

Memorandum

To: Milton Dohoney Jr., City Administrator

From: Brian Steglitz, Public Services Administrator and Missy Stults, Sustainability and Innovations Director

Subject: Staff Recommendations on Next Steps Related to Achieving 100% Renewable Energy by 2030

Date: February 20, 2024

Summary of Recommendations

City Council requested staff analyze our electricity-related energy options and make recommendations to achieve our goal of 100% renewable energy powering our electrical grid. As explained in this memo, staff is bringing forward three recommendations:

- Hold a vote of the people to formally authorize the supplemental, municipally owned Sustainable Energy Utility (the “SEU”).
- Pursue federal grant to be able to further advance the SEU (assuming voters approve SEU creation).
- Begin the process to enter into virtual power purchase agreements to “fill the gap” to allow the City to achieve the 100% renewable energy goal established by Council.

Background

City Council, via the adoption of the A²ZERO Climate Action Plan in June of 2020, established the goal of powering the entire community with 100% renewable electricity. This equates to generating roughly 1,200,000 megawatt-hours of renewably powered electricity per year. Right now, most of the electricity that the Ann Arbor community uses is purchased from DTE Energy, which holds the franchise to serve Ann Arbor, and which powers its grid primarily through the burning of fossil fuels.

To meet its goals given DTE’s resource mix, the City has been launching programs to support residents and businesses with embracing renewable energy for electricity production such as Solarize, our Commercial Solar initiative, and via the installation of solar (and energy storage) at city facilities. The City also actively works on legislation and on regulations that support greater renewable energy adoption. For instance, in 2023, PA 235 became law, requiring 50% of the state’s electricity be from renewable sources by 2030, and 100% from a mix of renewables and clean energy resources by 2040. This legislation was signed by the Governor on November 28th, 2023, and strongly supported by Ann Arbor.

While all these actions are helpful, they will not be enough to achieve Ann Arbor’s clean energy goals. As such, the City commissioned 5 Lakes Energy to perform an Energy Options Analysis to explore the technical, legal, and financial viability of multiple pathways the City could take to meet its A²ZERO energy-related emissions reduction, clean energy, and equity goals. This included a study of multiple possible strategies, including creation of a municipally owned Sustainable Energy Utility, municipalization through

the taking of DTE's assets, the procurement of renewable energy credits, initiating a virtual power purchase agreement, and other potential pathways. Those findings were presented to City Council in late September. After this work was completed, the new energy laws for Michigan were enacted, which contained revised requirements for both DTE and municipal utilities.

Absent integration of the State's new energy laws, the 5 Lakes report recommended: launching a Sustainable Energy Utility, supporting as much adoption of local solar and energy storage as possible, and investing in renewable energy credits to close any lingering gaps.

The consultants noted that municipalization via the condemnation of DTE's assets (the municipal electric utility or MEU option), was unlikely to be achievable by the Council-established 2030 deadline and thus not a viable strategy to meeting the 2030 A²ZERO goals. The consultant gave a wide range of potential costs (the range exceeded an order of magnitude), which was driven by the use of different methodologies that courts might use to value DTE's assets. While their estimate could be refined in a Phase 2 study, the consultants noted only litigation could refine the most significant cost variable: the valuation methodology question.

In the months that followed the delivery of the 5 Lakes report, the 5 Lakes team finalized a series of models used to inform the report and delivered those models to the City. Those models, which do not factor in the impact of the State's new energy laws, consist of:

- Business as usual model
- A power pricing model
- An electrification model that includes achievement of the electrification and energy efficiency goals as called for in A²ZERO
- A Sustainable Energy Utility model
- A municipalization model
- A 2030 Energy Options model

Staff received these models late in 2023 and began exploring the underlying assumptions of the various models. In addition, external utility expertise was solicited and is under contract as of late January 2023 to validate and re-calibrate the models, as needed, to ensure their applicability to the Michigan context, especially considering the new clean energy laws that were enacted.

Based on the results of these inputs, staff recommend that the City invest in three core actions to advance progress towards the 100% renewable electricity goal.

Staff Recommendations

RECOMMENDATION ONE: PUT THE FORMATION OF A SUSTAINABLE ENERGY UTILITY TO A VOTE OF THE PEOPLE.

Staff believe that a Sustainable Energy Utility is a viable way to make rapid progress towards the City's stated clean energy goals, address the community's near-universal desire for increased electrical resiliency and reliability, and ensure access to clean energy and storage systems are more equitably distributed across the community. However, to demonstrate the level of likely customer take-up and otherwise allow the most successful launch possible, staff recommend putting the formation of an SEU on the November 2024 ballot. A vote would also allow the community to make an informed decision

where the benefits, risks, and costs are clearly identified before moving forward with formation of an SEU. Simultaneously, staff recommend including an authorization for financing the SEU to facilitate the best possible options without delay. Staff are exploring several financing possibilities and with the assistance of the City Attorney and CFO's office, will bring forward language, as needed, to facilitate the best financial pathways for possible SEU funding.

RECOMMENDATION TWO: PURSUE THE U.S. DEPARTMENT OF ENERGY'S GRID RESILIENCE INNOVATIVE PARTNERSHIP GRANT FUNDING TO SUPPORT THE CREATION OF THE SUSTAINABLE ENERGY UTILITY

In parallel with the above action, staff recommend that the City prepare an application to the U.S. Department of Energy, through their Grid Resilience Innovative Partnership funding opportunity, to launch the Sustainable Energy Utility. This application is due in April, but awards will not be announced until the end of 2024 or early 2025. If the City wins the award but the electorate do not authorize creation of the SEU, the City can decline the grant award. If the electorate votes to create the SEU, however, then the award funding would present an important source of initial capital, lowering or potentially eliminating the need for the immediate issuing of debt.

RECOMMENDATION THREE: INITIATE A REQUEST FOR PROPOSALS FOR NEW, ADDITIONAL, MICHIGAN RENEWABLE ENERGY SYSTEMS TO BE ACQUIRED THROUGH A VIRTUAL POWER PURCHASE AGREEMENT

Staff believe the SEU will play an important role in making progress towards the City's clean energy goals but is unlikely to produce 100% of the required renewable electricity to meet the 2030 timeline. As such, staff recommend that a request for proposals immediately be drafted to secure 200,000 – 300,000 MWh of new renewable energy for the City's usage. This contract will need to be through a virtual power purchase agreement or other related vehicle but will effectively serve as a bridge that can be lowered as the City generates more of its electricity through the Sustainable Energy Utility (or another vehicle). The cost of this action will vary depending on the bids, ranging from a premium product to being cost neutral, to potentially being a revenue generator depending on the contract that is secured. Regardless, funding for this action will need to be identified with potential sources including the Climate Action Millage, the General Fund, or potentially green bonds.

Other Considerations

As noted in the 5 Lakes Energy report, traditional municipalization, or the taking of DTE's assets through a condemnation proceeding, is almost certainly not feasible by 2030. And if it were achieved, the City would still be many years away from generating enough renewable energy to achieve its 100% clean electricity goals. As such, staff are making no formal recommendations regarding municipalization as it is outside the policy agenda as established by City Council.

However, if City Council decides to continue consideration of municipalization, staff recommended that:

- Any actions towards creation of a Sustainable Energy Utility (SEU) be prioritized and taken first, to avoid confusion amongst the public and to allow staff the time and attention needed to potentially launch a successful SEU.
- Following bullet point one, a Phase II Municipalization study be commissioned with the explicit goal of generating an appraisal of DTE's assets, any stranded costs, updated annual rate projections, and other analyses necessary to generate a detailed appraisal for all DTE's electrical assets that would need to be acquired or replaced as part of a condemnation proceeding. Importantly, funding has not been identified nor budgeted for this study so if Council decides to move in this direction, time will be needed to identify a potential funding source.
- If a Phase II Municipalization Study comes back showing a significant opportunity for cost savings for rate payers, Council put the topic of municipalization to a vote of the people. In tandem with this ask, staff strongly encourage Council to put a fee proposal to ensure that funding is authorized to finance the legal, technical, and expert costs associated with the condemnation process.
- If a vote of the people authorizes the beginning of a court process, Council authorize a reliability study so that the public, staff, and Council can understand the magnitude of investments needed to improve the reliability of DTE's assets, including the cost and time required to make any identified reliability improvements.
- Once the condemnation proceedings are complete, and the full costs of acquiring the system **as well as** the costs and timeframe to improve reliability are known, the option to purchase the infrastructure be taken back to a vote of the people.