

## THE OFFICE OF CLEAN ENERGY DEMONSTRATIONS



Energy Improvements in Rural or Remote Areas (ERA) Program Fixed Award Grant Program National Briefing

> Office of Clean Energy Demonstrations U.S. Department of Energy May 2, 2024

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Yes, this webinar is being recorded and will be available on the DOE YouTube channel and the OCED website within the next week.

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# Agenda

- Welcome
- Office of Clean Energy Demonstrations
- Energy Improvements in Rural or Remote Areas Program
- Community Benefits
- Project Overviews
- Community Engagement & Resources
- Wrap-up & Close



# **Opening Remarks**

# Office of Clean Energy Demonstrations (OCED)

# **OCED** Mission

Deliver clean energy technology demonstration projects at scale in partnership with the private sector to accelerate deployment, market adoption, and the equitable transition to a decarbonized energy system.



# Energy Improvements in Rural or Remote Areas (ERA) Program

## **ERA Program Overview**

The Bipartisan Infrastructure Law (BIL) authorizes U.S. Department of Energy (DOE) to invest **\$1 billion in Energy Improvements in Rural or Remote Areas**. The DOE Energy Improvements in Rural or Remote Areas (ERA) Program is managed by the Office of Clean Energy Demonstrations.

#### **Purpose**

#### **Program Goals**

To provide financial assistance to improve, in rural or remote areas of the United States, the resilience, safety, reliability, and availability of energy and environmental protection from adverse impacts of energy generation.



Deliver measurable benefits to energy customers in rural or remote areas by funding replicable energy projects that lower energy costs, improve energy access and resilience, and/or reduce environmental harm;



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Support new rural or remote energy system models using climate-resilient technologies, business structures that promote economic resilience, new financing mechanisms, and/or new community engagement practices; and

#### Build clean energy knowledge, capacity, and selfreliance in rural America.



# **ERA \$50M Funding Opportunity**

In May 2023, OCED announced a \$50 million grant Funding Opportunity Announcement (FOA) for the Energy Improvements in Rural or Remote Areas (ERA) program for small community-driven projects. This FOA is a direct response from rural communities' feedback.

#### **Reduce Barriers to Federal Funding**



- ✓ Simplified application process
- ✓ Removed cost-share requirement
- ✓ Offered technical assistance
- ✓ Reduced financial reporting requirements



## ERA Projects Address Unique Challenges by Deploying a Range of Technologies



# ERA GRANT PROJECT SELECTIONS – LOWER 48



Grid Access and Resiliency for Unserved Rural and Indigenous People Project
Ravalli Electric Community Storage Project
Lake City Area Power and Resiliency Augmentation Enterprise
Permanent, High-Quality Clean Energy Access for Rural Indigenous Communities
Navajo Sun Power! Home Solar Project
Greencare: Empowering Resilience in Poteau
Adams Electric Cooperative Green Energy Project
East Central Community College Solar and Lighting Upgrades
Clean Energy and Efficiency for Dallas County Alabama Schools
Reliability and Cost Effectiveness in Rural Areas Using Environmentally Sound
Rural Rebuild and Reconductor
<b>REMC Transmission Line Rebuild</b>
Cost-Effective and Equitable Cooperative Community Solar in Western Maine

#### Notes:

Subscripts indicate multi-site projects

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# ERA GRANT PROJECT SELECTIONS – ALASKA





# **Community Benefits Plans**

# **Prioritizing Community Benefits in OCED Projects**

OCED **requires** applicants to include a Community Benefits Plan (CBP) to help ensure broadly shared prosperity in the clean energy transition.

By prioritizing community benefits,

we can ensure the next chapter in America's energy story is marked by greater justice, equity, security, and resilience.

# **Community & Labor Engagement**

Diversity, Equity, Inclusion, & Accessibility

Investing in the American Workforce



#### **Justice40 Initiative**

# **Project Overviews**

# Adams Electric Cooperative Green Energy Project

#### **Project Overview**



Selectee: Adams Electric Cooperative



Location: Schuyler County, Illinois



Federal Cost Share: **\$5 million**\*



Technology: Wind and Solar PV Key Facts

- Adams Electric Co-op seeks to install a 1 MW wind turbine and 1 MW solar PV to eliminate more than 40,000 tons of greenhouse gas emissions each year
- Reduce energy costs by more than \$200,000 annually for 7,500 families in former coal mining communities
- Stabilize electricity rates for residents in disadvantaged communities

#### **Community Benefits**

- Partner with schools to support renewable energy curriculum
- Provide wind turbine tours to co-op and community members, students and youth organizations

\*Pending negotiations



# **Clean Energy and Efficiency for Dallas County Alabama Schools**

#### **Project Overview**

Selectee:



Dallas County, Alabama Board of Education



Location:

Dallas County, Alabama



Federal Cost Share: **\$5 million**\*



Technology: Solar PV and Energy Efficiency Upgrades

\*Pending negotiations

#### **Key Facts**

- The Dallas County, Alabama Board of Education seeks to retrofit up to nine schools across the district by upgrading HVAC units, lighting systems, and building controls with smart, energy-efficient technologies
- Three schools could receive up to 353 kW of rooftop solar PV, directly generating energy for their facilities

- Partner with Black Belt Community Foundation to host job fairs, connecting local workers to construction job opportunities associated with the project
- Collaborate with workforce development organizations such as Wallace Community College Selma, AlabamaWorks!, and Tuskegee University to recruit, train and empower the local workforce



## **Cost-Effective and Equitable Cooperative Community Solar in Western Maine**

#### **Project Overview**



Selectee: Center for an Ecology-Based Economy



Location: Western Maine



Federal Cost Share: **\$3 million**\*



Technology: Solar PV

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- The Center for an Ecology-Based Economy seeks to install 150 kW solar PV arrays at six sites across Western Maine to reduce energy costs for consumer- and worker-owned cooperative members
- Reduce annual household electricity costs by 20 40%

#### **Community Benefits**

- 50% of participating households are low-income
- Create job opportunities for local installers and contractors through a partnership with the Rural Co-operative Development Training Program

\*Pending negotiations



# **Decarbonizing the Tongass with Tribally Owned Heat Pumps**

#### **Project Overview**



**Spruce Root** 



Location:

Prince of Wales Island, Alaska



Federal Cost Share: \$2.5 million\*



Technology: **Air-Source Heat Pumps** 

\*Pending negotiations

#### **Key Facts**

Spruce Root seeks to install highly-efficient, air-source heat pumps in approximately 240 tribal homes and buildings, to help reduce residents' energy reliance on and emissions from fossil fuel use



Increase the use of local hydroelectricity to power the heat pumps, keeping rates affordable for all residents

#### **Community Benefits**

Create local jobs and workforce development opportunities to empower residents to support the installation and maintenance of heat pumps

# East Central Community College Solar and Lighting Upgrades

#### **Project Overview**



Selectee: Path Company

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Location: Decatur, Mississippi



Federal Cost Share: **\$2.8 million**\*



Technology: Solar PV and Energy Efficiency Upgrades

\*Pending negotiations



#### **Key Facts**

- East Central Community College aims to install 1 MW of solar PV to provide clean power to 38 campus facilities and upgrade 25 facilities with energy-efficient LED lighting
- Reduce annual energy costs for the college by approximately \$170,000—funds that can be invested into the college and students

- Establish one of the first community-college solar installation and maintenance curricula in Mississippi
- Work with the local K-12 school system, Newton County School District, to highlight the significance of clean energy technology, encourage career opportunities, and foster the study of STEM courses

# **Greencare: Empowering Resilience in Poteau**

#### **Project Overview**



Selectee: Choctaw Nation of Oklahoma

Location:

Poteau, Oklahoma



Federal Cost Share: **\$5 million**\*

#### Technology:

Battery Energy Storage System, Microgrid, and Energy Efficiency Upgrades

#### **Key Facts**

- The Choctaw Nation of Oklahoma aims to create a microgrid with 2.1 MWh of battery energy storage systems that will provide backup power during outages for a health clinic, child development center, and food distribution center
- Upgrade seven buildings across the Choctaw Nation of Oklahoma's Poteau campus with energy efficient equipment
- Reduce reliance on diesel generators by installing a battery energy storage system, providing backup power and reducing greenhouse gas emissions

#### **Community Benefits**

Save \$140,000 annually in electricity costs

\*Pending negotiations



## Grid Access and Resiliency for Unserved Rural and Indigenous People Project

#### **Project Overview**



Selectee: PUD #1 of Ferry County



Location:

Ferry and Okanogan Counties, Washington



Federal Cost Share: **\$5 million**\*



Technology: Grid Improvements

\*Pending negotiations

#### **Key Facts**

- PUD #1 of Ferry County seeks to extend 30 miles of underground, electric distribution lines into a rural area in northeast Washington
- When complete, an estimated 135-190 unserved homes will have access to electrical service for the first time

- Reduce dependence on diesel generators
- Improve air quality and health
- Power modern necessities like heating and cooling, refrigeration, internet, and lighting, which can increase employment and education opportunities



# High Penetration Solar-Battery Project in Ambler, Alaska

#### **Project Overview**



Selectee: Northwest Arctic Borough



Location: Ambler, Alaska



Federal Cost Share: **\$2.1 million**\*



Technology: **Microgrid** 

\*Pending negotiations

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#### **Key Facts**

- Northwest Arctic Borough aims to upgrade an existing power plant to allow for a 400 kW solar PV system and a 500 kWh battery energy storage system
- Decrease diesel usage by more than 20,000 gallons annually, reducing greenhouse gas emissions, noise pollution, and risk of fuel spills

- Village plans to own and operate renewable generating assets and produce 22% of the community's electricity, which would allow diesel generators to be turned off for the first time in more than 40 years
- Located 45 miles north of the Arctic circle, 27% of residents live below the poverty line



## Kokhanok's Paradigm Shift: Big Battery as our System's Energy Backbone

#### **Project Overview**



Selectee:

Kokhanok Village Council



Location: **Kokhanok Village, Alaska** 

Federal Cost Share: **\$5 million**\*

Technology:



Battery Energy Storage System, Solar PV, Wind, Electrical Thermal Storage Heating Units, and Microgrid

\*Pending negotiations

#### **Key Facts**

- The Kokhanok Village Council aims to upgrade Kokhanok, Alaska's microgrid with a 943 kWh battery energy storage system, solar PV, wind turbine, and electric thermal storage heating units to help transition to 100% renewable energy
- Displace 70% or more of the village's diesel use within the first two years of the project's operations, with future diesel primarily used to charge the battery storage system

#### **Community Benefits**

 Install electric thermal storage heating units into 10 elders' and low-income residents' homes, reducing their annual heating costs and increasing comfort



# Lake City Area Power and Resiliency Augmentation Enterprise

#### **Project Overview**



Selectee: Gunnison County Electric Association



Location: Colorado







Grid Improvements

\*Pending negotiations

#### OCED Office of Clean Energy Demonstrations

#### **Key Facts**

- Gunnison County Electric Association aims to replace 30 miles of aged, overhead electric distribution lines, mitigating the rising costs of maintaining outdated and unreliable infrastructure
- Increase grid reliability for rural Gunnison County residents
  who experience frequent power outages

- Engage and collaborate with community stakeholders including government officials, health care and emergency services providers, and local farmers and ranchers—to mitigate potential risks to local communities and ecosystems
- Create clean energy jobs

# Navajo Sun Power! Home Solar Project

#### **Project Overview**

Selectee:



Navajo Transitional Energy Company



Location: Navajo Nation



Federal Cost Share: **\$2.6 million**\*



Technology: Solar PV and Battery Energy Storage System

\*Pending negotiations

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#### **Key Facts**

- Navajo Transitional Energy Company plans to install 375 kW of solar PV with battery energy storage systems on approximately 75 off-grid Navajo Nation homes that are located far from the grid and other community structures, which has delayed electric service to these households
- The project's compact systems expect to lower energy burdens, reduce greenhouse gas emissions, improve air quality, and deliver essential power to residents

#### **Community Benefits**

 Provide the power necessary for homeowners to participate in Navajo Nation and Indian Health Services programs for home improvements such as bathroom additions, indoor plumbing, and cistern pumps at no cost to the homeowners

# New Stuyahok Solar-Battery

#### **Project Overview**

Selectee:



Alaska Village Electric Cooperative



Location: New Stuyahok, Alaska

Federal Cost Share: **\$4.3 million**\*

Technology:



Solar PV, Battery Energy Storage System, and Microgrid

\*Pending negotiations

#### **Key Facts**

- The Alaska Village Electric Cooperative aims to construct a 500 kW solar PV array, a 540 kWh battery energy storage system, and a microgrid controller—leveraging their abundant summer daylight hours to produce energy for two remote indigenous communities
- Increase use of clean energy and storage to decrease electricity rates, emissions, and noise pollution

- Reduce reliance on imported diesel fuels and integrate clean energy to increase microgrid's resilience
- The Alaska Village Electric Cooperative will form an operational agreement with both the Tribe and the City of New Stuyahok to establish a utility board that would oversee operations and provide community input for the project



# **Ouzinkie Independent Power Energy Improvement Project**

#### **Project Overview**



Selectee: Native Village of Ouzinkie

Location:

Spruce Island, Alaska

Federal Cost Share: **\$1.7 million\*** 

Technology:



Solar PV, Battery Energy Storage System, and Microgrid

\*Pending negotiations

#### **Key Facts**

- The Native Village of Ouzinkie seeks to install 160 kW of solar PV and 210 kWh battery energy storage system for a new microgrid in the remote Alaskan Native village, offering reliable, resilient, back-up power during severe weather outages
- Reduce community dependence on diesel fuel and provide resilient backup power during extreme weather events for Ouzinkie's 128 residents

- Reduce electricity costs by an estimated 10%
- Partner with the Alaska Native Tribal Health Consortium, the state's largest nonprofit, to provide project support including onsite training on operations and maintenance, including involvement of local youth



# Permanent, High-Quality Clean Energy Access for Rural Indigenous Communities

#### **Project Overview**



Selectee: Navajo Power Home (NPHome)

Location:

Navajo Nation

Federal Cost Share: **\$5 million**\*

Technology:



Solar PV and Battery Energy Storage System

**Key Facts** 

- Navajo Power Home (NPHome) plans to install 568 kW of solar PV and 1,769 kWh of battery energy storage systems in up to 350 off-grid homes across Navajo Nation
- Provide approximately 140 economically vulnerable homes with a reduced rate, enabling residents access to high-quality, zero-carbon energy

#### **Community Benefits**

 Reduce the use of gas-generators as a main power source, decreasing air and noise pollution

\*Pending negotiations



# **Ravalli Electric Community Storage Project**

#### **Project Overview**



Selectee:

Pacific Northwest Generating Cooperative Power



Location: Victor, Montana



Federal Cost Share: **\$4.9 million**\*



Technology: Battery Energy Storage System

\*Pending negotiations

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#### **Key Facts**

- Pacific Northwest Generating Cooperative Power aims to install a battery energy storage system at the Woodside Substation, which serves two communities that are subject to extreme winter weather and wildfire risks
- The system aims to provide clean backup power during outages to the responding volunteer fire departments, as well a local school used as a community shelter

#### **Community Benefits**

Promote educational, mentoring, job-shadowing opportunities for local, at-risk youth

# **Reliability and Cost Effectiveness in Rural Areas Using Environmentally Sound Practices**

#### **Project Overview**



Selectee:

**Cumberland Valley Electric** 



Location: Kentucky



Federal Cost Share: \$4.9 million\*



**Grid Improvements** 

\*Pending negotiations

#### **Key Facts**

- Cumberland Valley Electric aims to improve grid reliability in three counties by addressing two critical issues: inefficient fuses and vegetation management
- Reduce power outages by 80% and reduce outage restoration costs
- Replace inefficient electrical fuses with self-restoring reclosers across 500 miles of distribution lines

- Create habitats for pollinators and wildlife, while reducing annual right-of-way maintenance costs
- Project partners plan to host workshops and information sessions on environmental conservation, energy efficiency, and career opportunities in the energy sector



# **REMC Transmission Line Rebuild**

#### **Project Overview**



Selectee: Randolph Electric Membership Corporation

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Location:

Snow Camp, Staley, Westmoore, and Ether, North Carolina



Federal Cost Share: **\$4.4 million**\*



Technology: Grid Improvements

\*Pending negotiations

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#### **Key Facts**

- Randolph Electric Membership Corporation aims to replace 21 miles of deteriorating wooden transmission poles with galvanized steel poles, improving infrastructure durability and longevity
- Provide increased energy resilience to combat power outages and damage from extreme weather events in rural North Carolina communities

#### **Community Benefits**

 Partner with North Carolina Electric Membership Corporation to create and implement a transmission apprenticeship program



# **Rural Rebuild and Reconductor**

#### **Project Overview**



Selectee: Monongahela Power Company



Location: West Virginia



Federal Cost Share: **\$5 million**\*



Technology: Grid Improvements

\*Pending negotiations

#### **Key Facts**

 The Monongahela Power Company plans to rebuild more than 23 miles of aged power-distribution lines and connect a two-mile tie line with the Petersburg Substation



- Upgrade distribution lines to increase grid reliability for more than 3,000 customers in rural West Virginia
- Restore electric service faster by rerouting customers to an adjacent circuit while making repairs during an outage

#### **Community Benefits**

 Engage with community-based organizations, labor unions, and educational institutions to address workforce disparity gaps for historically underresourced communities



# Tanacross Solar PV and Tok Battery Energy Storage System

#### **Project Overview**



Selectee: Tanana Chiefs Conference

#### Location:



Native Village of Tanacross and Tok, Alaska

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Federal Cost Share: **\$5 million**\*



Technology: Solar PV, Battery Energy Storage System, and Microgrid

\*Pending negotiations

#### **Key Facts**

• Tanana Chiefs Conference plans to install 1.5 MW of solar PV on the grid at the Alaska Power & Telephone power plant that provides electricity to federally recognized tribes in Tanacross, Tetlin, and Dot Lake



Paired with a 1.5 MWh battery energy storage system in Tok, Alaska, the project is expected to displace more than 125,000 gallons of expensive diesel fuel per year, improving air quality and reducing noise pollution in local communities

#### **Community Benefits**

 Generate \$380,000 in annual revenue to cover operations and maintenance costs and establish a reserve and replacement fund



# Community Engagement Opportunities & Resources

# **Get Involved**



DRAFT – FOR REVIEW

**Community Benefit Commitments Public** 

**Project Milestones** 



Next Steps – Virtual ERA Community Briefings

OCED will hold three regional community briefings to share information with the communities hosting ERA projects.

Information and to register: <u>Energy</u> <u>Improvements in Rural or</u> <u>Remote Areas Local</u> <u>Engagement Opportunities</u> <u>Department of Energy</u> Alaska Briefing Thursday, May 16, 2024 2:00-3:30 pm AKT

Eastern Region Briefing Tuesday, May 21, 2024 6:00-7:30 pm ET

Western Region Briefing Thursday, May 23, 2024 5:00-6:30 pm PT



# **National Environmental Policy Act**

What is NEPA? NEPA is a federal law that requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions.

**Does NEPA Apply?** All projects, including any potential connected actions (40 CFR 1501.9(e)(1)), receiving financial assistance from DOE must be reviewed under NEPA. There are three levels of NEPA reviews:

#### **Environmental Impact Environmental Assessment (EA)** Categorical Exclusion (CX) Statement (EIS) Categories of actions that DOE has A brief analysis to determine whether an EIS • A detailed statement for major federal determined, by regulation, do not is required actions significantly affecting the human individually or cumulatively have a environment Two public review/comment periods significant effect on the human (optional): Two (required) public review/comment environment and for which, therefore, Public scoping comment period and periods: neither an EA nor an EIS normally is Comment period and public scoping meeting ٠ required meeting after the notice of intent to Comment period and public meeting Categorical exclusions do not typically prepare an EIS is released after the draft EA is released involve public review/comment, but are Comment period and public hearing posted for public review once they are after the draft EIS release

NEPA Resources: https://www.energy.gov/oced/oceds-guide-nepa



complete



# For more information



- For questions regarding ERA projects email EngageERA@hq.doe.gov
- OCED Website & Newsletter Sign-up energy.gov/oced

Scroll to bottom to sign up here:



- OCED Exchange (RFIs, NOIs, and FOAs) oced-exchange.energy.gov
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# Thank you!



For more information, please visit energy.gov/OCED