

## Technical Requirements

### 2023-2025 Solar Rebate Program Technical Requirements

All 2023-2025 Solar Rebate Program PV projects must demonstrate compliance with the Minimum Technical Requirements set forth in this attachment. These requirements are not intended to be all-encompassing, nor is this attachment intended to be a substitute for engineering specifications or for safety requirements. Site-specific conditions and/or local regulations may require additional requirements not contained in this attachment. The Participating MLP reserves the right to withhold payment to any project that does not satisfy the Minimum Technical Requirements.

#### Minimum Design and Estimated Production Requirements

The PV project must be designed to meet the following specifications:

- Have an azimuth between 90 and 270 degrees. *Exception: Reading Municipal Light Department allows 80-280 degrees.*
- Submit a shade report demonstrating that the total annual access is at least 80% (or a system loss of no more than 20%). The analysis must include the azimuth, system tilt and shading for each plane that will host PV panels. *Exception: Reading Municipal Light Department allows 30% system loss (70% total annual access).* Accepted shade reports are described in the Program Description, Section 7.1. (Solmetric SunEye, Solar Pathfinder, Wiley ASSET software, Aurora software with LIDAR data available, Bright Harvest, Scanify, or other shading analyses specifically approved by the Participating MLP)

#### Installation Requirements

- The PV project electrical work must be performed by a Massachusetts licensed Master Electrician.
- The PV project must be installed according to the manufacturer's instructions and in compliance with all applicable codes and standards including:
- Local, state, and/or federal building and electrical laws, codes, and practices.
- All pertinent permits and inspections must be obtained, and copies kept on file as may be required by local codes and/or state law.
- Installer must purchase and install the LocusNOC meter from Also Energy on all residential projects *in addition* to the Participating MLP's meter. Also Energy sells to-the-trade only and stocks it at a slight discount for the ENE program. There are no exceptions to installing the LocusNOC meter. Commercial projects must contact Also Energy to purchase the appropriate meter according to project size. To contact Also Energy's sales representative, Installers should email [solar@ene.org](mailto:solar@ene.org). An MLP *might* replace the LocusNOC meter with an equivalent for new projects and will notify applicants and project owners during the interconnection approval process. Any substitutions will not affect existing program participants.

#### Additional Solar PV Equipment Requirements

The equipment and components that comprise the PV project must have the following characteristics:

- All electrical equipment funded in part or in whole under this program must be new.
- Underwriters Laboratory (UL) listed and compliant with Institute of Electrical and Electronics Engineers (IEEE) standards, or other nationally recognized testing laboratory standards (e.g., CSA, ETL, TUV, etc.).
- All photovoltaic modules must be certified by a nationally recognized testing laboratory as meeting the requirements of the UL Standard 1703.
- Inverters must be certified as meeting the requirements of IEEE 1547 and UL Standard 1741 SA.
- Exceptions:
- Reconditioned meters recertified to meet accuracy standards.
- UL is not required, but is recommended, for PV projects operating at less than 30 volts.