a mobile exchange of information between an authorized player system and the mobile gaming system that consists of all activities and communications performed by an authorized player and the mobile gaming system for the duration of a online session to place bets.

"Generic user accounts" are user accounts that are shared by multiple users (using the same password) to gain access to any component of a sports wagering and interactive gaming system: application, database, or operating system. The use of generic user accounts will not be approved by the Lottery.

"Group membership" (group profile) is a method of organizing user accounts into a single unit (by job position) whereby access to application functions may be modified at the unit level and the changes take effect for all user accounts assigned to the unit.

"Hosting center" is an entity unaffiliated with a licensee, registered with the Commission and hosting on its premises any part(s) of Commission regulated hardware or software.

"Interactive gaming" means the placing of wagers through a server-based gaming system with an operator at a casino located in West Virginia using a computer network of interoperable packet switched data networks through which the operator may offer authorized interactive games to a patron who has established an interactive gaming account with the operator. Throughout this rule, Interactive Gaming will be also referred to as igaming and it can used with an Android or IOS device using an application ("App") or through an Internet web browser on any supported device using software such as, but not limited to, Internet Explorer, Firefox and Google Chrome.

"Interactive gaming manager" means a person licensed as a casino key employee responsible for the operations of interactive gaming.

"IT personnel" are employees of the operator or an IT service provider who are independent of the operation of sports wagering and interactive gaming; and who have been designated to perform the information technology function for the operation of critical components of the sports wagering and interactive gaming system.

"IT service provider" is a person or an entity engaged by the operator, and licensed pursuant to W.Va. Code of State Rules § 179-9-5, to provide management, including system administration, support, security, or disaster recovery services for Commission regulated hardware or software.

"Multi-factor Authentication" is a method of authenticating an individual's identity through the use of different kinds of evidence. For the purposes of this definition, multi-factor authentication uses at a minimum, two of the three following factors:

- (a) What the individual knows as a secret, such as a password, PIN, or answers to questions;
- (b) What the individual uniquely has, such as a physical token, electronic token, or an ID card; and,
- (c) What the individual is, such as biometric data, like fingerprint, face geometry, or voice recognition.

"Peer-to-peer gaming" means all gaming activity, such as poker, where patrons are competing against each other and the interactive gaming licensee who receives a rake or an entry fee.

"Player Session" is an mobile exchange of information between an authorized player system and the mobile gaming system that consists of all activities and communications performed by an authorized player and the mobile gaming system between the time the authorized player logs into the mobile gaming system to the time the authorized player logs out or is logged out of the mobile gaming system.

"Rake" means that portion of the patrons' wager that is taken by the operator.

"Secured repository" is a secured environment that is used to store software source code once it has been approved for introduction into the production (live) environment. The repository is secured such that developers cannot modify code once it has been stored. In this way, the repository provides a history of a given software system ordered by version.

"Server-based gaming" means all gaming activity conducted via a patron device where the outcome of a game is determined by a random number generator (RNG) maintained on a server or a dealer-verified outcome from a simulcast table game.

"Service accounts" are accounts on which automated system functions (services) are dependent to execute. A service account does not correspond to an actual person. These are often built-in accounts that an automated system function (service) uses to access resources they need to perform its activities. However, some automated services may require actual user accounts to perform certain functions, and may be employed using domain accounts to run services.

"Strong Authentication" is a method of authenticating an individual's identity through the use of at least two responses to any of the three factors of multi-factor authentication

"System administrator" is the individual(s) responsible for maintaining the stable operation of the IT environment (including software and hardware infrastructure and application software).

"User-inactivity timeout" is a period of time defined in an mobile gaming system that is used to determine how long an authorized player has been inactive from the mobile gaming system.

Mobile Gaming Requirements

This section applies to mobile, internet and other authorized digital platforms used for gaming and is not applicable to land based sports wagering, the applicable MICS are #1 through #16. "Mobile gaming systems" shall include both sports wagering and interactive gaming, unless specifically stated otherwise.

- 1. Mobile gaming systems must require a mobile gaming account be established before an individual is designated as an authorized player and can engage in mobile gaming. "Mobile gaming account" shall include both sports wagering and interactive gaming, unless specifically stated otherwise.
- 2. Mobile gaming systems must have the capability to require an individual to affirm the following before a mobile gaming account can be established remotely:
 - (a) That the information provided to the operator by the individual to register is accurate;
 - (b) That the individual has reviewed and acknowledged access to the terms and conditions and house rules for mobile gaming;
 - (c) That the individual has been informed and has acknowledged that, as an authorized player, they are prohibited from allowing any other person access to or use of their mobile gaming account;
 - (d) That the individual has been informed and has acknowledged that, as an authorized player, they are prohibited from engaging in mobile gaming from a state or foreign

jurisdiction in which mobile gaming is illegal and that the operator is prohibited from allowing such mobile gaming;

- (e) Consents to the monitoring and recording by the operator and the Lottery Commission of any wagering communications and geographic location information; and,
- (f) Consents to the jurisdiction of the State of West Virginia to resolve any disputes arising out of mobile gaming.
- 3. Mobile gaming systems that transmit and store information about authorized players must encrypt or otherwise protect all personally identifiable information using a method generally approved by US Government Agencies which currently includes Advanced Encryption Standard (AES) and the RSA algorithm (Rivest-Shamir-Adelman). The Mobile gaming system provider must provide details related to their encryption model as part of the Licensing Process.
- 4. Mobile gaming systems must employ a mechanism to collect the following information prior to the creation of any mobile gaming account:
 - (a) The first and last name of the individual;
 - (b) The individual's date of birth showing that the individual is 21 years of age or older;
 - (c) The physical address where the individual resides;
- (d) The entire or last four digits of the social security number for the individual, if a United States resident;
 - (e) That the individual had not previously self-excluded with the operator and otherwise remains on the operator's self exclusion list; and
 - (f) That the individual is not on the list of excluded persons.
 - Note 1: The player may enter only the last four digits of a social number if the other factors are sufficient to determine the entire nine digit social number within four minutes, if that cannot be done, entry of the nine digit social number is required.

- 5. Mobile gaming systems must not allow any deposited funds to be available to the authorized player for play until such funds have been reasonably confirmed to be authorized by the source issuing the funds.
- 6. Mobile gaming systems must contain a mechanism to require strong authentication and multi-factor authentication before funds may be withdrawn from an mobile gaming account.

The mechanism must be configurable such that strong authentication may be used to withdraw funds up to a certain dollar limit during a given timeframe and multifactor authentication must be used after that limit has been reached. The request for this information must be made at the time of the withdrawal.

If the request for the withdrawal of funds is made in person, strong authentication may be used.

- 7. Mobile gaming systems must employ a mechanism that will place a mobile gaming account in a "suspended" mode. This mode shall be activated when an operator has evidence that indicates illegal activity, a negative account balance, or a violation of the terms of service has taken place on an authorized player's mobile gaming account. Mobile gaming accounts in a "suspended" mode must do the following:
 - (a) Prevent the authorized player holding the account from engaging in mobile gaming;
 - (b) Prevent the authorized player from depositing or withdrawing funds from their mobile

gaming account;

- (c) Prevent the authorized player from making changes to their mobile gaming account;
- (d) Prevent the removal of the mobile gaming account from the mobile gaming system;
- (e) Prominently display to the authorized player that the account is in a "suspended" mode, the restrictions placed on the account, and any further course of action needed to remove the "suspended" mode; and,
- (f) Notify the authorized player through electronic mail, or other method that the account is in a "suspended" mode, the restrictions placed on the account, and any further course of action needed to remove the "suspended" mode.
- 8. Mobile gaming systems must employ a mechanism that will place an mobile gaming account in a "pending investigation" mode. This mode shall be activated when an authorized player has filed a formal complaint or dispute with the operator of the mobile gaming system.

Mobile gaming accounts in a "pending investigation" mode must do the following:

- (a) Prevent the removal of the mobile gaming account from the mobile gaming system;
- (b) Prominently display to the authorized player that the account is in a "pending investigation" mode, the restrictions placed on the account and any further course of action that will be taken to resolve the complaint or dispute; and
- (c) Notify the authorized player through electronic mail, mail or other method that the account is in a "pending investigation mode", the restrictions placed on the account, and any further course of action that will be taken to resolve the complaint or dispute.
- 9. Mobile gaming systems must employ a mechanism to protect inactive mobile gaming

accounts that contain funds from unauthorized changes or removal.

- 10. Withdrawals from a mobile gaming account to an account with a financial institution must be in the name of the authorized player or made payable to the authorized player and forwarded to the authorized player's address. The name and address on the mobile gaming account and financial institution account must match.
- 11. Mobile gaming systems must be able to provide an account statement to authorized players both periodically and on demand. The account statement must include detailed information about their account activity for a defined time period. Information to be provided must include, at a minimum, the following:
 - (a) Deposits to the mobile gaming account;
 - (b) Withdrawals from the mobile gaming account;
 - (c) Money wagered in total during each session;
 - (d) Money won in each session;
 - (e) Promotional or bonus credits issued to the mobile gaming account;
 - (f) Promotional or bonus credits wagered in each game session;
 - (g) Manual adjustments or modifications to the mobile gaming account; and
 - (h) Any other information that the Lottery Commission may require.
- 12. Mobile gaming systems must not allow the transfer of funds or credits between authorized players.
- 13. Mobile gaming systems must employ a mechanism to reasonably detect and prevent the usage of multiple mobile gaming accounts for a single authorized player for the purposes of gaining an unfair advantage in an event.
- 14. Mobile gaming systems must employ a mechanism that allows authorized players to set limits on their mobile gaming account. This mechanism must require that the authorized

player acknowledge how the limit works, the amount of the limit, and whether or not the limit may take effect in the middle of a session. The mechanism must require that the authorized player wait at least 24 hours after a change to a limit is made before allowing any changes that would increase a limit. At a minimum, the following limits must be available to the authorized player:

1) Sports Wagering

- (a) "Wager limit" that specifies the maximum amount that can be wagered within a given timeframe;
- (b) "Loss limit" that specifies the maximum amount of money that can be lost within a given timeframe;
- (c) "Time available for play limit" that specifies the amount of time an authorized player can play within a given timeframe or session which must require player acknowledgement during event play to extend a session; and,
- (d) "Deposit Limit" that specifies the amount of money an authorized player can deposit into their mobile gaming account within a given timeframe.

2) Interactive Gaming

(a) "Deposit limit" offered on a daily, weekly, and monthly basis, which specifies the maximum amount of money a patron may deposit into his or her interctive gaming account during a particular period of time. Pursuant to W.Va. Code of State Rules § 179-10-6.29, the lifetime threshold is set at \$5,000 by the Commission. Pursuant to W. Va. Code of State Rules § 179-10-6.29, when a patron reaches this lifetime threshold, the interactive gaming system shall immediately prevent any interactive game play until the patron makes the required acknowledgement(s).

- (b) "Spend limit" offered on a daily, weekly, and monthly basis, which specifies the maximum amount of patron deposits that may be put at risk during a particular period of time;
- (c) "Time-based limit" offered on a daily basis, which specifies the maximum amount of time, measured hourly from the patron's log in to log off, that a patron may spend playing on an interactive gaming system, provided, that if the time-based limit is reached, a patron shall be permitted to complete any round of play, or active or prepaid tournament.
- 15. Mobile gaming systems must employ a mechanism to allow authorized players to self-exclude their mobile gaming account from conducting any gaming activities.

The mechanism must be able to do the following:

- (a) Immediately restrict all gaming activity and clearly indicate to the authorized player when the exclusion will take effect;
- (b) Provide the authorized player with information regarding the terms of the self-exclusion;
- (c) Remove the authorized player from all mailing and marketing lists within a reasonable timeframe; and,
- (d) Require multi-factor authentication upon any request to remove a self-exclusion.
- 16. Mobile gaming systems must employ a mechanism that can detect and prevent any player initiated wagering or withdrawal activity that would result in a negative balance of an mobile gaming account.

The mechanism must also detect whether an mobile gaming account balance is negative and place the account in a suspended mode if the account balance is negative.

Physical Access and Maintenance Controls

- 17. The written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 delineates the physical location of each component of the sports wagering and interactive gaming system, including the location of staff (operator, service provider, datacenter operator even if the datacenter is maintained by an independent party).
- 18. System documentation for all in-use components of the sports wagering and interactive gaming system (versions of application, database, network hardware, and operating system) must be maintained, including descriptions of both hardware and software (including version numbers), operator manuals, etc.
- 19. The written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 delineates the responsibilities of staff (operator, service provider, data center operator if the data center is maintained by an independent party) for operation, service and maintenance of sports wagering and interactive gaming system and/or its components.
- 20. The critical components of the sports wagering and interactive gaming system must be maintained in a secured area. The area must be equipped with controls to provide physical protection against damage from flood, fire, earthquake and other forms of natural or manmade disasters and include at a minimum:
 - a. Redundant power sources to reduce the risk of data loss in case of interruption of power.
 - b. Adequate climate control and fire suppression equipment.
 - c. Other measures to ensure physical protection of hardware and software.

- d. Adequate security mechanisms, such as traditional key locks, biometrics, combination door lock, or electronic key card system to prevent unauthorized physical access to areas housing critical components of the sports wagering and interactive gaming system.
- Note 1: The written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 is to delineate the methods, processes and practices used in meeting the requirements of this paragraph 20 (a-d).
- 21. Access to areas housing critical components of the sports wagering and interactive gaming system is restricted to authorized IT personnel. Non-IT personnel, including the manufacturers of the sports wagering and interactive gaming system's computer equipment, are allowed access to the areas housing critical components of the sports wagering and interactive gaming system only when authorized and accompanied by IT personnel and with continuous monitoring by IT personnel during each access. A record of each access by non-IT personnel is maintained with the name of the visitor(s), time and date of arrival, time and date of departure, reason for visit and the name of IT personnel authorizing such access.
- 22. The administration of the physical access security mechanism used to secure areas housing the sports wagering and interactive gaming critical components, is performed by authorized IT personnel.
- 23. The IT department maintains current documentation with respect to the network topology (e.g., flowchart/diagram), deployment of server(s) housing application and database, and inventory of software and hardware deployed (available upon request by authorized internal and external auditors and by the Commission). The employee responsible for maintaining the current documentation on the network topology is delineated in the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5.

Network Security

- 24. Production networks serving a sports wagering and interactive gaming system and its components are secured from outside traffic and are configured to detect and report security-related events. The employee responsible for the documentation indicating the procedures for detecting and reporting security-related events is delineated in the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5.
 - Note 1: A sports wagering and interactive gaming system and its components would include all devices on the network to support the system, including servers, storage, firewalls, routers and switches.
 - Note: 2: A suggested method for complying with this MICS is to configure the system to log unauthorized logins, failed login attempts, and other security-related events; and block all unused ports and any in-bound connections originating from outside the network.
 - Note: 3: The West Virginia Lottery will amend this MICS at a future date to require all logs and file system signature data be sent to the West Virginia Lottery data center. This will require installing an open source host-based intrusion detection system (HIDS) known as OSSEC at its/ gaming data center. That software will then provide data to the West Virginia Lottery who will have a system to alert regarding critical access attempts and unauthorized version changes for gaming software. However, this will not relieve the supplier from the requirements defined in these MICS but is considered as a complimentary control to those procedures.
- 25. Network shared drives containing application files and data for sports wagering and interactive gaming system are secured such that only authorized personnel may gain access.
- 26. Login accounts and passwords required to administer network and other equipment are secured such that only authorized IT personnel may gain access to these devices. The passwords for these accounts meet the security parameters of Physical Access and

Maintenace Controls, paragraphs 17 through 23 of these MICS and accounts are immediately disabled when IT personnel are terminated.

Remote Access

Note 1: For the purposes of the following standards, remote access allows a user access to the operator's network from outside of this network through some form of a data link. Remote access typically involves the use of the Internet, a dial-up modem, and/or Virtual Private Network (VPN) or similar technology.

- 27. Remote access to the sports wagering and interactive gaming system components (production servers, operating system, network infrastructure, application, database and other components) should be limited to authorized IT department personnel employed by the operator of the sports wagering and interactive gaming system.
- 28. Remote access by vendor personnel to any component of the sports wagering and interactive gaming system is allowed for purposes of support or updates and is enabled only when approved by authorized IT personnel employed by the sports wagering and interactive gaming system operator. If the remote access to a database is performed by unlicensed vendor personnel, the remote access must be continuously monitored by IT personnel employed by the operator of the sports wagering and interactive gaming system.
- 29. When the sports wagering and interactive gaming system (or its components) can be accessed remotely for purposes of vendor support, the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 must specifically address remote access procedures including, at a minimum:
 - a. The component(s) of a sports wagering and interactive gaming system requiring vendor support and vendor name(s).

- b. The method and procedures used to gain access remotely, including the use of passwords and other logical controls.
- c. The procedures to be used by IT personnel employed by the operator of the sports wagering and interactive gaming system to further control and monitor access, and to ensure that vendors have only the access needed to perform authorized support and update functions.
- 30. In the event of remote access by a vendor, a complete record of the access must be created and include at a minimum:
 - a. Name or identifier of the licensee's employee authorizing access;
 - b. Name of vendor;
 - c. Name or identifier of vendor employee accessing system;
 - d. Name of user account through which the vendor employee accessed the system;
 - e. System component(s) accessed by the vendor;
 - f. Adequate and detailed description of work performed; and
 - g. Date, time, and duration of access.
 - Such records must be made available to the West Virginia Lottery Commission upon request and failures in recording access will be considered a violation subject to progressive discipline and could result in the loss of license.
- 31. Vendor accounts must be restricted through logical security controls to have the ability to access only the application(s) and/or database(s) that are necessary for the purposes of support or providing updates/upgrades.
- 32. The sports wagering and interactive gaming operator must employ security methods in addition to passwords to verify the identity of vendor personnel prior to authorizing any remote access for that vendor.

- 33. User accounts used by vendors must remain disabled on all operating systems, databases, network devices, and applications until needed by such vendor. Subsequent to an authorized use by a vendor, the account is returned to a disabled state.
- 34. Remote access may be allowed for non-IT personnel (management personnel or other authorized employees of the sports wagering and interactive gaming operator), but must be limited to only the application functions necessary to perform their job duties. Non-IT personnel must be precluded from directly accessing any databases or operating systems of any of the sports wagering and interactive gaming system and other production environment servers. Additional security methods must be employed beyond passwords for user accounts to ensure that the sports wagering and interactive gaming system application and data integrity are maintained and secure. These additional security methods are to be delineated in the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5.
- 35. Any instance of remote access to the sports wagering and interactive gaming system components (by vendor, IT personnel, management personnel, or other authorized employee) is automatically logged by a device or software where it is established. At a minimum, the log is to indicate the date/time of such access and the identification of the individual accessing the sports wagering and interactive gaming system.
- 36. For at least one day each quarter, the remote access log required by MICS #30 is to be reviewed for remote access for the selected day by accounting/audit personnel. The review is to reasonably ensure that:
 - Each remote access session by a vendor has been appropriately documented (as required by MICS #14); and
 - b. Each remote access by non-vendor personnel (IT employee, management personnel, or other authorized employee) is performed by an individual who has been authorized to have such access.

- Note 1: The written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 is to delineate the procedures and documentation used to perform the review.
- 37. Evidence of the review of remote access logs is to be maintained for the last four quarterly periods. The evidence is to include at a minimum:
 - a. Date and time of review;
 - b. Name and title of person performing the review;
 - c. The remote access log reviewed;
 - d. Any exceptions, follow-up and resolution of exceptions.
 - e. This documented review shall be sent to the WV Lottery audit department at the end of each quarter.

System Parameters

- 38. The sports wagering and interactive gaming system, including application software, is logically secured through the use of passwords, biometrics, or other means approved by the Commission.
- 39. Security parameters for passwords shall meet the following minimum requirements:
 - a. Passwords shall be forced to change at least once every 60-90 days.
 - b. Passwords are at least 8 characters in length and contain a combination of at least two of the following criteria: upper case letters, lower case letters, numeric and/or special characters.
 - c. Passwords may not be re-used for a period of 18 months; and passwords may not be re-used within the last ten password changes.

- d. User accounts are automatically locked out after 3 consecutive failed login attempts.
- Note 1: The written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 is to delineate the methods used to comply with MICS #39(b) and (c).
- Note 2: MICS #39 does not apply to service accounts.
- Note 3: For MICS #39(d), the system may automatically release a locked out account after 30 minutes has elapsed. If an employee assists with releasing a locked out account and is reasonably certain of no unauthorized user access, the elapse time of 30 minutes is not applicable. The involvement of an employee assisting in the release of a locked out account is to be delineated in the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5. If automatic unlocking is enabled the system must maintain a log of lockouts and releases for thirteen (13) months and make this data available to the West Virginia Lottery Commission upon request.
- Note 4: For MICS #39, password rotation requirements are not applicable if the system utilizes multi-factor authentication including biometrics such as IRIS scan, fingerprint scan or the use of Short Messaging System (SMS) texts to a phone requiring a matching PIN entry before granting system access.
- Note 5: MICS #39 specifically applies to patron accounts for both mobile and land based sports wagering and interactive gaming.
- 40. A system event log or series of reports/logs for operating systems (including the database layer and network layer) and applications is configured to track at least the following events:
 - a. Failed login attempts;

- b. Changes to live data files occurring outside of normal program and operating system execution;
- c. Changes to operating system, database, network, and application policies and parameters;
- d. Audit trail of information changed by administrator accounts;
- e. Changes to date/time on master time server;
- f. Significant periods of unavailability of the sports wagering and interactive gaming system or any critical component of the sports wagering and interactive gaming system, and,
- g. Other significant events (the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 is to delineate what other events are to be logged).

Note 1: A significant period may be any length of time when a transaction cannot be performed as defined in the casino's minimum internal control standards.

- 41. All critical components of the sports wagering and interactive gaming system are to be operational in order for the sports wagering and interactive gaming system to operate and commence sports wagering and interactive gaming. The sports wagering and interactive gaming system detects and records information regarding the failure or non-operation of any component within the sports wagering and interactive gaming system. A log of this event is generated.
- 42. Daily system event logs are reviewed at least once a week (for each day of the entire previous week) by IT personnel, other than the system administrator, for events listed in MICS #24 and #30. The system event logs are maintained for a minimum of twenty one days following the review.

- 43. The review described in MICS #26 must be documented, and evidence of this review must be maintained for 18 months following the completion of the review. The evidence is to include:
 - a. Date and time of review:
 - b. Name and title of person performing the review;
 - c. Any exceptions noted; and
 - d. Follow-up and resolution of exceptions.
 - Note: 1 Compliance with MICS #24 and #30 may involve the use of an automated tool that "flags" the events for the sports wagering and interactive gaming system and provides the person assigned to complete the review with notification. A record of the notification should include the date and time of the notification.
- 44. Exception reports for the sports wagering and interactive gaming system are configured to track the following events that require employee intervention including, but not limited to:
 - Adjustments to an authorized player's sports wagering and interactive gaming account balance;
 - b. Changes made to information recorded in an authorized player's sports wagering and interactive gaming account;
 - c. Changes made to an authorized player's self-exclusion limits;
 - d. Changes made to game parameters (e.g., game rules, payout schedules);
 - e. Changes made to payout parameters;
 - f. Voids, overrides, corrections;
 - g. Mandatory deactivation of an authorized player; and

- h. Any other activity requiring employee intervention and occurring outside of the normal scope of system operation.
- 45. Exception reports produced for the sports wagering and interactive gaming system for the events listed in MICS #44 include at a minimum:
 - a. Date and time of the exception event;
 - b. Unique transaction identifier;
 - c. Identification of user who performed and/or authorized alteration;
 - d. Data or parameter altered;
 - e. Data or parameter value prior to alteration; and
 - f. Data or parameter value after alteration.

Structure of Information Technology Department

- 46. IT personnel are precluded from having access to any physical forms/documentation associated with patrons' accounts and sports wagering and interactive gaming (e.g., deposit/withdrawal slips, checks, etc.).
 - Note 1: Administrative access means access that would allow a user (i.e., system administrator) to:
 - Add, change, or delete user accounts and associated user provisioning;
 - Modify operating system, network, database, and application layers' security and policy parameters;
 - Add, change, or delete system exception logging information; or
 - Add, change, or delete permissions to data files, folders, libraries, tables, or databases.
- 47. Access to administer the network, operating system, applications, and database security and system parameters is limited to:

- a. Supervisory and/or management employees of the IT department; or
- b. IT employees under the supervision of supervisory and/or management employees of the IT department; or
- c. Employees of operator/service provider of sports wagering and interactive gaming under the supervision of supervisory and/or management employees of the IT department; or
- d. Employees of IT service provider.
- Note 1: The written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 is to delineate the assignment of administrative access and function for various components of the sports wagering and interactive gaming system.
- Note 2: The West Virginia Lottery Commission believes that the overall management of the IT function should report to a high level within the casino management structure and will require that an organization chart showing the relative hierarchy for IT management be provided as part of the licensure process.
- 48. The sports wagering and interactive gaming system and its components being administered are enabled to log all administrative account's activity. Such logs are to be maintained and include time, date, login account name, description of event, the value before the change, and the value after the change.
- 49. Administrative access at the operating system level for all servers that support or are part of the sports wagering and interactive gaming system must be reviewed quarterly. Reviews are performed by personnel independent of the IT department and include a complete review of all user accounts with administrative access. The reviewer performs the following:
 - a. Review all administrative groups and groups with elevated privileges to ensure membership is appropriate;

- Review the last login date and time for all administrative accounts to determine
 whether any "stale" accounts exist (e.g., users on extended leave or terminated IT
 employees remain active in the system);
- Review administrative accounts to ensure that passwords have been changed at least once every 60-90 days;
- d. Examine user list to determine whether IT personnel utilize normal user accounts for regular use and administrator accounts for administrative functions; and,
- e. Documentation of the results of the review is retained for a period of 18 months and includes the date, time, and name and title of the person performing the review.

Note 1: The casino MICS must define the period of time for password changes.

User Accounts

- 50. A system administrator is to establish user accounts for new employees and employees who transfer to a new department. Provisioning for user accounts consists of assigning application functions matching the employee's current job responsibilities, unless otherwise authorized by management personnel, to ensure adequate separation of duties. The transferred employees must have access appropriate for the new position only when the access for the previous position has been removed or disabled.
- 51. The access provisioning process must be documented; documentation must evidence authorization by the appropriate management personnel, original user access and each subsequent change to user account; documentation must be maintained and made available upon request.
- 52. A "User Access Listing" report must be produced by the sports wagering and interactive gaming system and contain at a minimum:
 - a. Employee name and title or position.

- b. User login name.
- Full list and description of application functions that each group/user account may execute.
- d. Date and time account created.
- e. Date and time of last login.
- f. Date of last password change.
- g. Date and time account disabled/deactivated.
- h. Group membership of user account, if applicable.
- 53. "User Access Listing" reports for the sports wagering and interactive gaming system are to be retained for at least one day of each month for the most recent five years. The reports may be archived electronically if the listing is written to unalterable media (secured to preclude alteration). The list of users and user access for an sports wagering and interactive gaming system must be available in electronic format that can be analyzed by analytical tools (e.g., spreadsheet or database) that may be employed by the Lottery and the Commission.
- 54. When multiple user accounts are used for one employee within a single application, only one user account may be active (enabled) at a time if the concurrent use of the multiple accounts by the employee could create a segregation of duties deficiency. Additionally, the user account has a unique prefix/suffix to easily identify the users with multiple user accounts within one application.
- 55. The system administrator is notified within 24 hours, when an employee is known to be no longer employed (e.g., voluntary or involuntary termination of employment). Hostile terminations require immediate notification to the system administrator who must promptly disable/remove access rights to the system(s). Upon notification, the system administrator changes the status of the employee's user account from active to inactive (disabled) status. The written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 delineates the process

and time period for notification to the system administrator; and the procedures established for updating the account status and preventing the employee from having unauthorized access to a user terminal.

- Note 1: The period of time for notification of the system administrator is to be set such that it is unlikely that the terminated employee would gain access to a user terminal within the notification period.
- 56. The system administrator is notified as soon as possible when an employee who has a user account with remote access capability is known to be no longer employed (e.g., voluntary or involuntary termination of employment). This action is to be performed simultaneous with # 55. Upon notification, the system administrator changes the status of an employee's user account with remote access capability from active to inactive (disabled) status. The written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 delineates the process and time period for notification to the system administrator; and the procedures established for updating the account status and preventing the employee from having unauthorized remote access.
 - Note 1: The period of time for notification of the system administrator is to be set such that it is unlikely that the terminated employee would gain remote access within the notification period.
- 57. "User Access Listing" reports produced at the application layer are reviewed quarterly by personnel independent of the authorization and user provisioning processes. The review consists of examining a sample of at least 10% (with a maximum of 25) of the users included in the listing. The reviewer maintains adequate evidence to support the review process, which includes the selected user accounts reviewed, documentation of the results of the review, and e-mails or signatures and dates indicating the individual(s) performing the review and when the user access listing was reviewed. For each of the randomly selected users, determine whether:

- a. The assigned system functions are being used as authorized (i.e., system functions are appropriate for user's job position);
- b. The assigned functions provide an adequate segregation of duties;
- c. Terminated employees' user accounts have been changed to inactive (disabled) status;
- d. Passwords have been changed within the last 60 90 days; and
- e. There are no inappropriate assigned functions for group membership, if applicable.

Generic User Accounts, Service & Default Accounts

- 58. Generic user accounts will be prohibited at the operating system level.
- 59. Generic user accounts at the application level are prohibited.
- 60. Service accounts, if used, are utilized in a manner to prevent unauthorized and inappropriate usage to gain logical access to an application and the underlying databases and operating system. The employee responsible for the documentation indicating the method used to prevent unauthorized and inappropriate usage of these service accounts (available upon request by authorized internal and external auditors and by the Commission) is delineated in the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5.
 - Note 1: Suggested methods include: (1) Service accounts are configured such that the account cannot be used to directly log in to the console of a server or workstation; (2) Service account passwords are to be changed at least once every 180 days, and immediately upon termination of system administrators.

- 61. User accounts created by default (default accounts) upon installation of any operating system, database or application are configured to minimize the possibility that these accounts may be utilized to gain unauthorized access to system resources and data. The employee responsible for the documentation indicating the procedures implemented to restrict access through the use of default accounts (available upon request by authorized internal and external auditors and by the Commission) is delineated in the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5.
- 62. Any other default accounts that are not administrator, service, or guest accounts should be disabled unless they are necessary for proper operation of the system. If these accounts must remain enabled, the passwords are changed at least once every 60 - 90 days.
- 63. System administrators maintain a current list of all enabled generic, system, and default accounts. The documentation includes, at a minimum, the following:
 - a. Name of system (i.e., the application, operating system, or database).
 - b. The user account login name.
 - c. A description of the account's purpose.
 - d. A record (or reference to a record) of the authorization for the account to remain enabled.
- 64. The current list is reviewed by IT management in addition to the system administrator at least once every six months and perform necessary procedures:
 - a. To identify any unauthorized or outdated accounts;
 - To ensure that all service, generic, and default accounts are not enabled for remote access;

c. To determine that the method used is a properly designed control process and is effectively operating to secure the generic, service, and default accounts from unauthorized usage.

Backup and Recovery Procedures

- 65. Daily backup and recovery procedures are in place and, if applicable, include:
 - a. Application data.
 - b. Application executable files (unless such files can be reinstalled).
 - c. Database contents and transaction logs.
- 66. Upon completion of the backup process, the backup media is immediately transferred to a location separate from the location housing the servers and data being backed up (for temporary and permanent storage). The storage location is secured to prevent unauthorized access and provides adequate protection to prevent the permanent loss of any data.
- 67. Backup system logs are reviewed daily by IT personnel or individuals authorized by IT personnel to ensure that backup jobs execute correctly and on schedule. The backup system logs are maintained for the most recent 30 days.
- 68. The employee responsible for the documentation indicating the procedures implemented for the backup processes and for restoring data and application files (available upon request by authorized internal and external auditors and by the Commission) is delineated in the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5.
- 69. Quarterly, Platform provider IT personnel test the recovery procedures. A record is to be maintained indicating the date a test of the recovery procedures was performed and the results of the recovery test. This audit report shall be readily available to the WV Lottery Information Technology and Audit departments upon request.

Electronic Storage of Documentation

- Note: For MICS #70 through #74 the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 must delineate the name and components of the electronic storage system, all procedures used for electronic document retention and the titles for all employees responsible for administering and maintaining the system.
- 70. Reports and other documents/records may be directly written to an electronic document retention system in a portable document format (PDF), stored to a Commission approved document retention system, or scanned to an electronic document retention system into either a portable document format or standard image format provided that the system:
 - a. Is properly configured to maintain the original version along with all subsequent versions reflecting all changes to the document;
 - Maintains a unique "hash" signature for each version of the document, including the original;
 - Retains and reports a complete log of changes to all documents including who (user ID and name) performed the changes and when (date and time);
 - d. Provides a method of complete indexing for easily locating and identifying the document including at least the following (which may be input by the user):
 - i. Date and time document was generated;
 - ii. Application or system generating the document;
 - iii. Title and description of the document;
 - iv. Name and title of the user/employee generating the document; and

- v. Any other information that may be useful in identifying the document and its purpose.
- e. Is configured to limit access to modify or add documents to the system through logical security of specific user accounts; and
- f. Is configured to provide a complete audit trail of all administrative user account activity.
- 71. If scanned, documentation must be verified by at least one additional person when being added to the electronic document storage system to ensure that the scanned version is identical to the original document. The second person must provide an electronic signature or other method of sign-off verification with the date and time to demonstrate that the review was performed prior to the document being added to the system.
- 72. Electronic document retention systems may utilize CD-ROM, DVD-ROM, Hard Drive, or other type of storage, but the system must be properly secured through use of logical security measures (user accounts with appropriate access, proper levels of event logging, and document the version control, etc.) and the system must be physically secured with all other critical components of the sports wagering and interactive gaming system.
- 73. Electronic document retention systems must be equipped to prevent disruption of document availability and loss of data through hardware and software redundancy best practices, and backup processes.
- 74. On a quarterly basis, accounting/audit personnel perform the following procedures:
 - a. Review a minimum of 20 documents added to the electronic retention system to determine that:
 - The documents are accurate reproductions of the original and the hash signatures match to the signatures recorded when the documents were added to the system;

- ii. The documents are readable and version control is functioning properly (i.e., all changes after the original was added are reflected in subsequent versions);
- iii. Indexing is correct (i.e., all information is accurate and the document is easily identified);
- Verify that user access to add or modify documents is set to an appropriate level
 of access to administer the electronic document retention system, and no
 terminated employees have active user accounts on the system;
- c. Verify that event recording and reporting is functioning as designed and logs are being reviewed by appropriate personnel regularly; and
- d. Verify that redundancy exists and is adequately functional to limit the level risk that an outage or loss of records may occur in the event of hardware failure or other unforeseen event.
- 75. Evidence of all reviews and verifications listed in MICS #74 above must be available upon request.

Production Environment Change Control Processes

76. The sports wagering and interactive gaming system operator must adopt a comprehensive and robust change control process to prevent unauthorized changes from being incorporated into the production environment at any layer. The process must include ALL changes to the sports wagering and interactive gaming production environment (operating system, network, databases, and applications). The change control process, including the titles of individuals responsible for all key decision points in the process, must be documented in the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5. The change control process includes, at a minimum:

- a. Proposed changes to the production environment are evaluated sufficiently for the impact on all aspects of production environment and authorized by management personnel prior to implementation;
- b. Proposed changes are properly and sufficiently tested prior to implementation into the production environment;
- c. A strategy and written procedures for reverting back to the last implementation (rollback plan) if the install is unsuccessful, including a test of the rollback plan prior to implementation to the production environment; and
- d. Sufficient documentation is maintained evidencing management evaluation, approvals, testing procedures and results, rollback plans, and any issues/resolutions encountered during implementation.
- 77. All changes must be sufficiently documented and maintained; and is to include at a minimum:
 - The date the program was placed into service;
 - b. The nature of the change (if applicable);
 - A description of procedures required in order to bring the new or modified program into service (conversion or input of data, installation procedures, etc.);
 and
 - d. An indication of who performed all such procedures.
- Any hardware changes and sports wagering and interactive gaming system changes
 must be approved by the West Virginia Lottery Commission independent testing
 laboratories.
- 79. Quarterly, casino licensee audit personnel review a sample of changes made during the prior period to determine that such changes were properly approved, adequately documented, properly tested, and issues resolved and rollback procedures applied. Evidence of the review is to be documented and maintained; and is to include at a

minimum the date of the review, the name of the individual(s) who performed the review and the exceptions noted and any related follow-up on the noted exceptions.

The results of this review shall be forwarded to the Lottery audit department.

- 80. If the sports wagering and interactive gaming system operator develops any software that interfaces with the sports wagering and interactive gaming application, or develops any or all source code for the sports wagering and interactive gaming application modules, then the operator must adopt and document in its system of internal control a comprehensive and robust software development change control process. The software development change control process must incorporate the following requirements:
 - a. Source code is maintained in a secured repository for code history and version control;
 - b. Technical documentation, including all regulatory submission and approval forms must be maintained and available upon request. Technical documentation must include approvals, development, testing, results of testing, and implementation into production. Documentation also includes a record of the final program or program changes, including evidence of user acceptance, date placed in service, programmer sign off, and explanation of the changes;
 - The production environment is logically and physically segregated from the test/development environment(s);
 - d. All enhancements and changes are reviewed and approved by management prior to development and the review and approval process is documented. Review and approval documentation, along with technical documentation, is maintained by an individual independent of the development process;
 - e. Developers are precluded from having access to promote code changes into the production environment. All changes must be promoted into production by someone independent of the development and testing function;

- f. End user documentation is maintained and remains current to reflect the most recent software changes. This documentation may be available electronically to the end user;
- g. Adequate segregation of duties exists among developers, testing personnel, administrators, personnel who may promote changes into production, personnel who may access frozen code, etc.;
- h. An evaluation of the impact of changes on all parts of the production environment and sports wagering and interactive gaming application is performed, and a rollback plan has been developed in case of failed promotion into production; and,
- i. Analysis and verification processes are performed to establish the integrity of data when conversion or migration occurs as part of the development process.

General Operation of Sports Wagering and Interactive Gaming

- 81. All domains, points of access, and communication media for remote sports wagering and interactive gaming operations conducted are to be delineated in the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5.
- 82. The compensation amount collected by the operator of sports wagering and interactive gaming as gross revenue pursuant to W.Va. Code §§29-22D-16-17 and W.Va. Code §§29-22E-16-17, and West Virginia Code of State Rules § 179-9-10, and West Virginia Code of State Rules § 179-10-12 is calculated for each 24-hour day. The term "gaming day" as used in these MICS refers to an interval of 24 hours as defined by the operator of sports wagering and interactive gaming. The operator's end time of a gaming day is delineated within the written system of internal controls and shall be 6:00 am.
- 83. Procedures are established to ensure an authorized player has sufficient available funds prior to processing the authorized player's wagering transaction.

Casino Account Transfers

Commented [DL1]: Merged with Change Management standards in Section 1.22

- Note 1: A "casino account" is defined as an authorized player's funds on deposit in any safekeeping, front money or wagering account being maintained at a gaming establishment operated by the operator of sports wagering and interactive gaming.
- 84. A transfer of funds between an authorized player's sports wagering and interactive gaming account and the player's casino account (i.e., to and from a player's casino account) is to be transacted through a Commission-approved mechanism designed to facilitate electronic commerce transactions.
- 85. A transfer transaction between an sports wagering and interactive gaming account and a casino account is to be recorded in the "daily sports wagering and interactive gaming player's funds transactions report" (refer to MICS #128).
- 86. For a transfer transaction between an sports wagering and interactive gaming account and a casino account in which an authorized player makes an in-person transfer request at a gaming establishment, a transfer document is prepared and maintained which includes:
 - a. Authorized player's name, casino account number and sports wagering and interactive gaming account number;
 - b. Date of transfer;
 - c. Type of transfer (deposit/withdrawal to/from casino account);
 - d. Dollar amount of transfer;
 - e. Signature of authorized player; and
 - f. Signature of employee handling the transaction.

Registering Authorized Players

87. The operator shall establish procedures to register an individual as an authorized player and to create an account for the individual pursuant to the requirements of W.Va. Code § 29-22D-1 et seq. and W.Va. Code § 29-22E-1 et seq. and W.Va. Code of State Rules

- § 179-9-7, 13-14 and W.Va. Code of State Rules § 179-10-7. Such procedures are delineated within the sports wagering and interactive gaming written procedures detailed in the system of internal controls implemented pursuant to W.Va. Code § 29-22D-1 et seq. and W.Va. Code § 29-22E-1 et seq., W.Va. Code of State Rules §179-9-5 and W.Va. Code of State Rules §179-10-5 et seq., and any additional policy directives issued by the Director or Commission.
- 88. The information obtained to initially create an authorized player's sports wagering and interactive gaming account is recorded and maintained. The information includes:
 - a. Authorized player's name, authorized player's fictitious name(s) to be used while engaged in sports wagering and interactive gaming (if applicable), and current residential address;
 - b. Date information provided by authorized player;
 - Authorized player's date of birth showing that the individual is 21 years of age or older;
 - d. Authorized player's physical address where the individual resides; Authorized player's social security number, if a United States resident;
 - e. That the authorized player had not been previously self-excluded with the operator and otherwise remains on the operator's self-exclusion list;
 - f. That the authorized player is not on the list of excluded persons; and
 - g. Authorized player's e-mail address, if used as medium of communication with authorized player.
- 89. The operator of sports wagering and interactive gaming is to establish procedures for handling the unsuccessful verification of the information provided by an individual who is registering as an authorized player. Such procedures are delineated within the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5. The operator of sports wagering and interactive gaming is to record and maintain the following information:

- a. Authorized player's name and account number;
- b. Date the account was suspended from further sports wagering and interactive gaming by the authorized player;
- c. Date the account was closed:
- d. Amount of winnings retained which were attributable to the authorized player; and
- e. Balance of amount refunded to the authorized player.

Identification and Verification of Authorized Players

90. The operator shall establish procedures to verify the identity of an authorized player to prevent those who are not authorized players from engaging in sports wagering and interactive gaming. Such procedures are delineated within the sports wagering and interactive gaming written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5.

Note: The procedures are to involve robust identification methods to mitigate the risks of non face-to-face transactions inherent in sports wagering and interactive gaming.

Protection of the Sports wagering and interactive gaming Accounts

- 91. An authorized player may hold only one sports wagering and interactive gaming account per platform with the operator of sports wagering and interactive gaming.
- 92. A sports wagering and interactive gaming account cannot be set up with an anonymous or fictitious account name, but may be associated with one or more fictitious "screen names" or may remain anonymous while engaging in sports wagering and interactive

- gaming provided that the operator complies with all requirements for account verification. Both names must be unique.
- 93. The sports wagering and interactive gaming written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 is to delineate:
 - a. Procedures established for the use of a payment processor to allow the operator of sports wagering and interactive gaming to fund an authorized player's sports wagering and interactive gaming account;
 - b. The deposit methods available to authorized players to fund accounts and a complete description of the entire process for each deposit method, including situations where additional information must be requested prior to completing the deposit transaction; and
 - c. Procedures performed to not allow an authorized player's sports wagering and interactive gaming account to be overdrawn unless caused by payment processing issues outside the control of the operator (e.g., chargebacks).
- 94. The routing procedures for deposits by mail (e.g., checks, cashier's checks, or money orders) require that the mail deposits are received by a department independent of the sports wagering and interactive gaming department.
- 95. Sports wagering and interactive gaming account deposits received via mail are documented on a listing indicating the following:
 - Authorized player's name on account to which the deposit is being applied and the name of individual making the deposit (if made by other than the authorized player);
 - b. Amount of deposit;
 - c. Nature of deposit (if other than a check); and
 - d. Date payment was received.

- 96. Direct access to an active authorized player's sports wagering and interactive gaming account to withdraw funds is restricted to the authorized player who owns the account and who is confirmed to be the owner by using positive authorized player identification methods such as a PIN number or password.
 - Note: The operator may be able to reset the PIN number or password for a sports wagering and interactive gaming account in the system to permit a person with legal authority to gain access to the sports wagering and interactive gaming account when the owner of the account is incapacitated or deceased. For this occurrence, sufficient records are maintained evidencing the reason for resetting the PIN number or password.
- 97. Indirect access (i.e., authorized player is not providing a PIN number or password) to an active authorized player's sports wagering and interactive gaming account to withdraw funds involves assisted access by an employee of the operator of sports wagering and interactive gaming whether online or by other means. The employee who is assisting with an indirect access is to use challenge questions to identify the person making remote access or employ a sufficient alternative process to ensure that the person is accurately identified as the owner of the sports wagering and interactive gaming account. If challenge questions are used, the responses to challenge questions should be obtained during the registration process for an authorized player sports wagering and interactive gaming account. Such procedures are delineated within the sports wagering and interactive gaming written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5.
- 98. An authorized player's request for withdrawal of funds (i.e., deposited and cleared funds and funds won) is completed by the operator of sports wagering and interactive gaming, unless there is a pending unresolved player dispute or investigation. Funds for withdrawal may be withheld from withdrawal until the funding instrument clears or the chargeback period ends. Promotional funds with conditions may not be withdrawn unless all conditions are met.

- 99. For withdrawals, a transfer of funds from an authorized player's sports wagering and interactive gaming account to an account with a financial institution is to be made to an account in the name of the authorized player. If a check is used as payment for a withdrawal of funds, the check is to be made payable to the authorized player and forwarded to the authorized player's address on file.
- 100. If an authorized player makes an in-person withdrawal request at a gaming establishment, documentation of the withdrawal is prepared and maintained. The withdrawal document contains the following information:
 - a. Authorized player's name and account number;
 - b. Date of withdrawal;
 - c. Dollar amount of withdrawal;
 - d. Method of withdrawal (e.g., check, wire transfer, cash, etc.);
 - e. Signature of employee handling the withdrawal transaction; and
 - f. Signature of authorized player.
- 101. Addition or removal of funds from a sports wagering and interactive gaming account other than an authorized player's deposit or withdrawal transactions must be sufficiently recorded (including substantiation of reasons for increases/decreases) and authorized/performed by supervisory personnel. Job title of supervisory personnel is delineated within the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5. The "daily sports wagering and interactive gaming account balance adjustment report" is randomly verified by accounting/audit personnel on a quarterly basis.
 - Note 1: On a daily basis, supervisory personnel may authorize multiple transactions occurring within a gaming day. Evidence of supervisory authorization for multiple transactions is to be recorded and maintained. The written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va.

Code of State Rules § 179-10-5 is to delineate the authorization process for multiple transactions rather than authorizing each individual transaction.

- 102. Changes to an authorized player's password are performed in a manner that ensures that the change is properly authorized by the authorized player. If e-mail is a component of this process, the procedures for the secure use of e-mail as a medium for communicating secure information must be documented in the licensee's written policies. The licensee shall develop alternative procedures for use in the event that an authorized player no longer has access to the e-mail address on record. The written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 shall delineate the title of the person responsible for the documentation of these procedures
- 103. Any change made to a sports wagering and interactive gaming account that affects an authorized player's personal information or account funds requires notification to the authorized player through e-mail, mail or other method to reasonably ensure the authorized player has been properly notified.
- 104. The operator shall document in the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 a description of procedures used to ensure full compliance with the reserve requirements stated in W.Va. Code of State Rules § 179-9-3.4 and 14.9 and W.Va. Code of State Rules § 179-10-3.3 and 7.11 to ensure prompt availability of patron funds for authorized withdrawals.
- 105. Funds in authorized players' sports wagering and interactive gaming accounts may not be used as security by the operator of sports wagering and interactive gaming and/or the sports wagering and interactive gaming service provider for any financial transactions.
- 106. Winnings awarded to players are posted immediately, or in the case of large wins, following the win verification procedures to the appropriate player's sports wagering and interactive gaming account at the completion of the authorized player's game session. For large wins, the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5 is to define the

- amount of a large win requiring verification, describe the verification process and indicate the amount of time needed to perform the verification process.
- 111. An authorized player shall not electronically transfer funds to any other authorized player.

Sports wagering and interactive gaming Engaged between Human Individuals

112. The operator shall establish procedures to reasonably ensure sports wagering and interactive gaming is conducted only between human individuals. Such procedures are delineated within the sports wagering and interactive gaming written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5.

Responsible Sports wagering and interactive gaming

- 113. The operator shall establish procedures to promote responsible sports wagering and interactive gaming. Such procedures are delineated within the sports wagering and interactive gaming written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5.
- 114. The operator's website is to provide information and/or a link to information on player protection and responsible gaming.
- 115. The operator shall establish procedures to allow authorized players the ability, through their sports wagering account, to select responsible gambling options that include a wager limit, loss limit, a deposit limit, a play time limit and a time-based exclusion from gambling settings. The operator shall establish procedures to allow authorized players the ability, through their interactive gaming account, to select responsible gambling options that include a deposit limit, a spend limit, a play time limit and a time-based exclusion from gambling settings. Pursuant to W.Va. Code of State Rules § 179-10-6.29, the lifetime threshold is set at \$5,000 by the Commission. Such procedures are delineated within the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5, and shall be

- submitted to and approved by the Lottery prior to any acceptance of mobile or online wagers.
- 116. The operator shall establish procedures to comply with the requirements to allow for self-exclusion and such procedures are delineated within the sports wagering and interactive gaming written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5.
- 117. The operator shall establish procedures to reasonably ensure a player under the age of 21 is prohibited from participating in and such procedures are delineated within the sports wagering and interactive gaming written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5.

Protection of Authorized Player's Personally Identifiable Information

The operator shall establish procedures and policies to protect the authorized player's personally identifiable information consistent with the requirements specified in W.Va. Code of State Rules § 179-9-14.2 and W.Va. Code of State Rules § 179-10-7.2. Such procedures and policies are delineated within the sports wagering and interactive gaming written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5. To the extent not otherwise required by federal law, regulation, or other laws of the State of West Virginia, a licensee shall have in place a Confidentiality Policy and Information Security Accountability Requirements to protect patron confidential information, including, but not limited to, financial information. Licensee shall require all third-party vendors and suppliers, whether required to be licensed to conduct i-Gaming in the State of West Virginia or not, to adhere to such policy and accountability requirements if that third-party vendor or supplier has access to confidential information in the course of providing i-Gaming to a patron in West Virginia.

Confidential information (including PII) for purposes of these minimum internal controls is as defined in subsection 2.2 of the State of West Virginia Confidentiality Policies and Information Security Accountability Requirements found at

www.state.wv.us/Admin/Purchase/Privacy/NoticeConfidentiality.pdf, which is

incorporated herein by reference. The licensee shall ensure that its policy and accountability requirements follow the minimum standards of care set forth in subsection 4.3 of the West Virginia Policy referenced above to the extent possible. Any incident or breach must be reported to the Lottery's Privacy Officer and the Deputy Director of Security according to the procedures set forth in subsection 4.4 of the West Virginia Policy referenced above.

118. The designation of one or more senior company official(s) with primary responsibility for the design, implementation and ongoing evaluation of the procedures related to the protection of the authorized player's personally identifiable information is delineated in the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5. If more than one senior company official is designated, then the responsibilities assigned to each official are to be specified in the system.

Closed/Inactive Accounts

- 119. The operator shall suspend a sports wagering and interactive gaming account if the account has not been logged into for a consecutive 16-month period. Provided that all licensees must comply with all applicable state and federal regulations including, but not limited to Chapter 36 Article 8, Uniform Unclaimed Property Act of the West Virginia State Code. The funds in the account shall be processed using the procedures in MICS 1.11, Unclaimed Winnings.
- 120. The operator may re-activate a suspended sports wagering and interactive gaming account only after re-verifying the information required by W.Va. Code of State Rules §§179-9-13 and 14 and W.Va. Code of State Rules §§179-10-7.2 and 6.21 and upon the authorized player presenting a current government issued picture identification credential.
- 121. The terms and conditions agreed upon between an operator of sports wagering and interactive gaming and any authorized player is to be made available upon request to authorized internal and external auditors and to Lottery Staff and the Commission.

- 122. A monthly "closed/inactive sports wagering and interactive gaming accounts report" is prepared and maintained indicating the sports wagering and interactive gaming accounts which were closed and not available for an authorized player to access for wagering transactions. Access to closed/inactive sports wagering and interactive gaming account information is restricted to those positions which require access and are so authorized by management. Such access is to be delineated within the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5. The report is to include, at a minimum:
 - a. The authorized player's name and account number;
 - b. User ID and name of employee handling the closure of account, if not an automated process and employee is involved;
 - c. Date and time account was opened;
 - d. Last date authorized player logged into account;
 - e. Number of days since authorized player logged into account;
 - f. Date and time account was closed; and
 - g. Balance of account when closed.

Authorized Player Disputes

123. The operator shall establish procedures to handle disputes with authorized players. Such procedures are delineated within the sports wagering and interactive gaming written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5.

Documentation

- Note 1: The following reports are to be created and maintained by each operator of a sports wagering and interactive gaming system. A single report of each type may contain all the information required below at the discretion of the licensee.
- Note 2: The West Virginia Lottery Commission shall require that all reports documented in this section will be transmitted the West Virginia Lottery Data Center in an approved format (currently comma separated values) within two hours after the close of the gaming day which will occur at 6:00 am.
- Note 3: The West Virginia Lottery Commission shall require that all revised reports are handled in the following manner:
 - a. The West Virginia Lottery audit staff shall be emailed each time there is a revised report created
 - b. The original report shall not be deleted from the reporting system
 - c. The revised report shall be named in a manner to identify there was a revision
- 124. A "Sports wagering and interactive gaming account transaction detail report" is to be created on demand, and at least daily, indicating by authorized player the detailed, sequential activity as follows:
 - a. Date of activity;
 - b. Authorized player's name and account number;
 - c. Date and time authorized player's session started;
 - d. State or foreign jurisdiction where authorized player is located while logged into session;
 - e. Unique transaction number;
 - f. Type of event (e.g., SuperBowl 2019, Texas hold 'em);
 - g. Date and time of each transaction;
 - h. Amount of each transaction:

- Type of each transaction (e.g., deposit, withdrawal, transfer to game, transfer from game, adjustment, etc.);
- j. Name of authorized player's financial institution and last four digits of account number for deposit and withdrawal transactions, if applicable;
- k. Method of deposit/withdrawal (e.g., cash, debit instrument, prepaid access instrument or credit card, personal check, cashier's check, wire transfer, money order and transfer to/from casino account);
- User ID and employee name handling the transaction, if assisting authorized player;
- m. Amount of outstanding account balance before and after each transaction;
- n. Date and time authorized player session ended;
- o. Subtotals by transaction type; and
- p. Ending account balance at the end of the authorized player's session.
- 125. A "Sports wagering and interactive gaming account transaction detail report" is to be maintained:
 - a. For authorized players through on-line access to their sports wagering and interactive gaming account, at a minimum, for the prior 180-day period.
 - b. For authorized players through off-line access to sports wagering and interactive gaming account records, at a minimum, for the prior five-year period.
- 126. An "Sports wagering and interactive gaming account balance summary report" is to be created on demand, and at least daily, indicating by authorized player with an account balance the following information:
 - a. Date of activity;
 - b. Authorized player's name and account number;

- c. Status of account (e.g., active, inactive, closed, suspended, etc.);
- d. Date account was opened;
- e. Date registration information provided by authorized player;
- f. Date registration information verified by operator of sports wagering and interactive gaming;
- g. Date of last activity;
- h. Amount of beginning account balance;
- i. Total amount of deposit transactions;
- j. Total amount of withdrawal transactions;
- k. Total amount of account adjustment transactions;
- 1. Total amount of transfers to game;
- m. Total amount of transfers from game; and,
- n. Amount of ending account balance.
- 127. A "daily sports wagering and interactive gaming player's funds transactions report" is prepared and maintained indicating by authorized player the deposit/withdrawal/adjustment transactions to a player's sports wagering and interactive gaming account that includes:
 - a. Authorized player's name and account number;
 - b. Amount of beginning account balance;
 - c. Unique transaction number;
 - d. Date and time of deposit/withdrawal or account balance adjustment;
 - e. Amount of deposit/withdrawal or account balance adjustment;

- f. Nature of deposit/withdrawal (e.g., cash, debit instrument, prepaid access instrument or credit card, personal check, cashier's check, wire transfer, money order and transfer to/from casino account);
- g. Reason/description of adjustment to account balance, if applicable;
- h. User ID and name of employee handling the deposit, withdrawal or account balance adjustment transaction, if assisting authorized player;
- User ID and name of supervisor authorizing an adjustment to account balance, if applicable;
- j. Totals for each type of transaction; and
- k. Amount of ending balance.
- 128. A "daily sports wagering and interactive gaming account balance adjustment report" is prepared and maintained indicating by authorized player adjustment transactions to a player's sports wagering and interactive gaming account that includes:
 - a. Authorized player's name and account number;
 - b. Date and time of account balance adjustment;
 - c. Unique transaction number;
 - d. User ID and name of employee handling the account balance adjustment transaction, if applicable;
 - e. User ID and name of supervisor authorizing an adjustment to account balance;
 - f. Amount of account balance adjustment;
 - g. Type of account adjustment; and
 - h. Reason/description of adjustment to account balance.
- 129. A "Sports wagering and interactive gaming game play report" by game type (Pro Football, Pro Basketball, College Football, Texas hold 'em etc.) is created and

maintained by day with a cumulative month-to-date total and includes the following information:

- a. Date of activity;
- b. Sport event name, Table session;
- c. Date and time session started for gaming day;
- d. Date and time for each session transaction;
- e. Type of session transaction;
- f. Amount of session transaction;
- g. Compensation amount collected by authorized player and state or foreign jurisdiction, if applicable for taxation purposes;
- h. Contribution amount to jackpot pool or progressive, if applicable;
- i. Amount of jackpot win, if applicable;
- j. Other amounts collected by operator of sports wagering and interactive gaming;
- k. Description of other amounts collected;
- 1. Amounts refunded;
- m. Description of amounts refunded;
- n. Date and time session ended for gaming day; and
- o. Total amount by transaction type.
- 130. A "Sports wagering and interactive gaming revenue report" by event (World Cup 2018, Super Bowl 2019, Texas hold 'em) which includes cash games and contest/tournament games, that is maintained by day, with a cumulative month-to-date total and includes the following information:
 - a. Date;

- b. Type of event (e.g., World Cup 2018, Super Bowl 2019 World Cup 2018, Super Bowl 2019, Texas hold 'em);
- c. Total wagered;
- d. Total amount contributed to a progressive pool, if applicable;
- e. Compensation amount collected by operator of sports wagering and interactive gaming;
- f. Other amounts collected by operator of sports wagering and interactive gaming;
- g. Description of other amounts collected;
- h. Amounts refunded; and
- i. Description of amounts refunded.
- 131. The wagering system shall create daily a "pending transaction report" which shall include and separately itemize:
 - a) Funds on game transactions;
 - b) Deposits and withdrawals not yet cleared
- 132. An "interactive gaming daily progressive pool activity report" is prepared and maintained which includes:
 - Note: The report required by this MICS applies to a progressive pool amount being offered by one operator of interactive gaming. It does not apply to a progressive pool amount being offered by a service provider to more than one operator of interactive gaming.
 - a. Progressive pool name;
 - b. Beginning balance;
 - c. Total wagers by table session;
 - d. Contributions to primary pool;
 - e. Contributions by hidden/secondary pool, as applicable;

- f. Date and time of payout;
- g. Winning authorized player(s) name and account number;
- h. Payout amount(s);
- i. User ID and name of the employee handling the payment, if applicable;
- j. Progressive reset amount after payout;
- k. User ID and name of employee performing an adjustment to the pool amount for other than an authorized player winning the pool amount during table session play;
- 1. Reason/description for employee making an adjustment to the pool amount;
- m. Date and time of pool amount adjustment; and
- n. Ending balance.
- 133. An "interactive gaming contest/tournament report" is prepared and maintained for each contest/tournament conducted which includes, at a minimum:
 - a. Date of activity;
 - b. Name of contest/tournament;
 - Name of each authorized player participating, amount of entry fee paid, and the date paid;
 - d. Total amount of entry fees collected;
 - e. Name of each winning authorized player, amount paid to a winner, and the date paid;
 - f. Total amount of winnings paid to authorized players; and
 - g. Compensation amount collected by the operator of interactive gaming.

Note: Compensation for contest/tournaments is a fee that was collected for participating in the contest/tournament.

- 134. Remote gaming servers shall generate the following reports:
 - "Game summary report" shall be generated on a daily basis and include the following:
 - a) Authorized site name

- b) Interactive game name
- c) Total number of transactions
- d) Total amount wagered
- e) Total amount paid out
- f) Total win/loss
- 2) "Pending transaction report" shall be generated on a monthly basis and separately itemize all outstanding transactions for each authorized site and shall include the following:
 - a) Authorized site name
 - b) Interactive game name
 - c) Transaction date and time
 - d) Transaction identifier
 - e) Unique patron identifier
 - f) Status
 - g) Amount of the wager
 - h) Amount of the win, if known
- 135. The sports wagering and interactive gaming audit is conducted by someone independent of the sports wagering and interactive gaming operations.
- 136. Daily, audit/accounting personnel are to use the "sports wagering and interactive gaming daily progressive pool activity report" to reconcile the amount indicated on the payout amount displayed to the authorized player to the amount received from sports wagering and interactive gaming play and the payouts made for each promotional progressive pot and/or pool. This reconciliation must be sufficiently documented (including substantiation of differences, adjustments, etc.).
 - Note: The report and reconciliation required by this MICS applies to a progressive pool amount being offered by one operator of sports wagering and interactive gaming. It does not apply to a progressive pool amount being offered by a service provider to more than one operator of sports wagering and interactive gaming.

- 137. Daily, accounting/audit personnel perform the following procedures using the reports provided by the sports wagering and interactive gaming system:
 - a. For a sample of table sessions, verify the accuracy of the compensation amount indicated on the "sports wagering and interactive gaming game play report" that resulted from wagering activity.
 - b. Reconcile the total daily compensation amount indicated on the "Sports wagering and interactive gaming game play report" by game type to the compensation amount indicated for the same game type on the "Sports wagering and interactive gaming revenue report".
 - c. Reconcile the total daily compensation amount indicated on the "Sports wagering and interactive gaming contest/tournament report" by game type to the compensation amount indicated for the same game type on the "Sports wagering and interactive gaming revenue report".
 - d. Reconcile the total amount of sports wagering and interactive gaming account deposit, withdrawal and account adjustment transactions indicated in the "Sports wagering and interactive gaming account balance summary report" to the amount recorded in the "Sports wagering and interactive gaming player's funds transactions report".
 - e. Review the sports wagering and interactive gaming system's exception reports for propriety of transactions and unusual occurrences. All noted improper transactions or unusual occurrences are investigated with the results documented.
- 138. At least annually, the sports wagering and interactive gaming system is reviewed by personnel independent of the individual who sets up or makes changes to the system parameters. The review is performed to determine that the configuration parameters are accurate and have not been altered without appropriate management authorization (e.g., verify the accuracy of the compensation % or flat rate to collect on wagering activity). The test results are documented and maintained.

- 139. At least monthly, reconcile the total outstanding balance of sports wagering and interactive gaming accounts indicated in the "Sports wagering and interactive gaming account balance summary report" to the dollar amount indicated in the bank account records.
- 140. At least monthly, review the "Sports wagering and interactive gaming account balance summary report" for accounts with a negative account balance to determine whether an authorized player's sports wagering and interactive gaming account is overdrawn due to a reason other than being caused by a payment processing issue outside the control of the operator (e.g., chargebacks).
- 141. For one day each month, accounting/audit personnel reconcile the total amount of the listing of sports wagering and interactive gaming account deposits received via mail with the deposit amount indicated in the bank account records.
- At least on a monthly basis, the "Sports wagering and interactive gaming account balance summary report" is reviewed to confirm compliance with W.Va. Code of State Rules §179-9-3.4 and 14.9 and W.Va. Code of State Rules §179-10-3.3 and 7.11 to ensure that the amount of the reserve being maintained shall be greater than or equal to the sum of the daily ending cashable balance of all patron sports wagering and interactive gaming accounts, funds on game, and pending withdrawals. The casino controller or above shall file a monthly attestation with the Lottery Director that the funds have been safeguarded pursuant to this subsection.
- 140. Documentation (e.g., log, checklist, notation on reports, and tapes attached to original documents) is maintained evidencing the performance of sports wagering and interactive gaming audit procedures, the exceptions noted and follow-up of all sports wagering and interactive gaming audit exceptions.

Section 1.15 Signature Requirements

- (a) Whenever in these Regulations a signature is required, the signature shall:
 - 1. Comply with either of the following requirements:

- i. Be, at a minimum, the signer's first initial, last name and occupational license number, written by the signer, and be immediately adjacent to or above the clearly printed or preprinted title of the signer; or
- ii. Be the employee's identification number or other computer identification code issued to the employee by the casino licensee, if the document to be signed is authorized by the Lottery to be generated by computer, and such method of signature is approved or required by the Lottery;
- 2. Signify that the signer has prepared forms, records, and documents, and/or authorized, observed, and/or participated in a transaction to a sufficient extent to attest to the accuracy of the information recorded thereon, in conformity with these Regulations and the casino licensee's system of internal accounting control; and
- 3. Signify that the signer required by this chapter to count or observe gaming chips and plaques has counted or observed the count of such chips and plaques and such count was made by breaking down stacks of chips to the extent necessary.
- (b) Signatures records shall be prepared for each person required by the rules and Regulations of the Lottery to sign records and documents and shall include specimens of signatures, titles of signers and the date the signature was obtained. Such signature records shall be filed alphabetically by last name either on a company-wide or departmental basis. The signature records shall be adjusted on a timely basis to reflect changes of personnel.

Section 1.16 New games; requirements and procedures for application

- (a) The Casino licensee may petition the Lottery for approval of a proposed sports wagering and interactive gaming tournament or other proposed games.
- (b) A petition for approval of a proposed new game must be in writing.
- (c) A proposed new game may be a variation of an authorized game, a composite of authorized games, or any other game compatible with the public interest and suitable for casino use.
- (d) A petition for a proposed new game shall be in writing, signed by the petitioner, and shall include the following information:
- 1. The name of the petitioner;

- 2. Whether the game is a variation of an authorized game, a composite of authorized games, or another game which is compatible with the public interest and is suitable for casino use;
- 3. A complete and detailed description of the game for which approval is sought, including:
- i. A summary of the game, including the objectives of the game, the method of play and the wagers offered;
- ii. The draft of proposed rules describing the equipment used to play the game, and the proposed rules of the game;
- iii. The true odds, the payout odds, and the house advantage for each wager;
- iv. A sketch or picture of the game layout, if any; and
- v. Sketches or pictures of the equipment used to play the game.
- 4. Whether the game, its name, or any of the equipment used to play it is covered by any copyrights, trademarks or patents, either issued or pending;
- 5. Request for a test or experiment of the game; and
- 6. Any other pertinent information or material requested by the Lottery.
- (e) In making a determination whether a proposed new game is an acceptable variation of an authorized game or a composite of authorized games, or is compatible with the public interest, the Lottery may consider rules and method of play; true and payout odds; wagers offered; layout; equipment used to play the game; personnel requirements; game security and integrity; similarity to other authorized games or other games of chance; other variations or composites of the game previously approved as authorized games; as well as any other relevant factors. Any such determination shall be subject to a condition that the game must undergo a successful test for suitability of casino use.
- (f) No proposed game may be implemented for casino play until it has been approved by the Lottery.
- (g) If the Lottery determines, at any time, that approved rules of the game are not adequate to ensure compliance with the regulations and this rule or the integrity of the game, then the Lottery may direct the casino licensee, in writing to amend its rules of the game.

Section 1.17 Patron access to the rules of the games; gaming guides

- (a) Each casino licensee shall maintain at its sports wagering lounge or some other area accessible to patrons, a printed copy of the complete text of the rules of all authorized sports wagering and all other information required to be made available to the public. This information shall be made available to the public for inspection upon request.
- (b) Each casino licensee shall prominently post within the sports wagering lounge, on the operator's Internet website, and included in the terms and conditions of the account wagering system, as appropriate, according to regulations of the Lottery the house rules together with any other information the Lottery deems appropriate.
- (c) No sports wagering and interactive gaming guide shall be issued, displayed or distributed by a casino licensee unless and until a sample thereof has been submitted to and approved by the Lottery. No casino licensee shall issue, display or distribute any sports wagering and interactive gaming guide that is materially different from the approved sample thereof.

Section 1.18 Currency Transaction Reporting Standards

- (a) Each casino licensee with annual gross gaming revenues in excess of \$1,000,000 shall establish, and the gaming operation shall comply with, procedures for the reporting of currency transactions in excess of \$10,000 that appear to be transacted to avoid filing requirements of the Bank Secrecy Act known as Title31 (31 CFR, part 103).
- (b) Definitions for purposes of this Section.
- 1. Currency is the coin and paper money of the United States or of any other country that is designated as legal tender.
- 2. Customer includes every person that is involved in a transaction with a casino, whether or not that person participates, or intends to participate, in the gaming activities offered by that casino
- 3. Established customer is a person with an account with the casino licensee, including an authorized credit or customer deposit account where the casino licensee has obtained and maintains on file the person's name and address, as well as taxpayer identification number or

social security or employer identification number or, if none, alien identification number or passport number.

- 4. Casino is a gambling establishment that is duly licensed or authorized to do business as such in the United States, or territory or possession of the United States, and has gross annual gaming revenue in excess of \$1 million.
- 5. Monetary instruments are:
- i. Currency;
- ii. Traveler's checks in any form;
- iii. All negotiable instruments including personal checks, business checks, official bank checks, cashier's checks, third-party checks, promissory notes and money orders that are either in bearer form, endorsed without restriction, or otherwise in such form that title thereto passes upon delivery;
- iv. Securities or stock in bearer form or otherwise in such form that title thereto passes upon delivery.
- 6. Person is an individual, a corporation, a partnership, a trust or estate, a joint stock company, an association, a syndicate, joint venture, or other unincorporated organization or group, and all entities recognized as legal personalities.
- 7. Structure or Structuring is the process of a person engaging in a transaction or transactions, whether acting alone or in conjunction with others or on behalf of others, who conducts or attempts to conduct one or more transactions in currency, in any amount, at one or more casino licensees on one or more days, in any manner, for the purpose of evading the reporting requirements under this section.
- 8. Transactions include, but are not limited to, deposit, withdrawal, transfer between accounts, exchange of currency, loan, extension of credit, purchase or redemption of casino chips or tokens, or other gaming instruments or any other payment, transfer, or delivery, by through, or to a casino licensee, by whatever means effected.
- 9. Gaming day is the normal business day of a casino licensee. For a casino that offers 24 hour gaming, the term means that 24-hour period by which the casino keeps its books and records for business, accounting, and tax purposes.

- 10. Affiliate(s) are business companies, organizations, or individuals who are affiliates of each other if, directly or indirectly, either one has the power to control the other, or a third party controls or has the power to control both.
- (c) Currency Transactions. Each casino licensee shall file a report with the West Virginia Lottery and FinCen of each currency transaction or multiple currency transactions, involving cash-in or cash-out in the same gaming day, of more than \$10,000. Cash-in transactions shall not be combined with Cash-out transactions, but shall be aggregated separately in order to determine that the reporting threshold is met.
- 1. Cash-in transactions include, but are not limited to, the following:
- i. Purchases of chips, tokens, and plaques;
- ii. Front money deposits;
- iii. Safekeeping deposits;
- iv. Payments on any form of credit, including markers;
- v. Bets of currency;
- vi. Currency received by a casino for transmittal of funds through wire transfer for a customer;
- vii. Purchases of a casino's check; and
- viii. Exchanges of currency for currency, including foreign currency.
- 2. Cash-out transactions include, but are not limited to, the following:
- i. Redemptions of chips, tokens, and plaques;
- ii. Front money withdrawals;
- iii. Safekeeping withdrawals;
- iv. Advances on any form of credit, including markers;
- v. Payments by a casino to a customer for winning bets, including slot jackpots;
- vi. Payments by a casino to a customer based on receipt of funds through wire transfer for credit to a customer;
- vii. Cashing of checks or other negotiable instruments;
- viii. Exchanges of currency for currency, including foreign currency; and
- ix. Reimbursements for customers' travel and entertainment expenses by the casino licensee.
- (d) Multiple Transactions and Multiple Transactions Logs.

- 1. Multiple currency transactions shall be treated as single transaction if the casino has knowledge that they are by or on behalf of any person and result in either cash in or cash out totaling more than \$10,000 during any gaming day.
- 2. For purposes of this section (d), a casino shall be deemed to have the knowledge, if: any sole proprietor, partner, officer, director, or employee of the casino, acting within the scope of his or her employment, has knowledge that such multiple currency transactions have occurred, including knowledge from examining the books, records, logs, information retained on magnetic disk, tape or other machine-readable media, or in any manual system, and similar documents and information, which the casino maintains pursuant to any law or regulation or within the ordinary course of its business, and which contain information that such multiple currency transactions have occurred.
- 3. Each casino licensee shall aggregate the same type transactions occurring in excess of \$3,000, during a designated 24-hour period, by establishing multiple transaction logs at each of the following areas:
- i. At a single specific cage;
- ii. At a single specific gaming pit; or
- iii. At another single specific gaming or other monitoring area as specified in the casino licensee's system of internal controls.
- 4. Before completing a cash transaction with a customer that, when aggregated with others, shall exceed the \$10,000 reporting threshold, the casino licensee shall complete the identification and record keeping requirements described in subsection (e) below and comply with subsection (c) above.
- (e) Report Filing Requirements. A report required by subsection (c) above shall be filed by the casino licensee within 15 days following the day on which the reportable transaction occurred. All reports required to be filed shall be filed with the Commissioner of Internal Revenue and the West Virginia Lottery unless otherwise specified.
- 1. Before concluding any transaction wherein a report is required to be filed, a casino licensee shall;
- i. Obtain the patron's name, address, social security or employer identification number;
- ii. Make reasonable attempts to obtain identification credentials such as;
- iii. Driver's license;

- iv. Passport;
- v. Non-resident alien identification card;
- vi. Other reliable Government Issue identification credentials; or
- vii. Other identification credentials normally acceptable when cashing checks.
- 2. Examine identification credentials specified in subsection (e)(1)(i-vii) above, and record on the report the specific identifying information.
- (f) Records to be maintained by casino licensees. Each casino licensee shall record and maintain the name, address and social security number of a customer who opens an account, deposits funds or receives a line of credit. At the time the account is opened, funds deposited or line of credit is approved, the name and address shall be verified by the examination of credentials described in subsection (e)(1)(i-vii). Other records to be maintained include:
- 1. Receipt of funds from patrons;
- 2. Bookkeeping entries of debit or credits to the patron's account;
- 3. Statement or ledger card showing deposits, withdrawals, transfers or other activity to the patron's account;
- 4. Record of extension of credit in excess of \$2500;
- 5. Record of advice, request or instruction received or given by a casino licensee for itself or another person with respect to a transaction outside the United States;
- 6. Records prepared or received by the casino licensee in the ordinary course of its business needed to reconstruct a customer's account activity;
- 7. All records, documents or manuals required to be maintained by state and local laws or regulations and the West Virginia Lottery;
- 8. All records prepared by the casino licensee to monitor a customer's gaming activity;
- 9. A separate record (log) containing a list of each transaction between the casino licensee and its customers involving the following types of instruments with a value of \$3000 or more:
- i. Personal checks;
- ii. Business checks;
- iii. Official bank checks
- iv. Cashier's checks;

- v. Third party checks;
- vi. Promissory notes;
- vii. Traveler's checks;
- viii. Money orders.
- 10. The record in subsection (f)(9) above shall contain the following;
- i. Date;
- ii. Time;
- iii. Amount;
- iv. customer's name;
- v. customer's address;
- vi. Name of drawee or issuer:
- vii. All reference numbers on the instrument; and
- viii. Name or license number of the casino employee who conducted the transaction.
- 11. Records required by this subsection shall be retained for a period of five years.
- 12. Wherever an original or a microfilm or other copy or reproduction of a check, draft, monetary instrument, investment security, or other similar instrument, is required to be maintained, a copy of both front and back of each such instrument or document shall be maintained.
- 13. All such records shall be filed or stored in such a way as to be accessible within a reasonable period of time.

Section 1.19 Suspicious Activity Reporting Standards

(a) Each casino licensee shall file, with the Financial Crimes Enforcement Network (FinCEN) and the West Virginia Lottery, to the extent and in the manner required by this section, a report of any suspicious transaction or transactions relevant to a possible violation of law or regulation. A casino licensee may also file with FinCEN, a Suspicious Activity Report, or otherwise, a report of any suspicious transaction that it believes is relevant to the possible violation of any law or regulation but whose reporting is not required by this section.

(b) SARC Reporting Requirements. A transaction requires reporting under the terms of this section if it is conducted or attempted, by, at, or through a casino licensee, and involves or

aggregates to at least \$5,000 in funds or other assets, and the casino licensee knows, suspects,

or has reason to suspect that the transaction or a pattern of transactions of which the transaction is a part:

- 1. Involves funds derived from illegal activity or is intended or conducted in order to hide or disguise funds or assets derived from illegal activity (including, without limitation, the ownership, nature, source, location, or control of such funds or assets) as part of a plan to violate or evade any federal law or regulation or to avoid any transaction reporting requirement under federal law or regulation or of the West Virginia Lottery.
- 2. Is designed, whether through structuring or other means, to evade any requirements of this part or of any other regulations promulgated under the Bank Secrecy Act;
- 3. Has no business or apparent lawful purpose or is not the sort in which the particular customer would normally be expected to engage, and the casino licensee knows of no reasonable explanation for the transaction after examining the available facts, including the background and possible purpose of the transaction; or
- 4. Involves use of the casino licensee to facilitate criminal activity.
- (c) Filing Procedures
- 1. A suspicious transaction shall be reported by completing a Suspicious Activity Report, and collecting and maintaining supporting documentation as required by subsection (e) of this section:
- 2. The SARC shall be filed with FinCEN in a central location, to be determined by FinCEN, as indicated in the instructions to the SARC;
- 3. A SARC shall be filed no later than 30 calendar days after the date of the initial detection by the casino licensee of facts that may constitute a basis for filing a SARC under this section. If no suspect is identified on the date of such initial detection, a casino licensee may delay filing a SARC for an additional 30 calendar days to identify a suspect, but in no case shall reporting be delayed more than 60 calendar days after the date of such initial detection. In situations involving violations that require immediate attention, such as ongoing money laundering schemes, the casino shall immediately notify by telephone an appropriate law enforcement authority in addition to filing timely a SARC. Casinos wishing voluntarily to report suspicious transactions that may relate to terrorist activity may call FinCEN's Financial Institutions Hotline, U.S. Department of Homeland Security, or any applicable regulatory authority, in addition to filing timely a SARC if required by this section.

- (d) Exceptions to Filing SARC'S. A casino licensee is not required to file a SARC for a robbery or burglary committed or attempted that is reported to appropriate law enforcement authorities.
- (e) Records to be retained by casino licensees. A casino licensee shall maintain a copy of any SARC filed and the original or business record equivalent of any supporting documentation for a period of five years from the date of filing the SARC. Supporting documentation shall be identified as such and maintained by the casino licensee, and shall be deemed to have been filed with the SARC. A casino licensee shall make all supporting documentation available to FinCEN, any other appropriate law enforcement agencies or federal, state, local, or West Virginia Lottery upon request.
- (f) Confidentiality of Reports; Limitation of Liability. No casino licensee, and no director, officer, employee, or agent of any casino licensee, who reports a suspicious transaction under this part, may notify any person involved in the transaction that the transaction has been reported. Thus, any person subpoenaed or otherwise requested to disclose a SARC or the information contained in a SARC, except where such disclosure is requested by FinCEN or another appropriate law enforcement or regulatory agency, shall decline to produce the SARC or to provide any information that would disclose that a SARC has been prepared or filed, citing the requirements of Title 31 U.S.C. and shall notify FinCEN of any such request and its response thereto. A casino licensee, and any director, officer, employee, or agent of such casino, that makes a report pursuant to this section, whether such report is required by this section or made voluntarily, shall be protected from liability for any disclosure contained in, or for failure to disclose the fact of, such report, or both, to the extent provided by Title 31 U.S.C.
- (g) Currency Transactions and Suspicious Transactions Compliance Programs
- 1. Each casino licensee shall develop and implement a written program reasonably designed to assure and monitor compliance with the requirements set forth in this section.
- 2. At a minimum, each compliance program shall provide for:
- i. A system of internal controls to assure ongoing compliance;
- ii. Internal and/or external independent testing for compliance;
- iii. Training of casino licensee personnel, including training in the identification of unusual or suspicious transactions, to the extent that the reporting of such transactions is required by

applicable law or regulation, or by the casino licensee's own administrative and compliance policies;

- iv. An individual or individuals to assure day-to-day compliance;
- v. Procedures for using all available information to determine:
- (1) When required by this section, the name, address, social security number, and other information, and verification of the same, of a person;
- (2) When required by this section, the occurrence of unusual or suspicious transactions; and
- (3) Whether any record must be made and retained; and
- vi. For casino licensee's that have automated data processing systems, the use of automated programs to aid in assuring compliance.

Section 1.20 Items Required in Licensee Internal Controls

The following list of items is related to procedures/controls that must be part of each casino's internal controls and furnished to the Lottery.

- 1. Risk Management Procedures
- 2. Fraud and Suspicious Conduct
- 3. Patrons Prohibited from Wagering
- 4. User Access Controls
- 5. On Line Wagering
- 6. Third Party Systems
 - a. This section is to document the use of any additional third party systems/processes that are not managed by the casino or sports book, an example might be a third party who is contracted to perform patch management, system backups, or vulnerability testing. A third party system is a hardware system or process performed by someone who is not part of the casino, MSP or supplier, examples include a company managed to operate the physical computer system, perform backups, or provide security services. This would also include a technology firm who provides assurance services such as SOC audits. None of these need licensed but the WV Lottery would

like to understand the environment in which the sports betting operates at each casino..

7. Reconciliation of Assets and Documents

- a. The assets for which each Sports Book Ticket Writer is responsible for shall be maintained on an imprest basis. A Sports Book Ticket Writer shall not permit any other person to access his or her imprest inventory.
- b. A Sports Book Ticket Writer shall begin a shift with an imprest amount of currency and coin to be known as the "sports wagering inventory." No funds shall be added to or removed from the sports wagering inventory during such shift except:
 - 1) In collection of sports wagering wagers;
 - 2) In order to make change for a patron buying a sports wagering ticket;
 - In payment of winning or properly cancelled or refunded sports wagering tickets;
 - 4) In payment for sports wagering vouchers;
 - 5) In exchanges with the money room or sports wagering lounge booth vault supported by proper documentation which documentation shall be sufficient for accounting reconciliation purposes.
- A "sports wagering count sheet" shall be completed and signed by the sports wagering shift supervisor, and the following information, at a minimum, shall be recorded thereon at the commencement of a shift:
 - 1) The date, time and shift of preparation;
 - 2) The total amount of currency and coin in the sports wagering inventory issued to the Sports Book Ticket Writer;
 - The sports wagering window number to which the Sports Book Ticket
 Writer is assigned; and
 - 4) The signature of the sports wagering shift supervisor.
- d. A Sports Book Ticket Writer assigned to a ticket writer window shall count and verify the sports wagering inventory at the sports wagering vault, and shall agree the count to the sports wagering count sheet. The Sports Book Ticket Writer shall sign the count sheet attesting to the accuracy of the

- information recorded thereon. The sports wagering inventory shall be placed in a ticket writer's drawer and transported directly to the appropriate sports wagering lounge booth window by the Sports Book Ticket Writer.
- e. At the conclusion of a Sports Book Ticket Writer's shift they will print a
 Teller Shift Summary ticket (sold, cashed & voided summary). The Sports
 Book Ticket Writer shall count the contents of the drawer and record the
 following information, at a minimum, on the sports wagering count sheet:
 - 1) The date, time and shift of preparation;
 - 2) The denomination of currency, coin, and coupons in the drawer;
 - The total amount of each denomination of currency, coin and coupons in the drawer;
 - 4) The total of any exchanges;
 - 5) The total amount in the drawer;
 - 6) The signature of the Sports Book Ticket Writer; and
 - 7) The value of the sold, voided, and cashed tickets or attach the Teller Shift Summary ticket to the count sheet
- f. The sports wagering shift supervisor shall compare the ticket writer window net for the shift as generated by the terminal and if it agrees with the sports wagering count sheet total plus the sports wagering inventory, shall agree the count to the sports wagering count sheet and sign the sports wagering count sheet attesting to the accuracy.
- g. If the sports wagering window net for the shift as generated by the system does not agree with the sports wagering count sheet total plus the sports wagering inventory, the sports wagering shift supervisor shall record any overage or shortage. If the count does not agree, the Sports Book Ticket Writer and the sports wagering shift supervisor shall attempt to determine the cause of the discrepancy in the count. If the discrepancy cannot be resolved by the Sports Book Ticket Writer and the sports wagering shift supervisor, such discrepancy shall be reported in writing to the sports wagering manager, or department supervisor in charge at such time and documentation will be provided to Accounting. Any discrepancy in excess of \$500 shall be reported

to Surveillance and WV Lottery Audit within two hours of the shift ending. The report shall include the following:

- 1) Date;
- 2) Shift;
- 3) Name of the Sports Book Ticket Writer;
- 4) Name of the supervisor;
- 5) Window number; and
- Amount of the discrepancy.
- 8. House Rules
- 9. Credit
- 10. Redemption of Winning Tickets Mail In

Section 1.21 Server-based Gaming: Minimum Game Requirements

- A server-based game shall pay out no less than eighty percent (80.00%) and no more
 than ninety-nine point nine percent (99.90%) of the amount wagered during the
 expected lifetime of the game. The theoretical payout percentage will be determined
 using standard methods of probability theory rather than some other measure such as
 field return.
 - a. Progressive server-based games with configurable progressive jackpot base reset amounts and/or contribution rates; the total return percentage of the game base paytable (not including the progressive contribution) shall not exceed the mandated payout limits.
 - b. Progressive server-based games with non-configurable progressive jackpot base reset amounts and/or contribution rates; the total return percentage of the game base paytable (including the progressive contribution) shall not exceed the mandated payout limits.
 - c. Volatility results are required for every game submitted for approval, including house banked poker. Exactomizer results are also required for house banked poker games.

- The interactive gaming operator or technology supplier shall provide game
 Math\PAR sheet documentation to the Commission with each server-based game
 submitted for approval.
- 3. Each server-based game on the interactive gaming system shall have a probability greater than one in seventeen million of obtaining the maximum payout for each play.
 - a. The Commission may approve games for server-based gaming that are outside of the one in seventeen million requirement. Top Award odds that exceed 1 in 17 million shall be noted in the independent testing laboratory certification letter with the actual odds stated.
- 4. The rules of play for each server-based game shall be available to the player through the game skin/interface. The Commission may reject any rules of play which are incomplete, confusing, misleading or inconsistent with the functionality of the game.
 - For each server-based game, there shall be a display detailing the credits awarded for the occurrence of each possible winning combination of numbers or symbols.
 - For each table game, there shall be a display indicating the permissible minimum and maximum wagers.
 - c. For all server-based game submissions, a game rule document must be provided to the Lottery Commission along with the certification report to be approved by the Commission.
 - The game rules document shall include color screenshots of the rules
 of play as displayed in the game skin/interface of each game, which
 includes all help screens, pay screens and any game interface artwork.
 - 2. The pay table screen shots within the game rules document shall be shown at the minimum bet and in cases where pays are non-linear, a screen shot of the pay screen at each non-linear pay change shall be provided to the Lottery Commission.
 - The game rules document shall include the game name, program ID and version.
 - 4. For progressive games, a brief description outlining the progressive feature shall be provided either on the game rules document or on a

separate document to accompany the game rules. This description shall include how many progressive jackpot pool levels exist in the game, base reset value and rate of progression of each level, jackpot pool limits, and any other critical information regarding the progressive feature such as a side bet wager or a qualifying bet that may exist on the game.

5. Progressive Jackpots

- The submission for Commission approval of progressive software to be used on an interactive gaming system shall include the following:
 - 1. Software controlling the Internet or mobile progressive jackpot;
 - 2. A mechanism to authenticate the software;
 - Rules that will be displayed to the patron that apply to the progressive jackpot;
 - Documentation stating the base reset values, rate of progression and limits of each jackpot level, and;
 - Total weight of the progressive jackpots on the game RTP used with the progressive.
- b. The interactive gaming operator shall describe in its internal controls its method of killing/retiring an active progressive jackpot(s) and its method of transferring liabilities from one progressive jackpot to another.
- c. Two or more linked internet or mobile games offering the same progressive jackpot may be of different denominations and/or have different minimum wagers required to win the progressive jackpot, provided that the probability of winning the progressive jackpot is directly proportional to the minimum wager required to win that jackpot. For example, if on the same link, a nickel game requires 20 credits (a \$ 1.00 wager), a quarter game requires eight credits (a \$ 2.00 wager), and a dollar game requires three credits (a \$ 3.00 wager) to win the progressive jackpot, then the probability of a winning wager must be three times more likely on a linked dollar game than on the linked nickel game, and twice more likely on a linked quarter game than on the linked nickel game. Similarly, if among three linked quarter denomination

games, the first required two credits (a \$ 0.50 wager), the second required four credits (a \$ 1.00 wager), and the third required eight credits (a \$ 2.00 wager) to play for the progressive jackpot, then on each wager, the probability of winning the jackpot would be twice more likely on the second game than on the first game, and four times more likely on the third game than on the first game.

Section 1.22 Initial Certification, Change Management Process, Change Testing, and Change Approval of System Components

1. Initial Certification

Prior to operating an sports wagering and/or interactive gaming system pursuant to W.Va. Code §§29-22D & §§29-22E et seq., all equipment and software used in conjunction with the operation shall be submitted for certification to an independent testing laboratory approved by the Commission or a testing laboratory operated in an accredited jurisdiction approved by the Commission.

- a. All <u>sports wagering and</u> interactive gaming system components pertaining to the <u>Player Account Management</u> Platform, <u>Sports Wagering Platform</u>, Remote Gaming Server, Game(s), and the RNG hardware and/or software shall be tested and certified by an independent testing laboratory approved by the Commission to comply with the applicable standards, laws, and regulations provided by the West Virginia Lottery Commission.
- b. The Commission may approve a sports wagering or interactive gaming component without an independent testing laboratory certification for go live, as long as said component is certified by a testing laboratory operated in an accredited jurisdiction approved by the Commission and the interactive gaming operator provides sufficient documentation that the component meets the applicable standards, laws and regulations. Certification from a Commission approved Independent Testing Laboratory shall then be obtained and provided to the Commission within 90 days of going live.
 - After October 1, 2020, any interactive gaming system component will require testing and certification from a Commission approved

independent testing laboratory before implementation into the production environment.

- c. The <u>sports wagering and/or</u> interactive gaming operator shall provide a test environment mirroring that of the production interactive gaming system for the Lottery Commission to use for user acceptance testing of interactive gaming system hardware and software.
 - The production environment must be logically and physically separated from the development and test environments.
 - Development staff shall be precluded from having access to promote code changes into the production environment.
 - 3) There must be a documented method to verify that test software is not deployed to the production environment.
 - 4) To prevent leakage of personally identifiable information, there must be a documented method to ensure that raw production data is not used in testing.
 - 5) All documentation relating to software and application development should be available and retained for the duration of its lifecycle and for seven (7) years thereafter.

2. Change Management Policy and Procedures

A change or modification to <u>a sports wagering or</u> interactive game system component, which impacts a regulated feature of a Commission approved component, unless otherwise authorized by the Commission, requires submission to an independent testing laboratory for testing and certification and approval by the Commission prior to implementation of the change or modification.

a. Change Management Certification

The Change Management policies and procedures outlined in this section must be certified by an independent testing laboratory that possesses knowledge of the product prior to deployment of the CMP. The Lottery Commission must approve the CMP before it is deployed, and it must be audited annually by an independent test laboratory with knowledge of the product.

a.b. Guidelines

The sports wagering and/or interactive gaming platform operator shall submit documentation outlining the change control processes and procedures to be deployed within the organization and adhered to covering all steps of deployment from initial development to build process and source code version controls to internal testing and signoff to deployment. The process must include ALL changes to the sports wagering and interactive gaming production environment (operating system, network, databases, and applications). The change control process, including the titles of individuals responsible for all key decision points in the process, must be documented in the written system of internal controls pursuant to W.Va. Code of State Rules § 179-9-5 and W.Va. Code of State Rules § 179-10-5. It is expected that the change control processes and procedures be written specifically to the approach of sports wagering or interactive gaming operator to the development life cycle but include at a minimum coverage of the following:

- Proposed changes to the production environment are evaluated
 sufficiently for the impact on all aspects of production environment
 and authorized by management personnel prior to implementation;
- 2) Sufficient documentation is maintained evidencing management evaluation, approvals, testing procedures and results, rollback plans, and any issues/resolutions encountered during implementation.
- 1)3) The acquisition and development of new software and /or hardware components;
- An appropriate software version control or mechanism for all software components, source code, and binary controls;
- 3)5) Coding standards and practices followed by the organization;
- 4)6) Internal testing standards and practices followed by the organization, including documented methods to:
 - i. Ensure that raw production data is not used in testing;
 - <u>ii.</u> Verify that test software is not deployed to the production environment;

- Ensure all changes are thoroughly tested prior to and after deployment to the production environment to ensure full compliance with applicable WVL rules and regulations.
- 5)7) Separation of the production environment from the development and test environments, both logically and physically. When cloud platforms are used, no direct connection may exist between the production environment and any other environments;
- 6)8) Separation of duties within the release process;
- 7)9) If applicable, establish the delegation of responsibilities between the licensed operator and/or technology supplier;
- Procedures for the migration of changes to ensure that only authorized versions of components are implemented on the production environment;
- 9)11) A strategy to cover the potential for an unsuccessful install or a field issue with one or more changes implemented under the CMP:
 - Where an outside party such as an App store is a stakeholder in the release process, this strategy must cover managing releases through the outside party. This strategy may take into account the severity of the issue;
 - Otherwise, this strategy must cover reverting back to the last implementation (rollback plan), including complete backups of previous versions of software and a test of the rollback plan prior to implementation to the production environment;
- 10)12) A policy addressing emergency change procedures;
- All documentation relating to software and application development, including procedures to ensure that technical and user documentation is updated as a result of a change; and
- 12)14) Identification of licensed individuals for signoff prior to release.

3. Critical Asset Register (CAR)

a. Classification of Components

1) <u>Classification Criteria</u>

The <u>platform operator</u>technology supplier shall classify all components of the platform or product operated under the Change Management Policy against the following four criteria:

- <u>Confidentiality</u>: Confidential information relating to the platform's players. For example, identifications/personal information of a player on the system or transactional information of players' data.
- ii. <u>Integrity</u>: The integrity of the platform, specifically any components that affect the functionality of the platform or has an influence on how information is stored/handled by the platform.
- iii. Accountability: The availability of player information.
- iv. <u>Availability</u>: User activity, and how much influence the component in question has on the user's activity.

2) Relevance Code

Each Component shall be assigned a relevance code on the scale below based on the component's role in achieving or ensuring each of the above classification criteria:

- i. <u>1</u> No relevance (the component can have no negative impact on the criteria);
- ii. <u>2</u> Some relevance (the component can have an impact on the criteria); and
- iii. <u>3</u> Substantial relevance (the criteria are related to or independent on the component).

b. Recording of Components in a CAR

All defined components shall be recorded in a Critical Asset Register (CAR). The structure of the component register shall include hardware and software components and the inter-relationships and dependencies of the components. The following minimum items shall be documented for each component:

1) The name/definition of each components;

- 2) A unique ID that is assigned to each individual component;
- 3) A version number of the component listed;
- 4) Identifying characteristics (Platform Component, DB, Virtual Machine, Hardware...etc.);
- 5) The Owner responsible for the component;
- 6) The geographical location of the hardware components; and
- 7) Relevance codes on the classification criteria;
 - Confidentiality
 - ii. Integrity
 - iii. Accountability
 - iv. Availability

c. Control Program Verification Listing

The <u>interactive gaming platform</u> operator shall maintain a report of all software files identified as critical control program components—along with the corresponding digital signatures of the critical control program component(s), as a minimum, the digital signatures must employ a cryptographic algorithm such as SHA-1 (or a stronger alternative) which produces a message digest of at least 128 bits. The report shall be <u>provided available</u> to the Commission on a bit weekly basis and upon request within the same business day.

4. Change Management Log (CML)

a. Classification of Changes

Level 1 - No Impact (No Notification or Release Notes Required)

The change has no impact to regulated components of the platform. Examples:

- Changes to the platform for other jurisdictions, which will have no impact on the West Virginia platform;
- 1)2) Installation or changes to backup software and/or hardware components;
- 2)3) Adding or removing users;
- 3)4) Database maintenance that modifies or deletes non-critical data the database;

- 4)5) Scheduled outages or maintenance to any WAN or internetnetwork service provider infrastructure;
- Scheduled outages or maintenance to any electrical infrastructure (generator, ATS, UPS, PDU, etc.);
- 6)7) Installation of operating system security patches:
 - 8) Background images, color schemes, or similar ancillary front-end client updates to the platform and mobile/web applications;
 - Changes to web pages or content not related to game play, game outcome or any regulated feature;
- 10) Installation or changes to software used to backup data;
- 11) Adding, removing, modifying, enabling or disabling of user or administrative accounts;
- 12) E-mails or mailings to patrons. Note: All promotions must be submitted to the Lottery for approval prior to issuing communications to patrons;
- 13) Creation of poker tournaments; or
- Any system configuration changes that have no impact on gaming, revenue calculation, or any regulated feature.

Level 2 – Low Impact (Notify and Do)

The change has low impact on the integrity of the platform. This may also include hardware component changes.

Examples:

- 1) Firewall rule changes;
- 2) Database maintenance;
- 3) Changes to the physical location of regulated primary backup data;
- 4) Any change or addition of physical hardware component; or
- Changes to non-game logic components of the overall platform that are not of a benign nature as described for Level 1 and with the exception of those representative of examples for Level 3 changes.
- 6) Database software updates and patches;
- 7) Resolution of stuck funds through an approved process;

- Whitelisting of IP addresses or test accounts to bypass geolocation testing; for the purpose of system testing in accordance with WVL regulations;
- 9) Addition of new games after the initial deployment of a new RGS provider;
- 10) Addition of new games to the PAM after the initial deployment of a new RGS provider.

Level 3 – High Impact (Requires WVL Approval)

The change has a high impact on regulated components or reporting of the platform.

Examples:

- Changes to web pages that contain terms and conditions, player protection information, or any other regulated feature;
- Configuration changes that impact gaming operations, revenue
 calculation, regulated features or any controlled computer system;
- 3) Backoffice software modifications;
- 4) Adoption or changes to processes or procedures used for the resolution of stuck funds;
- Addition, removal or changes to payment processing, KYC,
 responsible gaming, content delivery network (CDN) or fraud detection;
- 6) Adding a game with a progressive jackpot from an approved RGS;
- 7) Enabling new, previously approved, games on a RGS platform;
- 8) Removal or transfer of a game with a progressive jackpot; or
- 9) As further directed by the WVL.
- 0) If applicable, a change implemented by the platform provider that substantially impacts geolocation services; or
- <u>10)</u> Implementation of a new gambling feature or a change to any logic impacting wagering or game logic;
- 11) Launching a new RGS with initial deployment To be submitted by the RGS provider and Operator;

- 12) Addition of an approved and operational RGS to an existing platformTo be submitted by the Operator only;
- 13) Addition of new vendors that provide services affecting payment processing, KYC verification, or geolocation checks:
- 14) A change that substantially impacts geolocation, KYC and payment processing services;
- 4)15) A change impacting required regulatory reports or data used for financial reconciliation;
- 2)16) A change impacting the handling or storage of personally identifiable information;
 - 17) A change impacting the platforms responsible gaming controls;
 - 18) A change to accommodate updated regulatory requirements;
 - 19) New game themes or changes to game themes in critical gaming functionality, including server-side files, game logic, table game side wagers, game math, and game RNG.

b. Minimum Log Criteria

All changes must be documented in the CML. The <u>platform_interactive</u> gaming_operator shall record installations and/or modifications to the platform in the CML. It is the responsibility of the platform provider to create and maintain the CML. The CML shall be made available to the Commission upon request. The CML shall record at a minimum the following:

- 1) Date and time that a change is internally approved for release;
- 2) The component(s) to be changed including the unique identification number from the CAR, version information;
- Details of the reason or nature of the installation or change such as new software, server repair, significant configuration modification. If the component being changed is a hardware component, the physical location of this hardware component;

- A description of procedures required in order to bring the new or modified program into service (conversion or input of data, installation procedures, etc.);
- 3)5) Identification of the person responsible for authorizing the change;
- 4)6) Identification of the person conducting the change;
- 5)7) Anticipated release date of the installation or modification; and
- 6)8) The level of the change (Level 1, 2, or 3).

5. Notification, Testing and Approval of Changes

These procedures are mandatory for Games, Player Account Management Platforms (PAMP). Sports Wagering Platforms. Remote Gaming Servers (RGS), and associated RNG Systems. They are not applicable to payment processors, KYC, Back Office, Marketing, or Geolocation suppliers. If a system platform change will impact the Games, RGS, or RNG, these procedures are required with the Management Service Provider having the requirement to document their decision and providing that documentation to the Lottery Change Management Team. In the event the system platform change does not impact RGS or RNG, the Management Service Provider can follow the guidance in Section 1.14 (Sections 76 through 80) of the WV Minimum Internal Control Standards. This process is generally described as "Notify and Do". The Lottery will monitor system changes and determine whether additional platform testing is warranted if the success rate of program changes falls below acceptable standards.

f. Notification

- For Level 1 Changes, no advanced notice to the Commission is required, notification shall be provided at the time of deployment also known as "Notify and Do".
- 2) For Level 2 or Level 3 changes, this special class of Release Note allows a platform operator to make changes without explicit Lottery approval. These notification-only Release Notes must be submitted prior to (minimum 24 hours) the planned change, with the words "Notify and Do" in the e-mail subject line, at least 3 business day

advance notice prior to deployment must be provided to the Commission and independent test laboratory who performed the prior certification. The Commission and the independent test laboratory, if delegated by the Commission, reserve the right to request testing and potentially certification of the changes prior to implementation.

- 2)3) For Level 3 changes, this class of Release Note requires prior Lottery approval and must be submitted a minimum of five (5) business days prior to the proposed date of implementation. The Lottery and the independent test laboratory, if delegated by the Lottery, reserve the right to request testing and potentially certification of the changes prior to implementation.
- 3)4) Attestation: Included in the notification of deployment of any change shall be an attestation of confirmation in good faith based on internal development and testing practices and standards that the changes being introduced comply with the applicable standards, laws and regulations provided by the West Virginia Lottery Commission
- 4)5) Control Program Verification: Included in the notification of deployment of any change to a critical control program component shall be a Control Program Verification Listing report that details all control components of the platform and their latest digital signature

6. Testing of Changes

a. Testing Before Deployment:

In cases where certification of the Level 2 and Level 3 changes are needed prior to deployment, laboratory testing of these changes shall be certified to comply with the applicable GLI Standards, these MICS, as well as to the laws and regulations provided by the West Virginia Lottery Commission and accompanied by formal certification documentation from a Commission approved independent test laboratory with knowledge of the product.

b. Testing After Deployment:

1. For Level 2 and 3 changes, immediately after deployment to production, the platform operator shall conduct regression testing of the changes to

ensure proper implementation and no negative impact exists, as a result of those changes, to the patron or the regulatory functions of the system. The operator shall provide a follow-up notification to the Lottery of any findings from their regression testing and an attestation of confirmation that the changes have been tested and fully comply with all applicable WVL rules, regulations and standards.

1. In cases where certification of Level 2 and Level 3 changes are not needed prior to deployment, laboratory testing of these changes shall be completed within 90 days of introduction into the production environment. The testing process shall not preclude the platform operator from continuing to develop and introduce changes under the change management policy in this standard. Establishment of the CMP shall allow for notification of findings resulting from each testing cycle which shall be reported to the Commission via a formal certification documentation from the independent testing laboratory, via structures agreed to with the Commission.

b.c. Hardship Waiver:

The <u>interplatform active gaming</u> operator shall be allowed to seek approval for extension beyond 90 days if hardship can be demonstrated. Granting of a hardship waiver is the sole discretion of the Lottery Commission.

7. Emergency Change Rule

In emergency situations to deal with open threats or liabilities, thean interactive gaming platform operator may execute Level 2 or Level 3 changes immediately without prior consent. Notice shall be provided to the Lottery Commission as soon as possible and in accordance with any established emergency rule regulations. Notice shall include the necessity for employing the emergency rule and all details known at the time concerning the needed update. The Commission shall reserve the right to conduct analysis in each emergency instance to verify the necessity of the actions taken.

In these instances, Emergency Release Notes must be submitted which detail the steps taken to remedy the emergency. Any submission of Emergency Release Notes

necessitates the filing of an Incident Report which must detail the specifics of the emergency. Emergency Release Notes must be submitted within twenty-four (24) hours of the change having occurred.

8. Quarterly Change Reports

- a. The platform operator shall submit Quarterly Change Reports Quarterly
 Change Reports shall be issued for review to the Commission and to a
 Commission approved independent test laboratory with knowledge of the
 product for review to ensure risk is being assessed according to the change
 management policy requirements in this standard and all documentation for all
 changes are complete.
- a.b. The platform operator shall be allowed to seek approval for waiver if no changes were are made to the platform within the applicable period under the CMP. Granting of the waiver is the sole discretion of the Lottery Director.

9. Annual Certification

- a. At least once annually, each server based gaming productplayer account management platform and remote gaming server operating shall be fully certified to the applicable standards, laws and regulations provided by the West Virginia Lottery Commission and accompanied by formal certification documentation from a Commission approved independent test laboratory with knowledge of the product. The testing laboratory conducting the certification shall issue a formal report to the Commission documenting the recertification. The operator responsible for the platform shall ensure the annual certifications are completed by the due dates specified by the Lottery.
- b. The platform operator shall be allowed to seek approval for waiver if the
 platform has a current certification and no changes were are made within the
 applicable period under the CMP. Granting of the waiver is the sole
 discretion of the Lottery Director.
- <u>c.</u> The <u>iterative graining lation</u> operator and the department of the annual approval <u>due date</u> if hardship can be demonstrated. Granting of a hardship waiver is the sole discretion of the <u>CommissionLottery</u>.

8.10. Security Audits

An annual security audit shall be performed in accordance with the Legislative Rules to compliment the testing and annual certification designated in requirement "9. Annual Certification". The security audit covers the underlying operating system, network component, and hardware changes not included in the evaluation of the gaming software re-baselined per requirement "9. Annual Certification".