

Expanding Access to Solar: Plug-in Solar and Simpler Interconnections

Wednesday, October 7, 2026

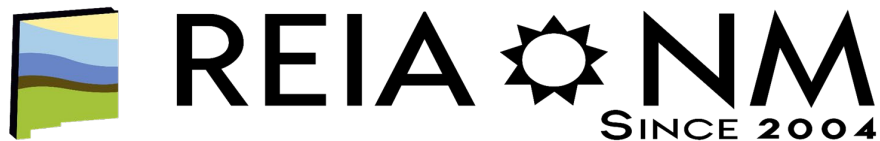
**FIFTH MEETING of the SCIENCE, TECHNOLOGY AND
TELECOMMUNICATIONS COMMITTEE**

Jim DesJardins, Executive Director

Renewable Energy Industries Association of New Mexico

executivedirector@reia-nm.org, (o) 505-503-1000, (c) 505-917-5074

Presentation by:



The United States is **one of the most expensive countries for residential solar installation**, and New Mexico is no exception. Installation costs in Australia and much of Europe are **about one-third of U.S. costs**.

Contributing factors include inefficient permitting and inspection processes, costly sales and marketing, and **reluctance to adopt newer technologies**. Loss of the 30% Federal Tax Credit for residential solar in 2026 has **increased the cost of residential solar**.

This presentation will discuss **two newer technologies** that have yet to be deployed in New Mexico that address some of the above issues:

Plug-in Solar: an easy and inexpensive solution that allows homeowners to install solar themselves.

Meter Socket Adapters: technology that makes installation of traditional rooftop solar faster and less expensive.



Plug-in Solar:

The Problem, Opportunity, and Local Impact

6–20%

Average annual bill increase

Driven by data center demand, aging grid infrastructure, and rising fuel costs.

90M

US households can't go solar

Rooftop solar requires ownership, permits, and \$20K+ installs most can't afford.

13%

NM low-income energy burden

Below-poverty NM households spend 13% of income on energy — 2x the national avg.

5+ States

Legalizing plug-in solar

Utah passed HB340 for permit-free plug-in solar. VA, CO and MD next. CA, and HI moving.

Sources and data courtesy of Pii Energy:

U.S. EIA Electric Power Monthly (eia.gov/electricity/monthly/update/end-use.php) · NREL Rooftop Solar Potential (nrel.gov/docs/fy18osti/70901.pdf)

ACEEE Energy Burden 2024 (aceee.org/energy-burden) · DOE LEAD Tool (energy.gov/scep/low-income-energy-affordability-data-lead-tool)

WRI: Enabling Plug-In Solar (wri.org/insights/enabling-plug-in-solar-states) · Utah HB340 (leg.utah.gov)

What is plug-in solar?



A solar panel captures sunlight and generates Direct Current (DC) electricity.

The panel connects to a micro-inverter converting DC power to Alternating Current (AC) electricity.

The micro-inverter plugs into a wall outlet sending the energy into your home.

Your home uses plug-in energy first, reducing the electricity you buy from the utility.

Average annual savings: US \$385

Average payback period: US 5 yrs

Average cost of system: \$400-\$2,000

**Average savings are based on national average electricity rates. These will vary by location and utility.*



State legislation is needed to open the market for plug-in solar in the U.S.

State legislation is needed to **set safety standards** & to **cut red tape** to open the market for plug-in solar.

- Sets safety standards (requires certification by Underwriters Laboratory or another nationally recognized testing laboratory)
- Removes utility interconnection requirements designed for larger solar installations
- Allow the use plug-in solar without fees or permits
- Defines a small, plug-in portable solar system
- Sets system capacity limit: 1200W (~3 panels, 400W each)



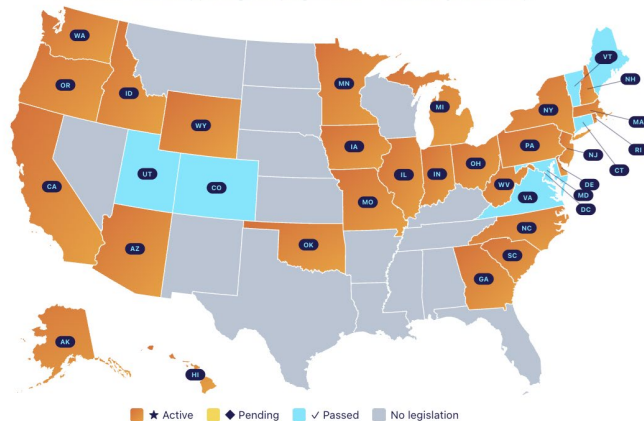
What's happening in other states

- State Rep. Raymond Ward (R), **Utah** was the first to pass plug-in solar legislation in 2025
- **36 states** considered plug-in solar bills in 2026
- **Seven states have passed plug-in solar bills!** Colorado, Connecticut, Maine, Maryland, Utah, Vermont, & Virginia
- **States still in play:** California, D.C., Delaware, Massachusetts, Michigan, North Carolina, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, and Rhode Island

Take action in your state

Several states have passed plug-in solar. Your state could be next.

Bills are moving in multiple states. Click your state (or use the dropdown below) to find out what's happening with plug-in solar — and how you can help.



Select your state:

Choose a state

Take action

**SOLAR UNITED
NEIGHBORS**

**Tracking Data as of 6/30/2026; passed means passed by both chambers & approved by Governor. Some state legislative sessions will end today 6/30.*

Benefits

- Plug-in solar is not only an opportunity to **expand access to the benefits of solar**, but also to a **part of the solution to the energy affordability crisis**.
- Opportunity for **bipartisan collaboration** & to **cultivate solar champions**.
- Offers a new, easy way to **educate decision makers and new audiences** about solar energy.

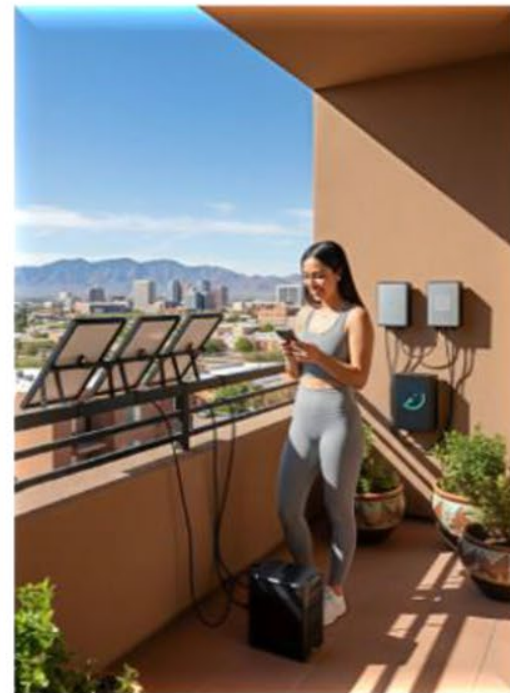


What this could look like in New Mexico

Safe and Affordable Plug-in Solar for the rest of us!

No electrician required:

- 01 Place the panels**
Balcony, porch, or yard. It's simple.
- 02 Plug in and connect**
Standard 120V outlet. Easy 30 min install, live support included.
- 03 Start saving**
Actual energy savings tracked in the Pii Energy app.



What's Included



3x400W Solar Panels



1.92 kWh Battery & Inverter



Pii Energy App



Smart Outlets



Raspberry Pi Hub



Touch-Safe Connector

1 Plug & Play

30-min setup.

2 Always-On Battery

Peak shifting and backup.

3 Safety First

Detect circuit breaker issues.

4 App Control

Energy alerts and automation.



Simpler Solar

How meter socket adapters connect homeowners to fast, affordable electrification, and installers to a safer, more efficient workday.



What is a Meter Socket Adapter (MSA)?

- A meter socket adapter (MSA) is a device that installs between an electric meter socket and a utility billing meter.
- MSAs form a simplified point of interconnection for customer-owned devices on the load side of the meter.
- Utilities have used MSAs for decades for surge suppression, meter form conversion, and other uses.
- Customer-owned MSAs have been available on the market since 2015, for use with residential solar and/or battery storage systems. **Over 50,000 customer-owned MSA units were installed in 2025 alone.**



Benefits of MSAs

- Expensive electrical service work is avoided, saving hundreds to thousands of dollars per install.
- Safe, consistent, reliable, repeatable installation process.
- Shortens installation time and minimizes customer disruption.
- Customer-owned: No impact to rate base.



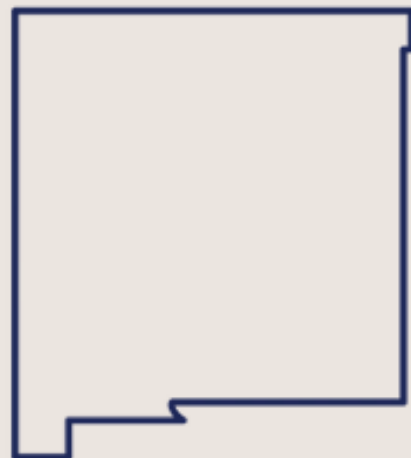
UL Standards

- MSAs are listed to UL 414 – the applicable national standard for meter sockets and meter socket adapters. The standards of UL 414 refer to and incorporate other UL standards, listed below.
- Listing and certification is completed by a Nationally Recognized Testing Laboratory (NRTL) such as UL Laboratories, Intertek ETL, and others.
- Some MSAs are listed to additional standards, like UL 1741. The NRTL determines which standards are applicable based on the MSA model and its functions.

Standard Number and Component	Standard Name
UL 746C, UL 50E – Enclosures	Polymeric Materials – Used in Electrical Equipment Evaluations Enclosures for Electrical Equipment, Environmental Considerations
UL 489 – Circuit Breaker	Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures
UL 1059 – Terminal Blocks	Terminal Blocks
UL 224, UL 486A-486B, UL 8 - Wires and insulation	Tubing, Extruded Insulating, Wire Connectors, Wires and Cables, Thermoplastic-Insulated
UL 414 - Meter Socket Stabs/ Meter Jaws	Meter Sockets

New Mexico and MSAs

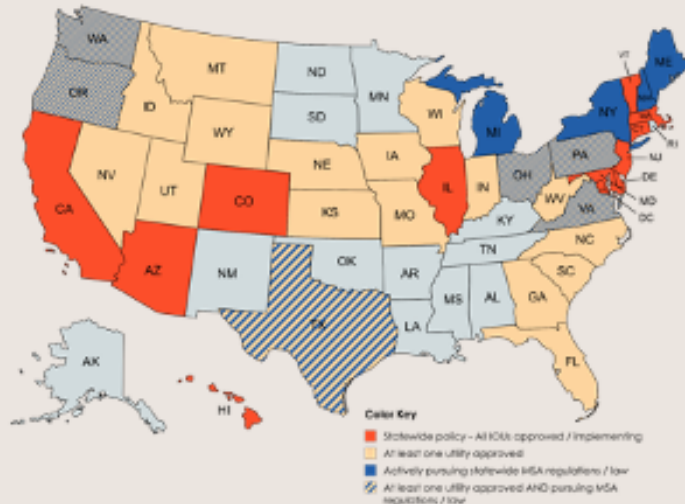
- Groups including REIA-NM, ConnectDER, and Tesla have engaged with the NM utilities on MSAs
 - PRC Docket 22-00089: Grid Modernization - REIA-NM filed comments recognizing MSAs as a cost-effective alternative to traditional distribution expansion and suggested that MSAs should be incorporated in utility grid planning.
 - Technical Interconnection and Interoperability Requirements (TIIR) Working Group - ConnectDER Presented on MSAs during October 2025 meeting, with follow up discussions in November and February.
- There are no New Mexico state rules restricting MSA usage: utilities may adopt their own rules without the need for state-level laws, but none have opted to do so.



Many states have adopted laws or regulations to allow the use of customer-owned MSAs

MSA Policies in the SW

State	Reg/Law	First MSA approval
CO	Law: SENATE BILL 21-261 Law: HOUSE BILL 26-1007	February 2022
AZ	Regulations: APS Docket E-01345A-20-0152 TEP Docket E-01933A-20-01	May 2022
CA	Regulation: PUC R.19-09-009, Decision D2101018	September 2022
TX	Ongoing regulatory docket: Project No. 54233 , intent to introduce a bill in 2027	February 2025



Policy Ask – Create a Process to Allow Customer-Owned MSAs

- Adopt legislation similar to House Bill 26-1007 in Colorado, which would direct the PRC to revise existing rules to explicitly require utilities to:
 - Maintain a public list of at least one approved meter collar adapter;
 - Have a process for approving a meter socket adapter that is not included in the public list;
 - Approve proposed meter collar adapters that meet applicable national standards;
 - Allow the installation of meter socket adapters by qualified installer electricians;
 - Establish an effective date for these utility requirements.



Thank you!



Jim DesJardins, 505-917-5074, jimdesjardins1@gmail.com