



Photovoltaic systems convert solar energy into direct current electricity. These systems:

- can use solar modules, charge controllers, inverters, and storage (i.e., batteries) to create useable electricity for grid-connected and grid-isolated solar systems,
- can be set up as remote or stand-alone systems to supply electricity independently from the grid, and
- can be integrated into a structure's existing electrical system to reduce the user's draw on the utility grid and potentially provide surplus power back to the grid.

Legislated Requirements

In Alberta, section 43 and 44 of the Designated Trades and Restricted Activities Regulation requires photovoltaic systems installers to be:

- certified journeyman electricians, or
- registered apprentices working under the supervision of a certified electrician.

This includes, but is not limited to, the installation, interconnection, and termination of any conductors (including bonding/grounding), conduits, and solar-specific equipment such as any inverters, solar modules, charge controllers, combiners, and storage systems.

Some of this work may also be done by power system electricians or powerline technicians or their apprentices.

Other related work, such as installation of mounting systems or any roof membrane penetration, or material handling (but not placement or final installation) of solar modules, falls outside the restricted activities related to electrical work and can be performed by other competently trained installers.

Compliance

In addition to being expected to comply with applicable building codes, electrical permitting procedures, and Occupational Health and Safety standards, professional contractors/installers are required to comply with both the *Skilled Trades and Apprenticeship Education (STAE) Act* and any applicable regulations. Failure to comply carries a maximum penalty of \$50,000.

Read the full *Skilled Trades and Apprenticeship Education Act* and the *Designated Trades and Restricted Activities Regulation* at www.tradesecrets.alberta.ca/regulations.

**For more information or to report non-compliance, contact the
Apprenticeship and Industry Training Information Line
1-800-248-4823**

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