This report will address all the potential health and/or safety risks of the Morven Solar project, including common concerns that have no potential for public health impact. Specifically, this report addresses the following possible negative impacts/concerns:

- Electrical Shock and Arc Flash
- Fire and Emergency Response
- Toxicity
- Electromagnetic Fields (EMF)
- Heat Island Effect
- Glare and Noise

This report does not address environmental impacts, such as wildlife impacts or erosion, that do not directly impact human health and safety, however the state of Georgia has robust permitting processes in place to protect any construction project, including utility-scale solar facilities, from violating environmental protection laws, such as the Clean Water Act. In addition to stormwater-related permitting required by the Georgia Department of Natural Resources, Environmental Protection Division, the Georgia Department of Natural Resources, Wildlife Resources Division is responsible for ecological environmental review activities such as impacts to engendered species.

Before addressing each of the above impact categories, this report provides an overview of utility-scale PV equipment, facility construction, and operations.

Utility-Scale PV Equipment, Construction, and Operations[2]

To understand the potential impacts of a utility-scale PV system it is helpful to understand the components of a typical PV facility, as well as how a facility is constructed and maintained. The components and practices in this overview are typical of the industry and representative of the proposed Morven Solar project. The initial site work occurs first, but the order of the other construction steps is flexible and may occur concurrently.

Initial Site Work (construction entrance/driveway, sedimentation and erosion control installation, clearing and grubbing, potentially some grading, perimeter fence, and internal road installation)



[2] Photo sources: author, ncre-usa.com, NC DEQ, blueoakenergy.com, solarbuildermag.com, hbc-inc.com, solarprofessional.com, ccrenew.com, and landiscontracting.com