### PUBLIC SERVICE COMMISSION OF WISCONSIN

### Memorandum

September 7, 2021

### FOR COMMISSION AGENDA

TO: The Commission

FROM: Kristy Nieto, Administrator

Tara Kiley, Deputy Administrator

Joe Pater, Director, Office of Energy Innovation Olivia Shanahan, Energy Grants Manager

Megan Levy, Local Energy Programs and Energy Assurance Coordinator

RE: Project Year 2020 (PY20) State Energy Program (SEP)

9705-FG-2020

Formula Grant Awarded by the US Department of Energy

### Suggested Minute:

The Commission reviewed the applications for the 2021 Critical Infrastructure Microgrid and Community Resilience Centers Pilot Grant Program and (determined which applicants should receive a grant award/remanded the matter back to Commission staff for additional investigation).

### Background

The Critical Infrastructure Microgrid and Community Resilience Centers Pilot Grant Program (CIMCRC) is a financial assistance program implemented by the Public Service Commission of Wisconsin's (Commission) Office of Energy Innovation (OEI). The CIMCRC was established by the Commission on June 4, 2021. (PSC REF#: 413223.) The program focuses on innovative pre-disaster mitigation through critical infrastructure microgrids and other resilient building strategies by studying the feasibility of the deployment of distributed energy resources (DERs) and appropriately sized storage, along with a grid-interactive controls schema.

On June 28, 2021, the pilot program year was launched with the issuance of the "Critical Infrastructure Microgrid and Community Resilience Center Pilot Grant Program Application

Instructions". (<u>PSC REF#: 414483.</u>) The Application Instructions provided definitions for the purpose of the program<sup>1</sup> and solicited applications for three eligible activities:

- Activity 1: Feasibility Study of Critical Infrastructure Microgrid Deployment Level 1 and 2
- Activity 2: Feasibility Study of Critical Infrastructure Microgrid Deployment Level 3
- Activity 3: Feasibility Study of Community Resilience Center (CRC) Deployment (Applicant indicates whether the CRC is a Level 1, 2, or 3 Microgrid).

### **Funding Available**

The Commission established an allotment of up to \$985,000 for the pilot grant round with maximum grant requests as shown in Table 1.

• Microgrid: A group of interconnected loads and distributed energy resources within clearly defined electrical boundaries that acts as a single controllable entity with respect to the grid. A microgrid can connect and disconnect from the grid to enable it to operate in both grid-connected or island-mode.

- Level 2 or single customer or campus setting (partial feeder microgrid): a single DER or multiple DERs serving multiple facilities, controlled by one meter at the interconnection point (also known as Point of Common Coupling or PCC). Example: a microgrid sited on a University campus connected to multiple buildings.
- O Level 3 or multiple customers (advanced or full feeder microgrid): a single DER or multiple DERs serving multiple facilities or customers on multiple meters. The DER(s) may be located on a different site from the facilities or customers. While the advanced microgrid has one PCC, the individual facilities or customers within the advanced microgrid may have their own individual connections to the distribution grid.
- Community Resilience Centers (CRC): Facilities designed to provide emergency heating and cooling capability; refrigeration of temperature-sensitive medications, vaccines and milk from nursing mothers; plug power for durable medical equipment (to include dialysis equipment and continuous positive airway pressure machines); plug power for charging of cell phone and computer batteries; and/or emergency lighting. A CRC may also be a designated location (by the city, county, or State of Wisconsin) for the distribution of emergency services during extended grid outages. This center would not necessarily be a replacement for an emergency shelter, and should not be required to have food service capabilities, showers, or locker rooms; however, an emergency shelter that does provide these services would still be eligible to apply. A CRC can be a Level 1, 2, or 3 Microgrid (see definition of Microgrid above).

<sup>&</sup>lt;sup>1</sup> For purposes of this grant program, the following definitions shall apply:

Level 1 or single customer: a single Distributed Energy Resource (DER) or multiple DERs serving one customer through one meter. Example: a single facility (such as a hospital) using an on-site microgrid to provide backup power.

Table 1. Annual Budget and Maximum Grant Requests per Activity

Total Funds Available	\$985,000
Activity	<b>Maximum Grant Requests</b>
Activity 1 (Level 1or Level 2 Microgrid)	Up to \$50,000
Activity 2 (Level 3 Microgrid)	Up to \$100,000
Activity 3 (CRC*)	Up to \$100,000
*A CRC which would fit the definition of a level	1 or 2 Microgrid was eligible to apply
for up to \$50,000.	0 0 11 1

### **Applications Received**

### **Overview of All Applications**

Applicants demonstrated substantial interest; 16 applications were submitted with the sum of the grant requests totaling \$962,695. Individual grant requests ranged from \$17,865 to \$100,000. Additional application data is provided below.

Figure 1. Summary of Applications Received

Activity	Activity 1 (Level 1 or Level 2 Microgrid)	Activity 2 (Level 3 Microgrid)	Activity 3 (CRC*)	Totals
Nonprofit	1	0	3	4
Municipality	3	2	3	8
Tribe	0	1	0	1
Utility	1	0	1	2
UW System	0	0	1	1
Totals	5	3	8	16
Sum of Grant Requests	\$182,865	\$245,400	\$534,430	\$962,695

### **Application Eligibility Determinations**

Eligibility parameters for applicants and activities were discussed in the Application Instructions, Section 1.2.3 and 1.2.4. Ineligible activities were itemized in Application Instructions, Section 1.2.6. Additionally, the Application Instructions Section 2, "Application Format and Procedures," specified a number of circumstances that could render an application or

filing ineligible, such as late filing or incorrect formatting. Applications were due August 6, 2021, at 12:00 pm CST to the Electronic Records Filing (ERF) system. A number of eligibility questions were addressed in the Frequently Asked Questions document published and updated on the Commission's web site<sup>2</sup>.

The following item was identified for a Commission determination of eligibility. Details on each filing and how it was processed are shown below, and each filing is included and marked accordingly in Attachment 1.

### **Application Material and Filing Matters**

Wisconsin Housing Preservation Corp. (WHPC) – The application was submitted late.
 Since it was readily available for the evaluation process, it was included, and the evaluation team gave it a full merit review. It was recommended for funding by the evaluation team, in the event the Commission determines it is eligible. See Attachment 1 #16.

Third-Party Letters of Support: The following third-party letter of support was filed late. Due to the timing, it was not seen by the evaluation team for the purpose of merit review. If the Commission chooses to deem this filing as eligible, it may serve as an additional factor to consider in the selection of grant awards.

• We Energies Letter of Support for Advocate Aurora Health. See Attachment 1 #1.

**Commission Alternatives – Application and Filing Matters** 

**Alternative One:** The Commission accepted:

**Sub-Alternative A**: The late application of WHPC.

**Sub-Alternative B**: The third-party letter of support filed by We Energies in support

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<sup>&</sup>lt;sup>2</sup> FAQ Critical Infrastructure Microgrid and Community Resilience Center Pilot Grant Program.pdf (wi.gov)

of Advocate Aurora Health.

**Sub-Alternative C**: Both the late application and third-party letter of support.

**Alternative Two**: The Commission did not accept either the late application or the third-party letter of support.

### **Evaluation Methodology**

Merit review scoring criteria included the following: (Activities 1 and 2 Only)

Identification of Critical Infrastructure; Key Partners and Stakeholders; Project Resilience

Objectives and Metrics; Evaluation of Site-specific information; Technologies under

consideration; Cost Match; Data Collection Plan; Systems Sizing Analysis, Financial Analysis

(including cost-to-benefit analysis and financing options); Environmental Impact.

The Commission is not bound by the recommendations of the review panel, but the scoring of a particular project may be one of several considerations that the Commission may consider. The grant award determinations will be made by the full Commission.

A three-member panel reviewed and scored the applications in a preliminary screening.<sup>3</sup> The review panel considered both the eligibility and merit of the applications, and scored and ranked them to facilitate the Commission's own review. Each application was assigned a score from 0 to 100 points. Emphasis was placed on reliability and resilience benefits (during outages not caused by events beyond a utility's control) and benefits of avoiding major power outages (i.e. outages caused by major storms or other events beyond a utility's control). Additionally, emphasis was placed on environmental impact. To assist the Commission, the team's preliminary evaluation results are incorporated in the section titled "Discussion of the Grant

<sup>&</sup>lt;sup>3</sup> The review panel included Commission staff from the OEI, representing both the Focus on Energy and State Energy Office teams, and the Division of Energy Regulation and Analysis.

Applications Recommended for Funding." A master list of grant applications, labeled as Attachment 1, provides brief project descriptions and links to the application documents.

The purpose of this memorandum is to provide an informed analysis and opinion regarding the relative merits of the grant applications and structure including organized index and visual materials to facilitate review.

### **Options to Redistribute Funds Based on Applications Received**

The commission allocated up to \$985,000. As shown above, the program was slightly undersubscribed by \$22,305. As the remaining amount is too small to be impactful if redistributed evenly or prorated among applications, the funds will remain in the SEP budget to be used in accordance with the guidance from U.S. Department of Energy and consistent with the Commission's orders on the SEP Annual Plans for Program Years 2020 and 2021 in dockets 9705-FG-2020 and 9705-FG-2021. (PSC REF#: 392202; PSC REF#: 413323.)

### Discussion of the Grant Applications Recommended for Funding

Of the 16 applications received, all applications were recommended for funding. Projects are discussed individually in this section.

# Activity 1: Critical Infrastructure Microgrid Feasibility Study Level 1 and 2 Aurora Health Care Inc. Advocate Aurora Pleasant Prairie Microgrid Feasibility Study Level 1 Critical Infrastructure Microgrid

This project proposes a feasibility study that will evaluate the potential to implement a microgrid system as part of the next phase of the 200,000 square foot hospital complex expansion, serving the Racine, Kenosha, and Lake County areas. The proposed microgrid will include a combination of technologies including onsite solar photovoltaic (PV), battery storage, fossil fuel-based emergency generators, and integration with existing electrical infrastructure.

The study will also evaluate the option to include a combined heat and power (CHP) system as part of the microgrid. The potential to power the boilers or generators by hydrogen will be evaluated to "future proof" the installation. The proposal aligned well with the resilience and reliability strategic objectives set out by the Commission due to the stated intent of the microgrid system to provide pre-disaster mitigation, achieve a higher level of reliability through more diverse and modern technologies available, expand the amount of load available to be served in outage situations, and to reduce and normalize buildings load needs on local transmission and distribution to reduce utility costs. Advocate Aurora has pledged to offset its health care operation with 100 percent renewable electricity by 2030. Evaluators found merit in Aurora's goals to decarbonize space heating and further use health care code required emergency generators and backup power systems to integrate into resilient and green microgrids broadly across their fleet of hospitals and clinics in the future.

## <u>Bayfield County Highway and Forestry Microgrid Study - Level 2 Critical Infrastructure Microgrid</u>

This project proposes to study the feasibility of creating a clean energy microgrid for both of the county's Highway and Forestry garage buildings, which provide critical services to the community, such as snow plowing and deicing, road maintenance, and emergency response due to flooding or high winds. An experienced project team proposes this relatively simple project that will provide benefits to an underserved population in Bayfield County while enhancing resilience of critical services. Evaluators noted the commitment of Bayfield County, a charter member of the OEI's Energy Independent Communities program, to continuous investment in sustainable resilience.

## <u>City of Eau Claire Water Treatment Plant Microgrid Feasibility Study - Level 1 Critical</u> Infrastructure Microgrid

This project proposes a study that will examine a set of technologies including backup generators, battery storage, solar PV and microgrid controls. This arrangement will be studied for individual pros and cons (practicality, fiscal, environment, resiliency) to understand if the investments will maximize the plant's need to meet the Wisconsin Department of Natural Resources' (DNR) requirement for back-up power, along with optimizing the plant's operations. Driven by the City of Eau Claire's Strategic Plan<sup>4</sup>, which includes the goal of achieving carbon neutrality for municipal operations and the city-at-large by 2050, this project requests a modest amount of funding to investigate a carbon neutral solution to providing more than 70,000 citizens with fresh clean water in the event of a power outage. Evaluators noted the strong support of Xcel energy and the DNR as well as the City's planning team, as indicators of the potential success.

<u>City of Madison Feasibility Study for a Microgrid at 1600 Emil St. and 1501 W. Badger Rd. - Level 2 Critical Infrastructure Microgrid</u>

This project proposes a feasibility study that will examine the conversion of two adjacent city-owned facilities into an interconnected microgrid, leveraging existing solar and back-up generation systems. Each of the proposed locations houses critical city functions (snow removal, road maintenance, and sewer maintenance, in addition to office support for police, firefighting, and GIS services for multiple agencies). Evaluators noted the key project partners include Madison Gas and Electric (MGE), the University of Wisconsin Electrical Engineering

Department, Slipstream, as well as the Mayor and City Sustainability Manager, which comprise

<sup>&</sup>lt;sup>4</sup> https://www.eauclairewi.gov/home/showpublisheddocument/30455/637110562312000000

a strong team with a track record of success. Further, the proposed study will investigate technology selected for the microgrid, which would directly improve the environmental impact of the site, and directly support the City of Madison goal for municipal operations to be powered by 100 percent renewable energy by 2030.

Kaukauna Utilities: The Heart of the Valley Metropolitan Sewerage District Facility Critical Infrastructure Microgrid - Level 1 Critical Infrastructure Microgrid

This project proposes investigating a microgrid solution for the Heart of the Valley Metropolitan Sewerage District Facility wastewater treatment plant in order to maintain service to approximately 52,000 customers in Kaukauna, Kimberly, Little Chute, Darboy, and Combined Locks during a long term power outage. Along with continued service for the plant's customers, the potential microgrid solution would prevent a spill into the Fox River, a vital waterway. The evaluation team noted that the environmental impact of providing clean energy back-up to this plant, which currently has no back-up (other than separate sub-station electrical service), could serve as an example for other similarly sized plants.

### Activity 2: Critical Infrastructure Microgrid Feasibility Study Level 3

### Appleton Airport Level 3 Critical Infrastructure Microgrid

This project proposes to study the feasibility of a large, shared microgrid with maximum storage capacity, serving multiple facilities and customers on multiple meters. The feasibility study will evaluate the controls strategy to connect these loads and also determine the optimal size for storage systems, additionally the study will evaluate technology options including rooftop and ground-mounted solar PV, lithium-ion batteries, and generators with innovative solutions including renewable fuels and natural gas, as well as a CHP system, geothermal, an onsite electrolyzer, and green hydrogen delivery. Advanced energy modeling techniques will be

deployed to develop operational and economic modeling for the project. The evaluation panel finds merit in the study due to the critical nature of the Appleton airport and the impressive scope, which includes supporting the airport, passengers, employees, tenants and a large portion of the surrounding community to provide critical services during emergencies, natural disasters, or other events. The panel noted that funding this study will advance the Appleton Airport's 2030 goals (as determined by the airport's participation in the Federal Aviation Administration's Sustainable Master Plan Pilot Program and the subsequent 2012 Master Plan): (1) To achieve a 70 percent reduction in energy use for the Passenger Terminal by 2030 and (2) to offset 50 percent of the Passenger Terminal energy consumption using renewable energy sources by 2030. Bad River Band Of Lake Superior Chippewa Indian Mashkiiziibii Community Resilience Minigrid Study

This project proposes an investigation into a community microgrid for both emergency services and critical infrastructure, a Level 3 microgrid with multiple points of common coupling and integration with several independently metered Community Resilience Centers. Evaluators noted the success of previous microgrid projects and the applicant's methodical approach to this technological and economic feasibility study, building on the recently completed Emergency Response Plan, Emergency Evacuation Plan, and Pre-Disaster Hazard Mitigation Plan. The tribe has identified the worst hazards to the community and identified critical resilience objectives and also aligned them with a phased path towards its clean, resilient energy goals through their "Long Range Energy Planning Report." The evaluation committee found merit in the proposal team which has planned and built three existing microgrids, and maintains working relationships with each other, and especially important is the history of cooperation between the Tribe and Bayfield Electric. Further, the conclusions of the study (particularly generation and storage

capacities, community microgrid topology, required modernization of the distribution network, identification of interoperable equipment, dispatch algorithm to optimize resilience and economic benefits, cost model to estimate capital expenses, policies regarding customers of Bayfield Electric, and Dairyland Power, as well as the legal and business risk of the venture) are expected to provide valuable lessons for other Tribal Nations and communities.

### Town of LaPointe Microgrid Feasibility Study- Critical Infrastructure Microgrid

This feasibility study would craft a plan so all Town buildings and services would be poised to operate continuously in a prolonged power outage, as well as have the ability to recover more quickly after any power outage. The proposed study would examine the feasibility of: building a new 35 kilowatt (kW) array at the rebuilt Emergency Services Building, to serve the ESB and Winter Transportation equipment, and possibly provide additional capacity to the nearby Materials Recovery Facility, building 130 kW of new solar PV arrays at the Public Works maintenance buildings, Sanitary District, and Airport, building a microgrid (or grids) to connect new and existing arrays, connecting critical infrastructure through these grids; clusters could include Town Hall, Community Health Clinic, Municipal Dock, Library, School, and ancillary buildings; the Emergency Services Building and Winter Transportation Building; Public Works Garages, pumping stations at the Sanitary District, and Airport; and enhancing capacity at the Materials Recovery Facility site and elsewhere as appropriate. Evaluators noted the strong project team, the town's experience with distributed generation assets, and awarded the proposal high marks for their well-defined resilience performance objectives and metrics.

### **Activity 3: Community Resilience Center Feasibility Study**

Florence Utilities: Florence Elementary School Emergency Shelter - Level 1 or 2

This project proposes a study that will examine the development of a microgrid powered, designated emergency shelter at the existing Florence Elementary School which would serve a population of 4,295, approximately 27 percent of that population is over age 65 and could have significant energy needs, such as oxygen and other medical equipment. The proposal was motivated by the failure of the 480 KW diesel generator, which previously served the school, and will be led by the local utility with the support of WPPI and services of the Smart Electric Power Alliance (SEPA). Key stakeholders include Emergency Management and municipal decision makers, along with the utility partners and SEPA; the strength of the project team was noted by the evaluators.

### City of Middleton Business Park Microgrid and Community Resilience Center-Level 3

The project concept to be investigated by this feasibility study will use primarily renewable energy sources, including solar PV and battery storage, to create an emergency microgrid to power critical economic, industrial, and public safety infrastructure in the event of a catastrophic power outage, similar to the emergency Middleton experienced during the flooding of 2018. The proposed feasibility study will include analysis of historical energy use and cost in the study area, project identification, sizing and scaling, physical site/facilities due diligence, and communication with the diverse ownership of potential solar hosts, a comprehensive baseline, a climate change and natural hazard vulnerability study, projected financial and environmental benefits for the project, a phasing strategy for growing the project in the future, and financial analysis to determine funding sources for implementation. The evaluation team noted that this project is a continuation of the City of Middleton's comprehensive energy planning work that the

Office of Energy Innovation funded through the inaugural round of the Energy Innovation Grant Program in 2018. The initial study included seven communities in Dane County, this proposal is similarly ambitious, proposing a large industrial park and airport as part of the study area.

Sun Prairie Public Library Microgrid and Community Resilience Center - Level 1

This project proposes a feasibility study that will explore the expansion of the library's current emergency and community capabilities by investigating integrating solar and storage with microgrid controls to serve critical loads (such as the HVAC, lighting, computers, and the Sun Prairie Media Center). The library is committed to providing community benefits, including those of a CRC. The library is planning an expansion and this microgrid feasibility study will align with multiple stated goals, such as: ensuring the library as an essential destination for the community during emergencies as a CRC, ensuring the spaces and services honor the library's commitment to diversity, equity, and inclusion, demonstrating good stewardship by being financially, environmentally, and culturally sustainable, and facilitating internet and broadcast communications during outages. Evaluators noted that the phone and electric charging station would provide a vital service for residents and emergency first responders alike.

<u>Millennium Economic Development Corp. Telelift Critical Infrastructure Resiliency Pilot-</u>
<u>Level 3</u>

The Telelift Critical Infrastructure Resiliency Pilot proposes a feasibility study to determine if alternative energy can supplant gas powered generators to power mobile, dynamic networks. Dynamic networks provide 4G/5G/LTE and/or WiFi during emergency and disaster response. Wisconsin Telelift (WiscLift) and Forest County Economic Development Partnership support Forest County Emergency Management directly and state emergency management through the state Business Emergency Operation Center (BEOC). WiscLift currently deploys a

heavy rescue truck providing network connectivity and power supply for contingency operations. This pilot will review the capability of battery storage for powering dynamic network trailers and vehicles, as well as a PV charging and storage capability in Forest County. Currently, Telelift stand-alone mobile dynamic networks provide critical communication networks during emergency and disaster response. The systems have also provided 110/220V AC power to support charging stations, operations centers, etc. By incorporating battery storage capacity and microgrid controls to link loads, Telelift trailers/vehicles will be become not only mobile networks but also mobile power supplies. Evaluators noted that WiscLift is already designed for rapid response and deployment to critical locations, and the results of this study will provide a path forward for robust mobile emergency connectivity in rural Wisconsin, among other applications during a long term power outage. Forest County Potawatomi and Chippewa Sokaogon among other tribal entities have expressed interest in the outcome of this study as well. Sauk Prairie Police Commission Emergency Operations Center- Community Resilience Center-Level 1

This project proposes a study that will examine the feasibility of adding a solar powered microgrid to the Sauk Prairie Police Commission's new police station located at 640 13<sup>th</sup> Street in the Village of Prairie du Sac. The new police station will house an emergency operations center that will routinely be used by the Sauk Prairie Police Department, Prairie du Sac Fire Department, Sauk City Fire Department, Sauk Prairie EMS, Village of Prairie du Sac, and Village of Sauk City during major events, critical incidents, and man-made or natural disasters. The emergency operations center may also be used by other area emergency government or law enforcement agencies as needed, including Sauk County Sheriff's Department, Sauk County Emergency Government, and Sauk County Public Health Department. The new police station is

currently under construction and has plans to include rooftop solar PV for energy cost savings. This project will pursue a feasibility investigation of a microgrid, including battery storage, in order to evaluate enhancements and additions to the new police station to accommodate a microgrid for resiliency.

### <u>Smart Electric Power Alliance (SEPA): Holy Wisdom Monastery Emergency Shelter-</u>Community Resilience Center- Level 1

This project is proposed by the Smart Electric Power Alliance in partnership with the Holy Wisdom Monastery and MGE, to determine the feasibility of replacing the existing MGE owned diesel back-up generator with an expansion of the Monastery's on-site solar and the addition of storage, among other potential clean energy solutions. Holy Wisdom Monastery has an agreement with the Dane County Airport to provide emergency shelter and critical services for stranded airline travelers during an emergency as well as aggressive renewable energy goals. This study will provide the non-profit organization with valuable information to help them determine the most cost-effective and feasible path to satisfying Holy Wisdom Monastery and MGE's clean energy and resilience goals.

# The Board of Regents of The University of Wisconsin System: South Madison Community Resilience Center –Level 3

This proposal requests funding for a Community Resilience Center (CRC) feasibility study in South Madison within the Village on Park site, to support the UW-South Madison Partnership. The study will explore implementation options for clean energy technology at the location, including solar powered kiosks. Further, the study will determine necessary technology to enable a CRC to serve the Village on Park site in three operating conditions: Everyday, Disruption, and Recovery. CRCs are expected to operate in Everyday Mode most of the time. In Disruption Mode, the CRC has the necessary operating agreements in place to activate the site

and requisite technology to provide back-up power at the site, this would enable the Village on Park CRC to provide vital services during outage events (such as heating and cooling, food distribution, phone charging, and community mobilizing). This implementation study will determine necessary sizing and system layout to downsize or avoid altogether the installation of a diesel power generator in favor of clean energy technologies such as solar photovoltaics and battery energy storage. Findings from the study will have the maximum impact to keep pace with the Community Development Authority (CDA) development schedule at the site and bring clean energy equity and energy security to the residents, end-users and community at Village on Park. Evaluators noted the strength and diversity of the project team as well as the funding and financing mechanisms in place; (e.g. the Madison Common Council has already authorized CDA funds and the Urban League of Greater Madison has also raised funds to be deployed at the site for a "Black Business Hub"). Funding this study is the first step in providing equitable access to the benefits of clean energy and preparedness for the local community and could serve as an innovative model for other communities in the state of Wisconsin and beyond.

<u>Wisconsin Housing Preservation Corp. (WHPC) Resilience Planning for Wisconsin Affordable</u>

<u>Housing – Villa West – Level 1</u>

This project proposes to complete a feasibility study and preliminary design for a Level 1 microgrid community resilience center for the Villa West Apartments campus in Green Bay, WI, which provides affordable housing and independent living amenities to low- and moderate-income senior and disabled residents. The Level 1 microgrid will incorporate rooftop solar and storage on twelve campus buildings and will support a CRC to serve as a safe haven; providing an emergency heating/cooling resilience hub for residents in the event of a power outage or extreme weather conditions. This microgrid seeks to provide continuous operation of several

key lifeline categories as defined by FEMA's Community Lifeline Tool Kit, including food,

water, and shelter for senior and disabled residents. The applicant's proposal indicates that by

supporting the energy lifeline, (by managing power supply and grid maintenance for this 170-

unit affordable housing campus) there will be the potential for supporting Health and Medical

lifelines by providing drug and medical supply storage for residents. The proposed study will

provide pre-development technical assessment and engineering that will be vital to

understanding the innovative funding or financing needed to provide these services to the

residents of Villa West Apartments. Evaluators awarded high marks to the proposals

environmental impact goals and resilience objectives and metrics.

**Commission Alternatives – Awards** 

The Commission reviewed the applications for the CIMCRC **Alternative One:** 

program and determined which applicants should receive a grant award and the amount of the

awards.

**Alternative Two:** The Commission reviewed the applications for the CIMCRC

program and remanded the matter back to Commission staff for additional investigation.

OS:pc DL: 01826773

Attachment 1 – Summary of CIMCRC Grant Applications by Activity

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### Attachment 1 – Summary of CIMCRC Grant Applications by Activity

### **Activity 1: Critical Infrastructure Microgrid Feasibility Study Level 1 and 2**

Reference No.	Applicant	Project Title	Grant Request	Match amount	ERF Ref No.
1	Aurora Health Care Inc.	Advocate Aurora Pleasant Prairie Microgrid Feasibility Study	\$35,000	\$22,500	418219 (application)  418872 (letter of support)*
2	Bayfield County	Bayfield County Highway & Forestry Microgrid Study	\$17,865	\$5,925	418157
3	City of Eau Claire	City of Eau Claire Water Treatment Plant Microgrid Feasibility Study	\$30,000	\$2,006	418257
4	City of Madison	Feasibility Study for a Microgrid at 1600 Emil St and 1501 W Badger	\$50,000	\$5,600	418263

5	Heart of the Valley	The Heart of the Valley	\$50,000	\$29,500	<u>418020</u>
	Metropolitan Sewer	Metropolitan Sewerage			
	<u>District</u>	District Facility			

**Activity 2: Critical Infrastructure Microgrid Feasibility Study Level 3** 

Reference No.	Applicant	Project Title	Grant Request	Match amount	ERF Ref No.
6	Appleton International Airport	Microgrid for Appleton International Airport	\$100,000	\$142,927	418218
7	Bad River Band of Lake Superior Tribe of Chippewa Indian	Mashkiiziibii Community Resilience Minigrid Study	\$98,400	\$21,306	418227
8	Town of La Pointe	Town of La Pointe Microgrid Feasibility Study	\$47,000	\$10,858	418162

**Activity 3: Community Resilience Center Feasibility Study** 

Reference No.	Applicant	Project Title	<b>Grant Request</b>	Match amount	ERF Ref No.
9	City of Florence Utility Commission	Florence Elementary School Emergency Shelter	\$50,000	\$29,500	418047 418115
10	City of Middleton	City of Middleton Business Park Microgrid and CRC	\$100,000	\$9,232	418254
11	City of Sun Prairie	Sun Prairie Public Library Micro grid + Community Resiliency Center	\$45,000	\$21,584	418250
12	Millenium Economic Development Corp	Telelift Critical Infrastructure Resiliency Pilot	\$100,000	\$200,000	418258

13	Sauk Prairie Police Commission	Sauk Prairie Police Commission Emergency Operation Center	\$50,000	\$34,500	418059
14	Smart Electric Power Alliance (SEPA)	Holy Wisdom Monastery Emergency Shelter	\$50,000	\$24,500	418023
15	The Board of Regents of the University of Wisconsin System	South Madison Community Resilience Center Deployment	\$92,000	\$51,500	418262
16	Wisconsin Housing Preservation Corp (WHPC)	Resilience Planning for Wisconsin Affordable Housing – Villa West	\$47,430	\$26,080	418298*