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Suppose we trail by 1 or 2 points near the end of the game, but we have the ball deep in the opponent's end, and have the choice of when to stop the clock prior to an attempt at a game-winning field goal. Further suppose that when we attempt the FG, we will have at least one timeout left, and it will not be fourth down.

Let  $p_{FG}$  denote the probability of a successful field goal. Let  $p_s$  denote the probability of a bad snap, and let  $p_k$  be the probability that the opponents score, if they get the opportunity, on a subsequent kickoff return. Let  $p_{TD}$  denote the probability that we are successful if, following a bad snap, we try to scramble for a touchdown.

If we stop the clock at 0:01 in preparation for the FG attempt, we win the game if the FG is good, or if the snap is bad but we scramble for a TD. Our probability of winning is

$$p_{FG} + p_s p_{TD}. \quad (1)$$

Alternatively, suppose we stop the clock with  $t$  seconds remaining in the game, with the intention of calling timeout if the snap is bad. Let  $q(t)$  be the probability that time expires during a successful FG attempt, and let  $v(t)$  be the probability that time expires before we can call timeout, in the event of a bad snap.

There are four scenarios in which we win the game. The first is that the kick is good, and time expires during the attempt. The second is that the kick is good, time remains on the clock, but the opponents don't score on the ensuing kickoff. The third is that the snap is bad, we are able to call timeout before time expires, and on our second attempt, the kick is good. The fourth is that the snap is bad, we are able to call timeout before time expires, the snap is also bad on the second attempt, but we scramble for a TD. Therefore, our probability of winning the game is

$$p_{FG}q(t) + p_{FG}(1 - q(t))(1 - p_k) + p_s(1 - v(t))\hat{p}_{FG} + p_s(1 - v(t))p_s\hat{p}_{TD}. \quad (2)$$

(There are hats on  $\hat{p}_{FG}$  and  $\hat{p}_{TD}$  because they correspond to a different line of scrimmage.) The fourth term in equation 2 is negligible for any reasonable value of  $p_s$ .

If  $t = 4$ , then according to Table 2 in the article,  $q(t)$  is about 0.64. Plausible values for  $p_k$  and  $p_s$  are 0.02 and 0.0075, respectively. Expression 1 can be either larger or smaller than expression 2, for reasonable assumptions. Stopping the clock at 0:01 will tend to be preferred with a higher probability of making the FG and a lower probability of a bad snap, a higher probability of being able to scramble for a TD, and a higher probability of the opponents scoring on a kickoff return.