(iv) Disable player inputs on the affected player interface, unless test mode is entered; and

(v) Disable all financial instrument disbursement, unless a test mode is entered.

(2) The Class II gaming system may return the component to a ready to play state when all sensored doors are closed.

(c) *Non-fault events.* The following non-fault events are to be acted upon as described below, if applicable:

Event	Definition
(1) Player interface off during play.	Indicates power has been lost during game play. This condition must be reported by the affected component(s).
(2) Player interface power on.	Indicates the player interface has been turned on. This condition must be reported by the affected component(s).
(3) Financial instrument storage component container/stacker removed.	Indicates that a financial instrument storage container has been removed. The event message must indicate which storage container was removed.

§ 547.11 What are the minimum technical standards for money and credit handling?

(a) *Credit acceptance, generally.* (1) Upon any credit acceptance, the Class II gaming system must register the correct number of credits on the player's credit balance.

(2) The Class II gaming system must reject financial instruments deemed invalid.

(b) *Credit redemption, generally.* (1) For cashable credits on a player interface, players must be allowed to cash out and/or redeem those credits at the player interface except when that player interface is:

(i) Involved in the play of a game;

(ii) In audit mode, recall mode or any test mode;

(iii) Detecting any sensored door open condition;

(iv) Updating the player credit balance or total win accounting data; or

(v) Displaying a fault condition that would prevent cash-out or credit redemption. In this case a fault indication must be displayed.

(2) For cashable credits not on a player interface, the player must be allowed to cash out and/or redeem those credits at any time.

(3) A Class II gaming system must not automatically pay an award subject to mandatory tax reporting or withholding.

(4) Credit redemption by voucher or coupon must conform to the following:

(i) A Class II gaming system may redeem credits by issuing a voucher or coupon when it communicates with a voucher system that validates the voucher or coupon.

(ii) A Class II gaming system that redeems credits by issuing vouchers and coupons must either:

(A) Maintain an electronic record of all information required by paragraphs (b)(5)(ii) through (vi) of this section; or

(B) Generate two identical copies of each voucher or coupon issued, one to be provided to the player and the other to be retained within the electronic player interface for audit purposes.

(5) Valid vouchers and coupons from a voucher system must contain the following:

(i) Tribal gaming operation name and location;

(ii) The identification number of the Class II gaming system component or the player interface number, as applicable;

(iii) Date and time of issuance;

(iv) Alpha and numeric dollar amount;

(v) A sequence number;

(vi) A validation number that:

(A) Is produced by a means specifically designed to prevent repetition of validation numbers; and

(B) Has some form of checkcode or other form of information redundancy to prevent prediction of subsequent validation numbers without knowledge of the checkcode algorithm and parameters;

(vii) For machine-readable vouchers and coupons, a bar code or other form of machine readable representation of the validation number, which must have enough redundancy and error checking to ensure that 99.9% of all misreads are flagged as errors;

(viii) Transaction type or other method of differentiating voucher and coupon types; and

(ix) Expiration period or date.

(6) Transfers from an account may not exceed the balance of that account.

(7) For Class II gaming systems not using dollars and cents accounting and not having odd cents accounting, the Class II gaming system must reject any transfers from voucher systems or cashless systems that are not even multiples of the Class II gaming system denomination.

(8) Voucher systems must include the ability to report redemptions per redemption location or user.

§ 547.12 What are the minimum technical standards for downloading on a Class II gaming system?

(a) *Downloads.* (1) Downloads are an acceptable means of transporting approved content, including, but not limited to software, files, data, and prize schedules.

(2) Downloads must use secure methodologies that will deliver the download data without alteration or modification, in accordance with § 547.15(a).

(3) Downloads conducted during operational periods must be performed in a manner that will not affect game play.

(4) Downloads must not affect the integrity of accounting data.

(5) The Class II gaming system must be capable of providing:

(i) The time and date of the initiation of the download;

(ii) The time and date of the completion of the download;

(iii) The Class II gaming system components to which software was downloaded;

(iv) The version(s) of download package and any software downloaded. Logging of the unique software signature will satisfy this requirement;

(v) The outcome of any software verification following the download (success or failure); and

(vi) The name and identification number, or other unique identifier, of any individual(s) conducting or scheduling a download.

(b) *Verifying downloads.* Downloaded software on a Class II gaming system must be capable of being verified by the Class II gaming system using a software signature verification method that meets the requirements of § 547.8(f).

§ 547.13 What are the minimum technical standards for program storage media?

(a) *Removable program storage media.* All removable program storage media must maintain an internal checksum or signature of its contents. Verification of this checksum or signature is to be performed after every restart. If the verification fails, the affected Class II gaming system component(s) must lock up and enter a fault state.

(b) *Nonrewritable program storage media.* (1) All EPROMs and Programmable Logic Devices that have erasure windows must be fitted with covers over their erasure windows.

(2) All unused areas of EPROMs must be written with the inverse of the erased state (zero bits (00 hex) for most EPROMs), random data, or repeats of the program data.

(3) Flash memory storage components intended to have the same logical function as ROM, must be write-protected or otherwise protected from unauthorized modification.

(4) The write cycle must be closed or finished for all CD–ROMs such that it is not possible to write any further data to the CD.

(5) Write protected hard disks are permitted if the hardware means of enabling the write protect is easily viewable and can be sealed in place. Write protected hard disks are permitted using software write protection verifiable by a testing laboratory.

(c) *Writable and rewritable program storage media.* (1) Writable and rewritable program storage, such as hard disk drives, Flash memory, writable CD–ROMs, and writable DVDs, may be used provided that the software stored thereon may be verified using the mechanism provided pursuant to § 547.8(f).

(2) Program storage must be structured so there is a verifiable separation of fixed data (such as program, fixed parameters, DLLs) and variable data.

(d) *Identification of program storage media.* All program storage media that is not rewritable in circuit, (EPROM, CD–ROM) must be uniquely identified, displaying:

(1) Manufacturer;

(2) Program identifier;