



NEIGHBORHOOD RESILIENCY CENTERS WITH SOLAR + STORAGE

Louisiana Public Service Commission | February 16, 2023





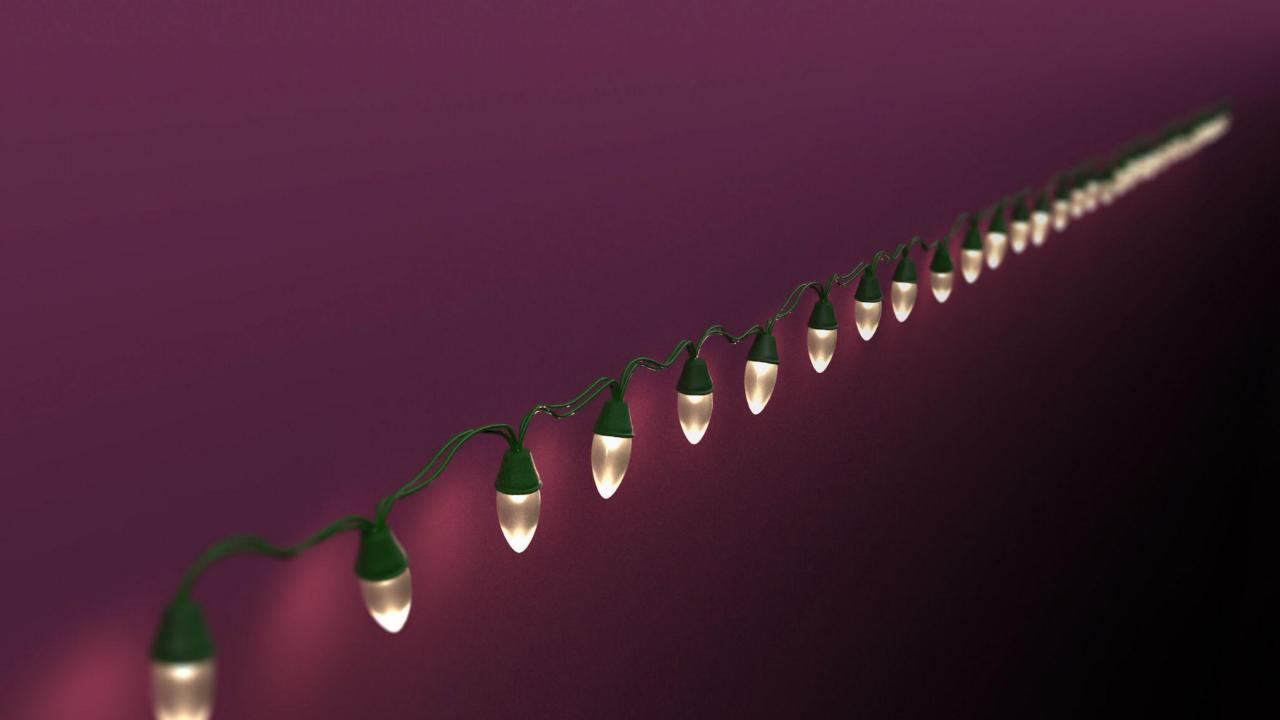
LONG DURATION POWER OUTAGES are now the leading cause of death from disaster in Gulf Coast = 1 fatality

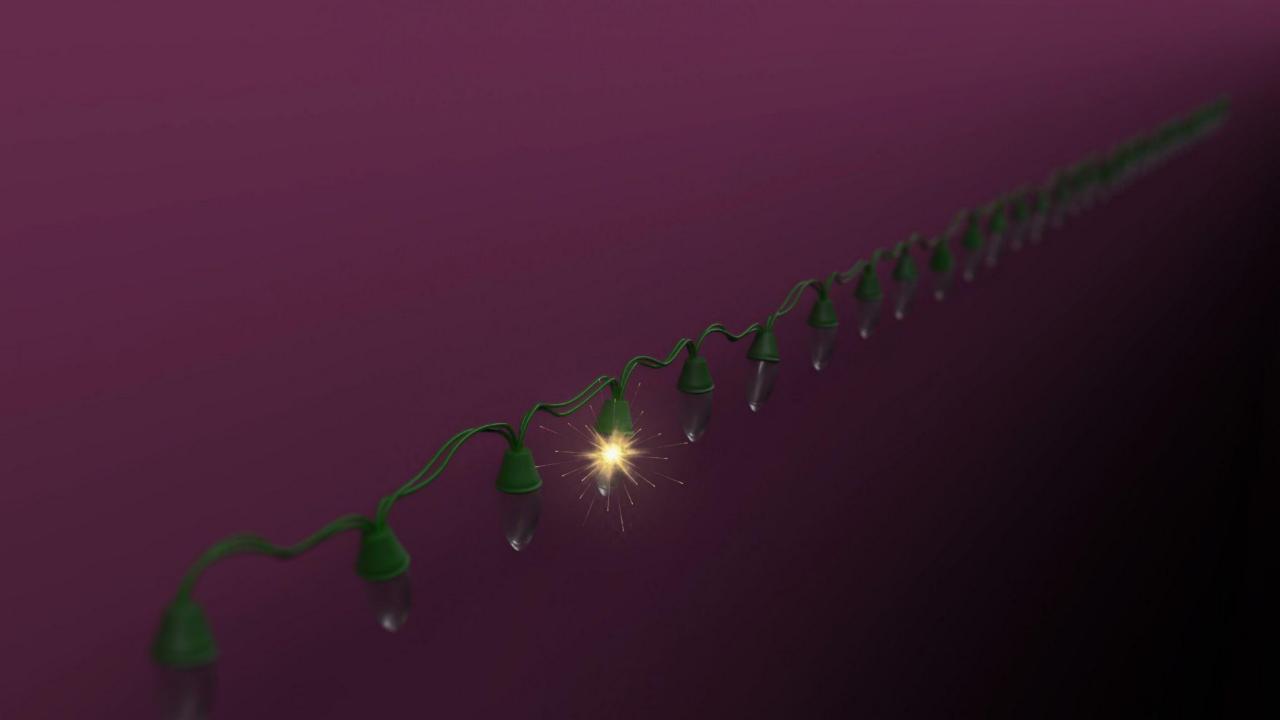
Power outages caused ...

19 of the 31 deaths in Hurricane Laura (August 2020)

246 deaths in Texas in Winter Storm Uri (February 2021)

30 of the 36 deaths in Hurricane Ida (August 2021)



















COMMUNITY LIGHTHOUSE STRATEGY

Engage congregations and community institutions to create a network of resiliency hubs, each with commercial-scale solar power and back-up battery capacity.

During power outages those institutions begin operating immediately to assess need and provide assistance to their surrounding communities.

GOALS OF COMMUNITY LIGHTHOUSE



RESILIENCY IN GRID OUTAGES



* NEIGHBORHOOD-LEVEL DISASTER RESPONSE



INVESTMENT IN RENEWABLE ENERGY



WORKFORCE TRAINING & JOBS

EVERY LIGHTHOUSE:

1) Builds & trains a response team

2) Claims "turf".
Door-to-door
canvassing to
identify
vulnerable
neighbors

Bethlehem Lutheran Church

3) Implements a response plan to provide services & reach out to EVERY high-risk neighbor within 24 hours

EACH LIGHTHOUSE PROVIDES: Food &

water

Cooling & heating centers

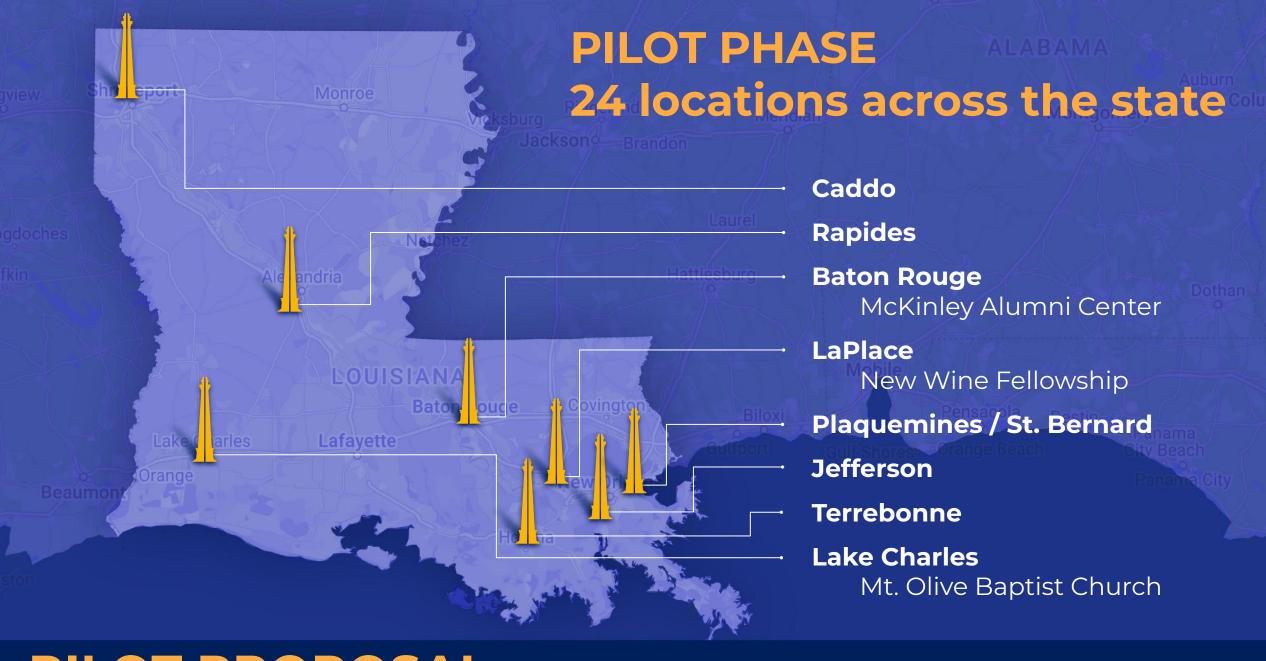
Charging stations / internet



Portable battery exchange



FULL IMPLEMENTATION



PILOT PROPOSAL





Behind-the-Meter Storage Benefits

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Jeremy Twitchell

Louisiana Public Service

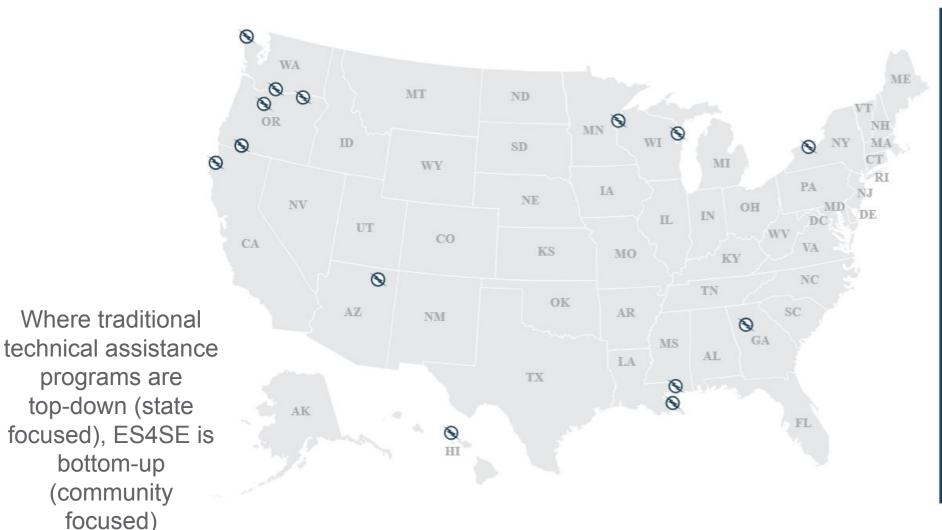


PNNL is operated by Battelle for the U.S. Department of Energy





The Energy Storage for Social Equity Program

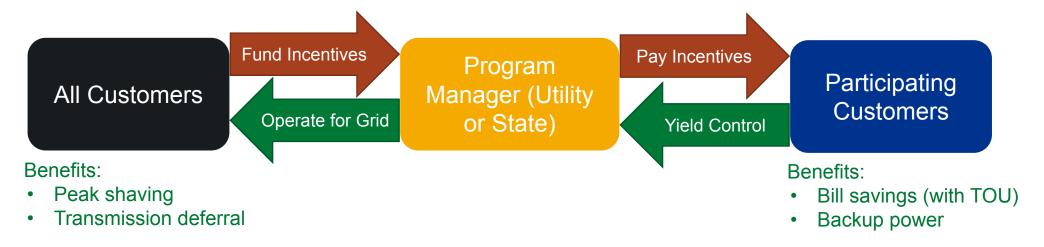


- Native Renewable
- Cher-Ae Heights Indian Community and Western Energy Development
- Ayika Solutions Incorporated
- Ho'āhu Energy
 Cooperative Molokai
- Together New Orleans
- Honor the Earth
- Coast Electric Power
 Association
- Joule Community Power and Open Door Mission
- Warm Springs Community Action Team
- Rogue Clim ate
- Coyote Steals Fire Energy Group
- Makah Tribe
- Klickitat Valley Health
- Oneida Nation



Shared Investment Model for BTM Storage

- Relative to front-of-meter (FTM) projects, behind-the-meter (BTM) projects cost more on a per-unit basis but can offer targeted resilience benefits to critical loads and other customers
- Many states and utilities are developing shared investment models for BTM storage:



 Some programs have also begun offering tiered incentives to enable participation by lowand moderate-income customers, enabling these programs to also improve energy system equity

Paper: Equitable Design of Behind-the-meter Energy Storage Programs



The Inflation Reduction Act Provides Additional Leverage

The Inflation Reduction Act created the Clean Energy Investment Credit (CEIC), a new incentive that applies to non-emitting sources of energy generation and energy storage.

Where the ITC provided a flat, 30% credit based on the asset's cost, the CEIC has a multi-tiered structure with many possible outcomes:

Project Type	Base	Energy Community Adder	Domestic Content Adder	Low-Income Bonus	Total Possible
< 1 MW	30%	10%	10%	10% or 20%	70%
> 1 MW	6%	2%	2%	< 5 MW: 10 or 20%	< 5 MW: 30%
				> 5 MW: N/A	> 5 MW: 10%
> 1 MW that meets prevailing wage	30%	10%	10%	< 5 MW: 10 or 20%	< 5 MW: 70%
and apprenticeship requirements	30 /6			> 5 MW: N/A	> 5 MW: 50%



Thank you

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