Electric resource planning in an era of Burgeoning Renewables. (n.d.). Retrieved April 04, 2021, from https://www.americanbar.org/groups/infrastructure-regulated-industries/publications/infrastructure/2019-20/summer/electric-resource-planning-an-era-burgeoning-renewables/

Author Mark Strain gives us an overview of the dynamic shift in technology surrounding our energy grid as we gain more renewable sources of power generation in his journal article Electric resource planning in an era of Burgeoning Renewables. The insights and data available through his writings are a great resource for foundational research in planning our future renewable power resource driven grid.

Mark Strain, Chief Scientist at Independent Scientific Services Port Macquarie, New South Wales, Australia. I specialize in facilitating strategic high payoff disruptive innovation to Top 100 businesses. I apply futures methodologies and complex socio-technical systems approaches leveraging extensive experience in Human Factors, Human Engineering, Human Systems Integration to drive organizational change. I have extensive experience working on complex projects with multi-disciplinary teams that successfully delivered value for clients.  
I have developed and implemented enterprise change programs and a wide range of strategic human factors engineering, training & evaluation systems, learning and development, business renewal and process re-engineering, project and program management, change management and change culture projects at the strategic, operational and front-line of businesses.  
I have extensive experience working with & advising, mentoring & coaching senior executives to lead and manage disruptive change to create more innovative capability with clients in Australia, NZ, USA, UK and Canada. My experience is diverse: From 2008 to 2010 I supported several strategic Defence White Paper projects on the cost effectiveness of preparing forces for current and future operations. Concurrently, I assisted with the implementation of a networked decision support environment for teams distributed geographically across Australia and overseas.  
From Oct 2010 to Dec 2013 I have worked extensively on change management and reform strategies to create innovative cultures. From Dec 13 to Mar 16 I worked on delivering Human Factors advice to clients in Sydney Trains and TfNSW.  
Since March 16 I have focused on facilitating strategies to adopting disruptive change. Disruptive change is reported (e.g. https://en.wikipedia.org/wiki/Disruptive\_innovation) as new technologies being the catalyst for change. However, disruptive change can also come from highly motivated groups or individuals who can rapidly integrate low-cost COTS technology. AIM: Low cost, high pay off, max effects. (Linked In profile)

Our nation is in the midst of a profound paradigm shift in the way the electric industry serves customers due to dramatic growth in **renewable** **energy**. ADMIN., TODAY IN **ENERGY**: NEW ELECTRICITY GENERATION WILL COME PRIMARILY FROM WIND AND SOLAR (**Jan**. 14, **2020**) [hereinafter EIA NEW ELECTRICITY GENERATION], https://www.eia.gov/todayinenergy/detail.php?id=42495. See OFFICE OF **ENERGY** EFFICIENCY & **RENEWABLE** **ENERGY**, U.S. DEP'T OF **ENERGY**, 2017 **RENEWABLE** **ENERGY** DATA BOOK (**Jan**. 2019), https://www.nrel.gov/docs/fyl9osti/72170.pdf. ADMIN., TODAY IN **ENERGY**: EIA EXPANDS DATA ON CAPACITY AND USAGE OF POWER PLANTS, ELECTRICITY **STORAGE** SYSTEMS (Feb, 28, **2020**), https://www.eia.gov/todayinenergy/detail.php?id=42995; see also See NAT'L **RENEWABLE** **ENERGY** LAB., ANALYSIS INSIGHTS: **ENERGY** **STORAGE** POSSIBILITIES FOR EXPANDING ELECTRIC GRID FLEXIBILITY (Feb. 2016), https://www.nrel.gov/docs/fyl6osti/64764.pdf. [Extracted from the article]