CITY OF Longmont
Power and Communications

Interconnection Application

The City of Longmont will approve the interconnection of a Distributed Energy Resource (DER) when the City of Longmont Building Services has received, and Longmont Power & Communications (LPC) has verified, the information below. LPC may, at its discretion, perform a pre-parallel/anti-islanding test prior to issuing Permission to Operate (PTO). Diversion and tampering fees will be assessed if your system is energized/turned on prior to LPC issuing PTO.

For DER systems inside city limits, apply for the expedited permit process online. You will be required to register for an account in order to use the online application process.

For DER systems outside city limits, email this completed application, Power Data Form, one-line diagram, and plans to LPC_Field_Engineering_Staff@longmontcolorado.gov.

- The system will be constructed as specified in the one-line diagram and is certified by customer and installer to comply with city interconnection standards.

- Customer & Installer (required information):

  - Customer Name _____
  - Customer Email Address* _____
  - Customer Address _____
  - Customer Phone Number _____
  - Project Address (if different than above) _____
  - Installer Name _____
  - Installer Email Address _____
  - Installer Address _____
  - Installer Phone Number _____
  - System Size _____ kW DC
  - Nameplate Rating of the Generator or Inverter(s) _____ kW AC
  - Expected Annual System Energy Production _____kWh
  - Historical Annual Energy Consumption _____kWh
  - Installed Battery Capacity (if applicable) _____kWh/kW
  - Existing Panel Size _____ AMPS
  - Panel Upgrade Size (if applicable) _____ AMPS
  - System Ownership
    - ☐ Customer (including financed) OR
    - ☐ 3rd Party (Power Purchase Agreement or Leased)

* Permission to Operate (PTO) will be sent to the customer's email address and is required prior to energizing the DER

Residential

1. For *customer-owned* DERs, LPC will allow the proposed system size if either of the following conditions is met:

    a. DER expected annual production is less than 200% of previous year's energy usage (kWh), OR
    b. DER size is less than 12 kW AC.

2. *For 3rd party-owned DERs,* expected annual production is limited to 120% of the previous year's energy usage (kWh).

3. For customers without energy usage history (for example, new construction or new ownership), a 6 kWh per square foot per year allowance will be used to estimate the annual electricity consumption based on the total finished square footage, including finished basement space, as referenced in Boulder County records. This allowance can also be used to address unique circumstances with the adoption of electrification measures when the standard system size shown in #1 above is insufficient for the anticipated electric load.

4. If the total size of the DER is greater than the conditions in either #1 or #3 above, the customer may request a variance, form to be provided by and submitted to your assigned Field Engineer, with documentation supporting the case for an oversized system. LPC may approve variances related to electrification of customer loads or anticipated increases in energy use on a case-by-case basis.

Commercial / Industrial

1. *For customer-owned behind-the-meter DERs*, installations are limited to 200% of the previous year's energy usage (kWh).

2. *For 3rd party-owned DERs*, expected annual production is limited to 120% of the previous year's energy usage (kWh).

3. DERs with an aggregated system size of 100 kW or larger are subject to additional requirements as outlined in the LPC Interconnection Standards for Distributed Energy Resources.

The City of Longmont Building Services Division typically approves residential solar permits within three (3) days following approval of the permit by LPC, barring any missing or incomplete documentation submitted by the customer or installer.

For more information visit City of Longmont Municipal Code or our website.

Interconnection Application Submittal Checklist

Use the following checklist to determine if your DER application submittal package is complete. Incomplete information will result in delay of the application review and issuance of your building permit. The design must meet all applicable conditions of the LPC Interconnection Standards for DERs, Electric Service Standards and the current adopted National & International standards as listed in the City of Longmont Municipal Code.

DER Application Submittal Requirements

Submit the following documents to LPC for review:

☐ Inside City limits, *OR*

Outside City limits, contact Boulder County to obtain **building permit** and submit Power Data Form to LPC.

☐ Calculation of **estimated annual energy output** and resulting **DER system size (AC and DC kW)**.

☐ DER Interconnection Agreement signed by LPC Customer

☐ DER Data Form to be completed and submitted online by installer/designer – ANY REVISION REQUIRES NEW FORM

☐**Site Plan** showing location of all major components (proposed and existing) of DER and electrical service equipment on the property including:

- ☐ AC disconnect, must be within 10 feet of utility billing meter
- ☐ Utility billing meter and DER production meter (if applicable)
- ☐ If DER includes roof-mounted equipment, include ridgeline and edge setback distances
- ☐ Site location and orientation details including identification of adjacent streets and compass

☐ **Electrical** one-line diagram (*example only*)***** showing:

- ☐ Proposed/existing AC electrical service showing main disconnect size and type, utility meter(s), panel bus voltage, phase, current rating, panel schedules and load calculations
- ☐ DER system components including DER disconnect(s); if existing DER at site, clearly identify new/existing equipment
- ☐ Total DER system size (AC and DC kW) - Including new & existing
- ☐ Electrical rating characteristics of all equipment
- ☐ Grounding and bonding connections (for system sizes exceeding 50 kW)
- ☐ Protective relay settings (for applicable system types and sizes)
- ☐ DER placards and signage per the National Electric Code (NEC)

*For larger systems, LPC may require the final version of this document bear the stamp of a professional electrical engineer registered in the state of Colorado.

☐ **Manufacturer specification sheets** for DER equipment (e.g., batteries, inverters, disconnects, modules, over-current devices, relays, etc.) that include:
- Inverter type and ratings (must meet most current IEEE 1547 & UL 1741 standards)
- Inverter output circuit current rating
- Relay settings and test reports (if applicable)
- Energy storage system charge source, capacity, and charge/discharge rates
- PV equipment must include a rapid shutdown system in conformance with the latest adopted version of the National Electrical Code section 690.12 requirements

☐ **Structural Evaluation Letter** for roof-mounted equipment
- A site-specific structural engineering evaluation letter indicating that the structure is adequate for the additional load
  - Design must use the City's most current adopted loads - wind speed (nominal and ultimate), snow load and dead load when determining design