

So, despite the risks that a rapidly growing level of DER penetration and other disruptive challenges may impose, they are *not* currently being discussed by the investment community and factored into the valuation calculus reflected in the capital markets. In fact, electric utility valuations and access to capital today are as strong as we have seen in decades, reflecting the relative safety of utilities in this uncertain economic environment.

In the late 1970s, deregulation started to take hold in two industries that share similar characteristics with the electric utility industry—the airline industry and the telecommunications industry (or “the telephone utility business”). Both industries were price- and franchise-regulated, with large barriers to entry due to regulation and the capital-intensive nature of these businesses. Airline industry changes were driven by regulatory actions (a move to competition), and the telecommunications industry experienced technology changes that encouraged regulators to allow competition. Both industries have experienced significant shifts in the landscape of industry players as a result.

In the airline sector, each of the major U.S. carriers that were in existence prior to deregulation in 1978 faced bankruptcy. The telecommunication businesses of 1978, meanwhile, are not recognizable today, nor are the names of many of the players and the service they once provided (“the plain old telephone service”). Both industries experienced poor financial market results by many of the former incumbent players for their investors (equity and fixed-income) and have sought mergers of necessity to achieve scale economies to respond to competitive dynamics.

The combination of new technologies, increasing costs, and changing customer-usage trends allow us to consider alternative scenarios for how the future of the electric sector may develop. Without fundamental changes to regulatory rules and recovery paradigms, one can speculate as to the adverse impact of disruptive challenges on electric utilities, investors, and access to capital, as well as the resulting impact on customers from a price and service perspective. We have the benefit of lessons learned from other industries to shift the story and move the industry in a direction that will allow for customers, investors, and the U.S. economy to benefit and prosper.

Revising utility tariff structures, particularly in states with potential for high DER adoption, to mitigate (or eliminate) cross subsidies and provide proper customer price signals will support economic implementation of DER while limiting stress on non-DER participants and utility finances. This is a near-term, must-consider action by all policy setting industry stakeholders.

The electric utility sector will benefit from proactive assessment and planning to address disruptive challenges. Thirty year investments need to be made on the basis that they will be recoverable in the future in a timely manner. To the extent that increased risk is incurred, capital deployment and recovery mechanisms need to be adapted accordingly. The paper addresses possible strategic responses to competitive threats in order to protect investors and capital availability. While the paper does not propose new business models for the industry to pursue to address disruptive challenges in order to protect investors and retain access to capital, it does highlight several of the expectations and objectives of investors, which may lead to business model transformation alternatives.