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R Luo (r1uo@mtsu.edu), Department of Mathematical Sciences, Middle Tennessee State University, Murfreesboro, TN 37132, and **Nick Zhao*** (yzhao@mail.ucf.edu), Department of Mathematics, University of Central Florida, Orlando, FL 32816. *Vizing's independence number conjecture on edge chromatic critical graphs.*

In 1968, Vizing proposed the following conjecture which claims that the independence number of edge chromatic critical graphs with n vertices is at most $\frac{n}{2}$. The first result about this conjecture appeared in 2000 which proves that the independence number of edge chromatic critical graphs with n vertices is at most $\frac{2n}{3}$. In this talk, we will present some new results about this conjecture and show that the independence number of edge chromatic critical graphs with n vertices is at most $\frac{5n}{8}$. (Received August 24, 2010)