962-05-1251 **Jennifer A Bruce*** (bruce@maryvillecollege.edu), Jennifer A. Bruce, Maryville College, Box 3394, 502 E. Lamar Alexander Parkway, Maryville, TN 37804. *Bilinski Maps and Geodesics in One-Ended Planar Maps (Preliminary report).* Preliminary report.

We denote by $\mathcal{G}_{a,a^*}$ the class of all 1-ended, 3-connected planar maps such that all vertices have valence at least a and all faces have covalence at least a^*. A geodesic in an infinite graph is a double ray, every subpath of which is a shortest path. A geodetic edge of a map is one that belongs to a geodesic. Bonnington, Imrich and Seifter (J. Combin. Theory Ser. B, 67, 1996) conjectured that in a 1-ended transitive planar map every edge is geodetic. Niemeyer and Watkins (J. Combin. Theory Ser. B, 69, 1997) prove using Bilinski maps (see S. Bilinski, Bull. Internat. Acad. Yougoslave Cl. Sci. Math. Phys. Tech., 2, 1949) that all maps in the class $\mathcal{G}_{4,4}$ satisfy this property, without any assumption of transitivity. In the present work we extend the Niemeyer-Watkins results to the following classes of maps: $\mathcal{G}_{6,3}$, $\mathcal{G}_{3,6}$, $\mathcal{G}_{5,3+}$ and $\mathcal{G}_{3+,5}$, also with no assumption of transitivity ($\mathcal{G}_{5,3+}$ is the subclass of maps in $\mathcal{G}_{5,3}$ with the property that each edge is incident with at most one 3-covalent face, and $\mathcal{G}_{3+,5}$ is the class of all maps dual to the maps in $\mathcal{G}_{5,3+}$). (Received October 03, 2000)