1131-13-340 Lars Winther Christensen* (lars.w.christensen@ttu.edu) and Oana Veliche. The Golod property of powers of the maximal ideal. Preliminary report.

We identify minimal cases in which a power of the maximal ideal \mathfrak{m} of a local ring R is not Golod, i.e. the quotient R/\mathfrak{m}^i is not a Golod ring. Complementary to a 2014 result by Rossi and Şega, we prove that for a generic artinian Gorenstein local ring (R, \mathfrak{m}) of socle degree 3, the quotient R/\mathfrak{m}^3 is not Golod. This is assuming that \mathfrak{m} is minimally generated by at least 3 elements. Indeed, we show that if \mathfrak{m} is 2-generated, then every proper quotient R/\mathfrak{m}^i is Golod. (Received July 18, 2017)