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Oguz Kurt*, 231 W 18th Ave, Columbus, OH 43210. *Planar 7-graphs are 7-edge-colorable*. Preliminary report.

An r -graph is an r -regular graph such that all edge-cuts separating odd subsets of the vertex set have at least r edges. As an edge-coloring generalization of 4-Color Theorem, Seymour conjectured that “Any planar r -graph is r -edge-colorable.” Guenin showed that the conjecture holds for $r = 4, 5$ and recently, Dvorak, Kawarabayashi and Kral [D-K-K] showed that it holds for $r = 6$. We show, using Discharging Method, that this conjecture holds for $r = 7$. We note here that [D-K-K] also claims to have a proof for $r = 7$. (Received January 12, 2012)