

- 1) **Use of hydrogen over a six-year period** - According to the EPA's modeling analyses, EGUs in South Carolina, and in other parts of the U.S., will only rely on the use of hydrogen co-firing for a six-year period, based on the model run year 2035. Kennedy is concerned that it would be unrealistic to assume that new hydrogen production and transportation infrastructure would materialize in the U.S. if EGUs in states such as South Carolina only rely on hydrogen for a six-year period.
- 2) **Supply chain issues** - In recent times, supply chain issues that started when COVID struck, caused major disruptions to the solar power, semi-conductor manufacturing, automobile, and other industries. Other factors have continued to exacerbate supply chain issues, including trade practice issues, shifts in demand, labor shortages, structural factors, and geopolitical events, even after the initial shocks of COVID have waned. With the significant increase in demand for the use of hydrogen and CCS, supply chain issues could continue to be a major problem, especially if capital investment and supply is unable to keep pace with the demand for hydrogen and CCS technologies.
- 3) **Mega-scale projects** - To meet the requirements of the EPA's Proposed Rule, hydrogen and CCS technologies will require huge investments over a short period of time. In recent years, there have been examples of large construction projects that were cancelled or significantly delayed due to technical or construction issues. One example is Mississippi Power's Plant Kemper Integrated Gasification Combined Cycle ("IGCC") Project that was approved for construction in 2009 and cancelled in 2018. The project was partially funded using grants from the DOE that helped fund research into cleaner generation using coal.⁸⁰ The EPA has not accounted for the possibility that similar problems could arise in attempting to ramp up complex new hydrogen and CCS industries in the U.S. that do not exist today.
- 4) **Transmission and Pipeline Construction** - To meet the requirements of the EPA's Proposed Rule, the electric utility industry will need to make large and simultaneous investments in transmission and natural gas pipelines. The U.S. DOE Office of Policy states, "Independent estimates indicate that to meet our growing clean electricity demands, we'll need to expand transmission systems by 60% by 2030 and may need to triple those systems by 2050. That means significant investments in transmission infrastructure will be required to meet our climate goals and unlock the benefits that the clean energy transition presents from spurring economic growth, to revitalizing domestic manufacturing, to creating millions of good jobs for American workers."⁸¹

⁸⁰ <https://mspolicy.org/two-years-since-kemper-clean-coal-project-ended/>

⁸¹ <https://www.energy.gov/policy/queued-need-transmission>

