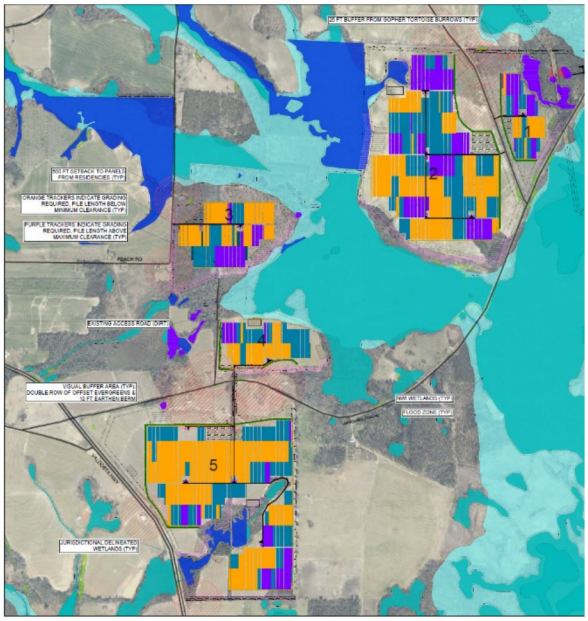
Health & Safety Assessment Report

Morven Solar
Brooks County, GA

Project Overview:

- **Project Name:** Morven Solar
- **Developer**: Pine Gate Renewables
- **Capacity**: 80 MW_{AC} (~112 MW_{DC})
- **Project Area**: ~940 acres (property lease area), ~603 acres (proposed disturbed area)
- **Solar Panels**: crystalline silicon modules: Canadian Solar BiHiKu5 Mono modules, or equivalent
- **Structure**: single-axis trackers (~North-South rows, slowly rotate East to West each day)
- **Inverters**: central station type (~2 to 4 MW each): Sungrow SG3600UD_MV, or equivalent
- **Point of Interconnection**: Georgia Power 230 kV transmission line passing through the northwest corner of the project area
- **Interconnection Equipment**: 230 kV/34.5 kV project substation and interconnection facilities located near Georgia Power transmission lines in northwest center of the project



Report Author

The author of this report is **Tommy Cleveland** (the "Author"), an expert in solar energy and its community impacts, based in Raleigh, North Carolina. Mr. Cleveland graduated from North Carolina State University ("NC State") with undergraduate and master's degrees in mechanical engineering, where he focused on energy. His solar career started with his master's thesis, which led to working over 12 years at the North Carolina Clean Energy Technology Center at NC State University. While at the university, Tommy worked on nearly every aspect of solar energy; from teaching, to testing equipment, to research & development, to leading a statewide stakeholder group in the development of a template solar ordinance. During his time at NC State, North Carolina became the state to install more photovoltaic ("PV") capacity than any state other than California, mostly in the form of 2-5 MW_{AC} utility-scale solar facilities covering around 40 acres each. Utility-scale solar was unfamiliar to the hundreds of communities around the state where the systems were proposed, and many of those communities had questions about the technology and its potential to harm public health or the environment in their community. Many of those questions found their way to Mr. Cleveland and he expanded his already broad knowledge of PV to research and find answers to the questions being asked. Over time he became an expert on the potential health and safety impacts of PV and was the lead author of the 2017 NC State white paper on the topic (pictured to the left). Since mid-2017 Mr. Cleveland has worked as a solar engineer at an energy engineering firm conducting interconnection commissioning of utility-scale solar and battery facilities for utilities in North and South Carolina. In this role Mr. Cleveland was the engineer responsible for (interconnection) commissioning over 60 PV sites and 4 battery sites. Mr. Cleveland has been licensed as a professional engineer in NC since 2007, and is also licensed in SC, VA, FL, and OH.