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GOOD TURNOFFS

At 6:30 p.m. on Feb. 28, residents in West Texas came home from work and turned on their appliances — at precisely the moment when the wind died down in local wind farms. Power plummeted by more than half. The grid neared collapse. ▪ So the utilities put in a frantic call to ConsumerPowerline. The company practices "demand response": it pays electricity consumers to turn out the lights when demand is too high. Within seven minutes, ConsumerPowerline instructed several major corporations to turn down their heat and lighting — removing 70 megawatts of demand — and a blackout was narrowly averted. ▪ Successes like this are why demand response has become one of the most powerful green techniques for protecting the nation's overtaxed power grids. When a blackout looms, utilities call a small coterie of demand-response firms. These firms prearrange for major users of electricity — factories, shopping malls, skyscrapers — to shut down all nonessential electricity in exchange for payments, often totaling tens of thousands of dollars each year. It's expensive, but far less so than a blackout that cascades across the country. The infamous Northeastern blackout in August 2003 cost an estimated $7 billion. ▪ Demand response is, in essence, an inversion of the traditional logic of power generation: instead of paying to create power, you pay money to reduce the need for it. The procedure has been particularly popular in major cities, where grids are strained to the limit. ConsumerPowerline controls 300 huge buildings in New York alone, where hastily brokered turnoffs by Macy's and major hotels prevented the spread of a 2006 blackout in Queens — a blackout that lasted for more than a week — into Manhattan. ▪ "If you're someone who's controlling 100 buildings at once, and with a flick of a finger you can change their energy behavior," says Gary Fromer, ConsumerPowerline's C.E.O., "that's very powerful." CLIVE THOMPSON