Ashland County, Wisconsin Community Change Grant Program Application

Environmental Protection Agency, Office of Environmental Justice and External Civil Rights (OEJECR) Funding Opportunity Number: EPA-R-OEJECR-OCS-23-04

Lead Applicant: Ashland County, WI

Community Benefits Organization and Statutory Partner: Tamarack Health Ashland Medical Center

Collaborating Partners:

- Cities of Ashland and Mellen
- Northland College
- Bad River Band of Lake Superior Chippewa Indians
- Ashland County Towns- Agenda, Gorgon, Jacobs, La Pointe, Marengo, Morse, Sanborn

Supporting Partners

- University of Wisconsin Extension Ashland County
- Cheq Bay Renewables
- Rural Partners Network USDA



City of Ashland Downtown Main Street

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EPA Climate Change Grant Program (CCGP) Narrative

Section A. Executive Summary

Application Title: Ashland County, Wisconsin – Building Community While Reducing Pollution and Adding Resilience (The Project)

Lead Applicant: Ashland County, Wisconsin

Statutory Partner to the Lead Applicant: Tamarack Health, Ashland Medical Center (AMC) **Contact Information:**

- Lead Applicant: Dan Grady, County Administrator, <u>dan.grady@ashlandcountywi.gov</u>, 715-682-7015, 715-681-1716 (cell)
- Statutory Partner: Jason Douglas, President/CEO Tamarack Health, Ashland Medical Center (AMC), jdouglas@tamarackhealth.org, 715-685-5510, 218-380-1155 (cell)

Eligibility: Ashland County is a local unit of government in the State of Wisconsin. Tamarack Health is a 501(c)(3) and deemed eligible as a Community Benefits Organization (CBO) after review by legal counsel Anich, Wickman & Lindsey, S.C. The letter of review is in Attachment C "Other Attachments".

Climate Action Strategy Strategies 2, 4 & 5 are used.

Strategy 2: Mobility and Transportation Options for Preventing Air Pollution and Improving Public Health and Climate Resilience. The Project will strategically place publicly available EV Charging infrastructure throughout Ashland County and initiate Ashland County EV Fleet infrastructure.

Strategy 4: Microgrid Installation for Community Energy Resilience. The Project will install 22 microgrids with solar PV and battery storage in area facilities.

Strategy 5: Community Resilience Hubs. The project will use new microgrids at area facilities at 10 Community Resilience Hubs.

Pollution Reduction Strategy: Strategy 2 is used.

Strategy 2: Outdoor Air Quality and Community Health Improvements. The Project will install 5.7 MW of Solar PV capacity to reduce GHG emissions and install 49 Electric Vehicle Supply Equipment (EVSE) ports to support county-wide public EV charging and County fleet charging to reduce GHG emissions.

Grant Award Period and Completion: Summer 2024 to Spring 2027 (36 months) Amount of EPA Funding Requested: \$19,093,048

Target Investment Area: TIA D: Disadvantaged Unincorporated Communities -**Disadvantaged Community to Benefit from the Projects**: Fifteen of the seventeen census tracts within Ashland County's borders are identified as disadvantaged by the EPA EJScreen Tool. The project will benefit all fifteen disadvantaged tracts. A list of all census tracts in Ashland County and their designation is included in Section 1.4 Community Strength Plan. **Other Sources of Funding:**

- Wisconsin Public Service Commission's Focus on Energy funding for Solar PV
- In-kind personnel from all stakeholders as itemized in Attachment A: Program Budget
- Tamarack Health Ashland Medical Center Cost Share

Resubmission Status: New application **Section B. Project Workplan**

Part 1 Community-Driven Investments for Change

1.1 Community Vision Description

Community Description:

Ashland County has a rich history characterized by turn-of-the-century brownstone buildings, unique architecture, and modern hand-painted murals telling the colorful stories of past entrepreneurs and naturalists who have shaped the landscape. From the inland lakes in the Chequamegon-Nicolet National Forest to the southern shores of Lake Superior, containing the Chequamegon Bay and islands within the Apostle Islands National Lakeshore, the area has a wealth of year-round outdoor recreation, scenic views, spectacular waterfalls, and a friendly and diverse population.

The County has a population of 16,027 according to the 2020 Decennial Census¹. Its median Household Income is \$55,070, compared to \$70,996 in Wisconsin, which is the second lowest county in Wisconsin. The poverty rate is 16%, well above the state average of 10.7%. The County is 13% native American and is home to the Bad River Band of Lake Superior Chippewa Indians, the largest Chippewa reservation in Wisconsin. The Bad River reservation is 13% of Ashland County's land area.

Ashland County has a history of persistent poverty and struggles with meeting essential services. In attempts to remedy financial challenges, voters turned down a referendum in April 2021 to add nearly \$1M in additional property taxes. A similar referendum in 2018 to deal with the drug epidemic failed by a nearly 2-1 margin. A proposal in October 2020 to raise money to balance the budget through a wheel tax also failed.²

County leaders said they were left with no alternative but to cut programs. The problem was exacerbated "when about 85 percent of the [Town of Sanborn's land in Ashland County] was declared tax-exempt [in 2022] when a federal appeals court ruled that Bad River tribal members who own property that was once sold to non-native tribal residents but has come back into tribal hands cannot be taxed under the 1854 treaty between the United States and the Ojibwe Nation".³

Out of the seventeen U.S. Census tracts in the County, fifteen are deemed disadvantaged by the Climate and Economic Justice Screening Tool (CEJST). The EPA's EJScreen tool map, included with this grant application, shows most of Ashland County as a disadvantaged community. Additional details are in Attachment F Community Strength Plan. Asking for more tax dollars to balance budgets from communities that don't have the resources has failed.

This EPA Community Change Grant Program is exactly what this community needs – to change and break the down-spiraling economic cycle while preserving its natural beauty, enhancing health benefits, and reducing pollution. Direct benefits will go to local units of government

¹ 2020 Decennial Census

² <u>Referendum vote means cuts are coming | Subscriber | apg-wi.com</u>

³ Ashland County looks for answers to Sanborn property tax issue | Local | apg-wi.com

governing disadvantaged communities in the form of reduced utility bills. AMC's Regional Wellness Fund, described in detail in Attachment E Community Engagement Plan and Attachment F Community Strength Plan, will significantly increase financially, with its benefits targeted at those most in need. 22 microgrids will build community resilience to mitigate against climate change, and a county-wide EV charging network will bring in regional tourism dollars to area businesses. Pollution will be reduced by avoided greenhouse gas emissions through 5.7 MW of solar PV installations and replacing gasoline used for transportation with electric charging.

Community Challenges:

Climate Change

Ashland County experienced a "500-year" flood in 2016, again in 2018, and again in 2023. The 2016 flood caused \$38 million in damages and a federal disaster declaration. 8"-12" of rain was reported in Ashland County. Communities were isolated, the National Guard was called in and two deaths were attributed to the flood⁴. U.S. Forest Service roads in the Chequamegon-Nicolet National Forest are still being repaired three years later. 300 miles of the 450 miles of forest roads were closed.⁵ As much as 13" of rain was reported in the 2018 flood. Highways 169, 13 and 2 were closed.⁶ After record snowfall, followed by near record 80-degree temperatures and subsequent rain, 2023 saw roads washed out again causing the City of Ashland's wastewater treatment plant (WWTP) to overflow and discharge 18 million gallons of sewage into Lake Superior.⁷ Climate Change has clearly impacted Ashland County.

Over a 10-year period, Northern Wisconsin Counties have seen roughly \$365 million in property damage from flooding as reported by the state of Wisconsin.⁸

The rural setting of Ashland County has a limited number of highways that transect the area. When several sections of Highway 2 closed during the 2016 flood, the Bad River Reservation was isolated from the outside world. The closing of Highway 13, Ashland County's main northsouth corridor, caused significant hardship for residents and first responders for numerous weeks.

Due to the remote nature of Ashland County, its residents and infrastructure are particularly susceptible to weather-related disasters. Climate mitigation solutions that help the region be resilient in the face of increasingly damaging weather events will be invaluable moving forward.

⁴ Storms, flooding hammer region | News | apg-wi.com

⁵ Forest roads damaged in 2016 floods still not repaired | Subscriber | apg-wi.com

⁶ <u>Heavy rains flood region | Subscriber | apg-wi.com</u>

⁷ Ashland preps to declare flooding emergency | Local | apg-wi.com

⁸ New bill aims to prevent flooding | Columnists | apg-wi.com



Figure 1 Northern Great Lakes Visitor Center on Ashland County's border during the 2018 flood with water closing Hwy. 2

Financial Crisis:

The financial crisis in Ashland County has led to tough decisions including cutting services, which in turn has led to strained relations between factions within the County. Breaking this cycle of economic despair and mending relationships is a challenge.

As an example, the Town of La Pointe has made formal claims, demanding that the County return property taxes to it because the county through budget cuts "ended a decades-long agreement under which it essentially refunded a portion of La Pointe's property taxes to help the town pay for its own police department" and now is no longer providing police protection to the community ⁹. The Town of La Pointe is uniquely located on Madeline Island, a 2.5-mile ferry ride from the City of Bayfield in Bayfield County and a 26 mile/1 hour and 15-minute trip from the Ashland County's Sheriff department.

Resolving the lost tax revenue from native American lands is another challenge. Requests have been made to Wisconsin legislatures to resolve this issue in a similar fashion to how the federal government pays local governments in lieu of taxes for Federal lands. To date, the Wisconsin legislature has responded with temporary patches, such as a loan to the Town of Sanborn.¹⁰

Supply Chain Constraints:

There are also more common challenges, like supply chain challenges. An electrical transformer or select electrical equipment can have a one year or longer delivery lead time. Fortunately, this project's three-year project scope is adequate to overcome this constraint.

⁹ La Pointe files claim over police services | Police | apg-wi.com

¹⁰ State approves \$600K loan to Sanborn | Local | apg-wi.com

Community Vision:

- 1. Breaking the County's downward economic cycle can be helped by:
 - Installing solar PV to reduce utility bills for County and Town governments, freeing up money for other essential services
 - Installing electric vehicle charging equipment to reduce transportation expenses for the county fleet as well as public transportation
 - Enhance economic development through carbon-free transportation infrastructure, bringing in additional tourism dollars while supporting local businesses
 - Dramatically expand and redefine AMC's current community benefits program with a new solar PV revenue stream. This new revenue will go directly to disadvantaged individuals, and community members will have oversight.
- 2. Building community resilience by installing 22 microgrids dispersed across the county at county, city, and town facilities and Northland College, helping to mitigate climate change and creating several community resilience hubs/centers.
- Creating a full-time Energy Specialist position within the County for project management and climate mitigation. The focus of this position will be on energy data collection and analysis, project development and implementation, and community engagement and education.
- 4. Enhancing health benefits by reducing greenhouse gas and particulate matter emissions by installing both solar PV and electric vehicle infrastructure.
- 5. Reducing water pollution by upgrading the City of Ashland's WWTP into a more resilient facility. The plant currently treats the wastewater for nearly 50% of the County's population. This will be accomplished by adding solar PV, battery storage, integrate backup generation, and install smart controls to form a modern and resilient microgrid, capable of operating with or without the electrical grid.
- 6. Creating a Solar Energy and Resilience Dashboard to serve the region's central hub for energy monitoring. The dashboard will demonstrate the effectiveness of the region's clean energy investments, a teaching tool, and connect interested parties.
- 7. Demonstrating "firsts" in Northern Wisconsin for:
 - Solar parking lot canopies
 - Single-axis solar tracking arrays
 - Brownfield redevelopment with solar modules on a retired landfill

1.2 Selected Strategies

1.2.1 Strategy Overview

The Ashland County Wisconsin – Building Community while Reducing Pollution and adding Resilience (the Project) is comprised of ten project groups:

- 1. 5 microgrids at County facilities including private EV charging stations and the beginning of a County EV fleet (Climate Action Strategy 4).
- 2. 6 public EV charging stations (24 L2/L3 charging ports) at sites dispersed across the County (Climate Action Strategy 2)
- 3. 11 microgrids at Town facilities (Climate Action Strategy 4).

- 4. 3 microgrids at the City of Ashland essential facilities including the WWTP, Fire Station, and Community Center (Climate Action Strategy 4)
- 5. Public Level-2 EV charging within the City of Ashland and Town of Gordon (Climate Action Strategy 2)
- 6. Solar array sited on a redeveloped landfill for the City of Mellen's WWTP (Pollution Reduction Strategy 2)
- 7. A 4 MW solar array at AMC (Pollution Reduction Strategy 2)
- 2 Community Resilience Hubs and microgrids located at Northland College's Ponzio Campus Center/Mead Hall, and at the Center for Science and Environment (CSE), demonstrating parking lot solar canopies (a first for Northern Wisconsin), and intelligent energy optimization through an AI supervisory layer of control. The project offers many educational opportunities for the college and community. (Climate Action Strategy 4 & 5)
- 9. A microgrid at the Laura Jean Zach Center, a 501(c)(3) day center for disabled adults. (Climate Action Strategy 4)
- 10. Community Resilience Hubs at 7 Town essential buildings (Climate Action Strategy 5).
- 11. Community Resilience Hub at the City of Ashland's Community Center (Climate Action Strategy 5)

The stated strategies above will achieve the following objectives:

- 1. Create resilient County infrastructure so that essential services are better prepared to withstand severe weather events, other emergencies, and meet first responder responsibilities.
- 2. Reduce greenhouse gas emissions to assist in climate change mitigation and improve community health.
- 3. Create designated community resiliency hubs to enhance disaster mitigation.
- 4. Generate community wealth by reducing government expenses and the direct infusion of financial support to the individuals and communities most in need.
- 5. Engage directly with the community to assist AMC's Regional Wellness Fund in prioritizing community benefits.
- 6. Having the County administration, with board oversight, and the newly hired Ashland County Energy Specialist Coordinate all aspects of the Community Change Project.

Climate Action Strategies Overview:

Strategy 2: Mobility and Transportation Options for Preventing Air Pollution and Improving Public Health and Climate Resilience:

Overview: Working from results of the *Ashland County Charges Ahead* workgroup, the Project will strategically place public EV Charging systems at six County sites. Each site will have a minimum of 4 charging ports which can simultaneously charge, at least two 150kW DC fast chargers, and at least two Level-2 chargers. In addition, the County will lease for an initial 3-year term, four F-150 Ford EV Lightning pickups and install 80amp Level-2 fleet chargers at each of the three highway garages and the Sheriff's Department. The City of Ashland will install public Level-2 charging infrastructure at two sites. The Town of Gordon will install Level-2 charging at its Town Hall, a walking distance from Gordon Lake Beach and handicap accessible

parking area. Three towns will also lease F-150 EV trucks (or equivalent) for an initial 3-year term.

Implementation: The County will work with Xcel Energy, Bayfield Electric Cooperative, and Cheq Bay Renewables to develop a preliminary site plan and issue a RFP to select an Electric Vehicle Supply Equipment (EVSE) vendor. Xcel Energy will install all EVSE and Electric Vehicle Supply Infrastructure (EVSI) at the sites within their territory, guaranteeing safety and code compliance. Bayfield Electric Cooperative will install utility service upgrades at the Bad River Reservation and the EVSE vendor and installation will be competitively bid.

Integration: The public charging stations will complement the county-owned private Level-2 charging stations located in each highway garage which are exclusively used for County fleet vehicles. As County electric vehicles are used, the added public charging stations will reduce range anxiety and increase travel efficiency. The fleet charging stations will also be integrated to, and be a component of, the County microgrids. Each will have solar PV supporting zero-emissions charging. The vehicles will offer vehicle-to-load (VTL) support and be capable of providing power to the buildings during emergency situations.

Requested Funding: Xcel Energy has a commercial EVC-1 tariff which supports EVSE installations by offering "program credits" based on kW capacity. Five of the six sites will be in Xcel Energy utility territory. Ashland County has worked with Xcel Energy to determine that on average 20% of the public charging stations costs will be covered by this tariff, and therefore the remaining 80% require grant support.

Strategy 4: Microgrid Installation for Community Energy Resilience:

Overview: Install 22 microgrids with solar PV and battery storage at County, town, city, and nonprofit facilities. The County will install five microgrids in essential service buildings, one in each of three highway garages, one in the Sheriff Department building, and one in the Health and Human Services (HHS) building. The Towns of Ashland County will install 11 microgrids at Town Halls/Garages and create 7 publicly-accessible Community Resilience Hubs where essential services like cell phone charging and shelter can be provided during extreme weather or emergency events. The City of Ashland will install 3 microgrids at their WWTP, Fire Station, and Community Center. Northland College will install 2 microgrids at two essential locations creating the community's largest Community Resilience Hub. The Laura Jean Zach Center will also install a microgrid creating cost savings and resilience for disabled seniors.

Microgrids offer direct financial benefits by reducing utility bills as summarized in the Program Budget. They also offer community resilience which is more intangible but of greater value. Another significant benefit of microgrids, especially when coupled with smart controls, is to support the grid itself. As an example, Bayfield County, adjacent to Ashland County, commissioned the first AI-enabled microgrid in Wisconsin, likely the Midwest, and maybe the nation supporting its courthouse and law enforcement center. By flattening the building's load (demand), especially during peak events, the utility receives direct benefits. The Project reduces the utility's capacity needs, stabilizes the grid, and prevents or delays the need for new power plant capacity additions and transmission/distribution line upgrades.

This Project proposes nearly 2MW/3.3MWH of battery capacity. The largest operating battery system in Wisconsin is in the County at the Bad River reservation's 3 microgrids with

500kW/1000kWh of battery capacity. This project will build upon that experience and the experience with Bayfield County.



Figure 2 Real-time flattening of utility demand

Figure 2 is from Bayfield County's Jail/Courthouse microgrid, commissioned November 2023, and using Xcel Energy's Empower Resiliency tariff. The dark red line shows the building load, the straight green line is the power provided by Xcel, and the variable green line toward the bottom is the battery being discharged to flatten utility power use.

The larger microgrids at Northland College and in the City of Ashland will follow this design with similar intelligent controls. Cheq Bay Renewables assisted in developing this project and the Bad River projects.

At the Bayfield Courthouse approximately 33kW of demand was eliminated using a relatively small 110kW battery on January 12, 2024. There was no assistance from solar generation because it was snowing. Extrapolating the demand reduction from this Project's proposed 2MW of battery capacity, roughly 600kW of utility demand could be reduced on a daily basis, and much more for short periods of time (if requested, and compensated, by the utility). The batteries proposed for this Project are sized for full capacity use (not demonstration) and the actual demand reduction will be significantly greater than 600kW. This benefits the grid and the community.

Implementation: The County, Towns, Cities, and nonprofits will work with Cheq Bay Renewables (CBR) to develop preliminary plans for each microgrid and jointly issue a RFP to purchase all needed equipment and select the installation contractor. The selected contractor will be responsible for final engineering design, construction commissioning and O&M services.

Integration: Many of the microgrids will have integrated Level-2 EV charging for government fleet use. The County, Towns, Cities, and nonprofits will retain their independence legally, but will coordinate all aspects of their respective projects, from preliminary design, release of RFP, installation, operation and maintenance. Combining municipal projects under a common umbrella while retaining independence worked successfully in other CBR projects and led to reduced costs because of economy of scale. AMC's large solar project could concurrently release its RFP.

Requested Funding: Project cost estimates are determined from current and ongoing installations in the immediate area. Grant requests are reduced by Wisconsin's Focus on Energy incentive for solar PV and in-kind preliminary design management services provided by CBR, County, Cities, AMC, and Northland College. In December 2023, AMC released a Request for Information (RFI) to refine their project cost estimates. CBR worked with local contractor Jolma Electric who provided pro bono cost estimates that are included in the Program Budget. The estimated installation cost for each project determined the percentage of total grant request as presented in the budget.

Strategy 5: Community Resilience Hubs:

Overview: The new microgrids at Town facilities will create Community Resilience Hubs while reducing utility bills and keeping the power on during outages. Most Town facilities are similar in size and include a nearby garage which houses road maintenance equipment. Each of the 13 Towns and 1 Village was contacted and those that expressed interest in pursuing a microgrid and had a suitable site with adequate solar window were considered. Seven sites met these requirements. The microgrids are modest in size and capacity but will reduce electric bills, reduce greenhouse gas emissions, and offer power to modest loads during power outages. In addition, their primary functions will be to provide shelter, heat, access to water, access to prepared food, serve as a command-and-control center for emergency services personnel, and provide electricity for powering cell phones and other critical devices.

The City of Ashland's microgrid at its Community Center will serve as a Community Resilience Hub. In addition, Northland College will have two microgrids. These will be the County's largest Community Resiliency Hubs with 615 kW of solar PV, 750kW/1210kWh of battery storage and microgrid controls. The project will demonstrate parking lot solar canopies, demand side management, energy arbitrage, and an AI-assisted supervisory layer of intelligent control and provide numerous educational opportunities for Northland College students, staff, and community members. Students will be able to log in to each hub's data recorders and analyze 15-minute data over the project's life.

Students affiliated with the Center for Rural Communities (CRC) at Northland College will help create, monitor, and maintain a Solar Dashboard proposed for this grant opportunity. The College will also continue to involve the community in outreach as it did in Nov. 2023 by hosting a Renewable Energy and Efficiency Presentation and Tour of projects the College

accomplished in 2023. Renewable Energy vendors have also recently contacted Northland to showcase their services to students and the community.

Community engagement and educational opportunities are key to the Community Resilience Hubs as detailed in Attachment E, Community Engagement Plan.

Implementation: The Community Resilience Hub projects will coordinate with Ashland County, the University of Wisconsin Extension - Ashland County and Northland College to design a common protocol and to create and document a new element of the County's Resiliency Plan.

Integration: The Community Resilience Hubs are integral to the microgrid's development at each site. Once the microgrids are operational, the accompanying Resiliency Plan will be implemented. Community members will also be made aware of new Resilience Hubs available to them and their neighbors.

Requested Funding: Attachment A, Program Budget and Attachment E, Community Engagement and Collaborative Governance Plan outline the costs associated with the Community Engagement Plan. The Program Budget details the activities and costs, plus lists the percentage compared to the total budget.

Pollution Reduction Strategies Overview:

Strategy 2: Outdoor Air Quality and Community Health Improvements.

Overview: The Projects will install 5.7 MW of solar PV to reduce GHG emissions. The Projects will also install a total of 49 EV charging ports, 42 ports to support County-wide public EV charging plus 4 County and 3 Town fleet charging ports, all of which will also reduce emissions. AMC's 4MW solar field will generate a predictable and ongoing revenue stream that will be utilized to benefit the disadvantaged communities they serve and be administered through AMC's Regional Wellness Fund as well as reduce emissions from the power plants.

Implementation: The AMC project's phase 1 and phase 2 solar analyses were completed by Madison Solar Consulting and Cheq Bay Renewables in December 2023. A Request for Information (RFI) was released to likely bidders on December 11, 2023, to refine cost estimates for a 4mW in-front-of-the-meter (IFM) solar PV installation. Coordination has been initiated with Xcel Energy for the project's implementation. A detailed RFP will be issued in the spring of 2024 with construction in the summer of 2025. Completion of AMC's solar project is scheduled for 2026, within the 3-year project time frame. Care will be taken to secure key technologies (e.g. switch gear) with long lead times.

Two other large solar PV installations are proposed; Northland College's microgrids (615 kW) and the City of Ashland's WWTP (334kW). A request for proposals (RFP) to select a contractor for design and construction will be released within the first quarter following the signed award contracts. The selected contractor will begin the utility interconnection application process in the first quarter following being selected, with a 30% design, and complete engineering to 90% design during the second and third quarters after selection. Project construction will begin in the summer of 2025 and commissioning before the end of 2026.

Integration: All three large solar projects will follow a similar timeline and be coordinated by Cheq Bay Renewables. Lessons learned from one project will be shared with other projects to increase efficiency and reduce downtime.

AMC's foundation board, who oversees the Regional Wellness Fund is composed of 10 community members with the primary mission of supporting community efforts for overall wellness. The solar project will expand the Fund's activities with all the new funds earmarked for disadvantaged communities within Ashland County.

Requested Funding: The requested funding for AMC's project was determined by the results of the RFI released in December 2023. Northland College's and the City of Ashland's microgrids have preliminary cost estimated developed by Cheq Bay Renewables with assistance from contractor Jolma Electric of Ashland and include vendor quotes from BESS suppliers and construction costs from Jolma Electric. Where applicable, the solar PV costs have been reduced by Wisconsin's Focus on Energy incentive funding. The percentage was determined by actual cost estimates.

1.2.2 Climate Action Strategies

The Climate Action Strategies associated with the Project will avoid 7414 tons of CO2 emissions annually helping to mitigate against the impact of climate change. Specifically, the CO2 emissions avoided are summarized in the following tables:

| CO2 Emissions Reduced by Solar PV | | | | | |
|-----------------------------------|----------------------|---------------|-------------------|-------------|--|
| Project | Project Description | Solar PV | Annual Generation | CO2 avoided | |
| # | | Capacity (kW) | (kWh) | (tons) | |
| 1 | Ashland County | 222 | 112 000 | 176 | |
| | Microgrids (5) | 222 | 115,800 | 170 | |
| 3 | Town Microgrids (11) | 157 | 188,400 | 148 | |
| 4 | City of Ashland | 566 | | EDE | |
| | Microgrids (3) | 000 | 707,500 | 550 | |
| 6 | City of Mellen Solar | 123 | 143,000 | 115 | |
| 7 | AMC Solar Field | 4,000 | 5,600,000 | 4375 | |
| 8 | Northland College | 615 | | EDO | |
| | Microgrids (2) | 015 | 070,500 | 526 | |
| 9 | Laura Jean Zach | 15 | 10 500 | 1 5 | |
| | Microgrid | 15 | 19,500 | 15 | |
| | Total | 5,705 | 7,448,700 | 5893 | |

Table 1

| CO2 Emissions Reduced by EV Charging | | | | | | | |
|--------------------------------------|--------------------|-----------|----------------|------------------------|-----------------|--|--|
| Project | Project | Annual | Electric Miles | s Gasoline CO2 Avoided | | | |
| # | Description | kWh | Driven | Equivalent | (66% reduction) | | |
| | | | | (Gal) | | | |
| 1 | Ashland County | 70,000 | 140,000 | 7777 | 44 | | |
| | Fleet Charging | | | | | | |
| 2 | County Public EV | 1,511,100 | 4,835,520 | 193,421 | 1251 | | |
| | Charging | | | | | | |
| 3g | Town of Goron L2 | 10,000 | 32,000 | 1280 | 9 | | |
| 5 | City of Ashland L2 | 131,400 | 420,480 | 16,819 | 109 | | |
| | Charging | | | | | | |

| 8 | Northland | 131,400 | 420,480 | 16,819 | 109 |
|---|--------------------|-----------|-----------|---------|------|
| | College L2 | | | | |
| | Charging | | | | |
| | Total all 49 Plugs | 1,803,900 | 5,736,480 | 230,389 | 1522 |
| | | | | | |

Table 2

Further details and assumptions used in these tables are listed in the "EV Charging + Emissions Analysis Tab" found in Attachment A Program Budget. The EPA Greenhouse Gas Equivalencies Calculator was used.

The microgrids will also help the County and community adapt to severe weather events and enable the County's essential services and first responders to better respond to emergency situations, thereby reducing risk and challenges facing the area. Community Resiliency Hubs (project 10) will provide a safe and secure resource for basic human needs (e.g. heat, and electricity) and serve as emergency services command-and-control center. The Climate Action Strategies will also reduce utility bills and transportation costs thereby lessening the financial strain on County services and taxpayers, again reducing risk and mitigating stated challenges.

The Climate Action Strategies are responsive to the community needs and challenges as identified in the Community Vision by reducing costs, lessening the economic burden, increasing resilience through microgrid development and Community Resilience Hubs, building community through strategic planning with increased workforce development, and increasing health benefits by reducing pollutants from fossil-fueled transportation and power.

1.2.3 Pollution Reduction Strategies

The installation of 5.7 MW of solar PV will reduce reliance on utility power, reducing emissions and improving air quality and health benefits for the area residents. The quantities of avoided GHG emissions are substantial and measurable. For example, 5.7 MW of solar PV would generate over 7,575,000 kWh annually, offsetting 5,893 Tons of CO2 equivalent. In addition, avoided gallons of gasoline when compared to utility supplied electricity would eliminate 41 pounds of CO2 for every 100 miles driven.¹¹ The AMC project will also add a new revenue stream earmarked for the Regional Wellness Fund which will target local disadvantaged communities.

A resilient microgrid at the County's largest WWTP will enhance the Plants resilience and extend the life of existing backup fossil generation by increasing its efficiency and reducing runtime.

The Pollution Reduction Strategies is consistent with the Community Vision Plan and will improve area health and reduce persistent challenges.

¹¹ Bayfield County 2022 Fleet Fuel Analysis, CBR

1.3 Community Engagement and Collaborative Governance Plan

The Community Engagement and Collaborative Governance Plan is broken down into three sections: 1) Past outreach and engagement conducted, 2) plan implementation, and 3) collaborative governance structure.

1.3.1 Past Community Outreach and Engagement Conducted

Multiple Ashland County entities have been working on solar installations and electric vehicle infrastructure as a new clean energy program for almost 10 years.

An example of how core partners have worked together and in diverse communities is that **UW Extension Ashland County** helped write a PACE designation for the county in 2018; also, that year, with UW Extension guidance, the county purchased and installed 24kW of solar PV on the Courthouse roof to offset the building's electricity use and reduce emissions.

In 2019, **UW Extension partnered with CBR** to host country-wide public tours of farms, businesses, private residences, and the Bad River Band's air quality monitoring station as part of Cheq Bay Renewables' (CBR) annual solar tour event. This event and activities helped build a foundation of awareness of and appreciation for solar power as a viable clean energy source for multiple types of users. For example, **CBR's engagement with the Bad River Band** on this tour led to establishing a technical partnership with the tribe's Mashkiibiizii Natural Resources Department to help the tribe build the area's first 3 microgrids at essential tribal facilities which house the largest battery storage system in Wisconsin at 500kW/1000kWh.

In 2023, **UW Extension met with local government leaders** in 10 towns, villages, townships, and a city during a series of community and one-on-one meetings to discuss activities that would help them be more resilient in the face of climate change impacts, and to help reduce pollution created by burning fossil fuels used to power their community buildings. The concept of resilience hubs was introduced at community meetings to enhance the understanding that municipal buildings could be self-sufficient energy generators for local residents who need a safe place to go when the power goes out during extreme weather.

In early 2023, UW Extension initiated a new way to address and build a clean energy economy after conducting an informal **needs assessment of local governments, businesses, a chamber of commerce, NGOs, and individuals** that wanted to explore solar and EV options. We found that stakeholders were interested in using renewable energy options, but lacked technical competence, as well as funding, to effectively pursue them. Without significant grant funding, most of Ashland County's local governments, businesses, and property owners are not now able to afford solar energy as a power source, nor afford EV vehicles or charging stations. As a small, rural disadvantaged county, we need outside funding such as this grant to become more resilient and energy efficient and less polluting.

Here is how we recently explored clean energy options with stakeholders throughout the county and with the Bad River Band, which demonstrates how our past engagements have impacted our engagement strategies, project selection, and implementation approaches.

Ashland County Charges Ahead! Work Group

We took the results from our needs assessment to develop a focused work group. In April 2023, UW-Extension Ashland County and CBR began co-hosting a new community work group called *Ashland County Charges Ahead*. The group established four goals to be applied across Ashland County; members met monthly for 1.5 hours each time over 10 months. Each meeting featured a guest speaker to expand the work group members' EV and clean energy literacy, and to connect members with specialists they could network with on future projects or developments. Recordings of all guest speakers' presentations and some of the group's discussions are posted on the public Ashland County UW Extension <u>website</u>, as well as on the <u>CBR website</u>.

The initial group had 38 participants and was expanded as interest grew. Participants included a widely diverse group of state and regional organizations and departments, local government officials, area businesses, car dealerships, Xcel Energy (main power company in the region), Northland College and a technical college, chamber of commerce office and an area economic development committee, area nonprofit organizations such as the local chapter of the national group Citizens Climate Lobby and representatives from the bipartisan League of Women Voters' local chapter, economic development staff and staff from the natural resources department for the Bad River Band of Lake Superior Chippewa, and several early adopter citizens.

Ashland County Charges Ahead is the primary community engagement group that's been used to develop the county-wide EV charging infrastructure plan. The lead facilitator for the group is a UW Extension educator who will also oversee execution of the shared 2024 outreach plan.

The first goal for the work group was to develop a map of existing private and public electric charging stations, plot potential future locations, and engage with potential site owners about site viability. An outcome of that goal was a brand-new map with layers that located existing private and public charging stations across the county, including charging rates and charging levels, and a proposed map of new private and public charging stations with suggested levels and priority rankings. This map serves as the guide for identifying future sites based on criteria such as geographic considerations, site logistics, accessibility, and demand.

The second goal was "Determine what grants are available to pay for charging stations and infrastructure: Can we apply collaboratively?" The focus was to explore various funding opportunities to implement the EVSE plan and explore if we could apply as a county-wide entity to streamline and simplify application processes. Guest speakers included employees with the Wisconsin Department of Transportation, Wisconsin Clean Cities, Xcel Energy, and CBR to explain federal and state monies available that could support an Ashland County clean energy economy.

The third goal was "Determine what kinds of vehicles are available for different uses, and whether a group vehicle purchase is possible or needed." During two meetings that focused on this goal, the guest speakers included representatives from different vehicle users (a police chief using EV squad cars, a local dealership that sells an EV car, a hybrid Jeep, and a pick-up truck, the directors of two Wisconsin EV owners associations, and local EV drivers) to learn about vehicle functionality, sizes and weights, costs and availability, and the possibility of organizing a county-wide group purchase or lease project to reduce overall costs to make it easier for disadvantaged buyers.

The fourth goal was to "Develop an outreach campaign for county partners to use in 2024." Two meetings were held that focused on identifying outreach messages for diverse audiences to help increase EV and clean energy literacy throughout the county and Bad River Band. We took into consideration social justice issues to ensure that all community stakeholders would be introduced to these messages.

The work group members contributed their outreach activities and program ideas for each month of 2024; using their ideas, we created an ongoing calendar as a mechanism to keep multiple messages fresh and related to all audiences. When appropriate, messages and activities are included that address social justice perspectives and our disadvantaged community members. A schedule of about two dozen activities and programs for 2024 is included in this section; we've included a budget of \$58,300 spent over three years to conduct these activities.

Cheq Bay Renewables Solar Developments and Grant Projects

CBR has worked extensively with Xcel Energy to develop a county-wide EV charging plan for adjacent Bayfield County. In June 2023, CBR applied through the U.S. Department of Transportation for the CFI grant opportunity for implementation.

In addition, CBR had been working with the City of Ashland to monitor existing solar installations and develop new ones. For example, CBR completed a preliminary site analysis of the city's wastewater treatment plant (WWTP) in the summer of 2023, and then presented a project outline at the City's Sustainability Committee to encourage first steps to advance the project's implementation. The City Planner has worked with the Public Works Department Director to further this project by doing additional data analysis budget analysis.

CBR had also completed an adjacent county-wide U.S. Department of Energy ERA grant application that involved developing and installing county and town microgrids and EV charging station implementation. As an extension that arose from that grant application, preliminary solar installation and EV charging station site assessments were completed in the summer of 2023 for all three Ashland County Highway Garages, in collaboration with the county Highway Department, to assess site logistics and promote solar arrays to the Highway Commissioner.

CBR had also been working with <u>Madison Solar Consulting</u>, a Madison-based technical expert firm, on a solar feasibility study for two Ashland County-based entities: Ashland Medical Center

and with the Bad River Band of Chippewa Indians who completed the installation of three microgrids at essential facilities in 2020. The three tribal facilities--one of which is a WWTP and the second is their community health clinic--comprise the largest battery storage system to date in Wisconsin.

Northland College

Northland College is a private, liberal arts college with a progressive focus on the environment and sustainability. It prepares students from across the United States and around the world for meaningful lives and successful careers. Founded in 1892, the College is surrounded by unique natural areas and Lake Superior, making it an unparalleled living laboratory and natural playground for faculty, staff, and students.

The College has conducted numerous renewable energy and energy efficiency community events in the last 20 years. Most recently, in November 2023, the campus Sustainability Work Group (made up of 20 student, faculty, and staff members) offered two presentations and two tours of the renewable energy projects it completed in 2023: a geothermal heating project, an AC replacement project, a solar improvement project, a new solar installation (proposed and funded by students), heat pump installations, and the replacement of 23 boilers that increased efficiency from 80 to 95 percent.

These community outreach events were especially well-attended by students, involved student planning, and included a student presenter. Similar events would be carried out for the newly proposed solar, microgrid, and EV projects; they are included in our 2024 calendar of outreach events included in this plan.

1.3.2 Community Engagement Plan Implementation

The Community Engagement Calendar of Activities is presented in the table below in an annual format with activities that can be repeated and updated throughout the performance period. These are carefully curated outreach methods that were generated by diverse members of the Ashland County Charges Ahead work group, Bad River Band, Northland College, chamber of commerce office, and UW Extension.

| Ashland County Community Engagement Calendar of Activities 2024-2027 | | | | | |
|--|---------------------------------------|---|-------------------------|----------------|--|
| MONTH | ACTION/ACTIVITY | AUDIENCE | | | |
| | UW Extension Countywide awareness | | General Public, | | |
| | Submit press release | press release Ashland County, of group's contributions, | | Bad River Band | |
| | about Work Group | CBR, local | accomplishments, future | | |
| Jan | progress | government | plans | | |
| | Press release with Countywide awarene | | Countywide awareness | General public | |
| | updates about the | UW Extension, of past, current, and | | | |
| | EPA CCGP and CRC | Northland | planned clean energy | | |
| Feb | Solar Dashboard | College | projects | | |

| Ashland County Community Engagement Calendar of Activities 2024-2027 | | | | | |
|--|---|---|---|--|--|
| MONTH | ACTION/ACTIVITY | WHO DOES IT | OUTCOME | AUDIENCE | |
| | | Northwood Tech College, Ashland Area | A discussion about whether there is a need | | |
| March | Meeting: Solar Systems and EV Charging as Workforce | Development Corp., Workforce Development | lopment for and capacity to ., Workforce elopment investigate job | | |
| April | Press release about benefits of EVs for Earth Day awareness | WINtraining/creationUW Extension/Increased awareness ofwork groupbenefits, how tomemberspurchase themBad River Bandnewsletter, socialmediabenefital | | General public/Disadvant aged population | |
| April | Community Outreach Program: ICE vehicles vs. EVs, Webinar or in-person event | Northland College | Increased awareness of EV benefits and College's role in contributing to sustainability initiatives | General public | |
| April | City of Ashland offers free EV charging at its station on Earth Day | City of Ashland Planner, Administrator, Public Works | r of Ashland nner, Highlight availability of ninistrator, public charging | | |
| April | City of Ashland water bill insert: Post materials on website | City Planner and Administer | City-wide increased awareness of City EV initiatives and benefits | City residents, disadvantaged | |
| Anril | Ashland City Council, County Board, Bad River Band, municipalities pass resolutions for Earth Week with solar/EV emphasis | All local government leaders Bad River band Tribal Council | County-wide increased awareness of solar/EV initiatives and benefits | City, County, Bad River Band residents | |
| April | City of Ashland event to highlight police vehicles | Ashland Police Dept | City-wide increased awareness of City EV initiatives and benefits | General public | |

| Ashland Co | ounty Community Engage | ement Calendar of <i>I</i> | Activities 2024-2027 | |
|------------|---|---|--|--|
| MONTH | ACTION/ACTIVITY | WHO DOES IT | OUTCOME | AUDIENCE |
| April | Handouts about EV basics and benefits, how to purchase vehicles; collaborate with WI Clean Cities, Xcel Energy Company | UW Extension (develops/distrib ution plan) | County-wide increased awareness of benefits of EVs | General public and Tribe |
| April | In-person demonstrations about how to use Ashland charging stations/handouts; Make recording and post on websites | UW Extension/Work group members | More informed citizens can demystify EV ownership | EV owners, general public, disadvantaged public |
| April | Demo/Webinar of how to install chargers at home; Record it and post on websites | Xcel Energy, Jolma Electric Contractors | More informed citizens can demystify EV ownership | EV owners, general public, disadvantaged public |
| May | No Mow May in City of Ashland: Benefits/Availability of electric mowers | UW Extension City of Ashland Public Works Dept Parks and Recreation Dept | Connect the awareness of EV and personal lawn care choices | General public, disadvantaged public |
| May | Factsheet of benefits of EV mowers | UW Extension City of Ashland Public Works Dept Parks and Recreation Dept | Connect the awareness of clean energy and personal lawn care choices | Lawn care management companies, homeowners |
| Мау | In-store demonstrations of electric tools used by property owners, tradespeople, gardeners | Local business selling electric tools | Help create increased demand for electric tools. Highlight any tools that are solar powered | Residents, tradespeople, gardeners |
| June | Table at local farmers markets with flyers | UW Extension Citizens Climate Lobby | Increase awareness of benefits of EVs | General public, farmers, |

| Ashland Co | Ashland County Community Engagement Calendar of Activities 2024-2027 | | | | | |
|------------|--|-------------------|-----------------------------|-----------------------|--|--|
| MONTH | ACTION/ACTIVITY | WHO DOES IT | OUTCOME | AUDIENCE | | |
| | and an EV parked | | | disadvantaged | | |
| | nearby | | | population | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | UW Extension/EV | | | | |
| l | Park an EV at the | owner/APD | Increased awareness of | Concernel as the line | | |
| June | Clean sweeps event | Hybrid | EV utility and availability | General public | | |
| | Display and EVS at | | | Conoral nublic | | |
| | Bdy Ddys Celebration | All work group | Increased awareness in | tourists | | |
| | EVe loosing ve | All work group | the general resident and | disadvantaged | | |
| luby | buying etc | Extension | tourist nonulations | nonulations | | |
| July | July Ath parade: FV | Dealershins | | General public in | | |
| | floats | vehicle owners | the general nonulation | Ashland La | | |
| | liouts | | | Pointe, Mellen. | | |
| | | | | Glidden | | |
| | | | | | | |
| July | | | | | | |
| - | | | Increased awareness in | | | |
| | | | the general population. | | | |
| | | | | | | |
| | Ashland County Fair | UW Extension, | | | | |
| | display and EV on | vehicle owners | Factsheet on leasing | General public in | | |
| | display | | options | the County | | |
| | | | | | | |
| Aug | | | | | | |
| | | | Increased awareness | | | |
| | EV Awareness Week | Press Release: | in the general | | | |
| Com | Sept 27-Oct 6 | UW Extension | population | General County | | |
| Sep | | Court | | population | | |
| | | County, | Increased awareness in | | | |
| | | River Pand pace | the general negative | | | |
| | | resolutions on EV | | General County | | |
| | | importance | | nonulation Rad | | |
| | | | | River Band | | |
| Sep | | | | | | |

| Ashland County Community Engagement Calendar of Activities 2024-2027 | | | | | |
|--|--|--|---|---|--|
| MONTH | ACTION/ACTIVITY | WHO DOES IT | OUTCOME | AUDIENCE | |
| Sep | | Flyers in public places: All can share them | Increased awareness in the general population | General County population, Bad River Band | |
| Sep | | County: Park a vehicle outside courthouse with banner | Increased awareness in the general population | Disadvantaged populations, all residents | |
| Sep | | Letter to editor: From work group member(s) | Increased awareness in the general population | General County population | |
| Sep | | Facebook campaign with daily posts | Increased awareness in the general population | General County population, Bad River Band | |
| Sep | Northland College class starts. Solar Dashboard Updated | Northland College staff and students | Solar education and monitoring activities | Youth, college students | |
| Sep | Northland College Campus Tours of Solar Sites and Dashboard demonstration AND host guest speaker to present key topics | Led by College professor for students AND UW Extension/CBR | Clean energy education AND current issues in solar energy and EV economy | Youth, general public, disadvantaged youth | |
| Oct | How to get tax credits/breaks when buying a vehicle | UW Extension Local car dealerships | Short videos of EV vehicles and driver features | General County population and disadvantaged | |
| Oct | Promote solar- powered Halloween lighting, lawn, and business lighting | UW Extension, Hardware stores | Increased awareness of new clean economy (buy local) | General County population | |

| Ashland Co | ounty Community Engag | ement Calendar of | Activities 2024-2027 | |
|------------|-------------------------|---|---------------------------|------------------|
| MONTH | ACTION/ACTIVITY | WHO DOES IT | OUTCOME | AUDIENCE |
| | Letters to the editors | CCL, Northland | Increased awareness of | |
| | | College students, | benefits of electric | General County |
| | | Bad River Band | economy | population |
| Oct | | | | |
| | Ride and Drive event | Local officials | Increased awareness of | |
| | | whose towns | benefits of electric | General County |
| | | have solar/EVs | economy | population |
| | Open Houses in Solar | Local officials | Increased awareness of | Residents, |
| | Communities | whose towns | town's resilience, how to | seniors, |
| | | have solar/EVs | access chargers | businesses, |
| | | | | youth |
| | Holiday solar and | | | |
| | electric gift and solar | UW Extension | Increase awareness | |
| | guide (Tools, | and Chambers of | translates to support of | General county |
| | mowers, solar | Commerce, | clean energy | population |
| | panels, boats, | collaborate with | | |
| Nov | vehicles, lights, etc) | suppliers | | |
| | EV sites grand | | | |
| | opening of EV | EV Site Hosts, | Increased awareness of | |
| | charger | Selected EVSE simplicity, availability of | | General public, |
| | | Vendor and | chargers | EV users |
| | | Contractor, WI | | |
| Nov | | Clean Cities | | |
| | Drive EVs in the | Local EV owners | Increased awareness of | |
| | Ashland Christmas | and dealerships | new clean economy | General/Disadva |
| | parade | Bad River Band | | ntaged residents |
| Dec | | | | |

Table 3

This calendar is a tool developed by the multi-stakeholders of the Ashland County Charges Ahead work group and others (see above) that demonstrates specific community engagement methods for diverse populations, including residents, disadvantaged people, businesses and associations, local governments, NGOs, Bad River Band, and other institutions. Activities are scheduled for every month to take advantage of appropriate seasonal messages and to also reach visitors during tourism seasons.

Governmental stakeholders and elected leaders have already pledged their willingness and excitement to help conduct these activities as indicated in the calendar.

1.3.3 Collaborative Governance Structure Lead Applicant

As the Lead Applicant, Ashland County will be project lead, primary EPA contact and reporting agent. Dan Grady, County Administrator, will be the principal point of contact. Dan's qualifications are discussed in the Narrative Part 2, Section 2.4.1

Dan Grady, County Administrator, will supervise the newly hired Ashland County Energy Specialist. A position description has been completed and is included in Attachment C "Other Attachments". It is estimated that approximately 25%, or 500 hours, annually will be dedicated to project implementation during the first three years; 25%/500 hours to community engagement to ensure resources and revenue streams from the project are supporting stated goals; 25%/500 hours to future energy project and climate mitigation efforts; and 25% to discretionary county needs or unfinished project business as determined by the County Administrator. The position will be filled as soon as possible after this grant award's subcontracts are in place.

Collaborating Entities

1) Ashland Medical Center (AMC) – Statutory Partner and CBO

A key component to distributing direct benefits to the disadvantaged communities will come from the AMC's Regional Wellness Fund (RWF). That structure already exists at the Medical Center, but enhancements and changes will be required to meet the specific goals of this project. Preliminary details of that plan are incorporated in the Partnership Agreement. The RWF board, composed of 10 community members, will report quarterly to the Ashland County Administrator. New avenues for community input will be established to reach the RWF board. That avenue is yet to be determined but may need to go through the Ashland County Energy Specialist.

2) Cheq Bay Renewables (CBR)

CBR will assist in training the Ashland County Energy Specialist and collaborate on monitoring existing systems and technical energy issues. The Energy Specialist will coordinate efforts with Northland College's Center for Rural Communities to track renewable energy resources and engage with the community through the newly developed *Solar Energy and Resilience dashboard*, part of the community vision outlined in Section 1.1 of the Narrative and discussed in more detail below under Northland College.

3) UW-Extension Ashland County

UW-Extension Ashland County will lead and help organize and implement community engagement activities as outlined in this CE proposal. The County's Community Development Educator in the Extension Community Development Institute (CDI) conceived the Ashland County Charges Ahead work group in 2022 after conducting a needs assessment with numerous diverse stakeholders about the county's future in a clean energy economy. The CDI educator has a 30+ year history of organizing community engagement and education programs in two states while employed with NGOs, state agencies, the Bad River Band, Northland College, and UW Extension. A 12-month schedule of outreach programs that reach diverse/disadvantaged communities is included in this community engagement report in Section 1.3.2. These activities are expected to cost \$58,300 over the three-year grant period for outreach costs such as: designing and printing FAQs and handouts; development of a new web site; conducting 12 community and tribal open houses to highlight completed installations in local government locations; wrapping EV trucks with branded decals, display ads in local newspapers at strategic times of the year; displays and information banners for public events, etc. The budget details are presented in Attachment A – Program Budget – Community Engagement Tab.

4) Northland College

Students are the College's primary audience, and a large portion of Northland's student body is considered low income: More than 40 percent of Northland's students qualify for Pell grants for disadvantaged young people. The College will organize community events and invite local community members to attend them, as was done previously, especially from the City of Ashland and the Bad River Reservation, two of the most disadvantaged communities in the state of Wisconsin (according to the EPA IRA Disadvantaged Communities map).

Northland College will work with its Center for Rural Communities (CRC) to develop a web presence detailing the solar projects completed by regional anchor institutions. This Solar Energy and Resilience Dashboard would include existing projects and those implemented through this community grant project. Anchor institutions are important when building this dashboard initiative, given their central role in modeling climate resilience and empowering communities. This initiative would also expand previous CRC work to map renewable energy production and potential throughout the Northwoods.

Faculty members will offer education/outreach opportunities to highlight benefits and functionality of solar energy/EV charging opportunities by offering three new programs: 1) A professor of outdoor education will work with students to develop and give tours of the existing projects and new projects installed through this grant opportunity; 2) A professor of climate science will work with students to write letters to the editor of the Ashland Daily Press about existing and new projects to educate communities and encourage participation; and 3) A physics professor will work with students on solar education and monitoring activities as has been done since the College first installed solar on campus 20 years ago.

5) Local Governments and Other Institutions/Agencies

This grant will fund solar PV and/or EV charging stations to 2 Cities, 7 Towns, 1 Village and 3 nonprofit agencies in Ashland County. Representatives from each of these 13 entities will generate their own documentation/reports for their projects and file that report as requested by the County to fulfill contractual obligations with the EPA. The County Energy Specialist will collate those reports/data into a cohesive package for County and EPA review. A monthly project meeting will be scheduled and chaired by the County Energy Specialist; more frequent intervals may be needed during key project phases.

1.4 Community Strength Plan

1.4.1 Maximizing Economic Benefits of Projects

Economic benefits will come in the following forms to Ashland County residents and specifically to the disadvantaged communities within Ashland County:

- Reduced costs to local units of government which govern the disadvantaged communities (\$155K annually). This ultimately reduces property tax burdens to individual households.
- 2. Increased resilience for first responders, reducing costs to mitigate against climate related and other natural disasters and reducing health costs for those affected (22 microgrids). This also reduces tax burdens.
- 3. Direct cash infusion to disadvantaged communities through AMC's Regional Wellness Fund. This is controlled by a 10-member board made up of community members with established procedures to ensure benefit to disadvantaged communities (\$345K annually into Fund).
- 4. Direct benefits to area businesses via EV charging infrastructure and indirect benefits area-wide from the infusion of tourism dollars into the local economy, capitalizing on the natural beauty and environmental assets of Ashland County.
- 5. Create Community Resiliency Hubs to offer members of 9 disadvantaged communities a place to mitigate against natural disasters and create command and control centers to effectively communicate with area resources safely and securely.
- 6. Directly impact a disabled seniors day facility with reduced utility bill expenses and increased resiliency.
- 7. Economically benefit Northland College, a nationally recognized not-for-profit environmental liberal arts college located in Ashland County. Benefits will include: reducing utility costs, which will help contain tuition costs for more than 40 percent of the College's student body that is considered low-income by federal standards; helping keep the College viable in a small community where more than 1,500 residents are Northland College graduates and contribute to a green economy as organic farmers, environmentally conscious entrepreneurs, and natural resource professionals; and supporting the College's Center for Rural Communities in developing a solar energy dashboard that will help expand the renewable resource economy in the area.

In total, \$584,800 will be directly injected annually into the disadvantaged communities and is broken down by project in the Project Benefits Tab of the Program Budget, Attachment A. Resiliency benefits and indirect benefits are also listed by project.

Monitoring energy generation resources is essential to guarantee optimal performance and thereby economic benefit. The Ashland County Energy Specialist will have access to all energy systems within this project through online monitoring and will collaborate with the Center for Rural Communities. This will include online solar/battery inverter monitoring, data recorded by data-loggers such as eGauge monitors, and specialized microgrid dashboards. In addition, monthly utility bills will validate cost reductions and be reported annually to the County and EPA. Cheq Bay Renewables can assist in setting up a tracking system to satisfy the County's, City's, Town's, AMC's, and EPA's requirements.

In addition, EV charging equipment will need to be continually monitored to ensure optimal performance. A 5-year service contract from the selected Electric Vehicle Supply Equipment (EVSE) vendor will be required with 24-hour response times. The County, as overseer, must also ensure equipment is operational, and if not, make sure contracts are adhered to and repairs are made in a timely fashion. Level-3 chargers have a national reputation of not always working. Product selection, based on past performance will be paramount. Only utility and EVSE vendor approved installations will be accepted. The terms of the service contracts, costs, and capacity of the EVSE vendor to respond will also determine final selection.

AMC's Regional Wellness Fund and their governing board is a key and essential component to delivering the goals stated in this grant application. The Regional Wellness Fund began in 1980 and was led by a group of community members who wanted to make a difference for people living in Ashland County. Grant applications are reviewed by the AMC Foundation Grant Review Committee, which includes members of the AMC Foundation board of directors, Foundation staff and representatives of AMC. For this grant initiative, oversite comes from the County, with established avenues for community input, and established protocol to govern decision making and conflict resolution.

The Regional Wellness Fund's mission is to support activities and programs that improve the health and wellbeing of our region. Over the years, the fund has provided financial support to a variety of projects and organizations in our community, including special programs for Bayfield Recreation Center, books for Can't Wait to Read, improvements for the Ashland Senior Center, the CORE Transitional Care Program and a new ambulance for the Town of Iron River. This fund considers proposals for start-up expenses for new programs, one-time grants for needed equipment, and one-time grants for a special purpose. Preference is given to those organizations that do not have a predictable funding source.

USDA Rural Development Support and Engagement

A significant strength of this project is that Ashland County is one of three counties that collaborated together and received a new designation as the Northern Wisconsin Community Network, which is one of only three Wisconsin Rural Partnership Networks (RPN) in the USDA's Rural Development program. The RPN launched in 2022 and is co-led by the White House Domestic Policy Council and US Department of Agriculture. It is an all-of-government program that partners with rural communities to facilitate access to federal agencies' resources and funding to create local jobs, build infrastructure, and support long-term economic stability on their own terms. The Environmental Protection Agency (EPA) is one of more than twenty federal agencies that are collaborating as part of RPN. The State Director of the Wisconsin USDA Rural Development program has endorsed this project; our RPN liaison has been involved in the development of this project and participated in the EV work group's meetings.

The following table lists 17 census tracts within the Projects boundaries. Fifteen of the census tracts are viewed as disadvantaged by the EPA EJScreen mapping tool. All proposed projects

are located within the 15 disadvantaged census tracts with direct benefits going to those communities.

| | Ashland County EPA EJScreen Environmental Justice Census List | | | | | | | |
|----|---|--------------|---------------|------------|--------|-------------------|--|--|
| | Area | | EPA IRA | | Sq. | Disadvantaged | | |
| # | Description | ID | Disadvantaged | Population | Miles | Reason | | |
| | NE Ashland | | | | | | | |
| | County | | | | | Superfund | | |
| | including Bad | | | | | Proximity, Native | | |
| 1 | River | 550039400001 | Yes | 2112 | 227 | American | | |
| | North Ashland | | | | | | | |
| | County | | | | | | | |
| | including | | | | | Lead Paint, Air | | |
| | Madeline | | | | | Toxics, Native | | |
| 2 | Island | 550039508001 | Yes | 386 | 493.21 | American | | |
| | East Ashland | | | | | | | |
| | County | | | | | | | |
| | including City | | | | | Lead Daint Ain | | |
| 2 | of Mellen and | 550020500001 | Vee | 700 | CC 27 | Lead Paint, Air | | |
| 3 | | 220039200001 | res | 708 | 00.27 | TOXICS | | |
| | Svv Ashianu | | | | | | | |
| | including Clam | | | | | | | |
| | Lake to Mellen | | | | | | | |
| | and | | | | | | | |
| | Chequamegon- | | | | | | | |
| | Nicolet | | | | | Lead Paint. Air | | |
| 4 | National Forest | 550039506002 | Yes | 633 | 138.26 | Toxics | | |
| 5 | Glidden area | 550039507001 | Yes | 466 | 68.52 | Lead Paint | | |
| | Butternut and | | | | | | | |
| 6 | East | 550039507003 | Yes | 1088 | 121.12 | Lead Paint | | |
| | SW Ashland | | | | | | | |
| | County Clam | | | | | | | |
| | Lake to | | | | | | | |
| 7 | Butternut | 550039507002 | Yes | 635 | 217.71 | Lead Paint | | |
| | West Ashland | | | | | | | |
| 8 | County N | 550039505001 | No | 1247 | 46.65 | NA | | |
| | West Ashland | | | | | | | |
| 9 | County S | 550039505002 | No | 917 | 83.75 | NA | | |
| | City of Ashland | | | | | | | |
| | west including | | | | | | | |
| 10 | AMC | 550039504001 | Yes | 1102 | 2.98 | Air Toxics | | |

| Ashland County EPA EJScreen Environmental Justice Census List | | | | | | | | | | |
|---|--|--------------|-------------------------------------|-------|--------------|-------------------------|--|--|--|--|
| # | Area # Description ID | | EPA IRA Disadvantaged Population | | Sq. Miles | Disadvantaged Reason | | | | |
| | City of Ashland middle including | | | | | | | | | |
| 11 | Northland College | 550039503001 | Yes | 1973 | 2.0 | Superfund Proximity | | | | |
| 12 | City of Ashland Center | 550039503002 | Yes | 1016 | 0.19 | Superfund Proximity | | | | |
| 13 | City of Ashland Center NW | 550039504002 | Yes | 463 | 0.18 | Air Toxics | | | | |
| 14 | City of Ashland Center N | 550039504003 | Yes | 626 | 0.21 | Air Toxics | | | | |
| 15 | City of Ashland NE | 550039508002 | Yes | 1263 | 0.45 | Superfund Proximity | | | | |
| 16 | City of Ashland E | 550039508003 | Yes | 718 | 7.4 | Superfund Proximity | | | | |
| 17 | City of Ashland NE | 550039508004 | Yes | 735 | 0.34 | Superfund Proximity | | | | |
| | Total | | | 16088 | 1476 | | | | | |

Table 4 Census Tracts in Ashland County



Figure 3 Census Tracts in Ashland County. Numbers from Table 1 (source EPA EJScreen Tool)

1.4.2 Displacement Avoidance

Solar PV has become something other than alternative energy. It is now one of the lowest cost and dependable resources available for energy generation because of no moving parts and no oil changes required. It is still dependent on the sun shining, however. It may not represent a 100% solution to our energy needs, but it is relatively risk free and a known quantity compared to other energy generation sources.

EV charging equipment and the transition to an electrified transportation system is still in its infancy, however. Ashland County has one small 50kW DC fast charger, which reportedly is not operational at all times. Adjacent Bayfield County has had the same experience. Equipment selection, vendor selection, code compliant installations, contract details which include service

contracts and timely repair requirements are all essential. Level-2 chargers have been much less problematic. Other issues include adequate cell coverage for payment options. Selected EV equipment will be required to have Near Field Communication (NFC) and/or Radio Frequency Identification (RFID). The EVSE also must have the capability and contractual agreements to join any available cellular provider as each site may have different signal strengths from various providers.

EVSE ownership must be privately owned, not municipally owned, if current Wisconsin legislation is enacted and electricity is sold. Private ownership will be allowed to charge by the kWh and must purchase all electricity from the local utility. The risk exists that low initial EV usage would not generate sufficient revenue to cover the utility bills and service contracts. That risk is mitigated by including a 5-year service contract with each EVSE installation and is included in the grant request. After 5-years, established EV charging stations *should* generate enough revenue to cover service contracts, the electric bills, and provide a modest profit. The station owner can adjust prices to cover expenses.

Inflationary pressures are abating presently, but a 10% contingency is included in budgetary estimates to cover unexpected price increases. Long lead times for certain electrical equipment is also taken into consideration and known components which have had past concerns will be identified and given ordering priority.

1.4.3 Performance Measurement Plan

Performance Measurement (evaluation) findings will be used to shape future choices about technology (EV, PV, charging stations) and ongoing outreach. Specifically, evaluation findings will help shape the effort so it can: 1) Reduce access barriers of information availability and technological literacy, e.g., equipment use (in)ability at charging stations; 2) Increase awareness of and demystify EV ownership opportunities; 3) Support workforce development related to clean energy; 4) Promote participation by local residents and students with EV and PV and related new clean economy that will be sustained after the grant period; and 5) Educate and inform new and potential solar and EV users to the new infrastructures and mechanics of clean energy technology.

To help us evaluate our performance throughout this three-year period, we will:

- Work closely with UW Extension specialists to plan, define/refine our list of intended outcomes and related performance measures, develop data collection instruments, review and interpret evaluation results, and share findings with stakeholders and the outreach team.
- Identify what audiences will use evaluation findings.
- Ensure that climate justice strategies are being incorporated into the evaluation by making sure the evaluation recruits feedback from all stakeholders.
- Define measures to evaluate fidelity of implementation (outputs) and of intended outcomes of the project.
- Collect and interpret data according to AEA and Community Engagement frameworks.

Part 2. Program Management, Capabilities and Capacity

2.1 Performance Management Plan, Outputs/Outcomes

The Project includes 3 Climate Action (CA) Strategies and 1 Pollution Reduction (PR) Strategy that run concurrently.

CA Strategy 2 Output-1: County-wide, publicly available, EV charging network. The first milestone is to develop the RFP to select EVSE equipment, select the site owners, and develop the contract terms for the EVSE installations and subsequent maintenance. At 5 of the 6 sites, Xcel Energy will complete the engineering design and then install the equipment once the vendor and sites are selected, and all the components are available. Bayfield Electric Cooperative (BEC) will design, supply, and install EVSI at the site in Bad River Reservation. A contractor will be competitively selected to install the EVSE equipment. Strategy 2 milestones are:

- Pre-Qr 1, County/EPA contract executed
- Quarter 1, RFP released
- Quarter 2, EVSE vendor and sites are selected, equipment ordered
- Quarter 3, Xcel Energy and BEC completes final engineering
- Quarter 4, Installation of EVSE begins
- Quarter 8, construction complete and charging stations commissioned

Based on pending Wisconsin legislation, municipalities cannot own EV charging stations and sell electricity except for their own use. Public charging stations must be privately owned. Site owners must be competitively selected, as per this NOFO, and will be selected through the RFP process. Ashland County, based on work completed by the Ashland County Charges Ahead workgroup, has selected a set of geographically diverse sites. However, the exact locations will be determined through the RFP process.

CA Strategy 2 Outcomes-1: Reduced air pollution from transportation will be measured in GHG emissions reduced. GHG reductions can be measured in kWh used for EV charging. As an example, on average for each 25kWh used for charging, 3.3 gallons of gasoline is avoided, and 41 lbs. of CO2 is avoided.¹² Each site will have a dedicated electric meter measuring kWhs used for charging. EV charging site owners will report the metered kWhs to the Ashland County Energy Specialist, who will tally GHG reductions and enter data into the tracking database and issue quarterly reports.

CA Strategy 2 Output-2: County and Town fleet vehicles and private Level-2 charging. The County will have four 80amp Level-2 charger installed for charging their EV pickup trucks at four locations. Three of the Towns will also have Level-2 charging in their Town Garages. Strategy 2 Output 2 milestones are as follows:

¹² Bayfield County 2022 Fleet Analysis

- Pre-Quarter 1, County/EPA contracts executed
- Quarter 1, EV trucks ordered
- Quarter 2, Microgrid/EV charging design finalized and RFP to select installation contractor sent out
- Quarter 3, Contractor selected
- Quarter 3, Contractor/County contracts executed
- Quarter 4 Contractor orders equipment
- Quarter 6 2025 EVSE equipment installed and commissioned
- Quarter 6 2025 EV trucks delivered

CA Strategy Outcome-2: The EV chargers will track kWh used for charging. From this data reports are easily generated for tracking GHG reductions, dollars saved, and gasoline avoided.

CA Strategy 2 was selected based on the results of a community-led initiative, called Ashland County Charges Ahead, cohosted by UW-Extension Ashland County and Cheq Bay Renewables. More about this initiative is described in Section 1.3 Community Engagement and Collaborative Governance Plan. County-wide EV charging infrastructure, during this early stage of the national clean fuels transition, will encourage more rapid EV adoption, both locally and regionally, improve air quality, reduce pollution caused by ICE vehicles, and improve public health, thereby helping meet the EPA CCGP and Ashland County Climate Action goals. For each measurable and quantifiable kWh used in charging, a specific amount of gasoline or diesel fuel, and its associated polluting elements are avoided. The County's EV adoption will be calculable during the performance period based on the charging network's electricity use.

CA Strategy 4 Output-1: Microgrid Installation, County, Town, and City Microgrids. A total of 22 microgrids will be installed, 5 at county facilities, 11 at town facilities, 3 at city facilities, and 3 at area nonprofits. The total solar PV capacity of the microgrids installed will be 1580 kW and total battery storage capacity installed will be 1980 kW/ 3350 kWh. The county and town installations will follow a similar timeline with the following milestones:

- Pre-Quarter 1, County/EPA contracts executed
- Quarter 1, Preliminary designs complete, and RFP issued to select installation contractor
- Quarter 2, Installation contractor selected
- Quarter 3, contracts executed
- Quarter 4, Contractor orders equipment
- Quarter 5, microgrid construction begins
- Quarter 8, installations complete, projects commissioned

CA Strategy 4 Outcome-1: Enhanced resilience as measured by fewer power disruptions; reduced GHG emissions (calculated based on solar kWh generation); reduced electric bills from reduced peak demand charges, solar generation kWh offset, and energy arbitrage.

CA Strategy 4 was selected to help mitigate extreme weather events which have recently caused widespread flooding, road washouts, power outages, and service disruptions, isolating communities and even causing death. By incorporating both solar PV and battery storage into

multiple microgrids throughout the County, GHG emissions will be measurably reduced, and resilience energy systems will be installed at critical sites to reduce the number and duration of power disruptions. These two metrics, GHG emissions reduced, and power outages avoided, will be tracked by each site owner on a quarterly basis, and results sent to the Ashland County Energy Specialist, who will summarize and file reports during the performance period and thereafter as agreed during final contract negotiations.

CA Strategy 5 Output-1: Community Resiliency Hubs. Seven town halls, two sites at Northland College, and the Community Center in the City of Ashland will be upgraded to serve as community resiliency hub, totaling 10 sites. 207,700 square feet of physical space will be upgraded into Community Resiliency Hubs and is summarized in Table 5.

| Community Resiliency Hubs Physical Space | | | | | | | |
|---|-----------------------------|--|--|--|--|--|--|
| Site Description | Building Square Feet | | | | | | |
| Town of Agenda | 5800 | | | | | | |
| Town of Jacobs | 5000 | | | | | | |
| Town of La Pointe | 9800 | | | | | | |
| Town of Marengo | 1200 | | | | | | |
| Town of Morse | 9300 | | | | | | |
| Town of Sanborn | 1100 | | | | | | |
| Town of Gordon | 1500 | | | | | | |
| Northland College Ponzio/Mead | 70,200 | | | | | | |
| Northland College Climate, Science & Environment Building | 86,200 | | | | | | |
| City of Ashland Community Center | 17,600 | | | | | | |
| Total | 207,700 | | | | | | |

Table 5

Each Hub will update their own disaster plan by determining the procedures to follow during emergency events. The Hubs can coordinate their efforts with Ashland County's Hazards Mitigation Plan (2019)¹³ as a resource/template. The Bad River Band also has an extensive Pre-Disaster Mitigation Plan (2018) in place that was the result of the 2016 flood. The Ashland County Energy Specialist's job description has 25% of time dedicated to community outsourcing and engagement. The Energy Specialist can use this time to assist the Towns in updating their plans with the assistance of the Ashland County UW-Extension.

Disaster preparedness training sessions will be held each year by the Ashland County Energy Specialist with assistance from Ashland County UW-Extension. An annual joint session for all 9 entities will be held, with at least one person attending from each entity required. Training sessions are integrated within the Community Engagement and Governance Plans, Section 1.3.

CA Strategy 5 Outcome-1: Enhanced physical safety during natural disasters, Increased community awareness of emergency preparedness.

¹³ <u>Ashland Co, WI HazMit Plan (ashlandcountywi.gov)</u>

CA Strategy 5 was selected as an outcome of Strategy 4. Having a microgrid leaves the opportunity to fully utilize and capitalize that resource, turning an automated energy resource into a human resource. Measurable results will be documented by counting the number of events that occur when each Hub is utilized.

PR Strategy 2 Output-1: Outdoor Air Quality and Community Health Improvements. AMC will install 4MW of solar PV of solar PV which will improve air quality and generate new revenue for the AMC Regional Wellness Fund (aka a public benefits program). The City of Mellen will install 123 kW DC of solar PV redeveloping a capped landfill and also improving air quality while reducing city expenses.

PR Strategy 2 Outcome-1: Increased public and environmental health literacy, and increased investment in public health assistance for seniors, disabled and disadvantaged populations. Reduced GHG emissions as measured by kWh of solar generation (tons CO2 avoided).

Solar generation will be monitored online via the solar inverter's software to generate quarterly and annual reports. The reports will compare actual solar production with original project estimates. The Ashland County Energy Specialist will assist AMC and City of Mellen with daily monitoring to check system performance during the performance period. Manufacturer and workmanship warranties and contractual minimum response times will be used to guarantee meeting key performance metrics.

Improved environmental conditions will be measured in tons of CO2 avoided using the EPA Greenhouse Gas Equivalency Calculator. The life expectancy of the solar arrays is estimated to be 40-50 years so the PV systems will provide near and long-term benefits. The measurable results of CO2 avoidance are specific and easily measurable. The key to success is to monitor the systems daily and report problems to local contractors for quick repair. Daily monitoring can be achieved online and only takes a few seconds.

2.2 Project Linkages to the EPA Strategic Plan

Each action included in this Project lies within the boundaries of a disadvantaged census tract as identified by the EPA EJScreen Tool. By strategically placing microgrids in the disadvantaged communities, creating Community Resilience Hubs, creating geographically dispersed EV charging within those disadvantaged communities, and installing a large solar field that reduces GHG emissions as well as creates a public benefits revenue stream, the Project builds community capacity, offers climate resilience, and maximizes benefits to the target communities.

The Project specifically supports the following EPA goals:

- Goal 1: Tackle the Climate Crisis. This is accomplished through:
 - Installing of 5.7 MW of solar PV to reduce GHG emissions
 - Installing an EV charging network to further reduce GHG emissions caused by ICE vehicles

- Creating 22 microgrids to enhance the County's response to emergencies and build community resilience
- Creating 10 Community Resilience Hubs to further advance community capacity and resilience
- Goal 4: Ensure Clean and Healthy Air for All Communities. This is accomplished through:
 - Installing 5.7MW of solar PV to reduce GHG emissions
 - Installing an EV charging network to further reduce GHG emissions caused by ICE vehicles
 - Creating a County fleet of EV vehicles and the supporting charging infrastructure, allowing the County to lead by example by demonstrating the clean transportation transition.
- Goal 5: Safeguard and Revitalize Communities: This is accomplished by:
 - Utilizing the Community Resilience Hubs to safeguard communities during natural disasters
 - Utilizing the financial resources generated from AMC's 4MW solar field to directly benefit communities and projects identified within those communities as determined by the community resource board that governs those funds

2.3 CBO Experience and Commitment

Tamarack Health, Ashland Medical Center (AMC) is the Project's Community Benefits Organization and Statutory Partner for this grant application. Ashland Medical Center joined forces with Hayward Area Memorial Hospital becoming Tamarack Health in November 2023. AMC is a locally-led, community-based health organization serving the medical needs of northwest Wisconsin with the main medical center campus in Ashland. AMC has been in operation since 1972, celebrates its deep roots in the communities it serves.

AMC is a nonprofit organization, providing a critical-access hospital, and numerous specialty services. The organization has over 60 full-time physicians on staff, and over 650 total employees. The primary service area of Ashland Medical Center includes Ashland, Bayfield, and Iron Counties, covering 3,281 square miles with a population of 37,089 residents. AMC has approximately 7,315 inpatient days per year and nearly 16,000 Emergency Room and Urgent Care visits annually.

AMC is committed to providing excellent healthcare in the region. Care that is grounded in respect, warmth, and trust. Care that ensures the voices of its patients are heard in order to address their needs and AMC's mission to improve the health and wellbeing of the people of the region. As the only hospital in a three-county, economically challenged area, AMC is committed to creating the most value possible for its patients. This includes participation in the Prescription 340b program and developing affiliations, partnerships, and other cost-effective solutions. An innovative partnership with a regional health system allows AMC to provide comprehensive cancer care at the Northwest Wisconsin Cancer Center, which is housed within AMC walls. This cancer care includes the most innovative technology to provide both medical oncology and radiation oncology care and treatment to community residents, eliminating the

need for them to travel great distances for specialized cancer care. AMC also proudly offers comprehensive Behavioral Health services, the only provider of comprehensive Mental Health services in Northern Wisconsin. The AMC Behavioral Health team provides a full range of outpatient mental health services and addiction treatment. AMC is the only regional provider of inpatient services for patients with an acute care, ten-bed inpatient locked treatment facility. Providing these services aligns AMC with the Ashland, Bayfield and Iron Counties *Community Health Plan* 2020 which identifies Mental Health and Substance Abuse as the number one regional health priority. Last year, AMC's Behavioral Health Unit had nearly 3,000 Behavioral Health Inpatient visits.

Ashland Medical Center has a long-standing history of partnering with Ashland County. AMC works closely with Ashland County Health and Human Services to coordinate care for individuals and families experiencing behavioral health crises. Individuals experiencing crisis are screened in AMC's Emergency Department and placement for care is coordinated through Ashland County's Health and Human Services Department. Coordinated crisis management is a partnership with Ashland County. Involuntary placement in AMC's In-Patient Behavioral Health Unit is a decision that providers, social workers, law enforcement, and care coordinators make together. Options for Outpatient services with one of our skilled professionals is also part of crisis management and part of our partnership agreement.

2.4 Programmatic and Managerial Capability and Resources

2.4.1 Programmatic and Managerial Capability and Resources – Ashland County, Lead Applicant

Ashland County has been a local unit of government since 1860, employs 200 people, and operates 22 departments. Its annual budget in 2023 was \$32,300,000 and is the eleventh largest county in Wisconsin by total area. The head of government is Dan Grady, the County Administrator and lead point of contact for this grant application.

Dan has 20 years of experience with local government and businesses and has a strong background in accounting and management. Prior to being Ashland County's Administrator, he was the City Administrator for the City of Abbotsford, WI, County Board Supervisor for Outagamie County, WI chairing numerous committees, the senior accountant for Coene Mechanical in Appleton, WI, and Accounting Manager for Integrated Document & Label Solutions in Neenah, WI.

Ashland County receives numerous federal and state grants each year. This includes TAD grants, SAMSA grants, highway grants, and health services grants. The County Accountant, Sue Misun, possesses more than 40 years of experience in segregating, allocating costs, and reporting grants to both the state and federal governments.

Ashland County currently is in the process of hiring an assistant administrator to more effectively manage grants to ensure full compliance with state and federal statutes. If awarded the EPA CCGP grant, Ashland County will also hire a dedicated Energy Specialist to ensure that

the day-to-day details of the grant implementation are fulfilled and coordinate and integrate future projects with current initiatives.

In addition, the County Administrator has overseen numerous construction projects through his professional career including a federally funded Safe Routes to School project, a \$32 million building rehabilitation project, and numerous projects in the \$1-\$3-million-dollar range that funded local levy dollars. In addition, while in the private sector the County Administrator opened a bar and grille from concept through construction to final opening and operation.

In 2021, Ashland County hired MWK, LLC., of Green Bay, WI as consultants to help Ashland County shore up internal controls and more responsibly use taxpayer resources. With the help of MWK, LLC., the County Administrator has been able to implement new accounting procedures and budgeting controls to make the County's financial position open and accountable to both the County Board and public.

The Program Budget includes a Gant chart which contains a milestone schedule for each project. It breaks down tasks for each quarter within the three-year performance window and has a quarterly budget overlay. Ashland County accountant, Sue Misun will establish procedures to track progress and prepare quarterly reports to the County Board and EPA. Ms. Misun will implement the new accounting procedures and controls recommended by MWK, LLC., and will be supported by the newly hired Energy Specialist who will handle the daily tasks and coordinate with the partners in this project.

2.4.2 Programmatic and Managerial Capability and Resources – Ashland Medical Center, CBO

AMC's President and CEO is Jason Douglas, MHA, HSE, FACHE, CMPE. Jason has been President/CEO since 2013. Kent Dumonseau, CPA, CHFP, VP Finance/CFO joined AMC at the same time. Jessica Nuutinen, RN, MSN, MBA-HCM, Vice President/Chief Operations Officer is an Ashland native with strong family connections to the Ashland community. AMC employs a fulltime Project Manager. Terri Kramolis, MHA, RN-BC, CHOP (B) has been in the role of AMC Project Manager for 5 years. As project manager, Terri Kramolis has coordinated large-scale construction projects including the new AMC Surgical Services, and development of AMC Specialty Services which include Orthopedic and General Surgery, Urology, Podiatry, Weight Management, ENT Specialties, Pain Management, Gastro, and OB-GYN. Terri also coordinated the acquisition and integration of Northern Waters Ophthalmology into AMC Ophthalmology Services. AMC Project Manager works on numerous internal projects that require organizational processes to change and become standard work procedures, which involves coordinating with the Quality Department to achieve organization improvements in process and practice. Terri Kramolis worked for Ashland County Health and Human Services as Health Department Director for twenty years prior to coming to AMC and continues to have strong ties with the Ashland City and County Departments.

As a Critical Access Hospital, AMC offers the full scope of comprehensive inpatient care services. To demonstrate AMC's commitment to the communities it serves, in the past five

years AMC completed construction on a new, state of the art surgical services department, new Cardiac and Physical Rehabilitation departments, a larger Emergency and Urgent Care Department, Ophthalmology Services, and is adding primary care services by the summer of 2024.

AMC has maintained positive operating margins over the past 10 plus years and has adequate cash reserves should any decline in operating margins occur in the future to continue serving its mission to the region served. AMC has demonstrated its ability to manage taxpayer dollars in the past, most recently through the Cares Funds received during COVID. AMC has adequate controls in place to ensure that funds are administered ethically and efficiently. AMC has not had any findings or questioned costs, nor had any significant or material weaknesses around Federal Funding during its Uniform audits prepared by an independent CPA firm. AMC's CFO has many years of prior auditing experience of Federal and State awards and will be actively involved in the grant fund administration for AMC. AMC also has annual training requirements around waste, fraud, and abuse for all employees and this is also included in our Employee Handbook. We also have an anonymous hotline available for our employees which is monitored by our Compliance Officer to provide whistleblower protections.

AMC has a payer mix of approximately 70% patients whose medical insurance is either Medicare or Medicaid. AMC provides more than 4 million dollars in free medical care each year in charity care and bad debt forgiveness. During our fiscal year ended 9/30/2022 we reported Community Benefits at cost on our 990 totaling \$9.1 million or 7% of our total expenses. Community benefits included in this amount were related to Charity Care (\$597,000), Costs to treat Medicaid patients in excess of reimbursements (\$4,267,000), Subsidized health servicesprimarily our behavioral health services (\$3,869,000 underfunding), and cash contributions to local nonprofits (\$348,000). In addition to the community benefits reported on the 990 we also had approximately \$519,000 of costs to treat Medicare patients in excess of reimbursements, and an additional \$3.7 million of bad debt expense for patients from our service areas who were unable to pay for their healthcare but didn't qualify for our Charity Care guidelines. These Community Benefits are very consistent year after year.

In addition to general community support AMC has a dedicated Regional Wellness Fund managed by a separate board of directors and discussed in Attachment E, the Community Engagement Plan.

2.5 Past Performance

While Ashland County has never received an EPA grant, we have received and successfully completed numerous state and federal grants. For example, we successfully received our second renewal of a Substance Abuse and Mental Health Services Administration (SAMHSA) grant for our treatment and wellness court, a DOJ grant to support at risk youth (with a 1-year extension), Hazard Mitigation Grants funded through FEMA, ARPA funding, and numerous state grants. The grants were successfully completed by providing the services that were required as

a condition of the grants and making timely and accurate reports. Many of our grants require periodic updates where we endeavor to provide these periodic reports in a timely and accurate manner. Ashland County is the second poorest county in the state of Wisconsin. Without grants there Is simply no way that we can provide our residents with the services that are required by statute and the services that our residents expect. As a result, we endeavor to successfully complete all components of the grants that we receive.

Part 3 - Readiness Approach

Part 3. Readiness to Proceed, Feasibility, and Sustainability

3.1 Readiness Approach, Overview:

Upon award announcement, Ashland County will immediately prepare and release, within 60 days, an RFP to select contractors for the following project groups:

- County-wide EV charging equipment (EVSE)
- Installation contractor for the Bad River Band charging station
- Microgrids at 5 County facilities
- Microgrids at 11 Town essential buildings (7 Towns/11 buildings)
- The microgrid at the Laura Jean Zach Center (a disabled/senior center)

The County will also release a second RFP to solicit private site hosts for the EV charging stations. The criterion for selecting the private sites will be at Ashland County's discretion and based on proximity to state highways, adequate parking spaces, availability of utility service, and diverse geographic location.

The County has developed a job description for the full-time Energy Specialist included in this grant application. Upon the award announcement, they will release a RFP to fill this position. This person's role is detailed in the Narrative and is essential for a coherent and integrated project. It is proposed that this position be filled within the first quarter of the performance period.

Once EV charging site hosts are selected, the County will engage with Xcel Energy to finalize utility cost estimates and initiate final engineering design on the 5 sites within their territory. The 6th EV charging site in Bad River has completed cost estimates and final engineering design, and a separate RFP will select the installation contractor. Long-lead-time equipment will be ordered. The County will also finalize contracts with the microgrid contractor and final engineering design will be completed, as well as order long-lead equipment.

The County will oversee and coordinate with the CBO and collaborating partners to release their respective RFP to select contractors. The County, CBO, and its collaborating partners will utilize the local resources of Cheq Bay Renewables' in-kind services to assist in preparing and managing the RFP process.

Within the first 12-months, all projects will be construction-ready. In Attachment A - Program Budget, a Gant chart is included identifying quarterly milestones throughout the 3-year performance period of each project. This chart demonstrates the readiness of the projects and the timeline to completion. The chart also has a quarterly budget overlay.

Government Approvals:

The selected contractors in each project will be responsible for ensuring the necessary building and electrical permits, applying for interconnection agreements with the appropriate utility, and any other special permits as required. Ashland County and AMC have completed preliminary site assessments and do not anticipate needing any special permits that would cause delays. The solar project at AMC would require an Xcel Energy Impact Study to determine interconnection requirements and final engineering design, but this is part of the planned scope and fits easily within the 3-year time frame. The project has purposely been sized not to require a Midcontinent Independent System Operator (MISO) review that could cause delays outside the 3-year allotted time. The Mellen WWTP solar installation has been vetted by the WI Department of Natural Resources: the WDNR has determined that because its size is less than one acre, a special review process and permits are not required.

Federal Requirements for Construction Projects:

Ashland County and AMC acknowledge that all projects must comply with the Clean Air Act § 314 and Davis Bacon Act pertaining to paying Federal prevailing wages and the Build American Buy American provisions. These requirements have been required for other renewable energy projects that Ashland County has completed, and therefore the County is familiar with and agrees to comply with these requirements.

Alignment with Existing Plans:

Ashland County has reviewed the projects as listed for compliance with their Hazard Mitigation Plan and found no inconsistencies. The projects also align with several elements of the County's Comprehensive Plan, namely in the chapters on Housing, Utilities and Community Facilities, and Economic Development. For example, in the chapter "Utilities and Community Facilities," one of the objectives is to1) Transition County infrastructure toward energy independence via renewable sources of energy, and 2) Promote, implement, and model energy independence to citizens and businesses in the county.

Site Control:

Ashland County owns the sites of their 5 proposed microgrids. AMC owns the site for its proposed solar field. The Towns in Ashland County own the sites of their proposed microgrids. Northland College owns the sites for their microgrids. The City of Mellen owns the site for its solar installation.

The only sites that cannot be identified prior to this grant application are the private host sites for the county-wide EV charging infrastructure because of the requirements laid out in this NOFO requiring competitive bidding. This restriction is combined with the State of Wisconsin requirements that EV charging infrastructure available for public use must be owned by the private sector. Ashland County will release a competitive RFP to select the EV charging station sites and enter into contractual agreements with each EV charging station site host, guaranteeing continued operation of the charging equipment. If a site host fails to perform this function, the equipment is transferred to a new owner or is relinquished to the County until a new owner can be established.

Operations and Maintenance:

Each project will require a 5-year workmanship warranty from the contractor in addition to manufacturers' equipment warranties. The 6 EV charging sites that have Level-3 DC fast chargers will include a 5-year service contract from the selected vendor. Each site owner will be responsible for the operations and maintenance of their respective project. Projects with solar PV will have reduced electric bill costs; the savings can be allocated to cover operation and maintenance expenses. Projects with private EV charging, such as the County Highway Garages, will also have reduced expenses, in gasoline not purchased, that can also be allocated toward operations and maintenance. Projects with publicly available charging will have new revenue streams from which funds can be allocated to pay for service contracts with supply vendors beyond the initial five years. In this way, each project becomes sustainable during and after the grant period of performance.

3.2 Feasibility:

Each of the projects can be successfully completed within the period of performance based on similar area projects that have been completed in the recent past. For example, the Bad River Band successfully completed 3 microgrids in 2020 from a U.S. Department of Energy funded project in 2018. One of those three microgrids was at Bad River's WWTP and will be similar to the City of Ashland's WWTP. Adjacent Bayfield County successfully completed its first microgrid in 2023 which was funded through a Wisconsin Office of Energy Innovation Grant (EIGP) from 2021. Bayfield County's second microgrid will be completed by the spring of 2024 and was also funded by an EIGP award from 2022. Bayfield County's second microgrid is at their Washburn Highway Garage and is similar to the proposed microgrids at the Ashland County's 3 highway garages. Building on community experience makes these projects feasible, and the likelihood of success is even greater because of lessons learned from past projects.

An example of lessons learned expands not only to the county involved, or the engineering firm completing the final design, but also to the utility. Bayfield County's first microgrid combined its County Jail and Courthouse into a single master metered facility with a sophisticated utility isolation switch called a Viper Recloser. This was the first application of this technology in Xcel Energy's Wisconsin territory and the first under its new Empower Resiliency tariff. Xcel Energy demonstrated to Bayfield County and its engineers that they also had a learning curve to complete all tasks in a smooth, efficient, safe, and professional manner. These lessons learned from all stakeholders will ensure that Ashland County is successful.

All projects listed will run concurrently so one project does not depend on another project to complete before it is started. In this way, many of the steps can be completed simultaneously and more efficiently than if repeated redundantly. The single project with the greatest risk to run beyond the 3-year window, is the 4MW solar installation at AMC. A project of this scale can

typically take about 3-years to complete from conception to completion. Knowing this potential challenge, AMC has already completed several of the planning stages. They have completed a Phase 1 and Phase 2 Feasibility Study by Madison Solar Consulting and Cheq Bay Renewables, and AMC issued a Request for Information in December 2023 to better understand and refine cost estimates. They are now preparing the final RFP to select a contractor that will be issued about the same time as this grant application is submitted. AMC has therefore already completed the first 6 months of planning, which should make the rest of the project fit well within the period of performance.

3.3 Sustainability:

As stated in Section 3.1 Readiness Approach, Operations and Maintenance, many of the projects listed will have reduced expenses or new revenue streams that can perpetually sustain themselves because they include solar PV or EV charging. The Program Budget tab labeled Project Benefits tallies \$584,800 in annual direct community benefits that can help sustainably maintain renewable energy systems and help create future ones. In addition, each Community Resilience Hub has a supporting microgrid that can fund minor expenses. Community Resilience Hubs are about maintaining operations during challenging incidents and do not inherently come with major expenses. Resilience Hubs are more about planning and utilizing the microgrid resources that are available, than requiring new resources that cost money.

The Energy Specialist position will be funded after year-3 by reallocating funds that have traditionally been spent on utility bills and now are not needed because of cost savings from solar plus storage installations. The Program Budget, Project Benefits Tab shows nearly \$40,000 annually in reduced County utility expenses. After year-3 when time spent on construction monitoring and reporting is complete, time will be allocated to new projects which in a similar fashion will reduce expenses and perpetuate a living wage.

3.4 Program Budget Description

The Budget Summary Template was utilized and is attached separately in Attachment A. It contains the Summary Sheet for the County and a summary sheet (tab) for each subrecipient, a Detail Sheet for the County and each subrecipient, Project Benefits Tab, Gant Chart, Community Engagement Budget Tab, EV Charging + Emissions Analysis Tab, and other financial information. In all, 37 spreadsheets are combined into a single PDF as Attachment A.

Additional supporting spreadsheets detailing each project and subproject are available upon request. The Budget Spreadsheet in the original Microsoft Excel format is also available upon request. The Detail Sheets itemizes the total costs in the Summary Sheet. The Project Benefits Sheet lists the direct and indirect benefits that will go to the disadvantaged communities. Also listed is the percentage of dollar amounts compared to the total budget, the dollar amount of direct benefits to the disadvantaged communities per project, the percentage of these benefits

compared to the total amount, and whether additional benefits should be considered, such as resiliency, economic development, pollution reduction, and health benefits.

As an example, AMC's solar project is the largest project by dollar percentage (37.4%) and by direct community benefit (59.0%) but has no additional resiliency benefit since the solar project does not have battery storage and is therefore not a microgrid. Other projects have a smaller direct community benefit, but many also have a resiliency and/or economic development benefit that is more valuable and harder to place a dollar amount on.

The budget is reasonable because all sites have a preliminary analysis completed by Cheq Bay Renewables with support from Jolma Electric of Ashland, a local installation contractor. One site (Town of La Pointe) has completed the competitive bid process for its microgrid, and budgetary costs listed are firm bids. The Ashland County highway microgrid cost estimates are based on an adjacent county's highway microgrid project that is under construction and will be completed in the spring of 2024. Cost estimates include vendor quotes for key components like the Battery Energy Storage Systems (BESS) and Electric Vehicle Supply Equipment (EVSE). Quotes were also received from the utilities for Electric Vehicle Supply Infrastructure (EVSI). AMC, the largest project by dollar amount, has completed two successively detailed feasibility studies, received additional information from a Request for Information (RFI) sent to regional contractors in December 2023 to narrow feasibility assumptions, and is preparing to release an RFP, all funded outside of this grant request.

The Project utilizes past experience from Cheq Bay Renewables, including:

- Executed a multiple-municipal community solar project to reduce costs (2021 Rural Development Initiative Award)¹⁴
- 2. Submitted a U.S. Department of Transportation Charging and Fueling Infrastructure Discretionary Grant in June 2023, which is pending and similar to project #2 listed in the table below
- Worked with towns and villages in adjacent Bayfield County when submitting a U.S. DOE, Energy Improvement in Rural or Remote Areas grant, also pending and similar to project #3 & #10
- 4. Developed 3 microgrids, including a WWTP, at the Bad River Band reservation, and solar projects at the City of Bayfield and City of Washburn's WWTPs, similar to project #4.
- Developed Bayfield County's Jail/Courthouse microgrid project, commissioned in November 2023, which is similar to Ashland County Sheriff Department's (project #1d), and Northland College's microgrids (project #9).

¹⁴ Cheq Bay Renewables Community Solar Project - Chequamegon Bay Renewable Energy Resources

Each project listed has a data sheet with energy and demand electrical use, cost estimates including vendor quotes, site maps, and summary benefits. These sheets are available upon request.

Indirect Costs

Northland College is the only subrecipient that has an approved indirect cost rate and that documentation is included in Attachment C "Other Attachments". Ashland County, AMC, UW Extension and all other subrecipients' indirect costs were calculated at the 10% de-minimus rate of modified total direct costs (MTDC). The definition used for MTDC was taken from the Code of Federal Regulations 2 CFR 200.68:

"Modified Total Direct Cost (MTDC) means all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel, and up to the first \$25,000 of each subaward (regardless of the period of performance of the subawards under the award). MTDC excludes equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs and the portion of each subaward in excess of \$25,000. Other items may only be excluded when necessary to avoid a serious inequity in the distribution of indirect costs, and with the approval of the cognizant agency for indirect costs."¹⁵

3.5 Compliance Plan

3.5 Compliance Plan:

Ashland County Administrator will oversee the compliance of the County with aspects of accounting and reporting as required by this grant opportunity. If awarded this grant, Ashland County plans to hire an Energy/Community Specialist who will dedicate up to 50% of a full-time position to assisting the County Administrator and fulfilling these requirements over the period of performance. The details and qualifications of the Energy Specialist position is described in more detail in the EPA CCGP Narrative submitted along with the grant application. The Energy Specialist will be assisted by the County Clerk, accounting department, county legal counsel, and third-party experts as needed. Cheq Bay Renewables offers in-kind technical assistance and UW-Extension Ashland County offers in-kind community engagement and development support.

¹⁵ § 200.68 - Modified Total Direct Cost (MTDC)., Acronyms, Subpart A - Acronyms and Definitions, Part 200 -Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, Chapter II -Office of Management and Budget Guidance, Subtitle A - Office of Management and Budget Guidance for Grants and Agreements, Title 2 - Grants and Agreements, Code of Federal Regulations (elaws.us)

3.5.1 Financial management: 2 CFR § 200.302(b).

(b)(1). Ashland County, as the primary applicant, will ensure compliance with 2 CFR § 200.302(b) by identifying all Federal awards received and expended in its accounts. The accounts will include Ashland County's name, the award title, number, and year, and reference to the U.S. EPA CCGP. Ashland County has experience with financial management of numerous other state and federal grants, which have been successfully completed by providing services that were required as conditions of such grants and making timely and accurate financial reports. For more information on past performance, see Section 2.5 of the EPA CCGP Narrative submitted along with this application.

(b)(2). The accounts will contain accurate, current, and complete disclosure of the financial results of the projects funded through the EPA CCGP award and will comply with the reporting requirements approved by the Office of Management and Budget. Ashland County acknowledges that they are responsible for monitoring and reporting not only their own activities, but also the activities of the subaward entities. Tamarack Health Ashland Medical Center ("Tamarack Health") will work closely with Ashland County to ensure that all necessary financial information is provided in a timely manner. Tamarack Health and Ashland County have a history of working together on projects that require financial collaboration, so there is a history of a clear line of communications between the two entities. Ashland County will submit quarterly reports during the performance period and relate findings and other metrics to the stated goals contained within this application. Standard financial metrics will be used where applicable. Ashland County accountant, Sue Misun, will be the individual in charge of accounting management for the County, and Kent Dumonseau, chief financial officer, will be responsible for monitoring, tracking, and communicating Tamarack Health's financial information to Ashland County for this grant.

Onsite technical inspections will precede quarterly reports to ensure accuracy and compliance with Federal requirements. Ashland County will seek outside expertise to help where necessary to conduct these technical inspections. Cheq Bay Renewables will assist the County with solar PV, battery energy storage, microgrid design and implementation, and electric vehicle charging infrastructure for technology evaluation.

If unforeseen events occur that significantly delay or affect the project(s) status, Ashland County will inform the EPA as soon as the condition is known. Conversely, if a favorable condition occurs that reduces costs or increases benefits to the project, EPA will also be notified.

Ashland County and Tamarack Health acknowledge and welcome site visits from the EPA.

(b)(3). The records compiled and retained by Ashland County will adequately identify the source and application of the funds for program activities. These records will contain all pertinent information pertaining to the U.S. EPA CCGP award and be supported by source documentation.

(b)(4). Effective control over, and accountability for, all funds, property, and other assets. Ashland County will safeguard all assets and assure that they are used solely for authorized purposes in connection with 2 CFR 200.303. Ashland County has experience in tracking the authorized use of funds due to its standard budget practices, which typically require tracking funds and assets within different departments, from different sources, and for differing purposes.

(b)(5). The records will contain a comparison of expenditures with budget amounts. Ashland County prepares similar reports in its annual budget, so it is familiar with this type of reporting and budgetary tracking.

(b)(6). Ashland County's Energy Specialist will develop written procedures to implement the requirements of § 200.305, Federal Payments, including minimizing the time between the transfer of Federal funds and their disbursement. OMB approved forms and procedures will be used to request funds. Ashland County will also only request the minimum amount of funds required to fulfill the immediate action; however, some consolidation is anticipated to streamline and efficiently manage cash disbursements.

(b)(7). Ashland County's Energy Specialist will develop written procedures for determining the allowability of costs in accordance with the terms and conditions of this award.

3.5.2 Internal Controls: 2 CFR 202.303.

Ashland County will have control over, and accountability for all funds dispersed. Ashland County will assure that all funds are used solely for authorized purposes and have internal controls in place guaranteeing compliance with Federal regulations as stated in 2 CFR § 200.303. Protection of personal data will be ensured in accordance with Federal, State, local and tribal laws. Ashland County is experienced in providing these internal controls as it is required to conduct annual financial audits and correct any errors that are identified, and the newly hired Energy Specialist will further assist in creating standard protocols for ensuring compliance with these internal controls.

3.5.3 Requirements for Pass-through Entities: 2 CFR § 200.332.

Each subrecipient will have each subaward clearly identified in Ashland County's accounting and reporting system, and include the required information, such as, subrecipient's name and ID number, Federal Award ID Number, Federal Award Date, Period of Performance, etc. as listed in 200.332(a)(1). The Ashland County Energy Specialist will develop a standard form or use a readily available Federal form to report this information.

Ashland County will clearly list all requirements imposed on the subrecipient to satisfy the Federal requirements of this award, as well as any additional requirements deemed appropriate by Ashland County to fulfill its own obligations.

If indirect cost rates are included in the subrecipient subaward, these rates will be federally recognized and negotiated between the subrecipient and the Federal Government, or Ashland County will assist in determining the appropriate rate based on past negotiations or the minimum indirect cost rate.

The subrecipient is required to allow Ashland County to have access to or audit their financial records as needed, so Ashland County can fulfill its obligations under this award. An expressed term limit will be included in the contract between Ashland County and the subrecipient.

Ashland County will evaluate each subrecipient's risk of noncompliance with the terms of their agreement to determine the frequency and intensity of monitoring activities. Monitoring activities include reviewing of financial and performance reports, on-site inspections, follow-up meetings and review of any deficiencies, and announcement of any management decisions pertaining to this award.

Pursuant to audit requirement thresholds, it is anticipated that the Tamarack Health, City of Ashland, and Northland College projects will each surpass the \$750,000 threshold and require a single or program-specific audit. Ashland County will use the KerberRose accounting firm to conduct the necessary audit for the County. The subrecipients may use their own accounting firms to conduct the necessary subrecipient audits. Ashland County has used KerberRose for financial audits for several years and the two entities have a good working relationship that will ensure successful completion of any required audit.

Appendix A Project Area Map



Figure 4 Ashland County Disadvantaged Communities EJScreen tool, Numbers reference Budget All Projects, column 1

City of Ashland Map - Enlargement



Figure 5 City of Ashland, Disadvantaged Communities, EJScreen tool, Numbers refer to Budget All Projects, column 1

Appendix B Project Facts

Ashland County EPA CCGP Fact Sheet by the numbers

- 22 Microgrids
 - $\circ~$ 5 Ashland County
 - o 11- Ashland Towns
 - 3 City of Ashland
 - 2 Northland College
 - o 1- Laura Jean Zach Center
- 5.7 MW of Solar PV
- 10 Community Resilience Hubs
 - o 7 at Town Halls
 - 2 at Northland College
 - o 1 at City of Ashland Community Center
- 207,700 square feet of buildings converted to Community Resilience Hubs
- 7 Leased EV pickup trucks
 - 4 Ashland County
 - 3 Ashland County Towns
- 2 MW/3.3 MWH of battery capacity
- 49 EV charging ports at 15 sites
 - 12 150Kw DC fast chargers
 - o 37 Level-2 chargers
 - 7 Level-2 fleet chargers
 - 30 Level-2 public chargers
- 7414 Tons of CO2 emissions avoided annually
 - 5893 tons avoided from solar PV
 - 1522 tons estimated avoided because of EV charging/driving
- \$22.4M Budget

Appendix C All Projects Budget Summary

Appendix D Letters of Support

| | All Projects Details | | | | | | | | | |
|---------------------|--|-----------|-------------|-----------|-------------|-------------|---------|------------|----------|----------|
| | • | | | | | | | | BESS | BESS |
| | | | | | Subproject | In-kind | Solar | Other | Capacity | Capacity |
| Project Description | | Year 1 | Year 2 | Year 3 | Amount | Funding | PV (dc) | Funding | (kWh) | (kW) |
| | Personnel | | | | | | | | | |
| | Ashland County Project Personnel (1%) | \$74,763 | \$74,763 | \$74,763 | \$224,290 | (\$44,858) | | | | |
| | Ashland County Energy Specialist/Project Manager 3-years | \$75,000 | \$75,000 | \$75,000 | \$225,000 | | | | | |
| | Towns' Project Personnel (2% each Town) | \$7,752 | \$7,752 | \$7,752 | \$23,257 | | | | | |
| | City of Ashland Project Personnel (1%) | \$11,636 | \$11,636 | \$11,636 | \$34,908 | (\$6,982) | | | | |
| | City of Mellen Personnel (2%) | \$2,938 | \$2,938 | \$2,938 | \$8,815 | | | | | |
| | AMC Project Personnel (1%) | \$27,960 | \$27,960 | \$27,960 | \$83,880 | (\$83,880) | | | | |
| | Northland Project Personnel (1%) | \$11,944 | \$11,944 | \$11,944 | \$35,831 | (\$35,831) | | | | |
| | Laura Jean Zach Center Personnel (2%) | \$572 | \$572 | \$572 | \$1,715 | | | | | |
| | Cheq Bay Renewables - Personnel (200 hours) | \$6,667 | \$6,667 | \$6,667 | \$20,000 | (\$20,000) | | | | |
| | UW-Extension Ashland County - Personnel (100 hours) | \$2,500 | \$2,500 | \$2,500 | \$7,500 | (\$7,500) | | | | |
| | Personnel Total | \$221,732 | \$221,732 | \$221,732 | \$665,196 | (\$199,051) | | | | |
| | | | | | | | | | | |
| | Fringe Benefits | | | | | | | | | |
| | Ashland County Project Personnel Fringe (20%) | \$14,953 | \$14,953 | \$14,953 | \$44,858 | (\$8,972) | | | | |
| | Energy Specialist Fringe (20%) | \$15,000 | \$15,000 | \$15,000 | \$45,000 | | | | | |
| | Towns' Fringe (20%) | \$1,550 | \$1,550 | \$1,550 | \$4,651 | | | | | |
| | City of Ashland Fringe (20%) | \$2,327 | \$2,327 | \$2,327 | \$6,982 | (\$1,396) | | | | |
| | City of Mellen Fringe (20%) | \$588 | \$588 | \$588 | \$1,763 | | | | | |
| | AMC Fringe (30%) | \$8,388 | \$8,388 | \$8,388 | \$25,164 | (\$25,164) | | | | |
| | Northland Fringe (30%) | \$3,583 | \$3,583 | \$3,583 | \$10,749 | (\$10,749) | | | | |
| | Laura Jean Zach Center Fringe (20%) | \$114 | \$114 | \$114 | \$343 | | | | | |
| | Fringe Benefits Total | \$46,503 | \$46,503 | \$46,503 | \$139,510 | (\$46,281) | | | | |
| | | | | | | | | | | |
| | Supplies | | | | | | | | | |
| 10 | Town Community Resilience Hubs/Community Engagement | \$31,081 | \$12,270 | \$15,059 | \$58,411 | | | | | |
| | | | | | | | | | | |
| | Other | | | | | | | | | |
| | Ashland County Single Audit Expense | \$6,667 | \$6,667 | \$6,667 | \$20,000 | | | | | |
| | Northland Single Audit Expense | \$3,900 | \$3,900 | \$3,900 | \$11,700 | | | | | |
| | City of Ashland Single Audit Expense | \$5,000 | \$5,000 | \$5,000 | \$15,000 | | | | | |
| | AMC Single Audit Expense | \$10,000 | \$10,000 | \$10,000 | \$30,000 | | | | | |
| | Total Other | \$25,567 | \$25,567 | \$25,567 | \$76,700 | | | | | |
| | | | | | | | | | | |
| | Contractual | | | | | | | | | |
| 1 | Ashland County Microgrids (5) | | | | | | | | | |
| 1a | Highbridge Garage | \$140,810 | \$281,621 | \$46,937 | \$469,368 | | 67 | (\$8,927) | 115 | 60 |
| 1b | Ashland Garage | \$64,461 | \$128,923 | \$21,487 | \$214,871 | | 25 | (\$3,609) | 60 | 30 |
| 1c | Glidden Garage | \$59,016 | \$118,033 | \$19,672 | \$196,721 | | 18 | (\$2,991) | 60 | 30 |
| 1d | Sheriff's Department | \$299,530 | \$599,059 | \$99,843 | \$998,432 | | 97 | (\$12,575) | 440 | 250 |
| 1e | Human Health Services | \$33,363 | \$66,726 | \$11,121 | \$111,210 | | 15 | (\$2,375) | 60 | 30 |
| | Subtotal Ashland County Microgrids | \$597,181 | \$1,194,362 | \$199,060 | \$1,990,603 | | | | 735 | 400 |

| | All Projects Details | | | | | | | | | |
|---------|--|-------------|--------------|-------------|--------------|----------|---------|---------------|----------|----------|
| | - | | | | | | | | BESS | BESS |
| | | | | | Subproject | In-kind | Solar | Other | Capacity | Capacity |
| Project | Description | Year 1 | Year 2 | Year 3 | Amount | Funding | PV (dc) | Funding | (kWh) | (kW) |
| | Ashland County-wide EV Charging Infrastructure (6 sites, 24- | | | | | | | | | |
| 2 | ports) | \$708,292 | \$944,389 | \$708,292 | \$2,360,973 | | | (\$376,400) | | |
| | | | | | | | | | | |
| 3 | Ashland County Town Microgrids (7 Towns) | | | | | | | | | |
| 3a | Town of La Pointe Emergency Services Building | \$54,004 | \$162,013 | \$54,004 | \$270,022 | | 35 | (\$5,277) | 60 | 30 |
| 3b | Town of Marengo - 2 microgrids/sites | \$32,027 | \$96,080 | \$32,027 | \$160,133 | | 15 | (\$2,407) | 60 | 30 |
| 30 | Town of Jacobs (Glidden) - 3 microgrids/sites | \$46,951 | \$140,853 | \$46,951 | \$234,754 | | 27 | (\$3,880) | 115 | 60 |
| 3d | Town of Agenda | \$17,160 | \$51,480 | \$17,160 | \$85,800 | | 19 | (\$2,875) | 30 | 15 |
| Зе | Town of Sanborn | \$19,659 | \$58,976 | \$19,659 | \$98,293 | | 17 | (\$2,648) | 30 | 15 |
| 3f | Town of Morse | \$17,641 | \$52,922 | \$17,641 | \$88,203 | | 17 | (\$2,550) | 30 | 15 |
| 3g | Town of Gordon - 2 microgrids | \$45,130 | \$135,391 | \$45,130 | \$225,652 | | 27 | (\$3,004) | 60 | 30 |
| | Subtotal Town Microgrids | \$232,571 | \$697,714 | \$232,571 | \$1,162,856 | | | | 385 | 195 |
| | | | | | | | | | | |
| 4 | City of Ashland Microgrids (3) | | | | | | | | | |
| 4a | WWTP Microgrid | \$476,992 | \$1,430,977 | \$476,992 | \$2,384,962 | | 334 | (\$35,890) | 770 | 500 |
| 4b | Fire Station Microgrid | \$110,279 | \$330,836 | \$110,279 | \$551,393 | | 144 | (\$17,430) | 110 | 60 |
| 4c | Community Center Microgrid | \$86,797 | \$260,392 | \$86,797 | \$433,986 | | 92 | (\$11,980) | 110 | 60 |
| | City of Ashland Microgrid Total | \$674,068 | \$2,022,205 | \$674,068 | \$3,370,342 | | | | 990 | 620 |
| 5 | City of Ashland Level-2 EV Charging Stations | \$21,088 | \$73,808 | \$10,544 | \$105,440 | | | | | |
| | | | | | | | | | | |
| 6 | City of Mellen WWTP Solar Field on Redeveloped Landfill | \$88,151 | \$308,530 | \$44,076 | \$440,757 | | 123 | (\$15,320) | | |
| | | | | | | | | | | |
| | Tamarack Health (AMC) Solar Field 4MW (solar only, in-front of | | | | | | | | | |
| 7 | meter) | \$1,671,600 | \$4,179,000 | \$2,507,400 | \$8,358,000 | | 4000 | (\$2,507,400) | | |
| | | | | | | | | | | |
| 8 | Northland College | | | 40.00.000 | | | | (+ | | |
| | Microgrids (2) | \$696,378 | \$2,437,324 | \$348,189 | \$3,481,892 | | 615 | (\$67,500) | 1210 | 750 |
| | 8 Level-2 EV charging ports | \$42,992 | \$21,560 | | \$64,552 | | | | | |
| | CRC Solar Energy Dashboard | \$25,000 | | 40.00.000 | \$25,000 | | | | | |
| | Northland Project Total | \$764,370 | \$2,458,884 | \$348,189 | \$3,571,444 | | | | | |
| | | 410.071 | <u> </u> | 40 | 405 744 | | | (40.004) | | |
| 9 | Laura Jean Zach Center microgrid | \$42,871 | \$42,871 | Ş0 | \$85,741 | | 15 | (\$2,391) | 30 | 15 |
| | | 64,000,400 | 644 024 762 | <i></i> | 624 446 456 | | | | | |
| | l otal Contractual | \$4,800,192 | \$11,921,763 | \$4,724,201 | \$21,446,156 | | | | | |
| | | 65 405 07C | 640.007.005 | AF 000 060 | 622 205 072 | | | | | |
| | I OTAL DIRECT COSTS | \$5,125,076 | \$12,227,835 | \$5,033,062 | \$22,385,973 | | | | | |
| | Indirect Costs | 622 770 | 622 770 | 622.770 | 674.240 | | | | | |
| | Townel Indirect (100/ do minimus) | \$23,770 | \$23,770 | \$23,770 | \$/1,310 | (35,655) | | | | |
| | City of Ashland Indirect (10% de minimus) | \$930 | \$930 | \$930 | \$2,791 | (2,/91) | | | | |
| | City of Ashiand Indirect (10% de minimus) | \$1,896 | \$1,896 | \$1,896 | \$5,089 | (2,844) | | | | |
| | ANC Indirect (10% de minimus) | \$353 | \$353 | \$353 | \$1,058 | (1,058) | | | | |
| | Aivic indirect (10% de minimus) | \$4,635 | \$4,635 | \$4,635 | \$13,904 | (13,904) | | | | |

| All Projects Details | | | | | | | | | | |
|----------------------|--|-------------|---------------|---------------|---------------|-------------|---------|-----------------|----------|----------|
| | | | | | | | | | BESS | BESS |
| | | | | | Subproject | In-kind | Solar | Other | Capacity | Capacity |
| Project | Description | Year 1 | Year 2 | Year 3 | Amount | Funding | PV (dc) | Funding | (kWh) | (kW) |
| | Northland Indirect (54% of Salary & Wages) | \$6,450 | \$6,450 | \$6,450 | \$19,349 | (19,349) | | | | |
| | Laura Jean Zach Center Indirect (10% de minimus) | \$69 | \$69 | \$69 | \$206 | (206) | | | | |
| | Total Indirect Costs | \$38,102 | \$38,102 | \$38,102 | \$114,307 | (\$75,807) | | | | |
| | | | | | | | | | | |
| | Total Direct and Indirect Costs | \$5,163,178 | \$12,265,938 | \$5,071,165 | \$22,500,280 | (\$321,140) | 5703 | (\$3,087,429) | 3350 | 1980 |
| | | | | | | | 1580 | microgrids only | y | |
| | Total Other Funding | (\$107,047) | (\$1,136,189) | (\$2,541,732) | (\$3,408,568) | | | | | |
| | Grant Request | \$5,056,131 | \$11,129,748 | \$2,529,432 | \$19,091,712 | | | | | |
| | Quarterly Grant Request | \$1,264,033 | | | | | | | | |
| | Quarterly Other Funding | (\$26,762) | | | | | | | | |



Romaine Robert Quinn

STATE SENATOR • 25th Senate District

January 23, 2024

Office of the Administrator U.S Environmental Protection Agency Mail Code 1101A 1200 Pennsylvania Ave. NW Washington, D.C. 20460

Dear USEPA Administrator,

I am writing today in support of Ashland County and Ashland County Extension along with Cheq Bay Renewables, an award-winning local nonprofit organization that focuses on developing solar installations to build capacity for renewable energy in Ashland and Bayfield counties, in development of a countywide clean energy economy using renewable energy source.

The group indicates the purpose of the partnership is to write and submit a joint \$10 to \$20 million U.S. Environmental Protection Agency (USEPA) grant that will pay for solar and electric vehicle (EV) infrastructure in disadvantaged areas in the United States. Most of Ashland County has already been designated as a disadvantaged county by the U.S. Census, which allows them to apply for this funding.

According to Ashland County leaders, the availability of electric vehicle fast chargers in the community will help to accelerate the adoption of electric vehicles and will also provide significant benefit to visitors traveling to the community which relies heavily on tourism and recreation to sustain its economy. They also note, in addition to the sustainability, it is important to make our community buildings more resilient during power outages and to save money, along with energy, by using solar-powered systems in the communities of Northern Wisconsin.

I encourage you to give every consideration of the grant request to Ashland County for solar and electric vehicles. I support this Northern Wisconsin effort.

Sincerely,

Romaine Robert Quinn State Senator Wisconsin's 25th Senate District



January 25, 2024

U.S. Environmental Protection Agency Office of Environmental Justice and External Civil Rights

SUBJECT: ASHLAND COUNTY COMMUNITY CHANGE GRANT APPLICATION

The purpose of my communication is to provide a letter of confirmation for Ashland County for their Community Change Grant application. Ashland County government is collaborating with Ashland County municipalities, Tamarack Ashland Medical Center, Northland College, the Bad River Band of Lake Superior Chippewa, and a community nonprofit senior center on their first-ever countywide opportunity to purchase and install solar PV systems, microgrids, and electric vehicle charging stations. Ashland County and collaborating organizations in this project are part of the Rural Partners Network - Northern Wisconsin Community Network.

The Rural Partners Network (RPN) launched in 2022 and is co-led by the White House Domestic Policy Council and US Department of Agriculture. It is an all-of-government program that partners with rural people to access resources and funding to create local jobs, build infrastructure, and support long-term economic stability on their own terms. It is part of the Biden-Harris Administration's commitment to ensure all rural communities can benefit from federal resources, including historic funding provided by the American Rescue Plan, Bipartisan Infrastructure Law, and Inflation Reduction Act. Environmental Protection Agency (EPA) is one of more than twenty federal agencies that are collaborating as part of RPN.

This project will be instrumental in the development of a countywide clean energy economy using solar as its renewable energy resource. Funding for this project will support solar array installations, electric vehicles, and EV infrastructure in Ashland County. According to U.S. Census, Ashland County is designated as a "Disadvantaged Area." Project support provides an essential opportunity for Ashland County to implement extensive energy efficient power production and build off-grid climate resilience hubs throughout their rural communities.

Ashland County relies heavily on tourism and recreation to sustain its economy. Ashland County leaders report the availability of electric vehicle fast chargers will help accelerate the adoption of electric vehicles within the county and provide significant benefit to visitors.

As the lead federal agency for the RPN, USDA Rural Development is committed to strengthening programs and initiatives that promote economic development and self-sufficiency to improve the lives of people living in the five Wisconsin RPN Community Networks, including the Northern Wisconsin Community Network. We look forward to a possible collaboration with the U.S. Environmental Protection Agency and Ashland County Community.

Sincerely,

Julie Lassa Wisconsin State Director USDA Rural Development

Rural Development • Wisconsin State Office 5417 Clem's Way • Stevens Point, WI 54482 Phone (715) 345-7635 • Fax (855) 731-0161

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