

Server-Supported Slot Systems

Accounting And Internal Controls

Gaming Equipment

Temporary Amendments: N.J.A.C. 19:40-1.2; N.J.A.C. 19:45-1.8, 1.10, 1.11
and 1.37B

Temporary New Rule: N.J.A.C. 19:46-2.1 et seq.

Authority: N.J.S.A. 5:12-5, 63, 69, 70, 99 and 100

The temporary rules follow:

Summary

This temporary adoption will permit the use of a “server-supported slot system,” which is defined as “a system comprised of one or more server-supported slot machines connected to a slot machine server and an associated computer network, all approved by the Commission for the purpose of downloading approved slot machine games and other related software from the slot machine server to the slot machines.” See N.J.A.C. 19:40-1.2(b).

Once installed on a server and then downloaded to a slot machine, the slot machine games and various game configurations can be remotely activated and deactivated from the server. Except as otherwise authorized by the Commission, all critical slot machine programs and files, as defined in N.J.A.C. 19:40-1.2(b), such as those controlling the game denomination, rules of play, payout percentage and odds of winning the jackpot, will be controlled only by and from the slot machine server, and not at or by any of the individual slot machines connected to the server or any other device. See N.J.A.C. 19:46-2.3(m). However, the outcome of each round of play will be determined solely by the individual slot machine game and not by the slot machine server. See N.J.A.C. 19:46-2.3(n).

The slot machine server will be required to be located in a dedicated, secure restricted-access slot machine server room in a casino hotel. See N.J.A.C. 19:46-2.2(a). That room is required to have continuous CCTV coverage, and the CCTV system recordings of the room must be retained for a minimum of 30 days. See N.J.A.C. 19:45-1.10(b)1(xi) and (j); N.J.A.C. 19:45-

1.11(b)1(xvi); and N.J.A.C. 19:46-2.2(b). The casino licensee will also be required to maintain a Server Room Entry Log. See N.J.A.C. 19:45-1.8(c)5(xiv) and 19:46-2.2(d).

Although N.J.A.C. 19:46-2.2(a) does not require that the server be located in the same casino hotel as the slot machines to which it provides service, the server will still have to be located in a casino hotel pursuant to N.J.S.A. 5:12-100(b) of the Casino Control Act. Additionally, in accordance with N.J.A.C. 19:45-1.11(b)3, the server will be required to be under the control of the MIS department of the casino licensee that operates the slot machines, even if the server is located in another casino hotel.

A casino service industry applicant or licensee that provides software for a server-supported slot machine will be required to submit for prior review and approval internal controls for the creation, application and use of digital signatures in connection with that software, including but not limited to, procedures for the security of the private key, verification software and the digital signatures in question. See N.J.A.C. 19:46-2.1(f)1.

The casino service industry applicant or licensee will also be required to provide a list of the employees or other persons who have access to or can authorize the use of the private key used to create digital signatures for that software, and will be required to update that list within 72 hours of each addition or other change. Such persons will be required, pursuant to N.J.S.A. 5:12-92(b), to qualify to the license standards, except residency, applicable to a casino key employee under N.J.S.A. 5:12-89. See N.J.A.C. 19:46-2.1(f)2.

Prior to implementing a server-supported slot system, a casino licensee must establish a system of approved internal controls which addresses the integrity, security and control of the system. See N.J.A.C. 19:46-2.1(d). The slot machine server will be under dual key control of the casino licensee's MIS department and the Commission. See N.J.A.C. 19:46-2.3(a). With prior Commission approval, a slot machine server can be connected to other casino computer systems, such as a slot monitoring or accounting system, located in a secure location within the casino hotel where the slot machine server is

located. A slot machine server can also be connected to a computer, system or other equipment operated by the Commission or the Division of Gaming Enforcement and located on or outside the premises of the casino hotel where the slot machine server is located, in order to monitor download activity. See N.J.A.C. 19:46-2.3(e)1 and 2.

Prior to the loading or installation of any software on a slot machine server, the software in question will have to be verified by a Commission representative using an independent verification device approved by and under the control of the Commission and the Division. The device will verify each digital signature on the software to ensure that the software is an authentic copy of the software that was approved for installation and use on the slot machine server. See N.J.A.C. 19:46-2.4(f).

At least once every 24 hours and upon startup, software installation or update, reboot or on demand, a slot machine server will also be required to automatically verify each digital signature of any software on that server, using approved verification software, and prevent the execution of any software program if the program or any portion thereof is determined to be invalid. See N.J.A.C. 19:46-2.3(i). As defined in N.J.A.C. 19:40-1.2(b), “verification software” is an authentication algorithm or other standard method of authentication with at least 128 bits of resolution or a bit-for-bit comparison that the Commission has approved for use in verifying a digital signature, or an alternative verification configuration determined by the Commission, in consultation with the Division, to be equally secure, such determination to be made prior to the submission of a server-supported slot system for prototype approval.

Pursuant to N.J.A.C. 19:46-2.4(a), any non-emergent software or hardware changes to the server’s operating system will require 72 hours advance written notice to the Commission and Division, except for certain pre-approved non-critical software files listed in the licensee’s internal controls. Any non-emergent installations of or changes to slot machine software on the slot system server will require at least 48 hours advance written notice to the

Commission and Division. See N.J.A.C. 19:46-2.4(b). Emergent installation, removal or modification of software or hardware will require prior notice to the Commission and Division, with the information required by N.J.A.C. 19:46-2.4(c) being provided within 24 hours after the work has been completed. See N.J.A.C. 19:46-2.4(d). In all cases, any changes will have to be made in the presence of at least two individuals, one of whom will be an employee of the casino licensee's MIS department, and one of whom will be a Commission representative. See N.J.A.C. 19:46-2.4(e).

N.J.A.C. 19:46-2.5 includes the requirements and procedures for transfers of software and data between a slot machine server and a server-supported slot machine. These transfers must be conducted using digital certificates, digital signatures and a secure hard-wired network that is dedicated to operating and monitoring slot machines and securely links the server to the slot machine, so that software can only be transferred to and used by an authorized slot machine.

Prior to any software being added to or removed from a server-supported slot machine, any configuration changes and any activations or deactivations of a slot machine game in that slot machine, a complete set of meter information from the Commission-required meters for the slot machine game currently being offered must be successfully communicated to a slot machine server, a slot monitoring system or other approved slot accounting system. See N.J.A.C. 19:46-2.5(d). Software may not be added to, modified in or removed from a server-supported slot machine if an error or tilt condition exists on that slot machine, except as necessary to rectify the error or tilt condition. See N.J.A.C. 19:46-2.5(e).

Except as otherwise authorized by the Commission, downloads of critical slot machine programs or computer files on a server-supported slot system and any activations, deactivations or changes thereto will be required to be controlled and effected by approved scheduling software. See N.J.A.C. 19:46-2.3(m) and 2.6(a). Access to such software may be provided at other terminals in secure restricted locations within the casino hotel as approved by the

Commission, and read-only access will be provided to the Commission and Division. See N.J.A.C. 19:46-2.6(d). Written notice of such downloads, schedules and changes will be provided to the Commission prior to implementation. See N.J.A.C. 19:46-2.6(e). Thus, casino licensees may provide advance copies of weekly or monthly schedules containing regularly recurring events if they so desire, but may also modify them at any time, provided the required notice is given prior to or at the time of the change.

Once activated for play, a slot machine game offered on a server-supported slot system will be required to be available at all times to all members of the general public under the same terms and conditions of play, until it is deactivated and unavailable for play. See N.J.A.C. 19:46-2.7(a).

A slot machine game offered on a server-supported slot system may offer a progressive jackpot, provided the game is continuously available for play on at least one slot machine on the same slot system in the same casino and complies with other Commission requirements regarding the removal or transfer of a progressive jackpot. See N.J.A.C. 19:46-2.7(f). Although a server-supported multi-casino linked slot machine system offering a progressive jackpot will also be permissible under these regulations, it is anticipated that such a system will not be considered or permitted to operate until after tests of server-supported standalone slot machines offering progressive jackpots and server-supported in-house linked slot machines offering a progressive jackpot have been conducted and successfully completed.

A slot machine game offered on a server-supported slot system may be used in a promotional slot machine event which does not permit a player to use coins, bills or other consideration to activate play on the slot machine game. Whenever the promotional version of a slot machine game is activated, the slot machine game must automatically and continuously display a notice visible to the player and CCTV coverage that the slot machine game is a promotional version. Additionally, the coin acceptor, bill validator, gaming voucher mechanism, hopper and all Commission required meters contained in the slot machine on which the game is offered and in the slot machine game itself will

be required to be disabled. Finally, the logical name (the filename) of the game will be required to be visually distinctive from other approved versions of the same server-supported game. See N.J.A.C. 19:46-2.7(g).

General requirements for a server-supported slot machine are set forth at N.J.A.C. 19:46-2.8. The slot machine will be required to contain a hardware device that stores the stored key and verification software in a secure manner, and uses it to verify the digital signature of all slot machine software downloaded to the slot machine from the slot machine server, except for sound files and other types of non-critical computer files that do not affect the integrity or outcome of the game. See N.J.A.C. 19:46-2.8(a). Each time a server-supported slot machine is powered up or rebooted and, in any event, at least once every 24 hours, the slot machine will be required to automatically authenticate the slot machine software by performing the above verification. If unexpected data or any inconsistencies are detected, the slot machine will be required to prevent execution of the software program and further play of the slot machine game by immediately entering into a tilt mode. See N.J.A.C. 19:46-2.8(k). The tower light of a server-supported slot machine will also be required to have a brown-colored bottom light. See N.J.A.C. 19:45-1.37B(b)2(ix).

Whenever any change is made to software in a server-supported slot machine, including but not limited to software programs, graphics or sound information, a log entry will be required to be made in the slot machine's computer and on the slot machine server for that slot machine. See N.J.A.C. 19:46-2.8(g). The log entries must be retained by the slot machine for a minimum of 100 logged events, and by the slot machine server until its software expires in accordance with N.J.A.C. 19:46-1.21, although logged events older than 90 days may be archived in a manner approved by the Commission at another secure location approved by the Commission. See N.J.A.C. 19:46-2.8(g)1(ii). The removal of any software from a server-supported slot machine or slot machine server will not affect the logging requirements related to that software. See N.J.A.C. 19:46-2.8(h).

In addition to the meters required by N.J.A.C. 19:45-1.37, 1.37A and 19:46-1.26, a server-supported slot machine will also be required to have all such meters for each individual slot machine game that is downloaded to that slot machine. See N.J.A.C. 19:46-2.8(i). At least once every 60 days, those meters will be required to be reconciled with the information for that slot machine obtained from the casino licensee's slot monitoring system pursuant to N.J.A.C. 19:45-1.42. Any variances will be confirmed and investigated in accordance with N.J.A.C. 19:45-1.42(q). See N.J.A.C. 19:46-2.1(b).

If a server-supported slot machine loses its ability to communicate with the slot machine server for more than seven days, the casino licensee will be required to use an approved alternate process for collecting the required meter information, which will most likely be manual meter readings, until communication with the slot machine server is restored. See N.J.A.C. 19:46-2.8(j). This is consistent with the requirement in N.J.A.C. 19:45-1.42 that the meters of every slot machine must be read at least once every seven days. This arrangement should provide casino licensees with sufficient time to repair and reinstitute the server/slot connection, while still providing the State with the information it needs to verify slot revenue and for investigatory purposes.

N.J.A.C. 19:46-2.9 contains the procedures for changing any feature or configuration of a server-supported game which has been activated and is currently offered to the public. For at least four minutes prior to implementing any change, the slot machine will be required to be in idle mode, with no errors or tilt conditions, no play and no credits on the machine. See N.J.A.C. 19:46-2.9(a). During implementation of the change, the slot machine on which the game is offered must be disabled and rendered unplayable for at least 60 seconds and; during that time, a conspicuous message, stating that the game configuration is being changed, must be continuously displayed either on the slot machine's video screen or in another manner approved by the Commission. See N.J.A.C. 19:46-2.9(b). The foregoing procedure does apply to an activated server-supported slot machine game that offers multiple games to a patron, who may select any of the offered games at any time with no waiting

period, once the present round of play has been completed. See N.J.A.C. 19:46-2.9(c).

Every slot machine must pass a CCTV inspection before it is permitted to become operational, and must be reinspected if any changes are made. For server-supported slot machines, N.J.A.C. 19:46-2.9(d) provides that within two hours after any change to a server-supported slot machine game that has been activated and is currently being offered to the public, the casino surveillance department will be required to conduct a preliminary CCTV inspection of the monitor screen of the changed slot machine game, to confirm that the change has occurred and to verify that CCTV coverage of the changed slot machine game is satisfactory, including the ability to view and read all areas of the monitor screen. If a changed slot machine game fails this preliminary CCTV inspection, a casino licensee will be required to immediately notify the Commission and Division.

The Commission will conduct a final CCTV inspection of all preliminarily inspected changed slot machine games. If a changed slot machine game fails the Commission's final CCTV inspection and the casino licensee is unable to correct the problem within 24 hours, the slot machine game may be required to be deactivated until the problem is corrected and the changed slot machine game passes a final CCTV inspection by the Commission. See N.J.A.C. 19:46-2.9(d)2 and 3.

These temporary rules for server-supported slot systems do not, and are not intended to, address server-based slot systems, in which the outcome of each round of play is determined by the server, rather than the individual slot machines. However, it is anticipated that this issue will be dealt with in the near future.

Full text of the temporary adoption follows (additions indicated in boldface **thus**; deletions indicated in brackets [thus]):

19:40-1.2 Definitions

(a) (No change.)

(b) The following words and terms, when used in these rules, shall have the following meanings, unless the context clearly indicates otherwise:

...

“Activated game” is a slot machine game that has been downloaded from a slot machine server to a server-supported slot machine and is available for play by the public.

...

“Alterable storage media” is defined in N.J.A.C. 19:46-1.26B.

...

“Critical slot machine program or computer file” is a software program or computer file that implements, reconfigures or deactivates any element of a slot machine game that is regulated by the rules of the Commission because it affects the integrity or outcome of a slot machine game, such as, without limitation, denomination, rules of play, payout percentage and odds. This definition does not apply to any software program or computer file that does not affect the integrity or outcome of a slot machine game, such as a sound file.

...

“Data warehouse” is a device that receives and stores data from a slot machine server and is physically and logically segregated from that slot machine server.

“Deactivated game” is a slot machine game that has been downloaded from a slot machine server to a server-supported slot machine but is not available for play by the public.

“Digital certificate” is an electronic identification credential attached to an approved computer hardware device, that:

- 1. Is initially created and subsequently verified in a manner and frequency approved by the Commission; and**

2. Uniquely authenticates the identity of the device in a manner approved by the Commission, using a generally accepted method for secure computing.

"Digital signature" is an electronic signature attached to a software program, file or data, that:

1. Is initially created and subsequently verified in a manner and frequency approved by the Commission;

2. Ensures that the contents of the software program, file or data were not changed in any manner whatsoever after the digital signature was created; and

3. Authenticates the origin of the software program, file or data in a manner approved by the Commission.

...

"Server-supported slot machine" is a slot machine connected to and administered by a server-supported slot system.

"Server-supported slot system" is a system comprised of one or more server-supported slot machines connected to a slot machine server and an associated computer network, all approved by the Commission for the purpose of downloading approved slot machine games and other related software from the slot machine server to the slot machines.

...

"Stored key" is an electronic key used by the casino licensee's verification software to verify a digital signature or digital certificate located in the server-supported slot system, and which is securely stored in a manner and location approved by the Commission.

...

"Slot machine server" is a casino computer system that receives and stores all approved server-supported slot system software, verifies the software and downloads it to connected server-supported slot machines. A slot machine server is also used to effect changes in the configuration of a connected server-supported slot machine.

“Slot machine server room” is defined in N.J.A.C. 19:46-2.2(a).

“Verification software” is an authentication algorithm or other standard method of authentication with:

1. At least 128 bits of resolution or a bit-for-bit comparison that the Commission has approved for use in verifying a digital signature; or

2. An alternative verification configuration determined by Commission in consultation with the Division to be equally secure as (1) above, such determination to be made prior to the submission of a server-supported slot system for prototype approval.

19:45-1.8 Retention, storage and destruction of books, records and documents

(a) – (b) (No change.)

(c) All original books, records and documents shall be retained by a casino licensee in accordance with the following schedules. For purposes of this subsection, "original books, records or documents" shall not include copies of originals, except for copies which contain original comments or notations or parts of multi-part forms.

1. – 4. (No change.)

5. The following original books, records and documents shall be retained by a casino licensee for a minimum of one year:

i. – xii. (No change.)

xiii. Logs of all multi-casino progressive slot system events and problems; [and]

xiv. Entry logs for slot machine server rooms pursuant to N.J.A.C. 19:46-2.2(d) and slot system monitor rooms pursuant to N.J.A.C. 19:45-1.39A(g)4; and

[xiv.] **xv.** (No change in text.)

6. – 10. (No change.)

(d) – (i) (No change.)

19:45-1.10 Closed circuit television system; surveillance department control;
surveillance department restrictions

(a) (No change.)

(b) The CCTV system shall be approved by the Commission in consultation with the Division and shall include, but need not be limited to, the following:

1. Light sensitive cameras, with lenses of sufficient magnification to allow the operator to read information on gaming chips, playing cards, dice, tiles, slot machine reel symbols and slot machine credit meters, and with 360 degree pan, tilt and zoom capabilities without camera stops or, until such time as they are replaced by cameras without camera stops, with camera stops as currently operating on the casino floor or in inventory as of the effective date of this amendment, to effectively and clandestinely monitor in detail and from various vantage points, the following:

i. – xi. (No change.)

xii. The operation of automated jackpot payout machines, gaming voucher redemption machines, gaming voucher systems and electronic transfer credit systems; [and]

xiii. A slot machine server room, pursuant to N.J.A.C.

19:46-2.2(b); and

[xiii.] **xiv.** (No change in text);

2. – 7. (No change.)

(c) – (i) (No change.)

(j) All CCTV system recordings shall be retained for a minimum of seven days, **except for CCTV system recordings of the casino's slot machine server room, which shall be retained for a minimum of 30 days. These recordings** [and] shall be made available for review upon request by the Commission or Division. In addition, any such recordings which are determined by Commission or Division agents to be of potential evidentiary

value shall be retained and stored pursuant to Commission or Division directives.

(k) – (m) (No change.)

19:45-1.11 Casino licensee's organization

(a) (No change.)

(b) In addition to satisfying the requirements of (a) above, each casino licensee's system of internal controls shall include, at a minimum, the following departments and supervisory positions. Each of the departments and supervisors required or authorized by this section (a “mandatory” department or supervisor) shall cooperate with, yet perform independently of, all other mandatory departments and supervisors of the casino licensee.

Notwithstanding the foregoing, a department or supervisor of a casino licensee that is not required or authorized by this section may operate under or in conjunction with a mandatory department or supervisor unless the Commission subsequently disapproves such operation as being inconsistent with the standards contained within N.J.S.A. 5:12-99a(3) and (a) above.

Mandatory departments and supervisory positions are as follows:

1. A surveillance department supervised by a person referred herein as the director of surveillance. The director of surveillance shall be subject to the reporting requirements specified in (c) below. The surveillance department monitoring room shall be supervised by a casino key employee who shall be present in the room at all times or, if not present, be within immediate contact and at a known location on the premises. The surveillance department shall be responsible for, without limitation, the following:

i. - xv. (No change.)

xvi. The clandestine surveillance of the operation of a slot server room as required by N.J.A.C. 19:46-2.2 and the monitoring of all changes to server-supported slot machines as required by N.J.A.C. 19:46-2.9;

Recodify xvi.– xviii. as **xvii.– xix.** (No change in existing text.)

2. - 7. (No change.)
- (c) – (h) (No change.)

19:45-1.37B Slot machine tower light

(a) (No change.)

(b) A slot machine tower light shall be approved by the Division and Commission pursuant to N.J.A.C. 19:46-1.20 and 1.28 and shall consist of two separate lights, one on top of the other, that function in accordance with the requirements of this section.

1. (No change.)

2. The top light of the two lights shall always be white. The color of the bottom light shall indicate the denomination of the slot machine to which it is attached:

i. – vii. (No change.)

vii. Pink means a two-dollar machine; [and]

viii. Purple means a five dollar or higher denomination machine; **and**

ix. Brown means a server-supported slot machine of any denomination.

(c) – (f) (No change.)

N.J.A.C. 19:46 GAMING EQUIPMENT

SUBCHAPTER 2. Server-Supported Slot Systems

19:46-2.1 General Provisions

(a) Any server-supported slot system used by a casino licensee shall comply with all the requirements of this subchapter.

(b) At least once every 60 days, the meter readings for each server-supported slot machine obtained from the slot machine meters required by N.J.A.C. 19:45-1.37, 1.37A and 19:46-1.26 shall be reconciled with the information for that slot machine, obtained at the time of the most recent

slot drop, from the casino licensee's slot monitoring system pursuant to N.J.A.C 19:45-1.42. Any variances between the meter readings and the slot monitoring system information shall be confirmed and investigated in accordance with N.J.A.C 19:45-1.42(q).

(c) Notwithstanding the requirements of N.J.A.C. 19:45-1.36, 1.37 and 1.37B, a casino licensee may utilize a server-supported slot machine that accepts more than one denomination, provided that the slot machine satisfies:

1. The tokenization requirements of N.J.A.C. 19:45-1.37C; or
2. The requirements of N.J.A.C. 19:45-1.37(b)6 and (e)4, and is connected to a computerized gaming voucher system that satisfies the requirements of N.J.A.C. 19:45-1.55.

(d) Prior to implementing a server-supported slot system, a casino licensee shall establish a system of internal controls that addresses the integrity, security and control of the system, including, at a minimum, the following:

1. Documentation of the system design and layout in both narrative and diagrammatic formats, user manuals, and a list of all configurable options and settings;
2. Procedures for assigning an asset number to a server-supported slot machine, and for enabling and disabling the capabilities of each such slot machine;
3. Copies of all documents generated in accordance with N.J.A.C. 19:46-2.3(j);
4. The process for controlling a stored encryption key, in accordance with N.J.A.C. 19:46-2.3(j);
5. Procedures for the issuance, modification, and termination of a unique system account for each user in accordance with N.J.A.C. 19:46-2.3(l);
6. Constraints used to configure, maintain and secure user passwords in accordance with N.J.A.C. 19:46-2.3(l);

7. Procedures for restricting special rights and privileges, such as “administrator” and override capabilities, in accordance with N.J.A.C. 19:46-2.3(l);

8. The duties and responsibilities of the MIS, internal audit and casino accounting departments, and the department responsible for the operation of slot machines, and the level of access to the system for each position in such departments, in accordance with N.J.A.C. 19:46-2.3(l);

9. Identification of all software files and directories, the location and a description of each, and the reports generated from such files, which software files, directories, and locations shall not be changed except in accordance with the provisions of N.J.A.C. 19:46-2.4;

10. A list of all critical and slot machine programs and computer files that are not controlled by the server, and the procedures for controlling such programs, pursuant to N.J.A.C. 19:46-2.3(m);

11. A description of the physical controls on all critical hardware such as locks and surveillance, including the location and security of each piece of equipment as approved by the Commission;

12. Procedures for the backup and timely recovery of critical data and failure analysis;

13. Logs used to document and maintain the details of any hardware and software modifications upon implementation, which modifications shall be approved and performed in accordance with N.J.A.C. 19:46-2.4; and

14. Procedures for reviewing the operation of the system and the adequacy and effectiveness of policies and procedures.

(e) In order to obtain a determination from the Commission that a server-supported slot machine system, as installed and configured by a casino licensee, complies with the requirements of this subchapter, the casino licensee shall, without limitation:

1. Submit certifications from the manager of its MIS department and a qualifier of the company that manufactured the system, both initially and following any changes to the system as approved pursuant to N.J.A.C. 19:46-1.20, stating that the system, as installed and configured by the casino licensee, complies with the requirements of this subchapter;

2. Successfully complete a minimum 60 day test of the system under terms and conditions established by the Commission;

3. Have approved internal controls as required by (c) above;
and

4. Provide the Commission and Division with access to the system in a manner and from such locations as required by each agency.

(f) A casino service industry applicant or licensee that provides software for a server-supported slot machine shall:

1. Submit for prior Commission review and approval internal controls for the creation, application and use of digital signatures in connection with any software for a server-supported slot machine, including, but not limited to, the procedures for the security of the private key, verification software and the digital signatures in question;
and;

2. Provide a list of the employees or other persons who have access to and can authorize the use of the private key that creates digital signatures for that software, and shall update the list within 72 hours of each addition or other change. Such persons shall be required, pursuant to N.J.S.A. 5:12-92(b), to qualify to the license standards, except residency, applicable to a casino key employee pursuant to N.J.S.A. 5:12-89.

19:46-2.2 Slot machine server room

(a) A slot machine server shall be located in a “slot machine server room,” a secure area with restricted access approved by the Commission

within a casino hotel. A slot machine server room shall be readily accessible to Commission and Division personnel 24 hours a day. Nothing herein shall be deemed to preclude the location of a slot machine server, with prior Commission approval, in a secure area with restricted access that contains other casino computer system components.

(b) The surveillance department of the casino licensee operating a server-supported slot system shall conduct continuous clandestine CCTV coverage of the slot machine server room, and shall, at a minimum:

1. Provide continuous dedicated CCTV coverage of the slot machine server room to the Principal Inspector's office, the Commission inspection booth and the Division's office located in that casino hotel facility; and

2. Record the CCTV coverage of the slot machine server room; and

3. Securely retain the recordings made by the CCTV system on tape or other storage media for a period of not less than 30 days or for such longer period as may be directed by the Commission or Division;

(c) A slot machine server room shall be accessible only through a locked door, which door shall be equipped with an alarm device that audibly signals the casino licensee's surveillance department whenever the door is open.

(d) The casino licensee shall maintain a Slot Machine Server Room Entry Log, which shall be:

1. Located in the slot machine server room;

2. Maintained in a book with bound numbered pages that cannot be readily removed;

3. Signed by each person entering the slot machine server room, with each entry containing, at a minimum, the following information:

i. The date and time of entering into the slot machine server room;

- ii. **The person's name, his or her department or employer and, if applicable, his or her employee license number;**
 - iii. **The reason for entering the slot machine server room;**
 - iv. **The name of the person authorizing the person's entry into the slot machine server room; and**
 - v. **The date and time of exiting the slot machine server room; and**
- 4. Retained for a minimum of one year.**

19:46-2.3 Slot machine server

(a) A slot machine server shall be maintained in a locked computer rack or other secure area approved by the Commission in the slot machine server room. Physical access to the slot machine server shall be controlled by two locks. The key to one lock shall be controlled by the MIS department of the casino licensee, and the key to the other lock shall be controlled by the Commission.

(b) Physical access to a slot machine server shall, at a minimum, be conducted in the presence of an employee of the MIS department of the casino licensee and a Commission representative.

(c) All aspects of a slot machine server, including all hardware and software, shall be subject to testing by the Division pursuant to N.J.A.C. 19:46-1.28, and review and approval by the Commission pursuant to N.J.A.C. 19:46-1.20 prior to the installation and use of the slot machine server by the casino licensee and, after installation, prior to any changes thereto.

(d) No slot machine shall be connected to or disconnected from a slot machine server without approved internal controls for the slot machine server and prior written approval of the Commission; provided, however, that with prior written notice to the Commission, a previously approved and connected server-supported slot machine may be disconnected from or reconnected to a slot machine server for the

purpose of testing, servicing or repairing the server-supported slot machine. All slot machines connected to the slot machine server shall comply with N.J.A.C. 19:46-1.28A and be approved for use by the Commission.

(e) With prior Commission approval, a slot machine server may be connected to:

1. Other necessary casino computer systems of a casino licensee (such as a slot monitoring system, accounting system or gaming voucher system) located in a secure location within the casino hotel where the slot machine server is located; and

2. A computer or other equipment operated by the Commission or the Division of Gaming Enforcement and located on or outside the premises of the casino hotel in which the slot machine server is located, in order to monitor download activity .

(f) Any connection approved pursuant to (e) above shall, at a minimum, include:

1. A secure, hard-wired, dedicated, exclusive network that is limited to “read-only” access to the slot machine server; and

2. A hardware firewall that satisfies the requirements of N.J.A.C. 19:45-2.2(f) and (g), located between the slot machine server and the casino computer system in question.

(g) Each casino computer system that has access rights to a slot machine server in a server-supported slot system shall have a digital certificate issued by the slot machine server. A slot machine server shall conduct a check for missing, invalid or revoked certificates whenever:

1. Any casino computer system is connected to the server-supported slot system;

2. A software program, file or data is transmitted to the casino computer system;

3. On startup, reboot or on demand, and

4. At a minimum, at least once every 24 hours.

(h) Access to any slot machine server data which is not transferred pursuant to (f) above shall be by way of a data warehouse that complies with the requirements of (f) and (g) above, and not by the slot machine server itself.

(i) Notwithstanding the requirements of N.J.A.C. 19:46-1.26B, any slot machine software program required to be approved pursuant to N.J.A.C. 19:46-1.20 and 1.28 or any software program stored on alterable storage media that will be installed on or used by a slot machine server shall contain a unique digital signature which utilizes an industry standard approved by the Commission.

1. A slot machine server shall, automatically at least once every 24 hours and upon startup, software installation or update, reboot or on demand, verify each digital signature using approved verification software, and shall prevent the execution of any software program if the program or any portion thereof is determined to be invalid.

2. The slot machine server shall also provide for an alternate verification method based upon a user seed input of at least 32 bits. The alternate verification method shall return a verification result of at least 32 bits corresponding to the software presently installed on the slot machine server.

3. Any verification software shall reside on and execute from separate non-alterable media in the slot machine server, which media shall be inspected and physically sealed or otherwise secured.

4. If a digital signature error or a slot machine tilt caused by a failed authentication is detected:

i. The slot machine server shall provide visual notification of the error, including the associated invalid program or programs and/or the slot machine tilt, to the casino licensee's MIS department and the slot shift manager or above;

ii. A written report shall automatically be generated by the slot machine server, which shall detail the outcome of the failed authentication and identify the invalid program or programs; and

iii. The casino licensee shall immediately notify the Commission and Division of the incident and any invalid programs.

(j) A slot machine server shall provide for adequate and effective control over server-supported slot system operations and, at a minimum, shall:

1. Create a log entry every time a software component is added, removed or altered in the slot machine server, which log entry shall contain:

i. The date and time of the action;

ii. Identification of the software affected;

iii. The name and employer of the individual performing the modification, and if applicable, his or her employee license number; and

iv. The reason for the modification and any pertinent validation information;

2. Create a log entry pursuant to N.J.A.C. 19:46-2.8(g) whenever any change is made to software in a server-supported slot machine connected to the slot machine server;

3. Generate daily monitoring logs of user access, security incidents and any event which reasonably indicates that the system is not operating in the same manner as its approved prototype, and immediately notify the MIS department of such security incidents and events in a manner approved by the Commission; and

4. Utilize a Commission-approved encryption standard with at least 128 bits of resolution for files and directories containing critical or sensitive data such as required meter information, bill changer programs, printer programs and gaming programs, and as defined and listed in the casino licensee's approved internal controls. The server logs required by

(j) above shall be also encrypted unless they are created by the WORM technology specified in (k)2(i)below; database tables need not be encrypted if they are secured in an alternate manner approved by the Commission. The casino licensee shall identify in its approved internal controls the procedures for controlling a stored encryption key, which shall include maintaining a current copy of the key in a secure location outside the computer server room as approved by the Commission.

(k) The logs required by (j) above shall be:

1. Maintained on the slot machine server for the time period required by N.J.A.C. 19:46-2.8(g); and

2. Protected against modification and loss by either being:

i. Created by a “write once, read many” (WORM) technology that shall not be susceptible to change; or

ii. Maintained in a manner specified in the casino licensee’s approved internal controls, which shall include access controls over such logs and procedures to ensure that information is not written over or deleted.

(l) A slot machine server shall provide for adequate and effective control of logical access to the server and, at a minimum, shall:

1. Be capable of assigning rights and privileges to each user, including:

i. Allowance for the secure administration of a unique system account for each user to provide an adequate segregation of duties; and

ii. Passwords which, at a minimum, shall:

(1) Contain at least six alphabetic and/or numeric characters and expire no more than 90 days after creation;

(2) Be stored in an approved encrypted form so that a stored encrypted password shall not be retrievable or readable; and

(3) Immediately disallow any further attempts to access the system following no more than five consecutive failed attempts within

no less than 30 minutes by a user account to obtain access to the system, by automatically disabling the user account; and

(4) Require a disabled user account to be reviewed by the MIS department, which may thereafter reactivate the user account upon verifying the identity of the person in accordance with approved internal controls;

2. Use appropriate access permissions to restrict unauthorized users from viewing, changing or deleting critical files and directories;

3. Require the user name and password of at least two employees of the casino licensee, at least one of whom shall be an MIS department employee, prior to providing access to files and directories containing critical or sensitive data; and

4. Automatically monitor and record access by any person to files and directories containing critical and sensitive data.

(m) Except as otherwise authorized by the Commission, all critical slot machine programs and computer files shall be controlled only from the slot machine server through the downloaded slot machine game software, and shall not be controlled at or by any of the individual slot machines connected to the slot machine server, or at or by any other casino computer system or device. Any critical slot machine program or computer file that is not controlled by the slot machine server shall be listed in the casino's internal control submission, together with the requirements and procedures for identifying and controlling such programs, which shall, at a minimum, also require:

1. The presence of a Division agent and a Commission representative whenever a critical slot machine program or computer file is installed, modified, configured or deleted;

2. Compliance with N.J.A.C. 19:46-2.8(g) and (h) regarding the required slot machine change log; and

3. Compliance with N.J.A.C. 19:46-2.9, regarding changes to slot machine games and game options.

(n) The outcome of each play on a server-supported slot machine shall be determined solely by the individual slot machine on which it is played and the software residing in that machine, including its random number generator. A slot machine server shall not alter any component of the slot machine game on any connected slot machine that would interrupt, or affect the functions or operating parameters of a game in progress on any server-supported slot machine connected to the slot machine server; provided however, that a slot machine server may stop a slot machine game or disable a slot machine at any time if there is a valid reason to do so, such as when required by tampering or a malfunction.

19:46-2.4 Installation or modification of slot machine server software and hardware

(a) Prior to a non-emergent installation, removal or implementation of any software, software change, software upgrade or configuration change to a slot machine server's operating system, or any hardware or networking addition, modification or replacement to a slot machine server, a casino licensee shall provide at least 72 hours advance written notice to the Commission and Division in accordance with the requirements of this section. Notwithstanding the foregoing, the Commission may permit a casino licensee to change or upgrade non-critical software files or directories or hardware governed by this subsection, as recommended by the Division and specifically identified in the casino licensee's approved internal controls, provided that written notice in accordance with the requirements of this section shall be filed within 24 hours following the change.

(b) Prior to a non-emergent installation or removal of any slot machine software, or a software change, software upgrade or configuration change to slot machine software on a slot machine server, a casino

licensee shall provide at least 48 hours advance written notice to the Commission and Division in accordance with the requirements of this section.

(c) Any written notice filed by a casino licensee in accordance with (a) or (b) above shall include, without limitation, the following:

- 1. A description of the reasons for the proposed modification;**
- 2. A list of the computer components and programs or versions to be modified or replaced;**
- 3. A description of any screens, menus, reports, operating processes, configurable options or settings that will be affected;**
- 4. The method to be used to complete the proposed modification;**
- 5. The date the proposed modification will be installed and the estimated time for completion;**
- 6. The name, title, and employer of the person or persons who will install the proposed modification; provided however, that the person providing the notification shall not be among the persons installing the modification;**
- 7. A diagrammatic representation of any proposed hardware design change; and**
- 8. Representations as to whether user and operator manuals will need to be updated to reflect changes in policies or procedures resulting from the proposed modification, and whether such updates have been made, and if not, when the changes will be implemented.**

(d) Prior to an emergent installation, implementation or removal of any software, or a software change, software upgrade or configuration change to any software on a slot machine server, or any hardware or networking addition, modification or replacement to a slot machine server that is required as a result of a software or equipment malfunction, a casino licensee shall immediately notify the Commission and Division, and

shall provide the Commission and Division with the information required by (c) above within 24 hours after the work has been completed.

(e) Subject to any testing required pursuant to N.J.A.C. 19:46-1.28 and approval by the Commission upon receipt of the notification required by (c) above, any modifications to a slot machine server or the software thereon shall be installed in the presence of an employee of the MIS department and a Commission representative.

(f) Prior to the loading or installation of any software on a slot machine server, the software in question shall be verified by a Commission employee using an independent verification device approved by and under the control of the Commission and the Division. At a minimum, the device shall verify each digital signature on the software to ensure that the software is an authentic copy of the software that was approved for use and installation on the slot machine server. The method of validation shall use an approved standard with at least 128 bits of resolution or shall be a bit-for-bit comparison, or an alternative verification configuration determined by Commission in consultation with the Division to be equally secure.

(g) Following completion of the modification, the server-supported slot system shall generate a record detailing the modification to the system or, if the system does not have the capability of generating such a record, the casino licensee shall create such other record as may be required by the Commission. In the event the Commission determines that testing is required after the modification, the Commission shall establish the terms and conditions of the test.

19:46-2.5 Transfers of software and data between a slot machine server and a server-supported slot machine

(a) Transfers of software between a slot machine server and a server-supported slot machine shall be conducted using digital signatures, digital certificates and a secure hard-wired network that is dedicated to

operating and monitoring slot machines. The network shall securely link the slot machine server to the slot machine so that the software can only be transferred to and used by an authorized slot machine. The network interface shall not allow any external connection to access the internal components, software or data of the server-supported slot machine.

(b) Prior to and while transferring software or data to a server-supported slot machine, a slot machine server shall, at a minimum:

- 1. Authenticate the identity of the slot machine or other device to which the software or data is transmitted;**
- 2. Ensure that all software and data transmitted is completely and accurately received; and**
- 3. Detect the presence of corrupt or lost data packets and, as necessary, repeat the transmission or abandon and log the failed attempt.**

(c) All transfers of software from a slot machine server to a server-supported slot machine shall include a verification of the software's approved digital signature.

(d) Prior to any critical software being added to or removed from a server-supported slot machine, or any configuration changes or any activations or deactivations of a slot machine game on a server-supported slot machine, a complete set of meter information for the slot machine game currently being offered by that slot machine, including all meters required by N.J.A.C. 19:45-1.37, 1.37A and 19:46-1.26, shall be successfully and accurately communicated to a slot machine server, a slot monitoring system or other approved slot accounting system.

(e) Software may not be activated, deactivated, added to, modified in or removed from a server-supported slot machine while an error or tilt condition exists on that slot machine, except as necessary to rectify the error or tilt condition.

(f) Data may be transferred from a slot machine server to a data warehouse, provided that the interface for any external request for information maintained in the data warehouse is:

1. Based on a specific defined protocol or a specific set of defined commands that permit retrieval of information in response to an external request; and

2. Capable of supplying the requested information while isolating the external request from the server-supported game components, software and data.

19:46-2.6 Scheduling software for a server-supported slot system

(a) A server-supported slot system shall contain or control scheduling software which instructs the slot machine server to download critical slot machine programs or computer files to connected slot machines, and to activate, modify or deactivate such programs, either on demand or at pre-established times and dates. The scheduling software shall be installed only on the slot machine server in the computer server room, and shall be approved by the Commission prior to installation and use.

(b) Scheduling software shall include, at a minimum, reports of all pending, successful and unsuccessful events, including the user name, date, time, asset numbers, names or identification numbers of critical slot machine programs and computer files successfully or unsuccessfully added, deleted, moved, activated or deactivated, and the status of each event.

(c) Any additions, deletions or changes to the scheduling software shall be performed in the presence of an employee of the MIS department with no incompatible functions and a Commission representative.

(d) Access to the scheduling software may be provided at terminals in secure restricted locations within the casino hotel as approved by the Commission, if such terminals are connected in accordance with N.J.A.C. 19:46-2.3(e) and (f). "Read-only" access to the scheduling software shall also be provided to the Commission and Division.

(e) A casino licensee shall submit the following scheduling software information to the Commission:

- 1. A written list of each proposed schedule, prior to its implementation; and**
- 2. Written notice of each change in a previously submitted schedule and any other changes, prior to implementation of the change.**

19:46-2.7 Requirements for a slot machine game on a server-supported slot system

(a) Once activated for play, a slot machine game offered on a server-supported slot system shall be available at all times to all members of the general public under the same terms and conditions of play, until it is deactivated and unavailable for play.

(b) The program for a slot machine game offered on a server-supported slot system shall contain a digital signature in accordance with N.J.A.C. 19:46-2.3(i).

(c) All configurable options in a slot machine game offered on a server-supported slot system that are governed by a critical slot machine program or computer file shall be configured at the slot machine server when the game is initially installed on the server, or prior to or after the downloading of the slot machine game, but in any event prior to activation of the slot machine game.

(d) Any feature of a slot machine game which is not approved for use by any casino licensees, in accordance with the requirements of N.J.A.C. 19:46-1.20 and 1.28, shall be disabled by:

- 1. Rendering such feature unreachable in the slot machine game's program source code (also known as "commenting it out") by the program's logical control prior to its being compiled into machine-readable form; or**

2. Disabling such feature in the configurable options of the slot machine game's program through the use of a hardware device, secure password or other method approved by the Commission.

(e) Any approved feature of a slot machine game which a particular casino licensee does not have approval to use shall be disabled by the casino licensee in accordance with (d)2 above.

(f) A slot machine game offered on a server-supported slot system may offer a progressive jackpot, as defined in N.J.A.C. 19:45-1.39, provided that the game:

1. Is continuously available for play on at least one slot machine on the same slot system in the same casino ; and

2. Complies with the requirements of N.J.A.C. 19:45-1.39 regarding the removal or transfer of a progressive jackpot.

(g) A slot machine game offered on a server-supported slot system may be used in a promotional slot machine event that does not permit a player to use coins, bills or other consideration to activate play on the slot machine game, provided that:

1. The logical name (the filename) of the game is visually distinctive from other approved versions of the same server-supported game and other slot machine game files (for example, using a prefix or suffix of "PROMO" in the filename, or using a different filename extension, such as ".PRO"); and

2. While a promotional version of a slot machine game is activated:

i. The slot machine game shall automatically and continuously display a prominent notice approved by the Commission and visible to the player and CCTV coverage that the slot machine game is a promotional version; and

ii. The coin acceptor, bill validator, gaming voucher mechanism, the hopper and all Commission-required meters contained in

the slot machine on which the game is offered and in the slot machine game itself shall be disabled.

(h) The logical name (the filename) of a server-supported slot machine game shall be visually distinctive from:

1. The filenames for any other versions, variations or upgrades of the same server-supported game (for example, using a prefix or suffix in the filename, such as “Lucky1, Lucky2, Lucky2a”, or using a different filename extension); and

2. The filenames for any other server-supported slot machine games offered by that manufacturer or distributor.

19:46-2.8 Requirements for a server-supported slot machine

(a) A server-supported slot machine shall contain an approved hardware device that:

1. Stores the stored key and verification software in a secure manner and uses it to verify the digital signature of all slot machine software downloaded to the slot machine from the slot machine server, except for sound files and other types of computer files that do not affect the integrity or outcome of the game;

2. Is an EPROM or other approved read-only storage media;

3. May be inspected and physically sealed or otherwise secured by the Division;

4. Executes for all computer files each time the server-supported slot machine is powered up, and whenever files are loaded from the media; and

5. Prevents further play of the slot machine game and gaming equipment if unexpected, abnormal or unauthorized activity is detected.

(b) A server-supported slot machine shall contain a secure interface port through which its software may be authenticated and validated.

(c) Downloaded software shall be completely authenticated by a server-supported slot machine immediately after the download is

completed and prior to performing any operation on the software, including but not limited to, decrypting, extracting or uncompressing the software.

(d) Whenever a slot machine game or other software is downloaded to a server-supported slot machine from the slot machine server, the slot machine shall automatically:

1. Ensure that all software and data sent is or was completely and accurately received; and

2. Detect the presence of corrupt or lost data packets and, as necessary, reject the transmission or prevent execution of the program.

(e) Downloaded software may not be activated and made available for play on a server-supported slot machine until such time as the slot machine has also met all requirements for changing the active software as set forth in N.J.A.C. 19:46-2.9.

(f) Software downloaded to a server-supported slot machine shall be initially stored in a separate area or partition of memory or hard disk space located in the slot machine, so that the downloaded software is segregated from the slot machine's operating software and cannot affect the operation of the slot machine.

(g) Whenever any change is made to software in a server-supported slot machine, including but not limited to software programs, graphics or sound information, a log entry shall be made in the slot machine's computer and on the slot machine server for that slot machine, which entry shall contain the date and time of the event and an identification of the software affected. Log entries on the slot machine server for that slot machine shall also contain the name of the individual performing the modification, and if applicable, his or her employee license number, and any pertinent software validation information. The logs shall be retained:

1. On the slot machine's computer, for a minimum of 100 logged events; and

2. On the slot machine server, until the software expires in accordance with the provisions of N.J.A.C. 19:46-1.21; provided that logged events older than 90 days may be archived in a manner and secure location approved by the Commission.

(h) The removal of any software from a server-supported slot machine or slot machine server shall in no way affect the requirement to maintain and store the logs of events related to that software and created pursuant to (g) above.

(i) In addition to the meters required by N.J.A.C. 19:45-1.37, 1.37A and 19:46-1.26, a server-supported slot machine shall also be required to have all such meters for each individual slot machine game that is downloaded to that slot machine.

(j) If and when a server-supported slot machine has lost its ability to communicate with the slot machine server for more than seven days, the casino licensee shall use an approved alternate process for obtaining the slot machine meter information required by N.J.A.C. 19:45-1.42 from that slot machine in a timely fashion, until the ability of the server-supported slot machine to communicate with the slot machine server is restored.

(k) Each time a server-supported slot machine is powered up or rebooted and, in any event, at least once every 24 hours, the slot machine shall automatically authenticate the slot machine software by performing the verification required by section (a) above. If unexpected data or any inconsistencies are detected, the slot machine shall prevent execution of the software program and further play of the slot machine game by immediately entering into a tilt mode pursuant to N.J.A.C. 19:45-1.37B(c)3.

(l) In the event that a failed authentication occurs, and a tilt mode is entered, the slot machine shall:

1. Record the details of the tilt in a log, which shall include at a minimum, the type of tilt, time, date, and slot machine event; and

2. Either automatically generate an alert notification of the tilt to the surveillance department and the slot shift manager or above, in a manner approved by the Commission, or, if the slot machine is not capable of such alert notification, cause an appropriate tower light state pursuant to N.J.A.C. 19:45-1.37B(d)3; and

3. If the slot machine is connected to an approved computerized slot monitoring system, send a specific signal that has been pre-approved by the Commission to the casino licensee's slot monitoring system indicating a tilt mode, which shall be reviewed in accordance with approved internal controls.

(m) A casino licensee shall immediately notify the Commission and Division of each failed authentication in a manner approved by the Commission and Division, respectively. A written report shall be prepared which details the outcome of the failed authentication and shall identify the invalid program or programs.

19:46-2.9 Change of slot machine games or game options at a server-supported slot machine

(a) For at least four minutes prior to the implementation of any change to any feature or configuration of a server-supported slot machine game which is governed by a critical slot machine program or computer file, has been activated and is currently being offered to the public, the slot machine on which the game is offered shall be in idle mode, with no tilts or error conditions, no play and no credits on the machine.

(b) During the implementation of any change to a server-supported slot machine game as described in (a) above, the slot machine on which the game is offered shall be disabled and rendered unplayable for at least 60 seconds. During that time, a conspicuous message stating that the game configuration is being changed shall be continuously displayed either on the slot machine's video screen or in another manner approved by the Commission.

(c) The change procedure described in (a) and (b) above shall not apply to an activated server-supported slot machine game that offers multiple games to a patron, who may select any of the offered games at any time with no waiting period, once the present round of play has been completed.

(d) Within two hours after any change to a slot machine game implemented pursuant to (b) above, the casino surveillance department shall conduct a preliminary CCTV inspection of the changed slot machine game, to confirm that the change has occurred and to verify that CCTV coverage of the changed slot machine game is satisfactory, including but not limited to the ability to view and read all areas of the monitor screen, including the text and graphics displayed thereon.

1. The casino surveillance department shall maintain a written CCTV Inspection Log, indicating the date and time of each CCTV slot machine game inspection, the name of the person conducting the inspection and the results of each inspection.

2. If a changed slot machine game fails the above CCTV inspection, the casino licensee shall immediately notify the Commission and Division.

3. The Commission shall conduct an independent CCTV inspection of the preliminarily inspected changed slot machine game. If the changed slot machine game fails the Commission's CCTV inspection and the casino licensee is unable to correct the problem within 24 hours, the Commission may require the slot machine game to be deactivated from further play until the problem has been corrected and the changed slot machine game passes a final CCTV inspection by the Commission.

(e) A casino licensee operating a server-supported slot system shall submit to the Commission a written list or maintain and make available on the server a record of all titles of all active slot machine games offered on all server-supported slot machines, and all changes made to any of those slot machine games, for each 24-hour period the slot machine game

is in operation. If a written list is submitted, the list shall be submitted no later than 12 hours after the expiration of the 24-hour period covered by the list.