

The electric grid is divided into three parts: generation (the production of electricity), transmission (the movement of electricity from one point to another) and distribution (the delivery of electricity to end consumers). Each of these three parts can be regulated differently depending on where you are in the country, and each pose separate issues of management.

Over the last two decades, there has been a considerable trend toward more competition in the electric grid. This trend has mostly been concentrated on the generation sector. However, there have also been moves to increase competition in the transmission sector as well.

One of the big moves toward transmission competition came from the federal agency responsible for ensuring the reliability of the electric grid, the Federal Energy Regulatory Commission (FERC). In July of 2011, FERC issued [Order 1000](#), which had the goal of using competition to reduce costs and increase the development of transmission.

Order 1000 eliminated federal requirements that utilities be given the right of first refusal for the building and ownership of new transmission and transmission facilities. This allowed, but did not require, the introduction of competition in this area.

Competition has the potential to reduce costs greatly and increase innovation in the transmission system. Traditionally, transmission has been seen as an unlikely candidate for competition because parallel sets of poles and wires do not make economic sense. Transmission lines are also operated by third party Regional Transmission Organizations (RTOs) or Independent System Operators (ISOs) in most of the country. Yet an element of competition can still be introduced into the system by making the construction and ownership of transmission lines open to competition.

Even these more modest steps can lead to substantial benefits. A recent study by the Brattle Group found that the winning bidders in competitive projects were 40 percent cheaper than the initial cost estimate for the project, whereas non-competitive projects ended up costing 34 percent more than initial estimates.

Despite this potential, Order 1000 has yet to achieve the goals for which it was set out. Since the order went into effect, only [3 percent](#) of transmission investment in the United States has been subject to competition.

Why has Order 1000 fallen short of expectations? Some of it is due in part to provisions of Order 1000 itself, which specifies that competition is to be applied to projects whose costs will be broadly (regionally) shared. “Local” projects are exempt. One way for states and ISOs to circumvent competition is to recommend only local transmission projects. By limiting transmission expansion to local projects, not only are competition benefits sacrificed, any larger scale regional economic benefits from reduced congestion are also forgone.

Some states have sought to avoid Order 1000 by passing so-called “Right of First Refusal” (ROFR) laws. Under a ROFR, when a transmission line is to be built, the utility to which that line will connect is given the option of building and owning the line itself. Only if the utility declines would the project be subject to competitive bidding.

Constitutional concerns have been raised about these laws, and ROFR laws in Minnesota and Texas are currently being challenged in court. For the time being, though, the laws effectively prevent competitive transmission within those states.

ISOs and states have also found ways to avoid the requirements of Order 1000 by creating artificial designations and classifications of projects. For example, a project might be classified as being about “reliability” rather than “improved economics,” and hence not subject to Order 1000. However, due to the networked nature of transmission, all projects contribute to both improved reliability and lower overall generation costs.

Upgrades offered by competitive suppliers to existing infrastructure can enhance grid reliability and often come at a lower cost than alternatives preferred by incumbents. This is especially evident in areas prone to severe weather like the Great Plains and Midwest. For example, a university study found transmission upgrades from a competitive supplier [reduced the risk of catastrophic grid failure](#) in the Oklahoma Panhandle area, which resulted in \$440 million in economic benefits from 2016 to 2019 with \$5 of benefit for each dollar of cost.

The current regulatory framework has a strong incumbency bias which stifles innovative new entrants. Incumbent transmission owners often define projects to take advantage of competitive “carve outs” under Order 1000 and use tweaks to the current regulatory framework to insulate themselves from competition. For example, they have sought to redefine the rules and zones governing transmission development in a way that makes new entrant business models commercially unviable. Productive improvements under the current regulatory model include reducing artificial barriers to entry, such as lowering qualification thresholds for competitive bids, and improving transparency, such as enhancing the reporting requirements to document the value of transmission competition.

Arguments against competition for the building and ownership of transmission are without merit. It is sometimes suggested that utilities should have preferable treatment in building and owning transmission because they have already built and own transmission. However, there are many companies in the United States that have demonstrated capabilities as builders and owners.

FERC should take further action to achieve the goals of Order 1000 by eliminating artificial designations around transmission projects and by requiring that any facility that will be operated by a third party once completed should be open to competition in building and ownership.

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