§ 547.9

- (i) Program interruption and resumption. The Class II gaming system software shall be designed so that upon resumption following any interruption, the system:
 - (1) Is able to return to a known state;
- (2) Shall check for any fault condition upon resumption;
- (3) Shall verify the integrity of data stored in critical memory;
- (4) Shall return the purchase or wager amount to the player in accordance with the rules of the game; and
- (5) Shall detect any change or corruption in the Class II gaming system software.
- (j) Class II gaming system components acting as progressive controllers. This paragraph applies to progressive controllers and components acting as progressive controllers in Class II gaming systems.
- (1) Modification of progressive parameters shall be conducted in a secure manner approved by the tribal gaming regulatory authority. Such parameters may include:
 - (i) Increment value;
 - (ii) Secondary pool increment(s);
 - (iii) Reset amount(s);
 - (iv) Maximum value(s); and
- (v) Identity of participating player interfaces.
- (2) The Class II gaming system component or other progressive controller shall provide a means of creating a progressive balancing report for each progressive link it controls. At a minum, that report shall provide balancing of the changes of the progressive amount, including progressive prizes won, for all participating player interfaces versus current progressive amount(s), plus progressive prizes. In addition, the report shall account for, and not be made inaccurate by, unusual events such as:
- (i) Class II gaming system critical memory clears;
- (ii) Modification, alteration, or deletion of progressive prizes;
 - (iii) Offline equipment; or
 - (iv) Multiple site progressive prizes.
- (k) Critical memory.(1) Critical memory may be located anywhere within the Class II gaming system. Critical memory is any memory that maintains any of the following data:
 - (i) Accounting data;

- (ii) Current credits;
- (iii) Configuration data;
- (iv) Last game recall information required by §547.8(d);
- (v) Game recall information for the current game, if incomplete;
- (vi) Software state (the last normal state software was in before interruption):
- (vii) RNG seed(s), if necessary for maintaining integrity;
- (viii) Encryption keys, if necessary for maintaining integrity;
- (ix) Progressive prize parameters and current values;
- (x) The five most recent financial instruments accepted by type, excluding coins and tokens;
- (xi) The five most recent financial instruments dispensed by type, excluding coins and tokens; and
- (xii) The five most recent cashless transactions paid and the five most recent cashless transactions accepted.
- (2) Critical memory shall be maintained using a methodology that enables errors to be identified and acted upon. All accounting and recall functions shall be verified as necessary to ensure their ongoing integrity.
- (3) The validity of affected data stored in critical memory shall be checked after each of the following events:
 - (i) Every restart;
 - (ii) Each attendant paid win;
- (iii) Each attendant paid progressive win:
- (iv) Each sensored door closure; and
- (v) Every reconfiguration, download, or change of prize schedule or denomination requiring operator intervention or action.
- (1) Secured access. Class II gaming systems that use a logon or other means of secured access shall include a user account lockout after a predetermined number of consecutive failed attempts to access system.

§ 547.9 What are the minimum technical standards for Class II gaming system accounting functions?

This section provides standards for accounting functions used in Class II gaming systems.

(a) Required accounting data. The following minimum accounting data,

however named, shall be maintained by the Class II gaming system.

Title	Description
(1) Amount In	The total value of all financial instruments and cashless transactions accepted by the Class II gaming system. Each type of financial instrument accepted by the Class II gaming system shall be tracked independently per financial instrument acceptor, and as required by applicable requirements of any Commission and tribal gaming regulatory authority regulations governing minimum internal control standards.
(2) Amount Out	The total value of all financial instruments and cashless transactions paid by the Class II gaming system, plus the total value of attendant pay. Each type of financial instrument paid by the Class II Gaming System shall be tracked independently per financial instrument dispenser, and as required by applicable requirements of any Commission and tribal gaming regulatory authority regulations governing minimum internal control standards.

- (b) Accounting data storage. If the Class II gaming system electronically maintains accounting data:
- (1) Accounting data shall be stored with at least eight decimal digits.
- (2) Credit balances shall have sufficient digits to accommodate the design of the game.
- (3) Accounting data displayed to the player may be incremented or decremented using visual effects, but the internal storage of this data shall be immediately updated in full.
- (4) Accounting data shall be updated upon the occurrence of the relevant accounting event.
- (5) Modifications to accounting data shall be recorded, including the identity of the person(s) making the modifications, and be reportable by the Class II gaming system.
- (c) *Rollover*. Accounting data that rolls over to zero shall not corrupt data.
- (d) Credit balance display and function.(1) Any credit balance maintained at the player interface shall be prominently displayed at all times except:
- (i) In audit, configuration, recall and test modes; or

- (ii) Temporarily, during entertaining displays of game results.
- (2) Progressive prizes may be added to the player's credit balance provided:
- (i) The player credit balance is maintained in dollars and cents;
- (ii) The progressive accounting data is incremented in number of credits; or
- (iii) The prize in dollars and cents is converted to player credits or transferred to the player's credit balance in a manner that does not mislead the player or cause accounting imbalances.
- (3) If the player credit balance displays in credits, but the actual balance includes fractional credits, the Class II gaming system shall display the fractional credit when the player credit balance drops below one credit.

§ 547.10 What are the minimum standards for Class II gaming system critical events?

This section provides standards for events such as system critical faults, deactivation, door open or other changes of states, and lockup within the Class II gaming system.

(a) Fault events.(1) The following events are to be treated as described below:

Events	Definition and action to be taken
(i) Component fault	Reported when a fault on a component is detected. When possible, this event message should indicate what the nature of the fault is.
(ii) Financial storage component full	Reported when a financial instrument acceptor or dispenser includes storage, and it becomes full. This event message should indicate what financial storage component is full.
(iii) Financial output component empty	Reported when a financial instrument dispenser is empty. The event message should indicate which financial output component is affected, and whether it is empty.
(iv) Financial component fault	Reported when an occurrence on a financial component results in a known fault state.
(v) Critical memory error	Some critical memory error has occurred. When a non-correctable critical memory error has occurred, the data on the Class II gaming system component can no longer be considered reliable. Accordingly, any game play on the affected component shall cease immediately, and an appropriate message shall be displayed, if possible.