

Electricity's past and future in America

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As Americans integrate renewable energy resources into the nation's power supply, a new research paper from the [Baker Institute for Public Policy](#) reviews how the country's electrical system developed and says that an understanding of its past can offer insights about its future.

A debate over how Americans should electrify their lives has continued throughout the 150 years of [power](#) network expansion in the United States, according to Julie Cohn, a research historian at the University of Houston's Center for Public History. Today, [environmental concerns](#) have led many people to support investment in a reconfigured power system that includes [renewable resources](#) like wind, solar, hydro and geothermal energy, Cohn said.

Engineers, policymakers, politicians, manufacturers and environmental advocates offer an array of strategies for increasing the use of [renewable energy resources](#). History may offer some valuable lessons on how that might happen, Cohen suggests.

Cohn's paper, "Historical Cases for Contemporary Electricity Decisions," assesses three case studies of conflicts among energy stakeholders and considers how they might affect future decision-making. She identifies a common theme: Different stakeholders have pushed the decision-makers in different directions at different times, causing the organic development of a power system without a central authority.

"History does not offer answers; rather, it poses questions," Cohn wrote. "Most Americans obtain electric power from a relatively reliable, dispatchable, nodally governed system. The decisions of stakeholders in the past brought us to a present-day configuration of giant interconnections. As we consider pathways to a renewable energy future, we can test our options against the issues that framed earlier choices."

Today's power system experts offer multiple approaches to integrating renewables, Cohn wrote. "At any point in the process, particular stakeholders, unexpected concerns, major diplomatic or political events or innovative technologies may influence the path forward in ways that are difficult to anticipate based on the choices of the past."

More information: Historical Cases for Contemporary Electricity
Decisions: [www.bakerinstitute.org/media/f ... ectricity-020320.pdf](http://www.bakerinstitute.org/media/f...ectricity-020320.pdf)

Provided by Rice University

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