

INLAND POWER & LIGHT

COOPERATIVE RESIDENTIAL BATTERY

STORAGE PILOT PROGRAM

➔ **PROGRAM TITLE**
Residential Resilient Energy Storage Initiative (RRESI)

➔ **PROGRAM OVERVIEW**

Inland Power and Light Cooperative (Inland Power), in collaboration with regional and industry partners, is launching a three-phase pilot program to deploy 100–650 residential battery storage systems in homes in our services territory. This initiative aims to:

- Reduce wildfire risk by enhancing grid resilience and enabling islanding capabilities.
- Gauge customer appetite for demand response and distributed energy resource (DER) participation.
- Support clean energy goals in alignment with Washington’s Clean Energy Transformation Act (CETA) and Clean Energy Implementation Plan (CEIP).
- Deliver community benefits in accordance with the NewERA grant requirements.
- Send price signals for demand response through partnerships with our balancing authority (Bonneville Power Administration) and neighboring utilities and balancing authorities.



*Photo is example of home battery storage systems

INLAND POWER & LIGHT

COOPERATIVE RESIDENTIAL BATTERY

PROGRAM PHASES

PHASE 1: DESIGN (JAN 2025 - JAN 2026)

OBJECTIVES:

- Define technical specifications, pricing incentives and site selection criteria.
- Engage communities and stakeholders to ensure equitable access and benefits.
- Develop program metrics for resilience, demand response, power supply cost savings, and emissions reduction.
- Ensure compliance with:
 - **NewERA grant community benefit requirements**
 - **Washington's CETA and CEIP**

KEY ACTIVITIES:

- Community outreach and education
- Regulatory and legal framework development
- Grid impact and wildfire risk modeling
- Procurement planning
- Contract with vendor for software, batteries, collars, and installation.
- Coordinate with Avista, Bonneville, Kootenai, Pend Oreille, and Northern Lights to determine if there are economies of scale or project synergies

LEAD:

Inland Power

PARTICIPANTS:

- **Community organizations**
- **Regulatory Subject Matter Experts**
- **IPL Membership/Communities**

ADVISERS:

- **Renewable Northwest**

INLAND POWER & LIGHT

COOPERATIVE RESIDENTIAL BATTERY

PROGRAM PHASES

PHASE 2: DEVELOP (JAN 2026 - MID 2027)

OBJECTIVES:

- Procure and install 100-650 Enphase residential battery systems.
- Integrate battery systems with existing home energy infrastructure.
- Train IPL staff on software and dispatch of the battery.

KEY ACTIVITIES:

- Finalize software agreements and logistics and processes
- Structure a demand response residential rate, currently anticipated to be the same as our residential rate, however the value of demand response is anticipated to grow over time
- Conduct site assessments and installations
- Establish data collection and monitoring systems

LEAD:

Inland Power

PARTICIPANTS:

- Northwest Renewables (installation and workforce training)
- Enphase Energy (battery manufacturing and technical support)
- Software Provider (currently unselected)
- Inland Membership

ADVISERS:

- Avista Utilities
- Washington State University
- University of Idaho

INLAND POWER & LIGHT

COOPERATIVE RESIDENTIAL BATTERY

PROGRAM PHASES

PHASE 3: DEMONSTRATE (MID 2027 - 2037)

OBJECTIVES:

- Test and evaluate battery dispatch strategies for demand response and wildfire mitigation.
- Analyze customer behavior and satisfaction.
- Share findings with regional and national stakeholders.

KEY ACTIVITIES:

- Real-time battery dispatch using third-party software
- Data analysis on grid impacts, emissions, and customer engagement
- Reporting and dissemination of results

LEAD:

Inland Power

PARTICIPANTS:

- **Regulatory Subject Matter Experts**
- **Avista Utilities (grid coordination and data sharing)**
- **Washington State University**
- **University of Idaho**
- **Software Partner (currently unselected)**

ADVISERS:

- **INTENT (regional energy transition collaboration)**

TECHNICAL SUPPORTERS:

- **Northwest Renewables (installation and workforce training)**
- **Enphase Energy (battery manufacturing and technical support)**

INLAND POWER & LIGHT

COOPERATIVE RESIDENTIAL BATTERY

EXPECTED OUTCOMES

- Enhanced grid resilience and reduced wildfire risk
- Increased customer participation in demand response
- Valuable insights into distributed energy resource integration and community energy resilience
- Scalable model for rural energy storage deployment

STAKEHOLDER	DESIGN	DEVELOP	DEMONSTRATE
INLAND POWER	Lead	Lead	Lead
COMMUNITY ORGANIZATIONS	Participate	Advise	
INLAND MEMBERSHIP /COMMUNITY	Participate	Participate	
REGULATORY SUBJECT MATTER EXPERTS	Participate		Participate
NORTHWEST RENEWABLES	Advise	Participate	Technical Support
ENPHASE ENERGY		Participate	Technical Support
INTENT		Advise	Advise
AVISTA UTILITIES		Advise	Participate
WASHINGTON STATE UNIVERSITY		Advise	Participate
UNIVERSITY OF IDAHO		Advise	Participate
SOFTWARE PARTNER		Participate	Participate