

The American Recovery & Reinvestment Act, better known as the economic stimulus package, throws 11 billion dollars at infrastructure development to support renewable energy, particularly improvement and expansion of transmission grids. It's characterized as a win-win scenario, getting people back to work while smoothing the way for substantially less carbon-intensive energy generation. That's quite a difference from what happened the last time we had an economic crisis of catastrophic proportions. By the late 1920's and 1930's, the electric power industry in urban areas had adopted the centralized business model still largely in place today: generate power at central plants and distribute it over a grid to substations and ultimately to consumers. Rural areas were not of much interest to the large power companies, and there was limited central power service available in those areas. Instead hundreds of thousands of farmers depended upon individual wind turbines installed on their own property for electricity. This niche market for wind energy, and the innovation in wind power technology engendered by it, faded away in the face of the Rural Electrification Administration's ("REA") efforts. That New Deal agency embraced the central power model, and supported the creation and operation of rural electrical cooperatives to provide electrical power to farms from central plants. Not all farmers adopted central power with glee; historians detail reports of the use of pressure and intimidation in some cases to secure their conversion. This government-subsidized diffusion of the central power model is often hailed as one of the most successful programs of the New Deal. One consequence of this success was the destruction of the market for individual wind power generating units, and the subsequent stagnation of technological development of wind power technology for decades.

Now wind power is back-this time within the context of central power model-but it faces significant problems in capturing a meaningful portion of the market. The wind power is often generated far from the location of the power users, and construction of the necessary transmission lines will be quite expensive and administratively difficult to accomplish. Federal Energy Regulatory Commission Acting Chairman [Jon Wellinghoff](#) characterized the stimulus package funds as "seed money," noting that is insufficient "to make huge advances in the overall backbone grid that we're talking about to integrate substantial amounts of wind." Wellinghoff set the total cost of upgrades at 200 billion.