RESEARCH PROJECTS:

* **Electricity Capacity Markets**(with Todd Aagaard. (Cambridge University Press, March 2022) Billions of dollars are spent each year by electricity consumers on “capacity markets,” which have the stated purpose of protecting electricity reliability.  This will be the first book length work on this important area.  Issues to be explored include how these markets are structured, how decisions are made for these markets, and whether these markets truly reach their goal of enhancing reliability, or merely represent an opportunity for the transfer of funds.  Other topics to be investigated are whether capacity market prices are biased upward, to the advantage of producers and the harm of consumers, how renewable energy sources fit into capacity markets, and evaluations of other methods of creating reliable electricity markets. Professor Aagaard and I are continuing our research in capacity markets and the reliability of the electricity grid.
* **Modern Energy Market Competition**(Emerald Press, November 2018).  As long as commodity and securities markets have been in operation, market manipulation has been a serious concern. Now that many electricity and natural gas markets have been opened to competition, manipulation threatens to destroy the value of these markets as well. Yet market manipulation itself remains ill-defined, with uncertain legal and economic principles operating on both sides of regulatory proceedings. This book explores this crucial gray area. It presents a coherent definition of market manipulation, and applies it a variety of legal context.  It examines two categories of manipulation cases.  In the first, the allegations fit the definition of manipulation, but the facts of the case are unclear.  In the second, the facts of the case are clear, but whether or not these events constitute manipulation is unclear.  The work casts a critical eye not only on the actions of energy companies but also the legal decisions of the Federal Energy Regulatory Commission.
* **Oil and Nature Gas Markets in Transition**. I have several projects underway examining issues relating to how oil and natural gas markets are reacting to the energy transition. Together with Dean Foreman of the American Petroleum Institute, I have written papers on the impacts of ending the U.S. crude oil export ban and the economics of prorationing. My colleague Arash Dahi and I are working on a project concerning optimal production decision for the production of “green” hydrogen.

PUBLICATIONS:

* Electricity Capacity Markets: (with Todd S. Aagaard).  (Cambridge University Press, March 2022).
* Modern Energy Market Manipulation (Emerald Publishing, 2018).
* “Covid Shut in Choices Across Unconventional Reservoirs: Evidence from the Bakken and the Marcellus” (with Dahi Taleghani). Forthcoming, Journal of Energy Resources Technology.
* “Grid Governance in the Energy Trilemma Era: Remedying the Democracy Deficit” (with Daniel Walters). Alabama Law Review (forthcoming).
* “Too Much Is Never Enough: Constructing Electricity Capacity Market Demand,” (with Todd Aagaard). Energy Law Journal 43:1 (2022).