



Legislation Details (With Text)

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Title: Resolution to Approve a Grid Resilience and Innovation Partnerships (GRIP) Grant Application to the U.S. Department of Energy for Creating an Ann Arbor Sustainable Energy Utility and Launching Microgrids in Three Areas of the City

Sponsors:

Indexes:

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Attachments: 1. Sustainable Energy Utility_Public Survey Results.pdf, 2. Memo to Council on Results from SEU Public Engagement_Full.pdf, 3. FundOpp_DE-FOA-0002740_Amd_000003.pdf

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2/21/2023	1	City Council	Approved	Pass

Resolution to Approve a Grid Resilience and Innovation Partnerships (GRIP) Grant Application to the U.S. Department of Energy for Creating an Ann Arbor Sustainable Energy Utility and Launching Microgrids in Three Areas of the City

Attached for your review and action is a resolution approving the submission of a grant application to the U.S. Department of Energy’s Grid Deployment Office and the Office of Clean Energy Demonstrations’ Grid Resilience and Innovation Partnerships (GRIP) funding opportunity for 1) launching the Ann Arbor Sustainable Energy Utility (SEU) and 2) designing, beta testing, and monitoring the impact of three to-be created microgrids.

Grant Description:

The U.S. Department of Energy GRIP opportunity is a \$10.5 billion grant opportunity to deploy technologies to increase grid reliability and resilience. Three goals guide the GRIP program:

1. Transform community, regional, interregional, and national resilience, including consideration of future shifts in generation and load;
2. Catalyze and leverage private sector and non-federal public capital for impactful technology and infrastructure deployment; and
3. Advance community benefits.

GRIP supports funding proposals in three areas: Grid Resilience; Smart Grid; and Grid Innovation. The Office of Sustainability and Innovations (OSI) has put together a concept note and started to build a project team to respond to area three: Grid Innovation Program. This track is only open to States, local governments, Tribes, and public utility commissions. A total of \$1.820 billion has been allocated for projects in this area with the DOE anticipating granting 4-40 awards, with a maximum award of \$250,000,000. All grants require a 50% non-federal match and may run for 60-96 months.

Interested parties had to submit a preliminary concept note in mid-January with full proposals due on May 19th, 2023. DOE will provide initial feedback to all entities that submitted concept notes. This feedback is expected in March. However, given the complexity of this grant application process and the need to begin preparing as soon as possible to have a competitive proposal, staff are requesting Council authorization to submit a GRIP proposal so they can immediately begin working on the grant application package.

Background:

In mid-2021, staff in OSI identified and began exploring the possibility of establishing a supplemental publicly owned municipal utility, called a Sustainable Energy Utility, to almost immediately begin generating local renewable energy. This model focuses on using the right of Michigan municipalities to create their own municipal utility regardless of who holds an existing electric franchise.

To further understand the feasibility of this work, staff convened a small group of individuals to analyze the legal, technical, policy, administrative, financing, and social feasibility of creating a locally owned sustainable energy utility. This group of individuals was originally asked to work with the city over an 8-month period to create a report on whether or not an SEU was possible for Ann Arbor and if so, what it should include and how it could be initiated. This work was slated to conclude in early 2022.

As the group got into their work, however, many of the key questions about feasibility were quickly answered, affirming the City's ability to create an SEU. Moreover, because preliminary analyses showed that an SEU aligned very closely with the goals of A²ZERO, strongly aligned with Council's adopted Energy Principles and Criteria, and could be a faster, cheaper, less risky, cleaner, more reliable, and more local energy system than our current system, staff expedited the release of an SEU feasibility report.

Upon receiving that report, City Council adopted a resolution (R-22-017) directing staff to undertake multiple actions, including:

- Releasing an RFP to formally study the technical, legal, and financial viability of multiple potential pathways the City could take to meet its A²ZERO energy-related emissions reductions, clean energy, and equity goals, and how well each pathway aligns with Council's adopted: 1) goal of community-wide carbon neutrality by 2030; 2) the A²ZERO plan and its three principles of equity, sustainability, and transformation; 3) Council's adopted Energy Criteria and Principles; 4) and the goal of achieving a just transition, where relevant, for workers in the fossil fuel industry.
- Developing a proposed governance model and staffing support structure for a future SEU.
- Starting to register public interest in an SEU, including through wide-spread public outreach, with special emphasis on collecting the views of energy users in lower-income neighborhoods.
- Conducting a rate analysis for the first phase of the SEU.
- Initiating technical studies into the creation of micro and nano-grids within Ann Arbor.
- Drafting an ordinance to formally create the SEU.

To guide public engagement, OSI and the Communications Department put together a multi-pronged community engagement and input strategy, inclusive of a short survey. In total, 1,867 separate responses were recorded through the survey. The sample population reflects the distribution of economic, gender, and cultural backgrounds of the Ann Arbor population. Results showed that 83.6%

of respondents were interested in an SEU if it was able to provide electricity at lower rates than to what is currently offered by DTE. A more detailed summary of the survey findings is attached with this resolution.

Upon review of the GRIP opportunity, staff identified a strong alignment of the requirements of the opportunity and the proposed SEU, including the Council's direction to initiate technical studies into the creation of micro and nanogrids as part of a future SEU. The alignment of the SEU with the GRIP funding opportunity was reaffirmed by multiple organizations that reached out encouraging the city to apply to advance the SEU. After preliminary conversations with an array of potential collaborators, OSI made the decision to submit a non-binding concept note to the U.S. Department of Energy in response to the GRIP opportunity. This was a requirement to formally submit a proposal.

Project Description:

City staff are still working on the final proposal design for submittal to GRIP but the preliminary framework is to garner financial and technical support to:

- Officially launch the Sustainable Energy Utility throughout the City with a focus on wide-scale deployment of solar and battery storage systems; and
- Design, install, and test nano and microgrids in three different use cases in the community: an existing neighborhood (Bryant), a commercial corridor (Main Street), and a to be built development (to be determined).

While the project team is still being finalized, right now, partners include: Ann Arbor 2030 District; City of Ann Arbor; Community Action Network; Downtown Development District; Elevate; International Brotherhood of Electrical Workers 252; Main Street Area Association; Oxford; National Renewable Energy Laboratory; Pecan Street, Inc.; Rivenoak Law Group, PC; Rivenoak Consulting, Inc.; Schneider Electric; University of Michigan College of Engineering; University of Michigan School for Environment and Sustainability; and the World Resources Institute.

Based on the scope above, the proposal team anticipates asking for between \$40 and \$50 million, of which 50% will have to be provided as a local match. To meet the required match, the City will bring forward capital from the Community Climate Action Millage and is working with proposed partners to identify what match they can offer. It is almost certain that the match requirement will be the factor that limits the size of the proposal.

Budget/Fiscal Impact: This grant requires a 50% match which the city and partners are preparing. It is anticipated that the city, as the lead applicant, will provide a significant portion of the match, which has currently been budgeted into the soon to be administered Community Climate Action Millage.

Alignment with A²ZERO:

This proposal would help the City take a significant step forward in providing 100% renewable energy to power our community while also directly addressing energy equity and access challenges.

Prepared by: Missy Stults, Sustainability and Innovations Director

Approved by: Milton Dohoney Jr., City Administrator

Whereas, At its June 1, 2020 meeting, City Council approved the Living A²ZERO Ann Arbor Carbon Neutrality Plan (R-20-193), incorporating the 2030 goal;

Whereas, The generation of electricity accounts for roughly 40 percent of Ann Arbor's annual greenhouse gas emissions;

Whereas, Council directed staff to investigate pathways to create and support a potential Ann Arbor Sustainable Energy Utility to help reduce emissions;

Whereas, The public has demonstrated a strong interest in seeing the Sustainable Energy Utility move forward, especially if it can provide renewable energy at cost-parity with current electricity rates;

Whereas, The U.S. Department of Energy's Grid Resilience and Innovation Partnership Grant would provide the necessary capital and technical assistance to support launching the proposed Sustainable Energy Utility and the deployment of microgrids in three different use cases of the city, helping defer costs and allowing for a real-world proof of concept; and

Whereas, The Office of Sustainability and Innovations has submitted the required concept note to the U.S. Department of Energy and is now eligible to move forward with a formal submittal;

RESOLVED, That City Council approves a grant application to the U.S. Department of Energy's Grid Deployment Office and the Office of Clean Energy Demonstrations' Grid Resilience and Innovation Partnerships (GRIP) for improvements initiating the Ann Arbor Sustainable Energy Utility and launching microgrids in three neighborhoods; and

RESOLVED, That City Administrator is authorized to take all appropriate actions to implement this resolution including an application and related documents.