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Let δ_k denote the minimum degree of the k^{th} iterated line graph $L^k(G)$. For any connected graph G that is not a path, the inequality $\delta_{k+1} \geq 2\delta_k - 2$ holds. Niepel, Knor, and Šoltés have conjectured that there exists an integer K such that, for all $k \geq K$, equality holds; that is, the minimum degree δ_k attains the least possible growth. We prove this conjecture using methods similar to those developed to prove the corresponding conjecture for the maximum degree Δ_k . (Received October 03, 2000)