Rachel Skipper* (skipper.rachel.k@gmail.com), 100 Math Tower, 231 W 18th Ave, Columbus, OH 43210, and Benjamin Steinberg. Generating lamplighter groups with bireversible automata.

We use the language of formal power series to construct finite state automata generating groups of the form $A \wr \mathbb{Z}$, where A is the additive group of a finite commutative ring and \mathbb{Z} is the integers. We then provide conditions on the units of the ring and the power series which make automata bireversible. (Received August 12, 2019)