

JUN 18 1999

Ron Nolte, President
Broward Vending, Inc.
124 East Main Street
Norman, OK 73069

Re: Challenger 9 Game Classification Opinion

Dear Mr. Nolte:

This letter is in response to your inquiry as to whether the Challenger 9 game is a game of skill or a game of chance. Our opinion is based on the following: a live demonstration of the game at our office; materials submitted by Broward Vending, including the game's "source code" or computer program; the expertise of Dr. Robert Kennedy, Human Factors Expert; the expertise of Robert W. Sertell, Gaming Devices Expert; and the expertise of Gaming Labs International, a game testing company. All three experts tested and reviewed Challenger 9 gaming machines provided directly to them by Broward Vending. We conclude, based on a thorough review, that it is a game of chance and, therefore, a class III gambling device that may only be legally played on Indian lands pursuant to a tribal-state compact.

Background

The Challenger 9 game is a modified version of the "Reels of Skill" game which was also manufactured and distributed by Broward Vending, Inc. The "Reels of Skill" game was the subject of administrative litigation before the NIGC, in which it was found to be a game of chance and therefore a class III gaming device pursuant to NIGC regulations.¹ Subsequent to that decision, Broward Vending, Inc. made several modifications to the Reels of Skill game in an attempt to alter its basic character such that the NIGC would find that it did not contain a substantial element of chance and therefore was a video amusement game, or game of skill and

¹ See, In the Matter of Choctaw Nation of Oklahoma, et. al., Decision and Order of the National Indian Gaming Commission, dated July 24, 1998. Respondents appealed this decision to the United States District Court for the District of Columbia but voluntarily dismissed their appeal after the Court denied their Motion for a Temporary Restraining Order. Choctaw Nation of Oklahoma, et.al. v. Janet Reno, et. al., Civ. No. 98-1862 (D.C.D.C.1998).

on the jurisdiction of the NIGC.²

Broward Vending represented that it made several key changes to the "Reels of Skill" game and maintained that certain features were not present in the game.³ These representations and assertions were made during the live demonstration at NIGC offices on September 2, 1998, and again in a written submission by Broward Vending to the NIGC dated September 10, 1998. A summary of the relevant representations is as follows:

1. The "all stop" button was removed, and the player now has the ability to stop each of the nine reels, one at a time;
2. The machine contains no feature which serves to introduce random elements;
3. The game includes no retention ratio; and
4. The software anomaly found in the "Reels of Skill" game, which caused the order of the icons to change randomly, has been removed.

It is important to note that Broward Vending, Inc. designed the Challenger 9 software from the ground up. The Reels of Skill game, in comparison, was developed by Broward Vending, Inc. based on the source code and software program from the "Cherry Master" game manufactured by a company called DYNA. During the Reels of Skill litigation, when it was revealed that the game would randomly change the order of the icons presented to the player, Broward Vending, Inc. claimed ignorance of this feature. Broward Vending Inc., as the sole developer of the Challenger 9 game, can make no such claim regarding any feature found to exist in Challenger 9.

Game Description

The Challenger 9 game is similar in outward appearance to an 8-liner slot machine. It consists of a cabinet containing a video screen, dollar bill acceptor, ticket printer (for dispensing

² The NIGC has jurisdiction over class II and class III gaming, which are defined in the NIGC regulations at 25 C.F.R. part 502. A game of skill would not constitute gambling and therefore does not fit within either definition.

³ At the beginning of the evaluation period, Broward Vending supplied a lengthy print-out of the software source code to the NIGC which we provided to our experts. In reviewing the printed source code and comparing it with the operation of the game itself, our experts determined that none of the code commands that were specified in the source code print-out could be actually located electronically at the specified address within the game's computer chip. Broward Vending then notified the experts that the paper print-out was for an earlier version of the machine, not the actual machine submitted by Broward Vending for testing.

credits via a paper ticket) and buttons to play the game. The video screen centers of nine windows, arranged in a 3 x 3 pattern. Arranged on the front of the machine are six buttons: the start button, the play points button, two stop buttons, an information button (listing points awarded for winning combinations), and an instruction button.

A sequence of 81 icons (27 icons repeated 3 times)⁴ of various shapes and colors appears in each of the nine windows, and, when the game is in play, the icons simulate a rapidly spinning reel, moving through the 27-item rotation in 1.8 seconds allowing 67 microseconds per icon.⁵ On the right side of the screen, a menu indicates how the player may obtain bonus play on the machine. The player may wager variable amounts of points using the play points button, receiving credits for winning patterns of symbols on these lines and losing credits when the winning symbols do not line up in a winning pattern.

To play the game, the player inserts money into the bill acceptor. Credits are given and appear on the screen numerically. The player must wager at least eight points, or one point per line, and may wager up to 32 points to play each game. One credit, or point, costs 5 cents. The player must wager at least eight points. Therefore the minimum cost for each game is 8x5 or 40 cents. Once sufficient points are applied to the play of the game, the player may depress the "START" button to begin play. Once the "START" button is activated, the nine reels begin to rotate in a top to bottom simulation of mechanical reels spinning.

There are nine independent windows spinning in a fixed pattern of 27 symbols. The premise is that reels continue to spin until the player activates the "STOP" button, at which time the first reel stops on a symbol on the video reel.⁶ The second reel begins to spin until the player

⁴ Throughout the entire evaluation and testing period, Broward Vending represented to the NIGC and its experts that the game's software contained a sequence of 27 icons in a continuously repeating sequence for each of the 9 windows. However, actual examination of the software code for the game revealed that the 27 icons were repeated 3 times in the software, for a total string of 81 icons. This difference in the game's software is significant because it would be very easy to modify the program such that a new icon could be introduced at number 81 in the sequence, thereby reducing to chance of stopping a reel on that icon from 1 in 27 to 1 in 81. If there is one jackpot symbol on each reel the odds of winning a jackpot on a 27 icon reel are $27 \times 27 \times 27 = 19,683$ to 1. On a reel with 81 icons, the odds are $81 \times 81 \times 81 = 531,441$ to 1. When presented with this finding, Broward Vending agreed that the program contained a string of 81 icons.

⁵ Broward Vending, represented to the NIGC, both at the live demonstration and in its September 10, 1998 submission, that the 27 icons pass through the window in 1.5-1.6 seconds. Dr. Kennedy determined that the 27 icons pass in 1.8 seconds.

⁶ As discussed later, we found that occasionally the first reel will stop by itself, without any player input.

again depress the "STOP" button. The player continues this process of depressing the "STOP" button until all nine reels have stopped. The object of the game is to match three alike symbols in a row, similar to the game of tic tac toe. When all nine reels have stopped, the game evaluates the symbols on the nine reels and issues points for any winning combinations. Points displayed to the player may be used to play another game, or cancelled by depressing the "TAKE SCORE" button. If the player presses this button, all credits, or points, are transferred to a paper voucher dispensed by the device.

Applicable Law

Under the Indian Gaming Regulatory Act (IGRA), Class III gaming is defined as "all forms of gaming that are not Class I or Class II gaming." 25 U.S.C § 2703(8). NIGC regulations define class III gaming to include, among other things, "any slot machines as defined in [the Johnson Act at] 15 U.S.C. § 1171(a)(1) and electronic or electromechanical facsimiles of any game of chance." 25 C.F.R. § 502.4(b). NIGC regulations further define electronic or electromechanical facsimile as "any gambling device as defined in 15 U.S.C. 1171(a)(2) or (3)." Therefore, the question of whether Challenger 9 is a class III game depends on whether it fits within one of the three categories of gambling devices identified by the Johnson Act. The definition of a gambling device relevant to this inquiry is as follows:

[A]ny other machine [other than a slot machine] or mechanical device (including, but not limited to, roulette wheels and similar devices) designed and manufactured primarily for use in connection with gambling, and (A) which when operated may deliver, as the result of an application of an element of chance, any money or property, or (B) by the operation of which a person may become entitled to receive, as the result of the application of an element of chance, any money or property. . . .

15 U.S.C. § 1171 (a)(2). Because the Challenger 9 game does not dispense money or property, but dispenses a paper receipt redeemable for a prize, we analyze the game under the elements of (B) above. These elements are commonly referred to as consideration, chance, and reward.⁷

⁷ Broward Vending eliminated one feature of the game, the "knockoff" switch", which was relied on in the "Reels of Skill" case to determine whether the game was designed and manufactured primarily for use in connection with gambling as required by the Johnson Act definition. The removal of this feature does not alter our opinion that the games, both "Reels of Skill" and Challenger 9, were designed and manufactured primarily for use in connection with gambling.

The Challenger 9 game clearly meets the consideration and reward element since the player must pay to use the machine and, if successful, will win a prize or reward. Broward Vending does not dispute this. The theory on which Broward Vending has offered Challenger 9 is that a player can influence the outcome of the game by acquiring skill and that the element of chance is absent. The degree of chance required to fit a game within the Johnson Act definition has not been uniformly articulated by the courts. However, one court has held that:

Where a substantial element of chance is involved, it appears to us that the fact that skill in operating the particular machine is helpful in attaining the end sought does not take the machine out of the type defined by the [Johnson Act]. With regard to the machines herein [so-called "digger" machines] there is at least an element of chance involved...

U.S. v. 24 Digger Merchandising Machines, 202 F.2d 647, 650 (1953).

Discussion

As referenced above, Broward Vending Inc. made several modifications to the Reels of Skill game previously determined to be a class III gaming device. It is not necessary to address all the relevant features of the Challenger 9 game that remain unchanged from the Reels of Skill game. Consequently, this opinion addresses only those material changes made to Reels of Skill that the NIGC deems relevant to the inquiry of whether the resultant Challenger 9 game is a class III gaming device.

The first relevant change made was removal of the "all stop" button from the Reels of Skill version, which had allowed a player to press one button to stop the movement of the icons in all nine windows simultaneously. The game now allows the player an ability to stop each of the nine reels individually, one at a time. This change does not materially alter the game from its original version and, more specifically, has no impact on the substantial element of chance present in the game.

Dr. Kennedy performed tests with human players on two Challenger 9 machines. He observed that there was no improvement in performance over time. He concluded based upon recognized theories of skill acquisition that the game is a game of chance and not one that in the course of play makes use of human skill.

Even with the removal of the "all stop" button, there remains an order of 27 icons spinning at such a fast rate of speed that virtually any opportunity for a player to interject skill into the outcome of the game is eliminated. Broward Vending's assertion that learning to exercise the stop control is within normal human capability, and will permit the skilled player to control the outcome of play, was substantially undermined by Dr. Kennedy's testing.

It is noteworthy, though not critical to our findings, that a previously undisclosed feature

of the game was revealed during testing at the GLI laboratories. Observers noted that the rotation speed of the reels would increase as the player waited a longer time to press the stop button. A test using slow-speed video playback confirmed this. The rate of speed of the icons, developed solely by Broward Vending and represented by Broward Vending to be a constant 27 icons per 1.5 seconds, actually is not constant. As a player studies and contemplates the icons, in a futile effort to memorize the order of the icons as they spin past, the speed at which the icons pass through the window increases, further defeating attempts by the player to concentrate and memorize the order. This tends to validate Dr. Kennedy's observation that there was no improvement in performance over time, nor would such improvement be likely.

Additionally, we note that while Broward Vending represented that all 9 reels will spin indefinitely until the player pushes the stop button to stop each reel, our testing revealed that the first reel will occasionally stop by itself, without any opportunity for player input. This certainly causes the machine to deliver an unpredictable outcome to the player.

The second representation made was that the machine contains no feature which serves to introduce randomness into the game. To the contrary, however, we found that the machine is programmed to perform in a random manner. Slow motion videotaping of the reel spin and stop sequence revealed that, after the "STOP" button is activated, the reel continues to spin in the correct sequence of symbols and stops after a few symbols have passed. However, the number of symbols that pass before stopping varies with each reel stopped. The range of symbols passing varies from 2 to 8.

Review of the source code developed by Broward Vending, Inc. indicates that this feature is under the deliberate control of a mathematical data table programmed into the source code. It introduces a constantly changing element of unpredictability into the player's attempt to employ skill in the stopping of the reels. We cannot envision a human player who could observe the varying stopping outcomes and figure out and then memorize the alternating values contained in that data table.

While this feature further interjects randomness into the play of the game, this feature was not present in the Reels of Skill game, and consequently was not relied upon in the NIGC's determination that Reels of Skill was a game of chance. Challenger 9 is a game of chance with or without this feature.

The third representation made by Broward Vending, Inc. is that the game has no retention ratio. Our testing has revealed otherwise. A mathematician at GLI was asked to examine the payout table of Challenger 9, together with the source code provided by Broward Vending, and to compile a standard slot machine type payout percentage sheet. He did so and discovered that Challenger 9 has a mathematical retention ratio which is dramatically in favor of the "house". Therefore, it will retain a fixed percentage of all monies inserted over the mathematical cycle of

the game.⁸

The final relevant change made by Broward Vending was the removal of the anomaly found in the "Reels of Skill" game, which caused the order of the icons to change randomly. Our testing has revealed that this representation is correct; the order of the icons does not randomly change on the Challenger 9 game. However, the correction of this feature does not alter our opinion that the game is a gambling device. In the Reels of Skill administrative litigation, the Recommended Decision of the Presiding Official, which was adopted in relevant part by the NIGC in its Decision and Order, found that "even without the anomaly, there was "an element of chance in the operation of the game sufficient to render it a gambling device." In the Matter of Choctaw Nation of Oklahoma, et. al., Recommended Decision, dated June 29, 1998.

Based on the foregoing analysis, we find that games of this type, and Challenger 9 in particular, introduce a substantial element of chance into the play of the game. The changes made by Broward Vending do not alter the basic character of the game which involves icons spinning at a fast rate of speed and a player relying on chance rather than "skill" to obtain a winning combination.

Conclusion

We find that the Challenger 9 game is a Class III game under IGRA and may be played lawfully on Indian lands only pursuant to a tribal-state compact.

By letter dated June 16, 1999, John Bailey of Broward Vending advised the NIGC that your company has reintroduced Challenger 9, in several versions, to Indian Country. Please be advised that, unless offered pursuant to an approved tribal-state compact, I will recommend issuance of a Notice of Violation for this play at each location. Any current operation of the game on Indian lands not conducted pursuant to a tribal-state compact must cease immediately.

Furthermore, the June 16, 1999, letter states that:

In our ongoing endeavors to produce a chance-free video game for prizes, we have pursued continuous software development and at this time have in our inventory several more recently developed versions with artwork and stop delay features that differ from

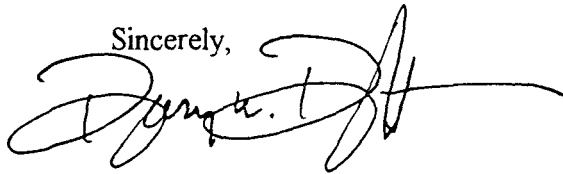
⁸It is interesting to note that the payout percentage table compiled by GLI shows that, as a player inserts more coins into the machines, the chance of winning actually decreases. For instance, when one coin is inserted, the payout percentage is 119.46%, however with the insertion of 18 coins, the payout percentage decreases to 59.32%. By way of example, New Jersey law requires slot machines to pay out at least 83%. We are aware of no regulatory jurisdictions which would authorize a game where payout diminishes with the insertion of additional coins. Certainly, a player who is playing a purported "skill" game should be guaranteed that his chances will get no worse the more he plays.

those submitted to Gaming Laboratories International. However, the differences are not, we believe, relevant to elements of chance or Johnson Act considerations.

Because we find that Challenger 9 is a gaming device which contains a substantial element of chance, any changes made to the game which are not relevant to the element of chance would not alter our opinion. Moreover, the NIGC does not expect to undertake further review of any subsequent versions of the Challenger 9 game for purposes of issuing further advisory opinion as we cannot conceive of a way to modify a reel stop game of this type to eliminate a substantial element of chance.

If you have any questions regarding this opinion, please contact Maria Getoff, Attorney, at (202) 632-7003.

Sincerely,

A handwritten signature in black ink, appearing to read "Barry W. Brandon", with a long horizontal flourish extending to the right.

Barry W. Brandon
General Counsel

cc: Kevin DiGregory, U.S. Department of Justice
Jim Simon, U.S. Department of Justice
Leslie Singer, U.S. Department of Justice
Steve Wasserman, U.S. Department of Justice
Edward Passarelli, U.S. Department of Justice
Bill Lewis, Texas Attorney General's Office
Janet M. Henthorn, Office of Congressman J.C. Watts
All Oklahoma Gaming Tribes
John Bailey, Broward Vending, Inc. via telefax