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Carolyn Mayer* (cdmayer@wpi.edu) and **William J. Martin.** *Domination Mappings for Low-Power Cooling Codes.* Preliminary report.

Low-power cooling (LPC) codes (introduced by Chee, Etzion, Kiah, Vardy, and Wei '18) are designed to control the power consumption and temperature of interconnects of wires by limiting the number of state transitions allowed per transmission and avoiding transitions on the hottest wires. LPC codes can be constructed using *domination mappings*, injective maps subject to certain constraints given by a bipartite graph. We will present a family of domination mappings and discuss a conjecture of Chee et al. about the graphs for which domination mappings exist. (Received February 03, 2020)