Danielle Riethmiller* (danielleriethmiller@sandiego.edu), 5998 Alcala Park, San Diego, CA 92110, and Samantha Armstrong. Strict Hierarchies with the Deegan-Packel Power Index.

We will analyze the relative power of players as determined by the Deegan-Packel power index in simple voting games. In particular, we investigate which strict hierarchies are achievable with respect to this power index. Inspired by previous work with other power indices, we focus particularly on weakly transparent, proper, simple voting games. We show that, under these conditions, any voting game with three to five players cannot have a strict hierarchy with respect to the Deegan-Packel power index. We then use simulation evidence to suggest that any game with more than five players can be constructed to have a strict hierarchy with respect to this index. (Received September 15, 2014)