# GRANT BETWEEN THE STATE OF MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS AND CITY OF ANN ARBOR

#### **GRANTEE/ADDRESS:**

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#### GRANT ADMINISTRATOR/ADDRESS:

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#### **GRANT PERIOD:**

From November 15, 2024 to April 30, 2026

TOTAL AUTHORIZED BUDGET: \$3,115,600.00

Federal Contribution: \$3,115,600.00

State Contribution: \$
Local Contribution: \$
Other Contributions: \$

SIGMA Vendor I.D.: CV0047636 SIGMA Payment Address Code: 044

ACCOUNTING DETAIL: Accounting Template No.: 6413502T001

ALN #: 21.027

#### **GRANT**

This is Grant #PSC-25-23-I between the Michigan Public Service Commission, Department of Licensing and Regulatory Affairs (Grantor), and the City of Ann Arbor (Grantee), subject to terms and conditions of this grant agreement (Agreement).

#### 1.0 Statement of Purpose

Public Act 119 of 2023 requires the Michigan Public Service Commission (MPSC or Commission) to develop a renewable energy and electrification infrastructure enhancement and development grant program for businesses, nonprofit organizations, local units of government and tribal governments for the purpose of planning, developing, designing, acquiring, or constructing renewable energy and electrification infrastructure projects.

#### 1.1 Statement of Work

The Grantee agrees to undertake, perform, and complete the following infrastructure project:

The City of Ann Arbor will make significant energy, electrification, health, safety, and comfort improvements in 50 low-income homes in the Bryant neighborhood.

These services are more specifically described in the Grantee's Proposal, Attachment A.

#### 1.2 Detailed Budget

- A. This Agreement does not commit the State of Michigan (State), the MPSC, or the Department of Licensing and Regulatory Affairs (LARA) to approve requests for additional funds at any time.
- B. Attachment B is the Budget. The Grantee agrees that all funds shown in the Budget are to be spent as detailed in the Budget.

Any changes to the budget must be pre-approved by the MPSC Grant Administrator. Changes in the budget of less than 5% of the total line-item amount, or \$2,000 (whichever is greater), do not require a formal amendment; however, a revised budget should be submitted to the MPSC Grant Administrator for approval. The allowable transfer should be calculated as less than 5%, or \$2,000 (whichever is greater), of the total line item that the funds are being transferred from.

Cumulative changes in the budget equal to or greater than 5% of the total line-item amount, or \$2,000 (whichever is greater), may be permitted only upon prior review and written approval by the MPSC Grant Administrator. A formal grant amendment must be signed by both the Grantor and Grantee.

#### 1.3 Payment Schedule

The maximum amount of grant assistance offered is \$3,115,600.00. Progress payments up to a total of 85% of the Total Authorized Budget may be made upon submission of a Grantee reimbursement request indicating grant funds received to date, project expenditures to date (supported with computer printouts of accounts, general ledger sheets, balance sheets, etc. – *all account numbers should be removed or redacted before submitting supporting documentation*), and objectives completed to date. Backup documentation such as computer printouts of accounts, ledger sheets, check copies, etc. shall be maintained for audit purposes in order to comply with this Agreement. The payment of the final 15% of the grant amount shall be made after completion of the project and after the Grant Administrator has received and approved a final report. The final payment is also contingent upon the submission of a final invoice that includes expenditures of grant funds reported by line item and compared to the approved Budget. All final documentation must be submitted within 30 days after the grant end date to receive final payment. See further details in Section 1.4, Monitoring and Reporting Program Performance.

Public Act 279 of 1984 states that the State shall take all steps necessary to assure that payment for goods or services is mailed within 45 days after receipt of the goods or services, a complete invoice for goods or services, or a complete contract for goods or services, whichever is later.

Grantee assumes the responsibility of ensuring all unexpended grant funds are returned to the State of Michigan at the end of the grant period. Failure to do so may render Grantee ineligible for future grant awards and/or subject to legal action.

Grantee may not commingle grant award funds with current or future grant awards. All funding sources must be managed and accounted for separately.

#### 1.4 Monitoring and Reporting Program Performance

Grantee will be required to assume responsibility for monitoring and reporting. Grantee will monitor performance to assure that time schedules are met and projected work by time period is accomplished. If a required report's due date falls on a weekend or holiday, the report may be delivered the following business day. All documentation submitted by the Grantee may be subject to audit by MPSC Auditors.

Monthly Financial Status Reports (also known as an FSR or C-108 form). The Grantee will submit signed and dated monthly financial status reports (FSR) to the MPSC Grant Administrator indicating the amount of funds expended in each line-item category of the budget. Monthly FSRs must include source documentation that supports all reported expenditures including, but not limited to, general ledgers, time sheets, payroll registers, invoices, check copies and bank statements, or cancelled checks. Expenses will be verified based on actual expenditures incurred within the grant period that are supported by source documentation, not budgeted amounts. Monthly FSRs will be completed on Form C-108, which will be provided to the Grantee by the MPSC Grant Administrator. Monthly FSRs may be accompanied by a status

update call between the Grantee and MPSC Grant Administrator or selected MPSC Staff as appropriate. The frequency of the status update call is subject to change by MPSC. The Grantee will provide a **monthly** summary on the following:

- 1. Project Milestones Percent (%) completion of the project objectives
- 2. Project Progress Brief outline of the work accomplished during the reporting period and the work to be completed during the subsequent reporting period(s).
- 3. Noteworthy Accomplishments Identify and describe any milestones reached or noteworthy accomplishments completed during the period.
- 4. Delays Brief description of problems or delays, real or anticipated, which should be brought to the attention of the MPSC Grant Administrator.
- 5. Attachments and Other Materials Provide project materials developed and implemented during the reporting period (e.g. newspaper articles, newspaper advertisements, forms, brochures, announcements, studies, reports, analyses, audits, etc.).

<u>Interim Project Status Reports</u>. The Grantee must submit Interim Project Status Reports to the MPSC Grant Administrator every **six months** during the project. The reports should include the following information at a minimum:

- 1. Project Identification Name of Grantee, grant number and dates of current reporting period.
- 2. Project Milestones Percent (%) completion of the project objectives.
- 3. Project Progress Brief outline of the work accomplished during the reporting period and the work to be completed during the subsequent reporting period(s).
- 4. Noteworthy Accomplishments Identify and describe any milestones reached or noteworthy accomplishments completed during the period.
- 5. Program Metrics
  - i. Provide an update on Grantee-defined program metrics for the project that were identified in the application under Section V-E. Include all relevant project or program metrics details.
  - ii. Provide an update on how the project supports the MI Healthy Climate Plan goals as directed by Public Act 119 of 2023.
- 6. Delays Brief description of problems or delays, real or anticipated, which should be brought to the attention of the MPSC Grant Administrator.
- 7. Project Deviations Statement concerning any significant deviation from the previously agreed-upon work plan developed in Part V: Information Required from Applicant.
- 8. Attachments and Other Materials Provide project materials developed and implemented during the reporting period (e.g. newspaper articles, newspaper advertisements, forms, brochures, announcements, studies, reports, analyses, audits, etc.).

<u>Final Project Report</u>. The Grantee must submit a draft final report to the MPSC Grant Administrator at the completion of the relevant project, detailing how the grant money was used. The MPSC Grant Administrator will provide feedback on the draft report. Then, **within 30 days of the grant end date**, the Grantee will submit a final project report incorporating all feedback

received from the MPSC Grant Administrator. The final project report shall include the following information at a minimum:

- 1. Project Identification Name of Grantee, grant number, and dates of current reporting period.
- 2. Project Milestones Percent (%) completion of the project objectives and description of the same.
- 3. Project Implementation Outline of the work accomplished during the grant term.
- 4. Program Metrics
  - i. Evaluate the success of the project based on the Grantee-defined program metrics for the project that were identified in the application under Section V-E. Include all relevant project or program metrics details. Did the Grantee complete the project or program within the timeline detailed in the Grantee's contract? Did the Grantee accomplish the goals of the project or program within the stated budget within the Grantee's contract?
  - ii. Evaluate the success of the project based on the MI Healthy Climate Plan goals as directed by Public Act 119 of 2023.
- 5. Noteworthy Accomplishments Accomplishments and problems experienced while carrying out project activities.
- 6. Coordinated Efforts Coordinated efforts with other organizations to complete the project.
- 7. Project Impacts Impacts, anticipated and unanticipated, experienced as a result of project implementation.
- 8. Financial Summary Summary of financial expenditures of grant funds; include the basis or reason for any discrepancies.
- 9. Evaluation Evaluate the success of the project. The project should be evaluated against the Grantee's work plan and objectives. The Grantee should provide an honest and objective assessment of the successes and failures of the project. The evaluation should have both quantitative and qualitative components.

<u>Final Financial Status Report (FSR)</u>. The Grantee must submit a signed and dated final FSR to the MPSC Grant Administrator indicating the amount of funds expended in each line-item category of the budget **within 15 days of the grant end date**. The Final FSR must include source documentation that supports all reported expenditures including, but not limited to, general ledgers, time sheets, payroll registers, invoices, check copies and bank statements, or cancelled checks. Expenses will be verified based on actual expenditures incurred within the grant period that are supported by source documentation, not budgeted amounts. The Final FSR will be completed on Form C-108. A holdback of 15% will not be paid until the final report is received and approved by the MPSC Grant Administrator.

<u>One Year Data Report</u>. The Grantee must submit a data report **one year post project completion**. The one-year data report shall include the following information at a minimum. It should be noted that information in the one-year report may be made publicly available in the Michigan Pilot Directory, through Commission reports and presentations, and in other venues or methods.

1. Project Identification – Name of Grantee, grant number, and dates of current reporting period.

- 2. Project Milestones Short written summary identifying the project's learnings and performance in the first year based on one of the following awarded grant types:
  - i. Infrastructure grants Provide monthly data for project metrics identified in the original application from completion to one full year after. In addition, monthly generation (as applicable), energy savings, emissions reductions, and quantified benefit and cost data will also be provided monthly for the first year. Quantified benefits and costs should be provided for each month and the associated quantification method and underlying information should be detailed.
  - ii. Planning grants Provide a summary of accomplishments since the grant closure date. For example, has the plan been implemented? If so, what aspects were implemented and what where the results? If the plan was not implemented, what were the roadblocks? Was it financial, organizational, bandwidth, etc.? What learnings were obtained from developing the plan and the subsequent decisions regarding implementation?

#### PART II - GENERAL PROVISIONS

#### 2.1 Project Changes

Grantee must obtain prior written approval for project changes from the Grant Administrator. **See Section 1.2, Detailed Budget.** The end date of the Grant as stated on the first page of this Grant Agreement may be extended to any time up to or through August 15, 2026, if the additional time is requested in writing by the Grantee and approved by the MPSC Grant Administrator.

#### 2.2 Delegation

Grantee may not delegate any of its obligations under the Grant without the prior written approval of the MPSC or the State. Grantee must notify the MPSC at least 90 calendar days before the proposed delegation and provide the MPSC any information it requests to determine whether the delegation is in its best interest. If approved, Grantee must: (a) be the sole point of contact regarding all contractual project matters, including payment and charges for all Grant Activities; (b) make all payments to the subcontractor; and (c) incorporate the terms and conditions contained in this Grant in any subcontract with a subcontractor. Grantee remains responsible for the completion of the Grant Activities, compliance with the terms of this Grant, and the acts and omissions of the subcontractor. The MPSC or the State, in its sole discretion, may require the replacement of any subcontractor.

#### 2.3 Project Income

To the extent that it can be determined that interest was earned on advances of funds, such interest shall be remitted to the Grantor. All other program income shall either be added to the project budget and used to further eligible program objectives or deducted from the total program budget for the purpose of determining the amount of reimbursable costs. The final determination shall be made by the Grant Administrator.

#### 2.4 Share-in-savings

The Grantor expects to share in any cost savings realized by the Grantee. Therefore, final Grantee reimbursement will be based on actual expenditures. Exceptions to this requirement must be approved in writing by the MPSC Grant Administrator. Documentation of cost savings is required.

#### 2.5 Order of Spending

There is no required order of spending.

#### 2.6 Purchase of Equipment

The purchase of equipment not specifically listed in the Grantee's approved Budget, Attachment B, must have prior written approval of the MPSC Grant Administrator. Equipment is defined as non-expendable personal property having a useful life of more than one year. Such equipment shall be retained by the Grantee unless otherwise specified at the time of approval.

#### 2.7 Accounting

The Grantee will adhere to the Generally Accepted Accounting Principles (2 CFR 200.302 of the Federal Uniform Guidance (UG) and will maintain records which will allow, at a minimum, for the comparison of actual outlays with budgeted amounts. The Grantee's overall financial management system must ensure effective control over and accountability for all funds received. Accounting records must be supported by source documentation including, but not limited to, balance sheets, general ledgers, time sheets and invoices. The expenditure of state funds shall be reported by line item and compared to the Budget.

#### 2.8 Records Maintenance, Inspection, Examination, and Audit

The MPSC or its designee may audit the Grantee to verify compliance with this Grant. Grantee must retain, and provide to the MPSC, the State or its designee upon request, all financial and accounting records related to the Grant through the term of the Grant and for 7 years after the latter of termination, expiration, or final payment under this grant or any extension ("Audit Period"). If an audit, litigation, or other action involving the records is initiated before the end of the Audit Period, the Grantee must retain the records until all issues are resolved.

Within 24 hours of providing notice, the MPSC, the State and its authorized representatives or designees have the right to enter and inspect Grantee's premises or any other places where Grant Activities are being performed, and examine Grantee's books and records, and copy and audit all records related to this Grant anytime during the period of the grant and through December 31, 2031. Grantee must cooperate and provide reasonable assistance. If an audit, litigation, or other action involving the records is initiated before the end of the audit period, Grantee must retain the records until all audit and monitoring issues are resolved. Any disqualified costs identified as a result of the monitoring review or audit will be refunded within 30 days.

This Section applies to Grantee, any parent, affiliate, or subsidiary organization of Grantee, and any subcontractor that performs Grant Activities in connection with this Grant.

If the Grantee is a governmental or non-profit organization and expends the minimum level specified in Office of Management and Budget's Uniform Guidance (\$750,000 as of December 26, 2013) or more in total federal funds in its fiscal year, then Grantee is required to submit an Audit Report to the Federal Audit Clearinghouse (FAC) as required in 200.36. Any questioned costs identified must be refunded within 30 days.

The MPSC will perform a close-out audit of this Grantee at the end of the grant period. Any disqualified costs identified must be refunded within 30 days.

#### 2.9 Competitive Bidding

The Grantee agrees that all procurement transactions involving the use of state funds shall be conducted in a manner that provides maximum open and free competition. When competitive selection is not feasible or practical, the Grantee agrees to obtain the written approval of the MPSC Grant Administrator before making a sole source selection. Sole source contracts should be negotiated to the extent that such negotiation is possible.

#### 3.0 Liability

The MPSC or the State is not liable for any costs incurred by the Grantee before the start date or after the end date of this Agreement. Liability of the MPSC or the State is limited to the terms and conditions of this Agreement and the grant amount.

#### 3.1 Intellectual Property

Unless otherwise required by law, all intellectual property developed using funds from this Agreement, including copyright, patent, trademark and trade secret, shall belong to the Grantee.

#### 3.2 Safety

The Grantee, and all subgrantees, are responsible for ensuring that all precautions are exercised at all times for the protection of persons and property. Safety provisions of all Applicable Laws and building and construction codes will be observed. The Grantee, and every subgrantee, are responsible for compliance with all federal, state and local laws and regulations in any manner affecting the work or performance of this Agreement and will at all times carefully observe and comply with all rules, ordinances, and regulations. The Grantee, and all subgrantees, will secure all necessary certificates and permits from municipal or other public authorities as may be required in connection with the performance of this Agreement.

#### 3.3 General Indemnification

Grantee must defend, indemnify and hold the State, its departments, divisions, agencies, offices, commissions, officers, and employees harmless, without limitation, from and against any and all actions, claims, losses, liabilities, damages, costs, attorney fees, and expenses (including those required to establish the right to indemnification), arising out of or relating to: (a) any breach by Grantee (or any of Grantee's employees, agents, subgrantees, or by anyone else for whose acts any of them may be liable) of any of the promises, agreements, representations, warranties, or insurance requirements contained in this Grant; (b) any infringement, misappropriation, or other violation of any intellectual property right or other right of any third party; (c) any bodily injury, death, or damage to real or tangible personal property occurring wholly or in part due to action or inaction by Grantee (or any of Grantee's employees, agents, subgrantees, or by anyone else for whose acts any of them may be liable); and (d) any acts or omissions of Grantee (or any of Grantee's employees, agents, subgrantees, or by anyone else for whose acts any of them may be liable).

The MPSC or the State will notify Grantee in writing if indemnification is sought; however, failure to do so will not relieve Grantee, except to the extent that Grantee is materially prejudiced. Grantee must, to the satisfaction of the State, demonstrate its financial ability to carry out these obligations.

The MPSC or the State is entitled to: (i) regular updates on proceeding status; (ii) participate in the defense of the proceeding; (iii) employ its own counsel; and to (iv) retain control of the defense if the State deems necessary. Grantee will not, without the State's written consent (not to be unreasonably withheld), settle, compromise, or consent to the entry of any judgment in or otherwise seek to terminate any claim, action, or proceeding. To the extent that any State employee, official, or law may be involved or challenged, the State may, at its own expense, control the defense of that portion of the claim.

Inasmuch as each party to this grant is a governmental entity of the State of Michigan, each party to this grant must seek its own legal representation and bear its own costs; including judgments, in any litigation which may arise from the performance of this grant. It is specifically understood and agreed that neither party will indemnify the other party in such litigation.

#### 3.4 Termination

The MPSC or the State may terminate the Grant Agreement without further liability or penalty to the State, its departments, divisions, agencies, offices, commissions, officers, agents, and employees for any of the following reasons:

#### A. Termination for Cause

The MPSC or the State may terminate this Grant for cause, in whole or in part, if Grantee, as determined by the MPSC or the State: (a) endangers the value, integrity, or security of any location, data, or personnel; (b) becomes insolvent, petitions for bankruptcy court proceedings, or has an involuntary bankruptcy proceeding filed against it by any creditor; (c) engages in any conduct that may expose the State to liability; (d) breaches any of its material duties or obligations; or (e) fails to cure a breach within the time stated in a notice of breach. Any reference to specific breaches being material breaches within this Grant will not be construed to mean that other breaches are not material.

If the MPSC or the State terminates this Grant under this Section, the State will issue a termination notice specifying whether Grantee must: (a) cease performance immediately, or (b) continue to perform for a specified period. If it is later determined that Grantee was not in breach of the Grant, the termination will be deemed to have been a Termination for Convenience, effective as of the same date, and the rights and obligations of the parties will be limited to those provided in Subsection B, Termination for Convenience.

The MPSC or the State will only pay for amounts due to Grantee for Grant Activities accepted by the MPSC or the State on or before the date of termination, subject to the State's right to set off any amounts owed by the Grantee for the MPSC or the State's reasonable costs in terminating this Grant. The Grantee must pay all reasonable costs incurred by the MPSC or the State in terminating this Grant for cause, including administrative costs, attorneys' fees, court costs, transition costs, and any costs the MPSC or the State incurs to procure the Grant Activities from other sources.

#### B. Termination for Convenience

The MPSC or the State may immediately terminate this Grant in whole or in part without penalty and for any reason, including but not limited to, appropriation or budget shortfalls. If the MPSC or the State terminates this Grant for convenience, the State will pay all reasonable costs, as determined by the State, for State approved Grant Responsibilities.

#### C. Non-Appropriation

Grantee acknowledges that continuation of the Grant Agreement is subject to appropriation or availability of funds for the Grant Agreement. If funds to enable the MPSC to effect continued payment under the Grant Agreement are not appropriated or otherwise made available (including the federal government suspending or halting the program or issuing directives preventing the State from continuing the program), the MPSC or the State will have the right to terminate the Grant Agreement, in whole or in part, at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of termination to Grantee.

The MPSC or the State will give Grantee at least thirty (30) days advance written notice of termination for non-appropriation or unavailability (or such time as is available if the MPSC or the State receives notice of the final decision less than thirty (30) days before the funding cutoff). In the event of a termination under this section, the Grantee will, unless otherwise directed by the MPSC or the State in writing, immediately take all reasonable steps to terminate its operations and to avoid and/or minimize further expenditures under the Grant Agreement.

#### D. Criminal Conviction

The MPSC or the State may terminate the Grant Agreement immediately and without further liability or penalty in the event Grantee, an officer of Grantee, or an owner of a 25% or greater share of Grantee is convicted of a criminal offense incident to the application for, or performance of, a State, public or private contract or subcontract or grant; convicted of a criminal offense, including any of the following: embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, attempting to influence a public employee to

breach the ethical conduct standards for State of Michigan employees; convicted under State or federal antitrust statutes; or convicted of any other criminal offense which in the sole discretion of the State, reflects upon Grantee's business integrity.

#### E. Approvals Rescinded

The MPSC or the State may terminate the Grant Agreement without further liability or penalty in the event any final administrative or judicial decision or adjudication disapproves a previously approved request for purchase of personal services pursuant to Constitution 1963, Article 11, § 5, and Civil Service Rule 7-1. Termination may be in whole or in part and may be immediate as of the date of the written notice to Grantee or may be effective as of the date stated in such written notice.

#### F. Transition Responsibilities

Upon termination or expiration of the Grant Agreement for any reason, Grantee must, for a period of time specified by the MPSC or the State (not to exceed 90 calendar days), provide all reasonable transition assistance requested by the MPSC or the State, to allow for the expired or terminated portion of the grant activities to continue without interruption or adverse effect, and to facilitate the orderly transfer of such grant activities to the MPSC or the State or its designees. Such transition assistance may include, but is not limited to: (a) continuing to perform the grant activities at the rates established in the Grant Agreement; (b) taking all reasonable and necessary measures to transition performance of the work, including all applicable grant activities, training, equipment, software, leases, reports and other documentation, to the MPSC or the State or the State's designee; (c) taking all necessary and appropriate steps, or such other action as the MPSC or the State may direct, to preserve, maintain, protect, or return to the MPSC or the State all materials, data, property, and confidential information provided directly or indirectly to Grantee by any entity, agent, vendor, or employee of the State; (d) transferring title in and delivering to the MPSC or the State, at the MPSC or the State's discretion, all completed or partially completed deliverables prepared under the Grant Agreement as of the Grant Agreement termination date; and (e) preparing an accurate accounting from which the MPSC and Grantee may reconcile all outstanding accounts (collectively, "Transition Responsibilities"). The Grant Agreement will automatically be extended through the end of the transition period.

#### 3.5 Conflicts and Ethics

Grantee will uphold high ethical standards and is prohibited from: (a) holding or acquiring an interest that would conflict with this Grant; (b) doing anything that creates an appearance of impropriety with respect to the award or performance of the Grant; (c) attempting to influence or appearing to influence any State employee by the direct or indirect

offer of anything of value; or (d) paying or agreeing to pay any person, other than employees and consultants working for Grantee, any consideration contingent upon the award of the Grant. Grantee must immediately notify the MPSC or the State of any violation or potential violation of these standards. This Section applies to Grantee, any parent, affiliate, or subsidiary organization of Grantee, and any subgrantee that performs Grant Activities in connection with this Grant. No member of the Legislature or Judiciary of the State of Michigan or any individual employed by the State shall be permitted to share in this Agreement, or any benefit that arises from this Agreement.

In the event of a conflict between the terms of the Grant Agreement and any federal or State laws or regulations, the federal or State laws or regulations will supersede any contrary term contained in the Grant Agreement, with the federal regulations taking precedence unless the State policy is more restrictive.

#### 3.5.1 Confidentiality State Data

- (a) Ownership. The State's data ("State Data," which will be treated by Grantee as Confidential Information) includes: (a) the State's data collected, used, processed, stored, or generated as the result of the grant activities; (b) personally identifiable information ("PII") collected, used, processed, stored, or generated as the result of the grant activities, including, without limitation, any information that identifies an individual, such as an individual's social security number or other government-issued identification number, date of birth, address, telephone number, biometric data, mother's maiden name, email address, credit card information, or an individual's name in combination with any other of the elements here listed; and, (c) personal health information ("PHI") collected, used, processed, stored, or generated as the result of the grant activities, which is defined under the Health Insurance Portability and Accountability Act (HIPAA) and its related rules and regulations. State Data is and will remain the sole and exclusive property of the State and all right, title, and interest in the same is reserved by the State. This section survives the termination of the Grant Agreement.
- (b) Grantee Use of State Data. Grantee is provided a limited license to State Data for the sole and exclusive purpose of providing the grant activities, including a license to collect, process, store, generate, and display State Data only to the extent necessary in the provision of the grant activities. Grantee must: (a) keep and maintain State Data in strict confidence, using such degree of care as is appropriate and consistent with its obligations as further described in the Grant Agreement and applicable law to avoid unauthorized access, use, disclosure, or loss; (b) use and disclose State Data solely and exclusively for the purpose of providing the grant activities, such use and disclosure being in accordance with the Grant Agreement, any applicable Statement of Work, and applicable law; and (c) not use, sell, rent, transfer, distribute, or otherwise disclose or make available State Data for Grantee's own purposes or for the benefit of anyone other than the State without the State's prior written consent. This section survives the termination of the Grant Agreement.
- (c) Extraction of State Data. Grantee must, within one (1) business day of the State's request, provide the State, without charge and without any conditions or contingencies

whatsoever (including but not limited to the payment of any fees due to Grantee), an extract of the State Data in the format specified by the State.

- (d) Backup and Recovery of State Data. Grantee is responsible for maintaining a backup of State Data and for an orderly and timely recovery of such data. Grantee must maintain a contemporaneous backup of State Data that can be recovered within two (2) hours at any point in time.
- Loss of Data. In the event of any act, error or omission, negligence, misconduct, or breach that compromises or is suspected to compromise the security, confidentiality, or integrity of State Data or the physical, technical, administrative, or organizational safeguards put in place by Grantee that relate to the protection of the security, confidentiality, or integrity of State Data, Grantee must, as applicable: (a) notify the State as soon as practicable but no later than twenty-four (24) hours of becoming aware of such occurrence; (b) cooperate with the State in investigating the occurrence, including making available all relevant records, logs, files, data reporting, and other materials required to comply with applicable law or as otherwise required by the State; (c) in the case of PII or PHI, at the State's sole election, (i) notify the affected individuals who comprise the PII or PHI as soon as practicable but no later than is required to comply with applicable law, or, in the absence of any legally required notification period, within 5 calendar days of the occurrence; or (ii) reimburse the State for any costs in notifying the affected individuals; (d) in the case of PII, provide third-party credit and identity monitoring services to each of the affected individuals who comprise the PII for the period required to comply with applicable law, or, in the absence of any legally required monitoring services, for no less than twenty-four (24) months following the date of notification to such individuals; (e) perform or take any other actions required to comply with applicable law as a result of the occurrence; (f) without limiting Grantee's obligations of indemnification as further described in the Grant Agreement, indemnify, defend, and hold harmless the State for any and all claims, including reasonable attorneys' fees, costs, and expenses incidental thereto, which may be suffered by, accrued against, charged to, or recoverable from the State in connection with the occurrence; (g) be responsible for recreating lost State Data in the manner and on the schedule set by the State without charge to the State; and, (h) provide to the State a detailed plan within 10 calendar days of the occurrence describing the measures Grantee will undertake to prevent a future occurrence. Notification to affected individuals, as described above, must comply with applicable law, be written in plain language, and contain, at a minimum: name and contact information of Grantee's representative; a description of the nature of the loss; a list of the types of data involved; the known or approximate date of the loss; how such loss may affect the affected individual; what steps Grantee has taken to protect the affected individual; what steps the affected individual can take to protect himself or herself; contact information for major credit card reporting agencies; and, information regarding the credit and identity monitoring services to be provided by Grantee. This section survives the termination of the Grant Agreement.

#### 3.5.2 Non-Disclosure of Confidential Information

The parties acknowledge that each party may be exposed to or acquire communication or data of the other party that is confidential, privileged communication not intended to be

disclosed to third parties. The provisions of this section survive the termination of the Grant Agreement.

- Meaning of Confidential Information. For the purposes of the Grant Agreement, the term "Confidential Information" means all information and documentation of a party that: (a) has been marked "confidential" or with words of similar meaning, at the time of disclosure by such party; (b) if disclosed orally or not marked "confidential" or with words of similar meaning, was subsequently summarized in writing by the disclosing party and marked "confidential" or with words of similar meaning; and, (c) should reasonably be recognized as confidential information of the disclosing party. The term "Confidential Information" does not include any information or documentation that was: (a) subject to disclosure under the Michigan Freedom of Information Act (FOIA); (b) already in the possession of the receiving party without an obligation of confidentiality; (c) developed independently by the receiving party, as demonstrated by the receiving party, without violating the disclosing party's proprietary rights; (d) obtained from a source other than the disclosing party without an obligation of confidentiality; or, (e) publicly available when received, or thereafter became publicly available (other than through any unauthorized disclosure by, through, or on behalf of, the receiving party). For purposes of the Grant Agreement, in all cases and for all matters, State Data is deemed to be Confidential Information.
- (b) Obligation of Confidentiality. The parties agree to hold all Confidential Information in strict confidence and not to copy, reproduce, sell, transfer, or otherwise dispose of, give or disclose such Confidential Information to third parties other than employees, agents, or subcontractors of a party who have a need to know in connection with the Grant Agreement or to use such Confidential Information for any purposes whatsoever other than the performance of the Grant Agreement. The parties agree to advise and require their respective employees, agents, and subcontractors of their obligations to keep all Confidential Information confidential. Disclosure to a subcontractor is permissible where: (a) use of a subcontractor is authorized under the Grant Agreement; (b) the disclosure is necessary or otherwise naturally occurs in connection with work that is within the subcontractor's responsibilities; and (c) Grantee obligates the subcontractor in a written contract to maintain the State's Confidential Information in confidence. At the State's request, any employee of Grantee or any subcontractor may be required to execute a separate agreement to be bound by the provisions of this section.
- (c) Cooperation to Prevent Disclosure of Confidential Information. Each party must use its best efforts to assist the other party in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limiting the foregoing, each party must advise the other party immediately in the event either party learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of the Grant Agreement and each party will cooperate with the other party in seeking injunctive or other equitable relief against any such person.
- (d) Remedies for Breach of Obligation of Confidentiality. Each party acknowledges that breach of its obligation of confidentiality may give rise to irreparable injury to the other party, which damage may be inadequately compensable in the form of monetary damages. Accordingly, a party may seek and obtain injunctive relief against the breach or

threatened breach of the foregoing undertakings, in addition to any other legal remedies which may be available, to include, in the case of the State, at the sole election of the State, the immediate termination, without liability to the State, of the Grant Agreement or any Statement of Work corresponding to the breach or threatened breach.

(e) Surrender of Confidential Information upon Termination. Upon termination of the Grant Agreement or a Statement of Work, in whole or in part, each party must, within 5 calendar days from the date of termination, return to the other party any and all Confidential Information received from the other party, or created or received by a party on behalf of the other party, which are in such party's possession, custody, or control; provided, however, that Grantee must return State Data to the State following the timeframe and procedure described further in the Grant Agreement. Should Grantee or the State determine that the return of any non-State Data Confidential Information is not feasible, such party must destroy the non-State Data Confidential Information and must certify the same in writing within 5 calendar days from the date of termination to the other party.

#### 3.5.3 Data Privacy and Information Security

- (a) Undertaking by Grantee. Without limiting Grantee's obligation of confidentiality as further described, Grantee is responsible for establishing and maintaining a data privacy and information security program, including physical, technical, administrative, and organizational safeguards, that is designed to: (a) ensure the security and confidentiality of the State Data; (b) protect against any anticipated threats or hazards to the security or integrity of the State Data; (c) protect against unauthorized disclosure, access to, or use of the State Data; (d) ensure the proper disposal of State Data; and (e) ensure that all employees, agents, and subcontractors of Grantee, if any, comply with all of the foregoing. In no case will the safeguards of Grantee's data privacy and information security program be less stringent than the safeguards used by the State, and Grantee must at all times comply with all applicable State IT policies and standards, which are available to Grantee upon request.
- (b) Audit by Grantee. No less than annually, Grantee must conduct a comprehensive independent third-party audit of its data privacy and information security program and provide such audit findings to the State.
- (c) Right of Audit by the State. Without limiting any other audit rights of the State, the State has the right to review Grantee's data privacy and information security program prior to the commencement of grant activities and from time to time during the term of the Grant Agreement. During the providing of the grant activities, on an ongoing basis from time to time and without notice, the State, at its own expense, is entitled to perform, or to have performed, an on-site audit of Grantee's data privacy and information security program. In lieu of an on-site audit, upon request by the State, Grantee agrees to complete, within 45 calendar days of receipt, an audit questionnaire provided by the State regarding Grantee's data privacy and information security program.
- (d) Audit Findings. Grantee must implement any required safeguards as identified by the State or by any audit of Grantee's data privacy and information security program.
- (e) State's Right to Termination for Deficiencies. The MPSC or the State reserves the right, at its sole election, to immediately terminate the Grant Agreement or a Statement of

Work without limitation and without liability if the MPSC or the State determines that Grantee fails or has failed to meet its obligations under this section.

#### 3.6 Non-Discrimination

Under the Elliott-Larsen Civil Rights Act, 1976 PA 453, MCL 37.2101, et seq., and the Persons with Disabilities Civil Rights Act, 1976 PA 220, MCL 37.1101, et seq., and Executive Directive 2019-09, Grantee and its subgrantees agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex (as defined in Executive Directive 2019-09), height, weight, marital status, partisan considerations, any mental or physical disability, or genetic information that is unrelated to the person's ability to perform the duties of a particular job or position. Breach of this covenant is a material breach of this Grant.

#### 3.7 Unfair Labor Practices

Under MCL 423.324, the State may void any Grant with a Grantee or subgrantee who appears on the Unfair Labor Practice register compiled under MCL 423.322.

#### 3.8 Force Majeure

Neither party will be in breach of this Grant because of any failure arising from any disaster or acts of God that are beyond their control and without their fault or negligence. Each party will use commercially reasonable efforts to resume performance. Grantee will not be relieved of a breach or delay caused by its subgrantees. If immediate performance is necessary to ensure public health and safety, the MPSC or the State may immediately Grant with a third party.

#### 3.9 Media Releases

News releases (including promotional literature and commercial advertisements) pertaining to the RFP, Grant, or project to which it relates must not be made without prior written approval, and then only in accordance with the explicit written instructions of the MPSC Grant Administrator.

#### 4.0 Website Incorporation

The State is not bound by any content on Grantee's website unless expressly incorporated directly into this Grant.

#### 4.1 Certification Regarding Debarment

The Grantee certifies, by signature to this Agreement, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this Agreement by any federal or State department or agency. If

the Grantee is unable to certify to any portion of this statement, the Grantee shall attach an explanation to this Agreement.

#### 4.2 Illegal Influence

The Grantee certifies, to the best of his or her knowledge and belief that:

- A. No federal appropriated funds have been paid nor will be paid, by or on behalf of the Grantee, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan or cooperative agreement.
- B. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this grant, the Grantee shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- C. The Grantee will require that the language of this certification be included in the award documents for all grants or subcontracts and that all subrecipients shall certify and disclose accordingly.

The State has relied upon this certification as a material representation. Submission of this certification is a prerequisite for entering into this Agreement imposed by 31 USC § 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Grantee certifies, to the best of his or her knowledge and belief that no state funds have been paid nor will be paid, by or on behalf of the Grantee, to any person for influencing or attempting to influence an officer or employee of any State agency, a member of the Legislature, or an employee of a member of the Legislature in connection with the awarding of any state contract, the making of any state grant, the making of any state loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any state contract, grant, loan or cooperative agreement.

#### 4.3 Governing Law

This Grant is governed, construed, and enforced in accordance with Michigan law, excluding choice-of-law principles, and all claims relating to or arising out of this Grant are governed by Michigan law, excluding choice-of-law principles. Any dispute arising from this Grant must be resolved in Michigan Court of Claims. Grantee consents to venue in Ingham

County, and waives any objections, such as lack of personal jurisdiction or forum non conveniens. Grantee must appoint agents in Michigan to receive service of process.

#### 4.4 Compliance with Laws

Grantee must comply with all federal, state and local laws, rules and regulations, which may include, without limitation the Federal Uniform Guidance. See 2 CFR 200. The Uniform Guidance requires an infrastructure for competitive bidding and contractor oversight, including maintaining written standards of conduct and prohibitions on dealing with suspended or debarred parties. Federal grant agreement terms and conditions are in Attachment C.

Section 291 of the fiscal year 2013 Omnibus Budget, PA 200 of 2012, requires verification that all new employees of the Grantee and all new employees of any approved subcontractor, working under the Grant Agreement, are legally present to work in the United States. The Grantee must perform this verification using the E-verify system (<a href="http://www.uscis.gov/portal/site/uscis">http://www.uscis.gov/portal/site/uscis</a>). The Grantee's signature on the Grant Agreement is the Grantee's certification that verification has and will be performed. The Grantee's signature also certifies that the Grantee is not an Iran linked business as defined in MCL 129.312.

#### 4.5 Disclosure of Litigation, or Other Proceeding

Grantee must notify the State within 14 calendar days of receiving notice of any litigation, investigation, arbitration, or other proceeding (collectively, "Proceeding") involving Grantee, a subgrantee, or an officer or director of Grantee or subgrantee, that arises during the term of the Grant, including: (a) a criminal Proceeding; (b) a parole or probation Proceeding; (c) a Proceeding under the Sarbanes-Oxley Act; (d) a civil Proceeding involving: (1) a claim that might reasonably be expected to adversely affect Grantee's viability or financial stability; or (2) a governmental or public entity's claim or written allegation of fraud; or (e) a Proceeding involving any license that Grantee is required to possess in order to perform under this Grant.

#### 4.6 Assignment

Grantee may not assign this Grant to any other party without the prior approval of the MPSC or the State. Upon notice to Grantee, the MPSC or the State, in its sole discretion, may assign in whole or in part, its rights or responsibilities under this Grant to any other party. If the MPSC or the State determines that a novation of the Grant to a third party is necessary, Grantee will agree to the novation, provide all necessary documentation and signatures, and continue to perform, with the third party, its obligations under the Grant.

#### 4.7 Entire Grant and Modification

This Grant is the entire agreement and replaces all previous agreements between the parties for the Grant Activities. This Grant may not be amended except by signed agreement between the parties.

#### 4.8 Grantee Relationship

Grantee is an independent contractor and assumes all rights, obligations and liabilities set forth in this Grant. Grantee, its employees, and agents will not be considered employees of the State. No partnership or joint venture relationship is created by virtue of this Grant. Grantee, and not the MPSC nor the State, is responsible for the payment of wages, benefits and taxes of Grantee's employees and any subcontractors. Prior performance does not modify Grantee's status as an independent Grantee. Grantee will be required to assume responsibility for all services offered in their proposal whether or not they possess them within their organization. Further, the MPSC will consider the Grantee to be the sole point of contact with regard to grant matters, including payment of any and all charges resulting from the grant.

Upon request, Grantee must perform background checks on all employees and subcontractors and its employees prior to their assignment. The scope is at the discretion of the MPSC, or the State, and documentation must be provided as requested. Grantee is responsible for all costs associated with the requested background checks. The MPSC or the State, in its sole discretion, may also perform background checks.

The provisions of the Grant Agreement that impose continuing obligations, including warranties and representations, termination, transition, indemnification, and confidentiality, will survive the expiration or termination of the Grant Agreement.

#### 4.9 Dispute Resolution

The parties will endeavor to resolve any Grant dispute in accordance with this provision. The dispute will be referred to the parties' respective Grant Administrators or Program Managers. Such referral must include a description of the issues and all supporting documentation. The parties must submit the dispute to a senior executive if unable to resolve the dispute within 15 business days. The parties will continue performing while a dispute is being resolved, unless the dispute precludes performance. A dispute involving payment does not preclude performance.

Litigation to resolve the dispute will not be instituted until after the dispute has been elevated to the parties' senior executive and either concludes that resolution is unlikely, or fails to respond within 15 business days. The parties are not prohibited from instituting formal proceedings: (a) to avoid the expiration of statute of limitations period; (b) to preserve a superior position with respect to creditors; or (c) where a party makes a determination that a temporary restraining order or other injunctive relief is the only adequate remedy. This Section does not limit the MPSC or the State's right to terminate the Grant.

#### 5.0 Severability

If any part of this Grant is held invalid or unenforceable, by any court of competent jurisdiction, that part will be deemed deleted from this Grant and the severed part will be replaced by agreed upon language that achieves the same or similar objectives. The remaining Grant will continue in full force and effect.

#### 5.1 Waiver

Failure to enforce any provision of this Grant will not constitute a waiver.

#### 5.2 Signatories

The signatories warrant that they are empowered to be bound by it.	enter into this Agreement and agree	
Laura Kwiecien, Procurement Director Procurement & Administration Division Bureau of Finance and Administrative Services Department of Licensing and Regulatory Affairs State of Michigan	Date	
Dr. Missy Stults Sustainability and Innovations Director City of Ann Arbor	Date	

GRANT NO. PSC-25-23-I

Rev. 1/27/2016

## State of Michigan Department of Licensing and Regulatory Affairs Michigan Public Service Commission

## Renewable Energy and Electrification Infrastructure Enhancement and Development Grant

#### **RESPONSE DOCUMENT**

Bidder Name: City of Ann Arbor, Michigan

ESTIMATED TIMELINE	
Issue Date	December 20, 2023
Inquiries Due (round one)	January 11, 2024
Reponses to Inquiries Posted	January 18, 2024
Inquiries Due (round two)	January 26, 2024
Responses to Inquiries Posted	February 5, 2024
Proposals Due	February 21, 2024
Proposals Posted Publicly	February 28, 2024
Public Comment Period End Date	April 12, 2024
Modified Proposals Due	April 29, 2024
Modified Proposals Posted Publicly	May 1, 2024
Anticipated Announcement of Grant Awards	September 2024
Anticipated Grant Start Date	November 15, 2024



#### PART III: WORK STATEMENT

#### III-A Purpose

The purpose of this Request for Proposals (RFP) is to obtain proposals from businesses, nonprofit organizations, local units of government, and tribal governments, for the purpose of planning, developing, designing, acquiring, or constructing renewable energy and electrification infrastructure projects. The MPSC may consider awarding up to 10% of the funding available to planning grants. The MPSC welcomes all technologies, project sizes, and locations to apply, consistent with the language outlined in <a href="Public Act 119 of 2023">Public Act 119 of 2023</a>.

From the total amount of funding for grants awarded for electric vehicle fast-charging infrastructure, 25% of that total amount must be allocated for infrastructure that provides charging at a power level of 350 kilowatts or less and 75% of that total amount must be allocated for infrastructure that provides charging at a power level of more than 350 kilowatts.

NOTE: The MPSC reserves the right to award funds for an amount other than that requested and/or request changes to, or clarification of any and all proposals received as a result of this RFP.

#### III-B Problem Statement

This grant will support renewable energy and electrification infrastructure enhancement and development projects.

#### III-C Objectives

Prioritized infrastructure or planning projects funded hereunder will meet one or more of the MI Healthy Climate Plan goals, specifically to:

- 1. Commit to environmental justice and pursue a just transition
- 2. Clean the electric grid
- 3. Enable electric vehicle charging infrastructure and increase public transit
- 4. Repair and decarbonize homes and businesses
- 5. Drive clean innovation in industry
- 6. Protect Michigan's air, land, and water

#### III-D Tasks

The tasks outlined below must be included in an application for either a renewable energy and electrification facility or program (infrastructure) grant or a renewable energy and electrification planning grant.

## A. Renewable Energy and Electrification Facilities or Program Infrastructure Grant applicant(s) must include the following to be considered for an award:

- 1. Submit an impact study of the project that includes an analysis of the following:
  - a. Potential cost savings.
  - b. Environmental impacts. In calculating the carbon emission reductions, a life cycle approach utilizing the Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies (GREET) Model developed by Argonne National Laboratory is preferred. Emission must be expressed in terms CO2e (carbon dioxide equivalent).
  - c. Local economic benefits.

Note: A utility, at its sole discretion, may prepare a single impact study covering the utility's service territory that accounts for likely proposals, evaluates regional opportunities, and minimizes or eliminates the need for repetitive studies.

- 2. Submit details addressing how the proposed project will align with the governor's MI Healthy Climate Plan.
- 3. Submit a detailed project timeline and Gantt chart. The estimated grant start date is November 15, 2024. Projects must be completed by August 15, 2026 for the portion of the project being funded by the grant.

### B. Renewable Natural Gas (RNG) Infrastructure Grant applicant(s) must include ALL of the following to be considered for an award:

"Renewable natural gas" or "RNG" means methane derived from organic material and degradable carbon sources, including, but not limited to, carbon sources and materials sourced from municipal solid waste, plant materials, or food waste. Renewable natural gas injected into a pipeline for downstream use must meet pipeline quality specifications.

- 1. Submit an impact study of the project that includes an analysis of the following:
  - a. The project details, including the location of renewable natural gas and the proposed interconnection.
  - b. The cost estimates for the interconnection, metering, and gas conditioning equipment needed to connect to an existing pipeline system.
  - c. A summary of the environmental and health impacts of the project, including the forecasted emission reductions. In calculating the carbon emission reductions, a life cycle approach utilizing the Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies (GREET) Model developed by Argonne National Laboratory is preferred. Emission must be expressed in terms CO2e (carbon dioxide equivalent).
  - d. Any local economic impact from the RNG infrastructure development.
  - e. The end-use application for the RNG infrastructure with a focus on projects being used for opportunities in this state.
- 2. Submit details addressing how the proposed project will align with the governor's MI Healthy Climate Plan.
- 3. Submit a detailed project timeline and Gantt chart. The estimated grant start date is November 15, 2024. Projects must be completed by August 15, 2026 for the portion of the project being funded by the grant.

## C. Renewable Energy and Electrification Facilities or Program Planning Grant applicant(s) must include ALL of the following to be considered for an award:

- 1. Submit a narrative including all of the following information:
  - a. Explanation of what planning will be taking place and how the grant award will be spent.
  - b. Explanation of the future project(s) which the planning is being conducted for.
  - c. Detailed Timeline and Gantt chart for the planning to be conducted and the future project being planned for. The estimated grant start date is November 15, 2024. Planning must be completed by August 15, 2026 for the portion of the project being funded by the grant.
  - d. Potential impact to Michigan citizens and businesses, including how the planning grant applicant intends to engage affected or surrounding community members and stakeholders in planning and project design and/or implementation.
  - e. How the future project(s) the planning is being conducted for will align with the governor's MI Healthy Climate Plan.
- 2. Identify potential funding sources to undertake construction of facilities or implementation of programs that a planning grant is being conducted for.

#### PART V: INFORMATION REQUIRED FROM APPLICANT(S)

Applicant(s) must submit one proposal. **Electronically submitted proposals must have a scanned signature or e-signature** and cannot exceed 15 MB.

Applicant(s) must provide responses to each section below. The RFP Response Template document can be found on the Renewable Energy and Electrification Infrastructure Enhancement and Development Grant webpage. Be as descriptive as possible and answer each question in its entirety; some questions have multiple components. In your responses, provide a straight-forward, concise description of the applicant(s)'s ability to meet the requirements of the RFP.

Questions that do not apply should be answered "N/A."

#### V-A Identification of Organization

Applicant will provide the following:

- 1. State the full name and address of the organization.
- 2. The organization's federal identification number.
- 3. The organization's telephone numbers.
- 4. What percentage of the organization is located in Michigan.
- 5. The organization's SIGMA ID number. Refer to Section I-B, Eligibility Requirements.
- 6. The organization's SIGMA ordering mail code Refer to Section I-B, Eligibility Requirements.
- 7. Name of the authorized signer(s) for any future grant agreements, their title, telephone number, fax number, and electronic mail address.

Bidder response:

Name of Applicant: City of Ann Arbor, Michigan

Address: 301 E. Huron Street, Ann Arbor, MI 48104

Federal Identification Number: 38-6004534

**Telephone:** 734-794-6430 x 43725

Percentage of Project in Michigan: 100% SIGMA ID: CV0047636

SIGMA Ordering Mail Code: 301 E. Huron Street, Ann Arbor, MI 48104

Name of Authorized Signer: Dr. Missy Stults, Sustainability and Innovations

Director, (734) 794-6430 x 43725, mstults@a2gov.org

#### V-B Authorized Negotiator

State the name of one (1) contact person and their title, telephone number, fax number, and electronic mail address. The contact person must be authorized to be the negotiator for the proposed Grant Agreement with the State of Michigan.

#### Bidder response:

Dr. Missy Stults, Sustainability and Innovations Director, (734) 794-6430 x 43725, mstults@a2gov.org

#### V-C Project Summary

Please provide a project summary not more than 500 characters in length.

#### Bidder response:

This project will help create the nation's first fully decarbonized existing neighborhood, and do that by centering the goals, aspirations, and strengths of low-income and BIPOC residents. Led by a coalition of residents, nonprofits, and governmental organizations, for more than two years, stakeholders have been envisioning what a carbon neutral Bryant neighborhood could look like. This grant will help implement some of the solutions identified – focusing on making significant energy, electrification, health, safety, and comfort improvements in 50 low-income homes.

#### V-D Method for Addressing the Problem

State in succinct terms how the applicant(s)'s proposed project will support renewable energy and electrification infrastructure enhancement and development. Refer to Section III-B, Problem Statement.

#### Bidder response:

This project will finance deep energy efficiency improvements, electric panel upgrades, beneficial electrification improvements such as the replacement of fossil gas water heaters, dryers, and stoves with all-electric, high-efficiency appliances, and the installation of solar and energy storage systems at 50 low-income households in the Bryant neighborhood in Ann Arbor (a predominately low-income, BIPOC neighborhood). Heating and cooling will not be covered in this grant because the City is currently undertaking a study to determine the viability of a district geothermal system to provide all the neighborhood's heating and cooling needs (thanks to a U.S. Department of Energy grant).

By combining multiple home decarbonization actions together, in a targeted neighborhood, the project team will be able to take advantage of significant cost and labor savings. Moreover, the team has identified additional funding that can help expand the impact of this project, including weatherization dollars, private philanthropic support, and some modest local funding. This approach to simultaneously undertaking holistic decarbonization solutions and stacking funding means that this project will be able to rapidly decarbonize a low-income neighborhood in a more affordable, efficient, and equitable manner than moving household by household. We believe this will demonstrate a scalable and transferable approach to neighborhood decarbonization, one that other neighborhoods in Ann Arbor and across Michigan can implement as we collectively work towards achieving the MI Healthy Climate Plan's goals.

This project is perfectly aligned with the MPSC's purpose for the EIED grant due to its direct and explicit focus on supporting the installation of renewable energy and electrification infrastructure, especially in a low-income neighborhood. For more information on the holistic work unfolding in the Bryant neighborhood, please see this video from the McKnight Foundation: <a href="https://www.mcknight.org/news-ideas/making-ann-arbor-bryant-neighborhood-most-sustainable-place-america/">https://www.mcknight.org/news-ideas/making-ann-arbor-bryant-neighborhood-most-sustainable-place-america/</a>.

#### V-E Project Objectives

Explain how the applicant's infrastructure or planning project will meet the goals of the MI Healthy Climate Plan. Refer to Section III-C, Objectives. Also include any other identified project metrics that will be included in the project status reports as referenced in Section IV-B.

#### Bidder response:

This project is about helping a low-income community reap the benefits of a clean energy transition while also building the workforce necessary to usher in economy wide-carbon neutrality, supporting MI Healthy Climate Plan goal area 1. The focus on equitable building decarbonization, especially in low-income neighborhoods that are largely left out of market-rate programs and initiatives, will directly advance MI Healthy Climate Plan goal area 4. The installation of renewable energy, energy storage, and

beneficial electrification activities directly advances MI Healthy Climate Plan goal area 2. And the entire project advances goal area 6: Protecting Michigan's air, land, and water, all while advancing numerous tangential goals, including: protecting public health, improving indoor air quality for vulnerable populations, investing in good paying, family-sustaining Michigan jobs, and demonstrating Michigan's leadership in the clean energy and decarbonization movement.

Metrics the team prepares to track for this project include:

- Number of nearly carbon neutral households (goal is 50 households by August 2026 that have reduced their energy spend and annual greenhouse gas emissions by 50% from baseline levels)
- Number of residents employed in high-road green job (goal is 4 FTE's; 2 residents job shadowing; and 3 residents interning on the project)
- Number of residents taking advantage of wealth-building strategies (goal is 20 residents by August 2026 have put 20% of project-based energy savings into wealth building techniques)
- Number of Neighborhood Ambassadors trained (goal is 5 residents)
- Resident input regarding the impact of improvements, including any changes to health, financial, or quality of life associated with project-based improvements.
- Number of communities looking to replicate project (goal is at least 3 communities are replicating the project)

#### V-F Work Plan

Provide a detailed work plan based on the requirements outlined in Part III-D Tasks. The applicant's impact study must be attached to the application. If applicant is applying for a Planning Grant, the Planning Narrative should be described in this section.

#### Bidder response:

The objective of this project is to find scalable solutions to decarbonize low-income and frontline communities in a just and equitable way while achieving deep energy reductions, cost savings, and improvements in home health, safety, and comfort. Three **distinct goals are identified** to realize the Project Objective over the duration of the project:

- 1. **Carbon Neutrality**: By August 2026 at least 50 low-income homes are all-electric (excluding heating as the City is exploring thermal energy networks for heating) and powered with renewable electricity, having reduced annual energy spend and annual greenhouse gas emissions by 50%.
- 2. **Neighborhood Stabilization:** By August 2026, 20 residents have utilized financial planning tools and are funneling 20% of project-based energy savings, on average, into wealth building techniques.
- 3. **Project Continuation, Scaling, and Dissemination:** By August 2026, at least 3 more Michigan communities are replicating the project, supported by toolkits, data sharing, and networking resources developed as part of the project.

To achieve these goals, this project is broken into three interrelated phases spanning 18-months: 1) project initiation; 2) home improvements; and 3) project continuation and scaling. Fulfillment of the above goals are integrated into all three phases.

**PHASE ONE: PROJECT INITIATION (3-Months)**. This phase centers on refining and enhancing existing systems to rapidly execute on the project. Tasks include:

- 1. Neighborhood Advisory Committee formation to guide program implementation and community engagement.
- 2. Execution of regular community-designed public engagement activities, including the hiring of two paid interns from the neighborhood fluent in Spanish and/or Arabic; the creation of a

- Neighborhood Ambassador program; and a door-to-door and flyer campaigns to ensure all residents know about the project and have the opportunity to participate.
- 3. Creation and administration of pre-improvement evaluations to assess resident experience and perception of indoor comfort, safety, and efficiency.
- 4. Conducting household assessments inclusive of a DOE approved energy audit, electrification assessment, solar feasibility study, weatherization readiness, environmental remediation needs, necessary electrical and plumbing upgrades, and other needs to achieve 50 all-electric (sans heating/cooling), nearly net zero energy homes.
- 5. The negotiation and administration, including into the Weatherization Program, of bulk deployment strategies (and potential discounts) for materials, appliances, or technologies necessary to achieve deep energy efficiency improvements. This will be done with local businesses and contractors to ensure labor and dollars come from and stay in the local economy.

Phase One Milestones: 30 low-income households have signed letters of commitment to move forward with home improvements; community engagement strategy co-designed with residents and being implemented; Neighborhood Ambassador program created; 2 paid community engagement and paid graduate student evaluation expert employed.

**PHASE TWO: HOME IMPROVEMENTS (12-Months)**: This phase focuses on making deep and lasting improvements in low-income homes while advancing wealth building strategies for residents and workforce development opportunities for communities of color and women. Tasks include:

- 6. Creation and administration of neighborhood stabilization tools and resources, inclusive of financial planning tools to funnel energy savings from the project into wealth building strategies.
- 7. Implementation of home improvements as identified in scopes of work co-created with residents to support at least 50 households with becoming all-electric (sans heating/cooling), nearly net zero energy users. This includes the integration of weatherization and philanthropic funding resources into funding stack to help complete more improvements per household.
- 8. Hosting a green job fair, and establishing job shadowing, skills training, fellowship, and internship opportunities for frontline individuals in the green jobs industry.

**Phase Two Milestones:** 50 households have received services outlined in project scopes to become nearly all-electric, net zero energy users; 5 Neighborhood Ambassadors trained; 2 paid community engagement and 1 paid graduate student evaluation intern employed; 2 residents employed and 2 additional recruited for job training/internships in a high-road green energy job.

**PHASE THREE: PROJECT CONTINUATION AND SCALING (3-Months):** This phase is about deepening the projects reach and scaling solutions throughout the county and country by:

- 9. Continuing to recruit individuals into the program and implementation of targeted home decarbonization strategies.
- 10. Continuation of community engagement activities including recruitment of Neighborhood Ambassadors, continuing to circulate financial and wealth management resources; and offering additional workforce development opportunities.
- 11. Evaluation of participants experience and program impacts, including changes in indoor air quality and comfort, changes in energy usage and expenditures, and overall resident satisfaction with the program.
- 12. Conducting engagement and outreach on project results and replication opportunities outside of Bryant, including the creation of ten case studies highlighting resident experience, one peer-reviewed journal article, at least 2 state-wide presentations, and 2 national conference presentations about the project.

**Phase Three Milestones:** 50 nearly carbon neutral households; 4 residents employed and 2 additional job shadowing/interning for a high-road green job; 2 paid community engagement interns and 1 paid graduate student evaluation intern employed; 10 case studies created; and tool kit and shared resource platforms established to disseminate project information and support adoption in additional communities.

#### ALIGNMENT WITH MI HEALTHY CLIMATE PLAN

This project is fundamentally about equitably decarbonizing a low-income neighborhood and doing that in a way that is in full alignment with, and a model for, the MI Healthy Climate Plan. The project focuses on lowering barriers to access for low-income households looking to embrace clean energy, beneficial electrification, and energy waste reduction solutions. It also works with labor and local businesses to grow the green job industry and recruit more underrepresented constituents into the local green industry workforce. And the entire project, from conception through implementation and evaluation, is done in tandem with residents, giving them power, voice, and decision-making authority of what to do and when, to make the Bryant neighborhood in Ann Arbor, the nation's first carbon neutral existing neighborhood.

#### **IMPACT ASSESSMENT NARRATIVE**

The Impact Assessment (attached) was generated by 5 Lakes Energy and supported by Elevate. This program shows an overall net present value benefit to residents of the 50 homes served at \$577,440 over 16 years via energy savings and solar generation. It also shows a net present value social benefit of \$297,458 via impacts to utility avoided costs, health impacts, social GHG impacts, economic impacts, and resilience impacts.

In addition, this proposed \$3,060,000 investment in renewable energy, home electrification, and resiliency solutions is projected to deliver the following social benefits:

- CO2e emissions reductions averaging 233 metric tons (MT) annually for a total of **3,730 MT** over 16 years, which translates into an average social benefit of \$27,481 annually and total **social** benefit of \$439,691 over 16 years (NPV).
- The creation of 30.86 jobs with an added income to our economy of \$2,293,360.27.
- **Health savings** worth an average of \$12,125 annually for a total **social benefit of \$194,004** over 16 years (NPV).
- Avoided utility capacity and energy costs worth an annual average of \$25,568 for a total social benefit of \$409,094 over 16 years (NPV).
- **Resilience** to electricity service outages a social benefit associated with battery storage technology of \$21,309 over 16 years.

Applicant must include a timeline and Gantt chart. Please attach as a separate document if necessary.

#### Bidder response:

Please see attached documents -

- Project Implementation Timeline
- MPSC\_Electrification\_Grant\_Gantt\_Chart\_2.7.24

#### V-G Management Summary

- (1) Describe management procedures that will be used by the organization to complete the proposed project.
- (2) Describe the organization's quality control measures, including measures for ensuring compliance as well as eligibility determination. In your description, include information regarding separation of duties.
- (3) Selected applicant(s) must provide fiscal control and financial accounting procedures that will assure that grant funds will be accounted for and properly dispersed in a way that will allow the Issuing Office to clearly review and verify all grant related expenditures. Describe the

organization's internal control policy:

- Identify the type of accounting system/software the organization will use to account for grant funds.
- Identify how duties will be separated.
- Describe how the organization will account for grant funds, i.e., will grant funds be placed in a separate bank account, will the grant funds be assigned a unique code(s) within the organization's overall accounting system. Ensure funds are maintained in a non-interestbearing account.
- Indicate whether internal and external audits of the organization's operations are
  performed on an annual basis. Selected applicant(s) must provide a copy of the
  organization's most recent audited financial statement as well as a copy of the
  organization's most recent single audit as required by OMB Circular 200.36.
- (4) Describe your agency's data security plan.

#### Bidder response:

#### (1) Project Management and Management Procedures

The project team will be managed by Dr. Missy Stults in the Ann Arbor Office of Sustainability and Innovations (A2), who will monitor progress toward work plan deliverables, organize bi-weekly Steering Committee check-ins, and ensure fidelity to project outcomes. The Steering Committee will include the City of Ann Arbor (Dr. Stults and Jordan Larson), Community Action Network (Derrick Miller and Krystal Steward), Elevate (Hank Love and Jamie Simmons), the University of Michigan (Dr. Hoey), and the County Weatherization Program (Aaron Kraft). This team will meet at least biweekly to coordinate on all aspects of program development and delivery. As the project lead, the City of Ann Arbor will prepare agendas, coordinate logistics, establish the project management plan (which will be managed in Monday.com), and ensure that all project elements are managed within time and on budget. A SharePoint site will be created to store all project-related files and the project management software, Monday.com, will be used to manage day to day activities.

Each Steering Committee member will lead a given area of programmatic work to ensure clear lines of authority and to leverage each member's unique abilities and expertise:

- Weatherization services, including coordination with contractors and quality control, will be conducted by the Washtenaw County Office of Community and Economic Development (OCED), under the supervision of Aaron Kraft.
- Implementation of other decarbonization strategies (non-weatherization related) will be managed by the City of Ann Arbor with support from Elevate, under the leadership of Hank Love.
- Community engagement, outreach, and recruitment, including the recruitment and training of neighborhood ambassadors, will be conducted by Community Action Network (CAN) and Bryant Community Center (BCC) under the supervision of Derrick Miller and with support from the Ann Arbor Office of Sustainability and Innovations.
- Workforce development will be led by Henry Love from Elevate.
- Neighborhood stabilization and wealth building strategies will be managed by the City of Ann Arbor in collaboration with Elevate.
- Program and participant evaluations will be managed by Dr. Lesli Hoey (UM) with support from Dr. Hoey's graduate students.

#### (2) Organizational Quality Control Measures

The City of Ann Arbor uses a robust financial management program known as New World ERP. This

program is capable of tracking and reporting activity at the fund and program level. The ERP system allows for electronic document retention for future quick reference and substantiation of all transactions. The software also has built in internal controls that require the separation of duties and multiple levels of approval to post transactions. Additional grant management and fiscal control practices/resources in the City of Ann Arbor include:

- A grant management policy (Administrative Policy 508) which outlines the specific steps staff must take to set-up the systems for grant tracking.
- A Financial Accounting system that includes a special grant tracking element allowing each grant
  to have its own unique bill code, enabling efficient tracking of time and expenses. This means
  that, if awarded, this grant will be placed into a separate financial account, with unique billing
  codes for specific expenses, thereby ensuring the fidelity of the funds for their intended
  purposes.
- Differentiation of responsibilities related to grant management to ensure no one individual has complete control over the entire-grant process.
- Management training for staff that administer programs, inclusive of grants, to ensure they are
  equipped with the knowledge necessary to successfully manage budgets, staff, projects, and
  associated work.
- Annual auditing of the City's "books" to ensure transparency into the financial status of the organization. This includes the production of an annual Single Audit Report that specifically tracks the City's work related to grants received.

#### (3) Fiscal Control and Financial Accounting Procedures

The City of Ann Arbor uses the New World ERP financial management program to manage the full city budget, inclusive of grants. This program allows for the separate of the City's budget into specific pools based on funding source. This means that every City grant is placed into a unique account (called OOMG) and given a unique series of grant codes for easy tracking of expenditures by grant, based on type (i.e., equipment versus labor versus community engagement materials). No two grants have the same codes meaning that funds cannot be commingled. This process allows for the easy tracking of specific grant expenses and rapid reporting. As an example, we are including a copy of a budget report that shows how a handful of existing grants are tracked within the City's fiscal management system. If awarded this grant, the City will place grant funds into an account unique to this project (i.e., set up only for this grant), and give the grant a unique set of billing codes that can only be used for authorized expenditures (per the grant agreement). This account will be a non-interest-bearing account.

In terms of separation of duties, if awarded this grant, the City will designate a finance project manager to coordinate all financially related elements of the project (e.g., invoicing, payment, budget tracking, reporting). This individual will be discrete from the program manager. In this way, the City will ensure a separation of duties between technical program implementation and financial management – helping ensure project success and avoiding any potential future tracking and reporting issues.

The City will also include this award, if granted, as part of its annual Single Audit Report and Comprehensive Audit. A list of all recent City audits can be found on the City of Ann Arbor's Financial Reporting website: <a href="https://www.a2gov.org/departments/finance-admin-services/financial-reporting/Pages/default.aspx">https://www.a2gov.org/departments/finance-admin-services/financial-reporting/Pages/default.aspx</a>.

#### (4) Data Security Plan

The City of Ann Arbor's Information Technology (IT) department has put in place numerous provisions to manage information and data. This includes on-premises storage/backup for data at our primary data center, the Justice Center, a redundant back-up of data at the City's backup data center at Wheeler, and storage backups in our Microsoft Azure cloud for off-site protection. Our Storage Area Network (SAN) retains immutable snapshots that cannot be overwritten or destroyed without engaging vendor support

and agreement from multiple administrators. This is critical ransomware protection. Additionally, the City secures our data through a number of mechanisms, including: DUO multi-factor authentication, firewalls (web and on-premise), strong password policies, Anti-virus and malware protection, Intrusion Detection Services (IDS), strong administrative policies for elevated access to our network, and regular security patching of services and workstations. Staff also undergo annual security training, inclusive of data protection training, cybersecurity training, and more.

#### V-H Personnel

Selected applicant(s) must be able to staff a project team that clearly possesses skill and experience relative to the project.

- Applicant(s) must identify the authorized contact person and key personnel to be involved with this
  project by name and title and provide a brief summary of their experience, qualifications, and the
  work to be performed.
- 2) If other organizations will be playing a role in the proposed project, provide sufficient background information that will give the MPSC a reasonable understanding of each organization's qualifications.
- 3) Include a detailed organizational chart including names, titles, and geographic location of all individuals that will contribute to the project.
- 4) If personnel or other organizations have signed a confidentiality agreement, attach a copy along with a list of personnel and the date that the confidentiality agreement was signed.

#### Bidder response:

- 1) <u>Authorized Contact Person</u> Dr. Missy Stults, Sustainability and Innovations Director, City of Ann Arbor. Missy has worked to advance local and tribal climate and sustainability initiatives for over 20 years, most recently as the City of Ann Arbor's first Sustainability Director. In this role, she is responsible for finding pathways and forming strategic collaborations to achieve the A<sup>2</sup>ZERO plan and goal of a just transition to community-wide carbon neutrality by the year 2030. She has extensive experience in program management, program design and creation, fundraising, community engagement, and management. She will serve as the authorized representative for the City of Ann Arbor.
- 2) <u>Key Personnel</u>. This proposal leans into community, nonprofit, and governmental expertise to form a team with the unique skillsets to deliver on this cutting-edge project. Combined, the project team has decades of experience working in and with frontline communities to improve quality of life and health outcomes, while improving comfort and advancing sustainability. These skilled and qualified team members include:
  - Jordan Larson, Community Engagement Innovator with the Ann Arbor Office of Sustainability and Innovations. Jordan's work builds community capacity, engagement, and action around A<sup>2</sup>ZERO initiatives and goals. Prior to joining OSI, Jordan attended the University of Michigan's School for Environmental and Sustainability to pursue a Masters in Environmental Justice and Geospatial Data Science, focusing his research and studies on urban climate justice and education for climate change leadership. For this project, Jordan and Krystal Steward will serve as the leads for community engagement strategy development and implementation. Jordan will also lead development of neighborhood stabilization and wealth building work.
  - Derrick Miller, Executive Director of Community Action Network (CAN). Derrick is a seasoned leader, social service entrepreneur, and executive director of CAN, a grassroots organization he's cultivated into one of Washtenaw County's most successful and impactful nonprofits. Under Derrick's leadership, CAN has expanded its service delivery, quadrupled the number of services provided, and tripled its operational revenue in just four years. Derrick also served honorably in the United States Marine Corps and is a veteran of Operation Iraqi Freedom. For this project,

- Derrick will oversee the development of the community engagement strategy and work with Elevate to obtain contractor bids for implementation of identified decarbonization solutions.
- Krystal Steward, Director of Community Outreach at Community Action Network. Krystal is a resident of the Bryant neighborhood and the lead for all community outreach and engagement at CAN, especially as it relates to the Bryant neighborhood project. Krystal has spent nearly 20 years working directly to provide housing supportive services and social services to residents most in need within the local community. She is deeply committed to making the Bryant neighborhood the national exemplar for equitable decarbonization. For this project, Krystal and Jordan Larson will serve as co-leads for community engagement strategy development and implementation.
- Henry Love, Vice President of Strategy, Elevate. Henry has two decades of experience in the sustainability field, spanning his time at Elevate where he helped to grow the Midwestern footprint of the organization and his time as the principal Director of Municipal and Community Programs, to his time as an independent consultant helping to grow the green jobs industry. Prior to this, Henry worked as the Executive Director at the American Jobs Project, where he played a key role in establishing the organization as a standalone nonprofit. Henry's early career includes a role as Assistant Director at Michigan Energy Options, a nonprofit that focuses on promoting sustainability and renewable energy. For this project, Henry will oversee the collection of contractor bids and the implementation of decarbonization projects, support the creation of neighborhood stabilization resources in tandem with the City of Ann Arbor, and lead workforce development activities.
- Jamie Simmons, Program Manager, Community Programs, Elevate. Jamie currently serves as the Program Manager and a key contributor to many of the City of Ann Arbor's programs, including our soon to be launched residential rebate initiative. Prior to joining Elevate, Jamie served as a Community Engagement Reporter at Michigan Radio and the Engagement Director at Michigan Climate Action Network. For this project, Jamie will help organize and collect contractor bids, and provide contractor coordination to ensure all projects are implemented as seamlessly as possible.
- Aaron Kraft, Housing Program Supervisor, Washtenaw County Office of Community and Economic Development. A long-time public servant and dedicated housing champion, Aaron has been leading housing programs in Washtenaw County for more than 20 years. In this role he works tirelessly to administer the County's weatherization program, providing critical services to some of those most in need in the region. Recent expansions to the program now allow the County to assist with roof replacements and to provide even deeper energy efficiency improvements to income qualified households. For this project, Aaron will be bringing his experience and expertise related to weatherization to the fore by helping to coordinate the provision of weatherization-related services to income qualified Bryant households.
- Dr. Lesli Hoey, Associate Professor in Urban and Regional Planning, University of Michigan. Dr. Hoey is a national expert in participatory program evaluation methods, food systems, implementation science, and equitable planning techniques. She studies grassroots and government-led efforts to achieve more just, sustainable, and healthy communities expertise she will bring to ensure Project goals are met and residents are centered in all elements of program design and implementation. For this project, Dr. Hoey will manage program and participant evaluations and provide real-time recommendations on any needed programmatic redesigns.

Organizational backgrounds are provided below for the organizations that key team members represent.

• Ann Arbor's Office of Sustainability and Innovations (OSI) is the keeper of the community's climate and equity plan and programs (A<sup>2</sup>ZERO). OSI works with more than 120 community collaborators to achieve a just transition to community-wide carbon neutrality by the year 2030

through the creation and implementation of programs and policies such as green rental housing, aging in place efficiently, Solarize, and via the deployment of incentives to support beneficial electrification and renewable energy adoption.

- Community Action Network (CAN) is a 501(c)3 that partners with children, youth, and families
  from under resourced Washtenaw County neighborhoods to create better futures for
  themselves and improve the communities in which they live. CAN provides direct services to
  residents and partners with others to ensure residents have the wrap-around services needed
  to survive and thrive. CAN operates numerous community centers, including the Bryant
  Community Center (BCC), which is the geographical focus for this project.
- Elevate is a 501(c)3 that works nationally to create a just and equitable world in which everyone has clean and affordable heat, power, and water in their homes and communities no matter who they are or where they live. Elevate's programmatic work includes initiatives that advance energy efficiency, solar adoption, healthy homes, high performance buildings, as well as workforce and small business development.
- Washtenaw County Office of Community and Economic Development (OCED) has assisted more than 900 households with home improvements and social support services over the last five years, while also developing new tools to extend the reach, impact, and equity of their work (e.g., Opportunity Index).
- University of Michigan's Taubman College of Architecture and Urban Planning is at the forefront
  of shaping education and industry to pursue a more beautiful, inclusive, sustainable, and just
  world. The College is on the leading edge of change and focused on the future, fostering a
  collaborative culture that supports and challenges, one that is constantly infused with new
  energy, an experimental mindset, and interdisciplinary pursuits.

A detailed organizational chart to successfully implement this project, inclusive of team members and their work locations, is provided as an attachment to this application.

No confidentiality statements have been signed as part of this proposal and/or associated work.

#### V-I Budget

To enable the MPSC to evaluate all project costs, applicant(s) will submit a proposed budget and corresponding budget narrative. Please see Attachment A for the required budget format. The budget and narrative must include only Renewable Energy and Electrification Infrastructure Enhancement and Development Grant Program funds in the budget; do not include matching, leveraged, cost share or any other type of supplemental funds. The budget narrative must identify the budget line item and number, provide a detailed description for each line, and include individual unit prices.

Selected applicant(s) will be required to provide supporting documentation for all grant expenditures incurred during the term of the grant. Accounting records must be supported by source documentation including, but not limited to, general ledgers, time sheets, payroll registers, invoices, check copies and bank statements, or cancelled checks. Expenses will be verified based on actual expenditures incurred within the grant period that are supported by source documentation, not budgeted amounts.

Administrator. Changes in the budget of less than 5% of the total line item amount, or \$2,000 (whichever is greater), do not require a formal amendment; however, a revised budget should be submitted to the MPSC Grant Administrator for approval. The allowable transfer should be calculated as less than 5%, or \$2,000 (whichever is greater), of the total line item that the funds are being transferred from.

Cumulative changes in the budget equal to or greater than 5% of the total line item amount, or \$2,000 (whichever is greater), may be permitted only upon prior review and written approval by

the MPSC Grant Administrator. A formal grant amendment must be signed by both the Grantor and Grantee.

- 2) **Disallowed Costs** Disallowed costs include but are not limited to the following: sick pay, vacation pay, holiday pay, bonuses, overtime, tuition reimbursement/remission, vehicle allowance, seminars, conferences, meetings, subscriptions, dues, and memberships.
- 3) Administrative Costs Administrative costs cover expenses related to general administrative functions and coordination of functions and oversight directly related to the Renewable Energy and Electrification Infrastructure Enhancement and Development Grant Program administrative functions. Administrative costs should include costs of goods and services required for administrative functions of the program; travel costs incurred for official business in carrying out administrative activities or the overall management of the Renewable Energy and Electrification Infrastructure Enhancement and Development Grant Program; costs of information systems related to administrative functions; and contractual services related to sub-recipients or vendors that are solely for the performance of administrative functions. Total direct administrative costs must be identified and labeled clearly.
- 4) **Budget Requirements** The proposed budget will display three (3) headings identified as the: Line Item, Budget Category, and Total Grant Request. The budget line items that need to be included, at a minimum, are listed below. The budget should reflect the best estimate of actual costs using whole numbers. Please refrain from using decimals or formulas. Refer to the budget example provided in Attachment A.
  - Personnel In the budget, include the name, job title, and salary for each staff position to be paid for by the grant. Time sheets and payroll registers must be submitted for each staff position, and hours worked must be grant related. Fringe benefits may not exceed 35% of each employee's salary. Fringe benefits will be reimbursed based on actual expenditures per employee up to 35%, not on budgeted amounts. Allowable benefits include: health, dental, and optical insurance, employer-paid Social Security and Medicare tax, Michigan and Federal unemployment tax, and other miscellaneous fringe benefits (life insurance, long- and short-term disability insurance, worker's compensation, and retirement program contributions up to 4%). Within the budget narrative, applicant(s) must provide details on the organization's method of calculating fringe benefit expenses that will be charged to the grant including whether fringe benefits are calculated on an annualized basis or based on the length of the grant term.

The budget narrative must include the number of weeks the individual will work on the grant; number of hours per week a full time employee of the organization is expected to work; a description of the work to be performed by each individual; the estimated hours to be worked; actual pay rate; the fringe benefit percentage being charged to the grant for each employee; the percentage of the employee's time allocated to the grant; whether each employee is salaried-exempt, salaried-non-exempt or hourly; and any other applicable information related to the individual's duties and responsibilities in connection with this grant.

Individuals that are not on selected applicant(s)'s payroll, e.g., independent contractors, individuals receiving a Form 1099, temporary workers, etc., must be placed under the Contractual Services budget category. Only employees on the selected applicant(s)'s payroll should be included in the Personnel budget category.

- Supplies, Materials, and Equipment Specify item(s) and cost. The budget narrative should include the anticipated cost of each item, a detailed explanation of the item's purpose, and how it relates to the project being funded. Be as detailed as possible.
- **Contractual Services** These services must be competitively bid. Individuals that are not on selected applicant(s)'s payroll, e.g., independent contractors, individuals receiving a Form 1099, temporary workers, etc., must be placed under **Contractual Services**. When

competitive selection is not feasible or practical, the selected applicant(s) agrees to obtain the written approval of the MPSC Grant Administrator before making a sole source selection. Selected applicant(s) must provide a copy of contracts, memoranda of understanding or agreements signed by selected applicant(s) and contractors.

Selected applicant(s) assumes responsibility to select subcontractors on a competitive basis. A minimum of three (3) bids must be solicited and proposals must include, at a minimum: (1) name of selected applicant(s), grant number, and grant period; and (2) the type, number, and description of projects as described in the proposal.

Selected applicant(s) must provide the MPSC Grant Administrator with the solicitation, list of vendor responses (including amounts), and name of the selected vendor. Selected applicant(s) must maintain bids on file at their place of business according to Section II-H, Records Maintenance, Inspection, Examination, and Audit. The MPSC Grant Administrator will reserve the right to request a copy of all bids for services that are competitively bid.

Selected applicant(s) must award the project to the lowest bid unless the MPSC Grant Administrator has given prior written approval for selection of a higher bid. Selected applicant(s) must provide a written justification for the selection of a higher bid. When awarding subcontracts, the selected applicant(s) must ensure that preference is given to products manufactured in or services offered by Michigan-based firms.

- Other Expenses This category is solely for use by organizations charging a per-case fee for
  work performed by subunits or internal agencies within the organization that do not require
  a competitive bid, i.e. contract, memorandum of understanding or any other type of signed
  agreement.
- Indirect Costs Indirect costs are costs not directly or specifically related to the grant program. Indirect costs are costs of administering the organization and must be spread over a number of products, services, or grant programs proportionately. Examples include office supplies and equipment, utilities, rent, maintenance and repair, insurance, accounting and bookkeeping services, and legal services. Non-cash expenses like depreciation, amortization, and depletion are not allowable indirect costs under this grant. Total indirect costs must be identified, labeled clearly, and may not exceed an amount equal to 10% of the total direct costs.

Selected applicant(s) will be reimbursed for its proportional share of indirect costs. This means the MPSC should be allocated a portion of the selected applicant(s)'s indirect costs and not 100% of the organization's total indirect cost.

Indirect costs should be displayed on the face of the budget on a single line item and the indirect rate should be rounded to six (6) decimal places. The budget narrative should contain a list of indirect costs, how the selected applicant(s) determined its indirect costs, and the percentage rate calculation for reimbursable indirect costs. Selected applicant(s) is not required to provide documentation supporting indirect costs; however, documentation verifying the costs must be retained by the selected applicant(s).

Indirect costs should be displayed on the face of the budget on a single line item and the indirect rate should be rounded to six (6) decimal places. The budget narrative should contain a list of indirect costs, how the selected applicant(s) determined its indirect costs, and the percentage rate calculation for reimbursable indirect costs. Selected applicant(s) is not required to provide documentation supporting indirect costs; however, documentation verifying the costs must be retained by the selected applicant(s).

5) **Grant Expenditure Guidelines** - To ensure efficient review and approval of grant expenditures, selected applicant(s) will be provided additional guidelines to assist with calculating and determining accurate and appropriate grant expenditures.

- 6) **Budget Subtotal** Each budget category should have a subtotal displaying the total anticipated amount to be expended, and the budget should include a subtotal for total direct project costs and a sum of total project costs.
- 7) **Travel** In the event that any necessary travel is anticipated, all expenses must be reflected in the applicant(s) hourly rate.
- 8) **Budget Modifications** After grants are approved by the MPSC, modifications of proposals and budgets may be necessary. If the MPSC does not approve the total amount requested in the original proposal, selected applicant(s) will be required to submit a revised proposal, budget and budget narrative for the purpose of entering into a Grant Agreement. New line items to the revised budget are notallowed.
- 9) **Unexpended Grant Funds** Selected applicant(s) assumes the responsibility of ensuring all unexpended grant funds are returned to the State of Michigan at the end of the grant period. Failure to do so may render selected applicant(s) ineligible for future grant awards and/or subject to legal action.
- 10) **Commingling Grand Funds** Selected applicant(s) may not commingle grant award funds with current or future grant awards. All funding sources must be managed and accounted for separately.

Bidder response: Templates for the Budget and Budget Narrative are attached to the RFP Response document located on the Renewable Energy EIED webpage. In this bidder response, add any information not included in the Budget or Budget Narrative.

The City has very strong grant management guidelines which help ensure that grant funds are not commingled and are transparently managed. Those policies, procedures, and tools were outlined previously in this proposal.

In addition to the content provided in our Budget and Budget Narrative, the project team is prepared to offer, as in-kind match, the following:

25% or 3 months (12 weeks) or Jordan Larson's time as the Community Engagement Innovator in the Office of Sustainability and Innovations, plus his fringe benefits. Jordan will co-lead community engagement activities outlined as part of this grant. The approximate match for this benefit is = \$16,800.

10% or 1.2 months (5 weeks) of Dr. Missy Stults' time as the Sustainability and Innovations Director in the Office of Sustainability and Innovations, plus her fringe benefits. Dr. Stults will serve as the overall project manager for this grant, coordinating all major deliverables and ensuring the project stays on time and on budget. The approximate match for this benefit is = \$14,200.

400 hours of our Ann Arbor Climate Corps (AmeriCorps program) Members time to assist in public engagement-related activities. The approximate match for this benefit is = \$7,200.

\$25,000 in in-kind time from Community Action Network to assist with community outreach and engagement (CAN has an existing contract with the City that will cover this time).

\$30,000 in in-kind time from Elevate to assist with contractor engagement and technical assessments (Elevate has an existing contract with the City that will cover this time).

#### V-J Current and Prior Experience and Funding Disclosure

Current and prior experience is important to the selection process. Proposals submitted by applicant(s) should include:

- 1) A description of the organization's experience in conducting the type of work proposed. Include current activities and activities for the previous ten years. Include project results.
- 2) If applicant(s) received a similar grant award from the State of Michigan in prior years for the type of project proposed, provide a summary of project accomplishments. Include a plan for addressing and resolving past problems.
- 3) Current funding source(s) and the level of funding for the current year and the previous ten years.
- 4) If additional dollars beyond these grant funds are being used for this project, indicate the source and amount.
- 5) If applying for a planning grant, identify potential funding sources (both internal and external) that are secured to undertake construction of facilities or implementation of programs that a planning grant is intended to identify.

#### Bidder response:

The City of Ann Arbor has extensive prior experience managing grants and community-based projects. As one example, for the last 2.5 years, the City has been working in collaboration with Community Action Network, Elevate, the University of Michigan, and residents in the Bryant neighborhood to design what it would mean to make this neighborhood America's first carbon neutral existing neighborhood. Based on ideas generated during public engagement, the City and CAN have been actively seeking and securing funding to help implement solutions (which is why we are pursuing this MPSC grant). Moreover, the City regularly conducts community outreach and engagement on projects and to inform City planning, including:

- hosting over 65 public engagement events in less than 80 days to inform the creation of the City's climate action plan,
- translating materials into various languages to help ensure accessibility,
- creating a resident advisory task force to help guide policy decision making related to things such as affordable housing design, greening rental housing, and creating commercial decarbonization solutions
- Having staff work weekly in local community centers to more directly engage with local residents
- Conducting door knocking outreach to talk to residents on their "steps"
- And much more!

Over the next 10 years, the City of Ann Arbor will continue these efforts and more, working towards ensuring that the City achieves its goal of becoming carbon neutral in a just and equitable way by the year 2030. In terms of this project, the goal is to create America's first fully carbon neutral neighborhood by the year 2028. It's an aggressive timeline but one that collaborators and residents are deeply committed to meaning that the City will continue to emphasize fundraising and engagement activities to make this vision manifest. The City also hopes to expand the program to at least three other neighborhoods in the next ten years, launch thermal energy networks in at least two neighborhoods in that time, have a robust local rebate program that mirrors the State's rebate program, and have at least 50% of residents know about and actively engaging in local efforts to achieve carbon neutrality.

<u>Prior State Funding</u>: The City has not received any state funding related to this project. However, community collaborator, Community Action Network, has received funding through MSHDA to assist with implementing decarbonization strategies in a handful of homes in the Bryant neighborhood and the City of Ann Arbor provides in-kind support for this work. What this work and the associated funding has taught us is that low-income households often need far more financial, technical, and social support than expected. For example, upon conducting home assessments, it was discovered that nearly 50% of all

candidates for home improvements had extensive flood damage that was leading to mold and other health-threatening conditions. A decision was made to redirect funding to immediately address this flooding before moving forward with traditional weatherization, electrification, or renewable energy initiatives. But the cost of flooding remediation is extremely high, meaning that resources that were once dedicated to beneficial electrification had to first go towards fundamental work such as mold remediation, flooding abatement, and crawl space insulation. Once these improvements were made, any additional funds were prioritized towards weatherization and efficiency improvements that will make the homes operational expenses more affordable. This change was critical, but it also has meant that, due to limited funding, many households were unable to get desired improvements such as energy storage systems, onsite renewables (solar), new windows, or all-electric appliances. The hope is that this MPSC grant will help those households and additional households go all the way towards a cleaner, safer, healthier, and climate-friendly home (all except for heating and cooling as the City is currently exploring the viability of thermal energy networks or district geothermal systems as a solution to sustainably heat and cool the neighborhood).

Current Funding Sources: The City of Ann Arbor's Office of Sustainability and Innovations is currently funded from the taxpayers of Ann Arbor. In addition, in November of 2022, Ann Arborites voted overwhelming (71%) in favor of a local Community Climate Action Millage to fund 20 years of climate work at the rate of 1-mil (roughly \$7,000,000 per year). This funding has helped stabilize the Office and provides a steady stream of resources that can be invested in community-facing and communitybenefiting programs and services. This is part of the reason that no funding for staffing is required as part of this grant. Moreover, having guaranteed funding for the next 19 years (we are in year one), means that the Office can dedicate fundraising efforts to the direct needs of residents, which, in this case, means focusing on helping low-income residents secure funding support to implement decarbonization and beneficial electrification solutions that are largely unavailable to them. In addition, the Office currently provides \$75,000 a year to Community Action Network to continue outreach and engagement with the frontline communities they serve around sustainability activities. This funding is expected to continue for the foreseeable future and will be leveraged to help enhance outreach and engagement around the goals of making the Bryant neighborhood America's most sustainable neighborhood. The City also has an on-demand contract with Elevate that will be leveraged to support contractor engagement, the securing of home improvement quotes, and construction coordination services. These two grants / contracts also come from the recently passed Community Climate Action Millage.

In addition to the above, Community Action Network (CAN) and the City have been fundraising to implement electrification, renewable energy, health and safety, and full decarbonization solutions in the Bryant neighborhood. To-date, CAN has successfully secured two MSHDA grants to support roughly 40 households with making some key home improvements around decarbonization. These funds, however, were not enough to meet all project objectives as home assessments found critical health and safety issues that required immediate attention in roughly 50% of all assessed homes (i.e., mold, flooding, gas leaks). As such, funds were diverted from decarbonization activities towards critical repairs. This has left a notable gap in funding needed to implement identified solutions and save residents money. To help close this gap, CAN and the City have been seeking funds from philanthropic sources such as the McKnight Foundation and Builder's Initiative. McKnight Foundation has provided a capacity building grant to CAN to cover some of their staff time needed to engage with residents in the Bryant neighborhood and the Builder's Initiative has provided \$300,000 in flexible funding to help make critical repairs in homes, as needed. Combined, these resources are helping approximately 40 homes make important health and safety improvements and bringing them closer to being fully electric and powered with 100% renewable electricity. There are, however, 262 households in the Bryant neighborhood so while making progress on 40 is a vital first step, the project team is constantly looking for additional funding to help the remaining households on their climate, health, safety, and equity journey.

<u>Additional Funding</u>: The City of Ann Arbor and community partners will continue to fundraise for this project as the Bryant neighborhood is composed of 262 houses all needing repair. To-date, the project

team has secured funding to assist approximately 40 houses with improvements that take them much closer to full electrification and being powered with 100% renewable energy. In addition, the City won a U.S. Department of Energy planning grant to design a district geothermal system to provide 75% of the heating and cooling load for the Bryant neighborhood (inclusive of a local elementary school, community center, mental health facility, the City's public works facility, and the 262 households in the neighborhood). This planning grant concludes in October of 2024 at which time the City will prepare an application to support implementation of any district geothermal systems designed and found to be technical and economically feasible through the project. And, as noted above, the City continues to fundraise through all available sources to help bring the Bryant project to fruition. As such, the project team expects to continue fundraising for the remaining homes in the neighborhood even after hearing about this MPSC grant given that the grant will only be able to provide extensive support for 50 of the 262 (or 222 remaining) households in the neighborhood.

<u>Planning Grant</u>: Given that the City and community partners have undertaken extensive planning with residents to design what it means to make the Bryant neighborhood America's first carbon neutral existing neighborhood, the City is not seeking a planning grant but is instead looking to implement resident-identified and prioritized solutions towards decarbonization.

#### V-K Additional Information and Comments

Include in this section any other information that is believed to be pertinent but not specifically requested elsewhere in this RFP.

#### Bidder response:

This funding proposal is about centering the needs, desires, visions, and aspiration of a low-income, largely BIPOC neighborhood in our State and community's efforts to equitably decarbonize. It's about rectifying many of the flaws in our current funding systems to ensure that no one is left behind and that we focus first and most on those that are the most severely impacted by climate change. This project has the potential to serve as a state-wide and national model for what equitable climate action looks like. We invite the State into this work and look forward to sharing all of our lessons learned (the good and the bad) with peer communities to help them sidestep our mistakes, learn from our wins, and collectively help us all usher in a more sustainable, just, and equitable future as envisioned in the MI Healthy Climate Plan.

#### V-L Certification of Proposal

Please sign the proposal including the following language:

I certify that all information contained in the proposal is true to the best of my knowledge and belief, and that the organization is in compliance and agreement with all sections of the Request for Proposal. Failure to comply with grant terms may result in termination.

Budget Table and Budget Narrative have been removed. Budget and Narrative are attached as Attachment B to Grant Agreement.

Activity	Metrics										nth								
Activity	ivictites	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	8-10 individuals signed NAC commitment letter, meetings initiated, and members receiving stipend																		
Hiring of 2 Neighborhood Interns	2 neighborhood residents hired as interns to help with community engagement and outreach																		
Engagement Strategy Developed	Engagement strategy created outlining monthly events, modes, mediums, and messengers to equitably engage with Bryant residents																		
Graduate Interns	2 graduate interns hired to help administer evaluations																		
Comfort Assessments	Pre-improvement evaluation ready																		
Bulk Deployment	Bulk Deployment Strategy developed with local businesses																		
Engagement Events and Program Recruitment	50 households registered to receive energy assessments or 50 signed letters of commitment																		
Ambassador	At least 5 residents trained as project ambassadors																		
Home Assessments	50 completed comfort evaluations																		
Home Assessments	50 completed energy assessments with cost information and steps to achieve nearly all-electric, net zero energy homes																		
Neighborhood Stabilization	Administration of two financial and asset planning sessions																		
Implementation	50 nearly net-zero energy low-income household projects completed with 30 additional engaged in self-funded deep energy retrofits																		
Workforce Development	4 residents are employed or being trained, and 2 additional are job shadowing/interning for a high-road job																		
Workforce Development	Green job Fair hosted in neighborhood																		
Scaling	30 Completed project evaluations																		
Scaling	10 case studies created																		
Scaling	One peer-reviewed journal article created																		
Scaling	2 State-wide presentations on project																		
Scaling	2 national-presentations on project																		

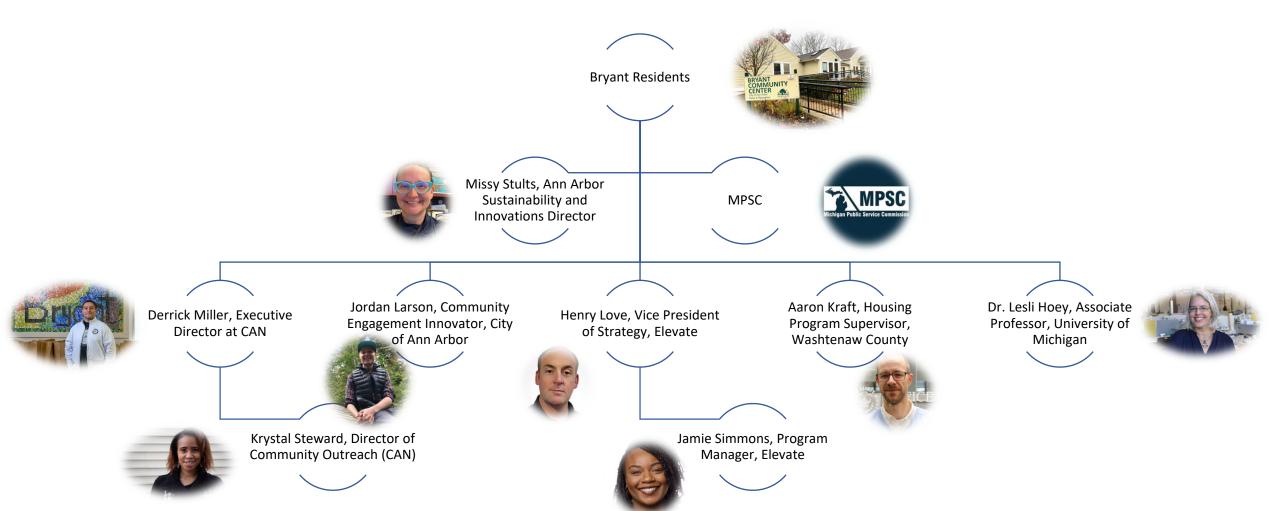
## **MPSC Electrification Grant Gantt Chart**

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### **Project Implementation Timeline**

Name	Person	Timeline - Start	Timeline - End	Metrics
Neighborhood Advisory Committee Formation	Krystal	2024-11-15	2024-12-21	8-10 individuals signed NAC commitment letter, meetings initiated, and members receiving stipend
Hiring of 2 Neighborhood Interns	Derrick	2024-11-15	2024-12-21	2 neighborhood residents hired as interns to help with community engagement and outreach
Engagement Strategy Developed	Jordan	2024-11-15	2025-01-15	Engagement strategy created outlining monthly events, modes, mediums, and messengers to equitably engage with Bryant residents
Graduate Interns	Leslie	2024-11-15	2025-01-15	2 graduate interns hired to help administer evaluations
Comfort Assessments	Leslie	2024-11-15	2025-02-15	Pre-improvement evaluation ready
Bulk Deployment	Missy	2024-11-15	2025-02-15	Bulk Deployment Strategy developed with local businesses
Engagement Events and Program Recruitment	Krystal	2024-11-23	2025-04-12	50 households registered to receive energy assessments or 50 signed letters of commitment
Ambassador	Jordan	2025-01-07	2025-04-08	At least 5 residents trained as project ambassadors
Home Assessments	Hank	2025-01-07	2025-05-13	50 completed comfort evaluations
Home Assessments	Hank	2025-01-07	2025-05-10	50 completed energy assessments with cost information and steps to achieve nearly all-electric, net zero energy homes
Neighborhood Stabilization	Missy	2025-03-01	2025-10-04	Administration of two financial and asset planning sessions
Implementation	Derrick / Hank	2025-01-07	2026-02-28	50 nearly net-zero energy low-income household projects completed with 30 additional engaged in self-funded deep energy retrofits
Workforce Development	Jerrell	2025-04-01	2026-04-01	4 residents are employed or being trained, and 2 additional are job shadowing/interning for a high-road job
Workforce Development	Jerrell	2025-10-01	2025-12-31	Green job Fair hosted in neighborhood
Scaling	Leslie	2025-12-01	2026-04-01	30 Completed project evaluations
Scaling	Jordan	2026-02-01	2026-04-30	10 case studies created
Scaling	Missy	2026-02-01	2026-04-30	One peer-reviewed journal article created
Scaling	All	2026-01-01	2026-04-30	2 State-wide presentations on project
Scaling	All	2026-01-01	2026-04-30	2 national-presentations on project
		2024-11-15	2026-04-30	

# Organizational Chart



#### City of Ann Arbor

MPSC - Renewable Energy and Electrification Infrastructure Enhancement and Development

#### **Impact Study**

February 2024

With support from Elevate, 5 Lakes Energy produced this impact study on the City of Ann Arbor's proposal to add solar energy and battery storage systems to 50 homes, install energy efficiency measures, and replace gas-powered equipment with induction stoves and electric heat-pump water heaters and clothes dryers. The following summarizes the analytical approach and results.<sup>1</sup>

**I. Approach**. This study estimates applicant/customer utility cost savings and environmental, economic, and other social benefits over a **16-year period**—a conventional period for evaluating an investment with the combination of renewable energy, home electrification, and resiliency measures included in this application (and one that aligns with the anticipated lifespan of key project installation components). However, many of the activities proposed for implementation through this grant will have lifetimes that well exceed the 16-year estimate. This means that the figures below should be viewed as conservative estimates of savings.

It deploys a net-present-value (NPV) analysis, which applies "time value of money" principles to discount the benefits of an investment over time into the future (please see **Appendix A** for a brief explanation of NPV). In our NPV analysis for this impact study, 5 Lakes Energy applied annual discount rates we have adopted as convention based on commonly used industry standards: 2.5% for social impacts (i.e., society's discount rate), 4.0% for utility customer impacts, and 5.8% for utilities on avoided costs.

#### **II. Impact Summary**

**A.** Applicant/Customer Benefits (Cost Savings). Per the figures provided by the applicant, the project will generate an estimated average utility bill savings of \$36,090 for a total of \$577,440 over the 16-year period (NPV with a 4% annual discount).

Consistent with the applicant's narrative and budget, our analysis assumes that the full direct cost of the project installation will be covered by grants. With no capital expenditures left unreimbursed, our study assumes that the 50 homeowners will enjoy 100% of those savings/benefits with no offsetting costs. Therefore, a benefit-cost ratio is not provided for this part of our impact study.

- **B. Social Benefits.** Starting the projected environmental and economic net benefits required by the MPSC's request for proposal, the following summarizes projected social net benefits of the proposed project (in monetary terms).
  - **1. Environmental.** Using a Michigan-specific factor to calculate emissions avoided by displacing energy from the current electricity grid and considering the reduction of on-site fuel use, the proposed project

<sup>&</sup>lt;sup>1</sup> The applicant may have included figures that extrapolate from this impact study in its proposal and/or used other data sources to develop its narrative.

will deliver an average annual reduction in CO2e of 233 metric tons (MT) for a total of 3,730 MT over our period of analysis. Using a social benefit of \$120 per MT of CO2e and a NPV discount rate of 2.5% for society, the estimated net social benefit from lower carbon emissions will average \$27,481 annually for a total of \$439,691 over 16 years.

- **2. Economic.** Elevate completed the economic analysis for this impact study, using tools created by Greenlink Analytics and supported by peer reviewed research from Georgia Tech University. The analysis was conducted in a similar fashion and with the same underlying data (IMPLAN) as other MPSC accepted economic impact tools. Limited to the impacts in the year of the project's implementation, it considers jobs directly involved in project installation and indirect jobs spurred by that activity. Per that method, this study estimates that the project will create 30.86 jobs with added income to our economy of \$2,293,360.27.
- **3. Health.** This study used the EPA's CO–Benefits Risk Assessment (COBRA) screening model to project net health benefits that the proposed project will deliver by reducing reliance on fossil-fuel energy resources and the corresponding emissions of major air pollutants (particulate matter (PM2.5), sulfur dioxide (SO2), nitrogen oxides (NOX), ammonia (NH3), and volatile organic compounds (VOCs)). We applied COBRA factors to calculate the economic value of health benefits/avoided costs from reducing emissions. Applying a 2.5% discount rate for society, we project a NPV of net health benefits will average \$12,125 annually for a total of \$194,004 over 16 years.
- **4. Avoided Costs.** The installed measures reflected in the proposal will reduce the amount of energy the electric utility would otherwise need to purchase and the costs it would otherwise incur to meet its capacity requirements at peak times. Because these costs would have been borne by ratepayers (society), this represents another social benefit. Using reasonable estimates based on industry standards, including a 5.8% discount rate for a utility company), our study projects that the NPV of those avoided costs will average \$25,568 annually for a total of \$409,094 over 16 years.
- **5. Resiliency.** 5 Lakes Energy also calculated the resilience-related value of installed battery storage. The method relies on reported utility outage data and subsequent economic damages caused by these events. We estimated the amount of these damages which would be offset from on-site batteries. The resulting social net benefit from battery storage technology is \$21,309 over the 16-year study timeframe.
- **III.** Conclusion. The above-described customer/application and social benefits are summarized in the following and captured below in Table 1. The proposed project is estimated to provide the 50 participating households (in the aggregate) with an average annual utility bill savings of \$36,090 and total utility bill savings of \$577,440 over 16 years (NPV). If the project's capital expenditures are covered by grants, there will be no "unreimbursed" cost to the applicant, and it will enjoy 100% of those benefits.

In addition, this proposed \$3,060,000 investment in renewable energy, home electrification, and resiliency solutions is projected to deliver the following social benefits:

- CO2e emissions reductions averaging 233 metric tons (MT) annually for a total of **3,730 MT** over 16 years, which translates into an average social benefit of \$27,481 annually and total **social** benefit of \$439,691 over 16 years (NPV).
- The creation of 30.86 jobs with an added income to our economy of \$2,293,360.27.
- Health savings worth an average of \$12,125 annually for a total social benefit of \$194,004 over 16 years (NPV).
- Avoided utility capacity and energy costs worth an annual average of \$25,568 for a total social benefit of \$409,094 over 16 years (NPV).
- **Resilience** to electricity service outages a social benefit associated with battery storage technology of \$21,309 over 16 years.

Table 1. Discounted Annual NPV Cash Flows (Benefits are Positive, Costs are Negative)

Discount %	Net Benefit Categories	16-Year Totals	16-Year Annual Avg.
	Utility Customer Impacts (\$)		
	Total Capital Expenses, per Elevate	0	
4.00%	Net Annual Operating Expenses (electricity), per Toolkit	463,133	28,946
4.00%	Net Annual Operating Expenses (on-site fuel), per Toolkit	95,126	5,945
4.00%	Resiliency, per 5 Lakes Energy	19,181	1,199
	Total Net Benefits/Annual Average	577,440	36,090
	Societal Impacts (\$)		
	Total Capital Expenses	(3,060,000)	
	Electric Utility Financial Impacts (\$)		
5.84%	Net Avoided Energy Costs, per Toolkit	215,928	13,495
5.84%	Net Avoided Capacity Costs, per Toolkit	193,166	12,073
	Utility Capacity Impacts (\$) Subtotal:	409,094	25,568
	Health Impacts (\$)		
2.50%	Net Avoided Outdoor Emissions (electricity), per Toolkit	121,494	7,593
2.50%	Net Avoided Outdoor Emissions (on-site fuel), per Toolkit	72,510	4,532
	Health Impacts (\$) Subtotal:	194,004	12,125
	Social GHG Impacts (\$)		
2.50%	Net Avoided Carbon Emissions (electricity), per Toolkit	286,956	17,935
2.50%	Net Avoided Carbon Emissions (on-site fuel), per Toolkit	152,735	9,546
	Social GHG Impacts (\$) Subtotal:	439,691	27,481
	Economic Impacts (\$)		
	Net Jobs Created, per Elevate: 30.86		
	Net Income Effect, per Elevate	2,293,360.27	
	Other Impacts (\$)		
4.00%	Resiliency, per 5 Lakes Energy	21,309	1,332

Total Net Benefits	297,458	
Benefit/Cost Ratio	1.10	
CO2e savings (MT)	3,730	233

<sup>\*&</sup>quot;Toolkit" is the analytical tool that 5 Lakes Energy and partners are currently developing with MPSC grant support to quantify and assess the customer and social impacts of clean energy projects.

#### Appendix A

#### Explanation of Net Present Value (NPV)

Empirically and according to economic theory, people behave as though they prefer benefits (i.e., money) sooner rather than later. A net-present-value (NPV) approach to projecting a return-on-investment takes that into account by decreasing the projected per-unit value of a benefit over time.

In the context of this impact study, the projected utility savings from an investment in renewable energy, home electrification, and resiliency measures are more valuable per dollar to the customer/applicant in the year that the project is installed than in each successive year. For example, in the case of a hypothetical project that generates annual utility savings of \$50,000 for a given period, that savings may be valued at \$50,000 by the customer in Year 1, \$40,000 several years later, and as little as \$30,000 further down the road. This "time value of money" dynamic also holds for the environmental, economic, and other social costs/benefits associated with an investment, whether it is a solar installation or some other project. Those benefits also decrease per unit over time, relative to today, from the perspective of the entity enjoying the benefit (or incurring the cost).

To calculate how future benefits diminish over time compared to the present (or time of the decision), an annual discount rate is applied. Generally a small percentage of 2-10%, those rates vary by the extent to which the stakeholder (type of actor) values benefits in the present versus the future. A larger discount rate is used for actors who give less weight to the future compared to the present (and vice versa). As mentioned above, in our NPV analysis for this impact study, 5 Lakes Energy applied discount rates we have adopted as convention based on commonly used industry standards: 2.5% for social benefits (i.e., society's discount rate), 4.0% for utility customers on energy savings, and 5.8% for utilities on avoided costs.



	119	Adopted	Budget	Amended	Current Month	YTD	YTD	Budget - YTD	% Used/	
Account	Account Description	Budget	Amendments	Budget	Transactions	Encumbrances	Transactions	Transactions	Rec'd	Prior Year Tota
Fund <b>00M</b>	G - Major Grants Programs									
REVENUE										
Agenc	y 029 - Sustainability & Innovation									
Org	ganization 0300 - ARPA									
	Activity 0000 - Revenue									
2129	ARPA Revenue	.00	.00	.00	.00	.00	191,000.00	(191,000.00)	+++	563,753.50
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$191,000.00	(\$191,000.00)	+++	\$563,753.50
	Organization 0300 - ARPA Totals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$191,000.00	(\$191,000.00)	+++	\$563,753.50
Org	ganization 0316 - CPF Grant Wheeler Solar									
	Activity 0000 - Revenue									
2260	State of Michigan - Grant	.00	5,000,000.00	5,000,000.00	.00	.00	.00	5,000,000.00	0	.00
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$5,000,000.00	\$5,000,000.00	\$0.00	\$0.00	\$0.00	\$5,000,000.00	0%	\$0.00
	Organization 0316 - CPF Grant Wheeler Solar Totals	\$0.00	\$5,000,000.00	\$5,000,000.00	\$0.00	\$0.00	\$0.00	\$5,000,000.00	0%	\$0.00
Org	ganization 0320 - AmeriCorps MCSC									
	Activity 0000 - Revenue									
2171	MCSC AmeriCorps Revenue	.00	25,000.00	25,000.00	(23,196.19)	.00	4,384.63	20,615.37	18	.00
2710	Operating Transfers									
2710.0010	Operating Transfers 0010	.00	.00	.00	.00	.00	8,751.12	(8,751.12)	+++	.00.
2710.0109	Operating Transfers 0109	.00	27,975.00	27,975.00	.00	.00	347.85	27,627.15	1	.00
	2710 - Operating Transfers Totals	\$0.00	\$27,975.00	\$27,975.00	\$0.00	\$0.00	\$9,098.97	\$18,876.03	33%	\$0.00
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$52,975.00	\$52,975.00	(\$23,196.19)	\$0.00	\$13,483.60	\$39,491.40	25%	\$0.00
	Organization 0320 - AmeriCorps MCSC Totals	\$0.00	\$52,975.00	\$52,975.00	(\$23,196.19)	\$0.00	\$13,483.60	\$39,491.40	25%	\$0.00
Org	ganization 0321 - UCRF Michigan									
	Activity 0000 - Revenue									
2260	State of Michigan - Grant	.00	72,500.00	72,500.00	.00	.00	.00	72,500.00	0	.00.
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$72,500.00	\$72,500.00	\$0.00	\$0.00	\$0.00	\$72,500.00	0%	\$0.00
	Organization 0321 - UCRF Michigan Totals	\$0.00	\$72,500.00	\$72,500.00	\$0.00	\$0.00	\$0.00	\$72,500.00	0%	\$0.00
Org	ganization 0325 - Climate Corps Program CNCS									
	Activity 0000 - Revenue									
2172	CNCS Revenue	.00	224,471.00	224,471.00	.00	.00	45,655.33	178,815.67	20	.00
2710	Operating Transfers									
2710.0109	Operating Transfers 0109	.00	427,982.00	427,982.00	.00	.00	42,533.20	385,448.80	10	.00.
	2710 - Operating Transfers Totals	\$0.00	\$427,982.00	\$427,982.00	\$0.00	\$0.00	\$42,533.20	\$385,448.80	10%	\$0.00
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$652,453.00	\$652,453.00	\$0.00	\$0.00	\$88,188.53	\$564,264.47	14%	\$0.00
Oı	rganization 0325 - Climate Corps Program CNCS Totals	\$0.00	\$652,453.00	\$652,453.00	\$0.00	\$0.00	\$88,188.53	\$564,264.47	14%	\$0.00
Org	ganization 0331 - Clean & Healthy - Bryant									
	Activity 0000 - Revenue									
2144	Federal - US EPA Grant	.00	.00	.00	.00	.00	.00	.00	+++	9,530.00
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+++	\$9,530.00
	Organization 0331 - Clean & Healthy - Bryant Totals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+++	\$9,530.00



	SHIGH	Adopted	Budget	Amended	Current Month	YTD	YTD	Budget - YTD	% Used/	
Account	Account Description	Budget	Amendments	Budget	Transactions	Encumbrances	Transactions	Transactions	Rec'd	Prior Year Total
Fund (	00MG - Major Grants Programs									
REVE	NUE									
Ag	ency 029 - Sustainability & Innovation									
	Organization 0333 - Bryant Geothermal									
	Activity 0000 - Revenue									
2175	US Dept Of Energy - Grant	.00	563,250.00	563,250.00	.00	.00	51,532.70	511,717.30	9	.00
2710	Operating Transfers									
2710.01	09 Operating Transfers 0109	.00	79,036.00	79,036.00	.00	.00	8,310.54	70,725.46	11	.00
	<b>2710 - Operating Transfers</b> Totals	\$0.00	\$79,036.00	\$79,036.00	\$0.00	\$0.00	\$8,310.54	\$70,725.46	11%	\$0.00
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$642,286.00	\$642,286.00	\$0.00	\$0.00	\$59,843.24	\$582,442.76	9%	\$0.00
	Organization 0333 - Bryant Geothermal Totals	\$0.00	\$642,286.00	\$642,286.00	\$0.00	\$0.00	\$59,843.24	\$582,442.76	9%	\$0.00
	Organization 0334 - DOE EECBG									
	Activity 0000 - Revenue									
2175	US Dept Of Energy - Grant	.00	182,360.00	182,360.00	.00	.00	.00	182,360.00	0	.00
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$182,360.00	\$182,360.00	\$0.00	\$0.00	\$0.00	\$182,360.00	0%	\$0.00
	Organization 0334 - DOE EECBG Totals	\$0.00	\$182,360.00	\$182,360.00	\$0.00	\$0.00	\$0.00	\$182,360.00	0%	\$0.00
	Organization 0364 - Urban Sustain Director Network									
	Activity 0000 - Revenue									
2339	Urban Sustainability Directors Network Grant	.00	9,475.00	9,475.00	.00	.00	9,474.93	.07	100	10,525.07
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$9,475.00	\$9,475.00	\$0.00	\$0.00	\$9,474.93	\$0.07	100%	\$10,525.07
	Organization <b>0364 - Urban Sustain Director Network</b> Totals	\$0.00	\$9,475.00	\$9,475.00	\$0.00	\$0.00	\$9,474.93	\$0.07	100%	\$10,525.07
	Organization 0368 - NextCycle Micro Grant									
	Activity 0000 - Revenue									
2245	Environment, Great Lakes & Energy - Grant	.00	1,500.00	1,500.00	.00	.00	1,500.00	.00	100	8,500.00
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$1,500.00	\$1,500.00	\$0.00	\$0.00	\$1,500.00	\$0.00	100%	\$8,500.00
	Organization 0368 - NextCycle Micro Grant Totals	\$0.00	\$1,500.00	\$1,500.00	\$0.00	\$0.00	\$1,500.00	\$0.00	100%	\$8,500.00
	Organization 0369 - MDNRE Climate Action Grant									
	Activity 0000 - Revenue									
2245	Environment, Great Lakes & Energy - Grant	.00	25,000.00	25,000.00	.00	.00	25,000.00	.00	100	.00
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$25,000.00	\$25,000.00	\$0.00	\$0.00	\$25,000.00	\$0.00	100%	\$0.00
	Organization 0369 - MDNRE Climate Action Grant Totals	\$0.00	\$25,000.00	\$25,000.00	\$0.00	\$0.00	\$25,000.00	\$0.00	100%	\$0.00
	Organization 0370 - HUD Sustainable Community Grant									
	Activity 0000 - Revenue									
2148	HUD Sustainable Community Grant	.00	2,500,000.00	2,500,000.00	.00	.00	.00	2,500,000.00	0	.00
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$2,500,000.00	\$2,500,000.00	\$0.00	\$0.00	\$0.00	\$2,500,000.00	0%	\$0.00
	Organization 0370 - HUD Sustainable Community Grant Totals	\$0.00	\$2,500,000.00	\$2,500,000.00	\$0.00	\$0.00	\$0.00	\$2,500,000.00	0%	\$0.00
	Organization 0373 - Home Electricity Expo									
	Activity 0000 - Revenue Environment, Great Lakes & Energy - Grant									
		.00	2,500.00	2,500.00	.00	.00	2,500.00	.00	100	2,500.00



•	HIGH									
		Adopted	Budget	Amended	Current Month	YTD	YTD	Budget - YTD	•	
Account	Account Description	Budget	Amendments	Budget	Transactions	Encumbrances	Transactions	Transactions	Rec'd	Prior Year Tota
	MG - Major Grants Programs									
REVENU										
_	ncy 029 - Sustainability & Innovation									
0	rganization 0373 - Home Electricity Expo									
	Activity 0000 - Revenue									
2710	Operating Transfers									
2710.0010	, ,	.00	2,500.00	2,500.00	.00	.00	.00	2,500.00	0	.00
2710.0100		.00	.00	.00	.00	.00	2,500.00	(2,500.00)	+++	.00
	<b>2710 - Operating Transfers</b> Totals	\$0.00	\$2,500.00	\$2,500.00	\$0.00	\$0.00	\$2,500.00	\$0.00	100%	\$0.00
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$5,000.00	\$5,000.00	\$0.00	\$0.00	\$5,000.00	\$0.00	100%	\$2,500.00
	Organization <b>0373 - Home Electricity Expo</b> Totals	\$0.00	\$5,000.00	\$5,000.00	\$0.00	\$0.00	\$5,000.00	\$0.00	100%	\$2,500.00
0	rganization 0381 - Utility Pole Chargers									
	Activity 0000 - Revenue									
2245	Environment, Great Lakes & Energy - Grant	.00	12,089.00	12,089.00	.00	.00	7,756.00	4,333.00	64	41,911.03
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$12,089.00	\$12,089.00	\$0.00	\$0.00	\$7,756.00	\$4,333.00	64%	\$41,911.03
	Organization 0381 - Utility Pole Chargers Totals	\$0.00	\$12,089.00	\$12,089.00	\$0.00	\$0.00	\$7,756.00	\$4,333.00	64%	\$41,911.03
0	rganization 0382 - Heat Pump Training & Support									
	Activity 0000 - Revenue									
2245	Environment, Great Lakes & Energy - Grant	.00	.00	.00	.00	.00	.00	.00	+++	8,500.00
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+++	\$8,500.00
	Organization 0382 - Heat Pump Training & Support	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+++	\$8,500.00
0 <b>S</b> i	Totals rganization 0383 - 2024 CEM Grant (80% Fed, 20% F)									
	Activity 0000 - Revenue									
2245	Environment, Great Lakes & Energy - Grant	.00	70,000.00	70,000.00	.00	.00	.00	70,000.00	0	.00
	Activity <b>0000 - Revenue</b> Totals	\$0.00	\$70,000.00	\$70,000.00	\$0.00	\$0.00	\$0.00	\$70,000.00	0%	\$0.00
	Organization 0383 - 2024 CEM Grant (80% Fed, 20% St) Totals	\$0.00	\$70,000.00	\$70,000.00	\$0.00	\$0.00	\$0.00	\$70,000.00	0%	\$0.00
	Agency <b>029 - Sustainability &amp; Innovation</b> Totals	\$0.00	\$9,225,638.00	\$9,225,638.00	(\$23,196.19)	\$0.00	\$401,246.30	\$8,824,391.70	4%	\$645,219.60
	REVENUE TOTALS	\$0.00	\$9,225,638.00	\$9,225,638.00	(\$23,196.19)	\$0.00	\$401,246.30	\$8,824,391.70	4%	\$645,219.60
EXPENS	E									
Ager	ncy 029 - Sustainability & Innovation									
0	rganization 0300 - ARPA									
	Activity 1376 - Solar - City Facilities									
2100	Professional Services	.00	1.00	1.00	.00	.00	.00	1.00	0	8,447.50
4520	Contingency	.00	892,999.00	892,999.00	.00	.00	.00	892,999.00	0	.00
5130	Equipment	.00	3,043,247.00	3,043,247.00	.00	3,745,247.00	191,000.00	(893,000.00)	129	555,306.00
		¢0.00	\$3,936,247.00	¢2 026 247 00	\$0.00	\$3,745,247.00	\$191,000.00	\$0.00	100%	\$563,753.50
	Activity 1376 - Solar - City Facilities Totals	\$0.00	\$3,936,247.00	\$3,936,247.00	\$0.00	\$3,743,247.00	\$191,000.00	\$0.00	100%	\$503,/53.50



	HIGH	Adopted	Budget	Amended	Current Month	YTD	YTD	Budget - YTD	% Used/	
Account	Account Description	Budget	Amendments	Budget	Transactions	Encumbrances	Transactions	Transactions	Rec'd	Prior Year Tota
Fund <b>00</b>	DMG - Major Grants Programs									
EXPEN	ISE									
Age	ency 029 - Sustainability & Innovation									
(	Organization 0316 - CPF Grant Wheeler Solar									
	Activity 1329 - Energy Management									
7999	Transfer-Grant/Loan Recipients	.00	5,000,000.00	5,000,000.00	.00	.00	.00	5,000,000.00	0	.0
	Activity <b>1329 - Energy Management</b> Totals	\$0.00	\$5,000,000.00	\$5,000,000.00	\$0.00	\$0.00	\$0.00	\$5,000,000.00	0%	\$0.0
	Organization 0316 - CPF Grant Wheeler Solar Totals	\$0.00	\$5,000,000.00	\$5,000,000.00	\$0.00	\$0.00	\$0.00	\$5,000,000.00	0%	\$0.0
(	Organization 0320 - AmeriCorps MCSC									
	Activity 1329 - Energy Management									
1100	Permanent Time Worked	.00	52,975.00	52,975.00	.00	.00	11,634.63	41,340.37	22	.0
4220	Life Insurance	.00	.00	.00	.00	.00	16.47	(16.47)	+++	.0
4230	Medical Insurance	.00	.00	.00	.00	.00	869.02	(869.02)	+++	.0
4234	Disability Insurance	.00	.00	.00	.00	.00	19.77	(19.77)	+++	.0
4250	Social Security-Employer	.00	.00	.00	.00	.00	877.25	(877.25)	+++	.0
4270	Dental Insurance	.00	.00	.00	.00	.00	56.97	(56.97)	+++	.0
4280	Optical Insurance	.00	.00	.00	.00	.00	6.85	(6.85)	+++	.0
4440	Unemployment Compensation	.00	.00	.00	.00	.00	2.64	(2.64)	+++	.0
	Activity <b>1329 - Energy Management</b> Totals	\$0.00	\$52,975.00	\$52,975.00	\$0.00	\$0.00	\$13,483.60	\$39,491.40	25%	\$0.0
	Organization 0320 - AmeriCorps MCSC Totals	\$0.00	\$52,975.00	\$52,975.00	\$0.00	\$0.00	\$13,483.60	\$39,491.40	25%	\$0.0
(	Organization 0321 - UCRF Michigan									
	Activity 1329 - Energy Management									
2430	Contracted Services	.00	72,500.00	72,500.00	.00	.00	.00	72,500.00	0	.0
	Activity 1329 - Energy Management Totals	\$0.00	\$72,500.00	\$72,500.00	\$0.00	\$0.00	\$0.00	\$72,500.00	0%	\$0.0
	Organization 0321 - UCRF Michigan Totals	\$0.00	\$72,500.00	\$72,500.00	\$0.00	\$0.00	\$0.00	\$72,500.00	0%	\$0.0
(	Organization 0325 - Climate Corps Program CNCS									
	Activity 1329 - Energy Management									
1100	Permanent Time Worked	.00	171,773.00	171,773.00	5,951.42	.00	25,777.23	145,995.77	15	.0
1121	Vacation Used	.00	.00	.00	.00	.00	1,384.61	(1,384.61)	+++	.0
1161	Holiday	.00	.00	.00	230.77	.00	2,538.47	(2,538.47)	+++	.0
1200	Temporary Pay	.00	280,000.00	280,000.00	18,666.72	.00	74,666.88	205,333.12	27	.0
2430	Contracted Services	.00	73,489.00	73,489.00	.00	.00	4,737.50	68,751.50	6	.0
2500	Printing	.00	500.00	500.00	.00	.00	.00	500.00	0	.0
2700	Conference Training & Travel	.00	11,447.00	11,447.00	.00	.00	.00	11,447.00	0	.0
2908	Background Check/Drug Screen	.00	2,250.00	2,250.00	.00	.00	392.75	1,857.25	17	.0
3300	Uniforms & Accessories	.00	.00	.00	.00	.00	1,719.38	(1,719.38)	+++	.0
3400	Materials & Supplies	.00	3,255.00	3,255.00	.00	.00	.00	3,255.00	0	.0
4220	Life Insurance	.00	.00	.00	22.44	.00	125.40	(125.40)	+++	.0
4230	Medical Insurance	.00	.00	.00	1,827.47	.00	8,206.99	(8,206.99)	+++	.0
4234	Disability Insurance	.00	.00	.00	12.05	.00	52.54	(52.54)	+++	.0
4240	Workers Comp	.00	.00	.00	.00	.00	76.66	(76.66)	+++	.0



		Adopted	Budget	Amended	Current Month	YTD	YTD	Budget - YTD	% Used/	
Account	Account Description	Budget	Amendments	Budget	Transactions	Encumbrances	Transactions	Transactions	Rec'd	Prior Year Tota
Fund 0	00MG - Major Grants Programs									
EXPE	NSE									
Ag	ency 029 - Sustainability & Innovation									
	Organization 0325 - Climate Corps Program CNCS									
	Activity 1329 - Energy Management									
4250	Social Security-Employer	.00	29,739.00	29,739.00	1,909.04	.00	8,011.86	21,727.14	27	.00
4256	Employer Match for Defined Contribution Plan	.00	.00	.00	240.00	.00	1,440.00	(1,440.00)	+++	.00
4270	Dental Insurance	.00	.00	.00	110.58	.00	496.60	(496.60)	+++	.00
4280	Optical Insurance	.00	.00	.00	13.29	.00	59.68	(59.68)	+++	.00
4423	Transfer To IT Fund	.00	80,000.00	80,000.00	.00	.00	52,590.00	27,410.00	66	.00
4440	Unemployment Compensation	.00	.00	.00	4.38	.00	36.88	(36.88)	+++	.00.
	Activity 1329 - Energy Management Totals	\$0.00	\$652,453.00	\$652,453.00	\$28,988.16	\$0.00	\$182,313.43	\$470,139.57	28%	\$0.00
	Organization 0325 - Climate Corps Program CNCS Totals	\$0.00	\$652,453.00	\$652,453.00	\$28,988.16	\$0.00	\$182,313.43	\$470,139.57	28%	\$0.00
	Organization 0331 - Clean & Healthy - Bryant									
	Activity 1000 - Administration									
2430	Contracted Services	.00	.00	.00	.00	.00	.00	.00	+++	9,530.00
	Activity 1000 - Administration Totals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+++	\$9,530.00
	Organization 0331 - Clean & Healthy - Bryant Totals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+++	\$9,530.00
	Organization 0333 - Bryant Geothermal									
	Activity 1329 - Energy Management									
1100	Permanent Time Worked	.00	40,238.00	40,238.00	5,496.51	.00	14,197.05	26,040.95	35	.00
2430	Contracted Services	.00	582,250.00	582,250.00	7,833.33	425,900.62	51,349.38	105,000.00	82	.00
2500	Printing	.00	.00	.00	.00	.00	329.67	(329.67)	+++	.00
3100	Postage	.00	.00	.00	.00	.00	165.69	(165.69)	+++	.00
3400	Materials & Supplies	.00	6,000.00	6,000.00	.00	.00	.00	6,000.00	0	.00
4220	Life Insurance	.00	64.00	64.00	8.76	.00	22.70	41.30	35	.00
4230	Medical Insurance	.00	7,886.00	7,886.00	1,123.87	.00	2,851.03	5,034.97	36	.00
4234	Disability Insurance	.00	187.00	187.00	9.78	.00	27.68	159.32	15	.00
4250	Social Security-Employer	.00	3,078.00	3,078.00	410.83	.00	1,061.72	2,016.28	34	.00
4256	Employer Match for Defined Contribution Plan	.00	2,092.00	2,092.00	.00	.00	.00	2,092.00	0	.00
4270	Dental Insurance	.00	432.00	432.00	68.00	.00	172.50	259.50	40	.00
4280	Optical Insurance	.00	46.00	46.00	8.20	.00	20.77	25.23	45	.00
4440	Unemployment Compensation	.00	13.00	13.00	.61	.00	1.31	11.69	10	.00
	Activity 1329 - Energy Management Totals	\$0.00	\$642,286.00	\$642,286.00	\$14,959.89	\$425,900.62	\$70,199.50	\$146,185.88	77%	\$0.00
	Organization 0333 - Bryant Geothermal Totals	\$0.00	\$642,286.00	\$642,286.00	\$14,959.89	\$425,900.62	\$70,199.50	\$146,185.88	77%	\$0.00
	Organization 0334 - DOE EECBG									
	Activity 1329 - Energy Management									
2430	Contracted Services	.00	181,625.00	181,625.00	.00	.00	2,316.50	179,308.50	1	.00
3400	Materials & Supplies	.00	735.00	735.00	.00	.00	.00	735.00	0	.00
	Activity 1329 - Energy Management Totals	\$0.00	\$182,360.00	\$182,360.00	\$0.00	\$0.00	\$2,316.50	\$180,043.50	1%	\$0.00
	Organization 0334 - DOE EECBG Totals	\$0.00	\$182,360.00	\$182,360.00	\$0.00	\$0.00	\$2,316.50	\$180,043.50	1%	\$0.00



		Adopted	Budget	Amended	Current Month	YTD	YTD	Budget - YTD	% Used/	
Accour	at Account Description	Budget	Amendments	Budget	Transactions	Encumbrances	Transactions	Transactions	Rec'd	Prior Year Tota
Fund	00MG - Major Grants Programs									
EXP	ENSE									
P	gency 029 - Sustainability & Innovation									
	Organization 0364 - Urban Sustain Director Network									
	Activity 1329 - Energy Management									
2100	Professional Services	.00	7,460.00	7,460.00	.00	.00	1,475.00	5,985.00	20	7,540.4
2430	Contracted Services	.00	.00	.00	.00	.00	6,829.25	(6,829.25)	+++	2,000.00
2950	Governmental Services	.00	.00	.00	.00	.00	260.94	(260.94)	+++	903.90
3400	Materials & Supplies	.00	2,015.00	2,015.00	.00	.00	.00	2,015.00	0	80.72
	Activity 1329 - Energy Management Totals	\$0.00	\$9,475.00	\$9,475.00	\$0.00	\$0.00	\$8,565.19	\$909.81	90%	\$10,525.0
	Organization 0364 - Urban Sustain Director Network	\$0.00	\$9,475.00	\$9,475.00	\$0.00	\$0.00	\$8,565.19	\$909.81	90%	\$10,525.07
	Totals									
	Organization 0368 - NextCycle Micro Grant									
0.4.00	Activity 1329 - Energy Management		4 500 00	4 500 00	•	•	4 500 00		400	0.500.0
2100	Professional Services	.00	1,500.00	1,500.00	.00	.00	1,500.00	.00	100	8,500.00
	Activity 1329 - Energy Management Totals	\$0.00	\$1,500.00	\$1,500.00	\$0.00	\$0.00	\$1,500.00	\$0.00	100%	\$8,500.0
	Organization 0368 - NextCycle Micro Grant Totals	\$0.00	\$1,500.00	\$1,500.00	\$0.00	\$0.00	\$1,500.00	\$0.00	100%	\$8,500.00
	Organization 0369 - MDNRE Climate Action Grant									
	Activity 1329 - Energy Management									_
2430	Contracted Services	.00	25,000.00	25,000.00	.00	.00	25,000.00	.00	100	.00
	Activity 1329 - Energy Management Totals	\$0.00	\$25,000.00	\$25,000.00	\$0.00	\$0.00	\$25,000.00	\$0.00	100%	\$0.00
	Organization 0369 - MDNRE Climate Action Grant Totals	\$0.00	\$25,000.00	\$25,000.00	\$0.00	\$0.00	\$25,000.00	\$0.00	100%	\$0.00
	Organization 0370 - HUD Sustainable Community Grant									
	Activity 1329 - Energy Management									
2100	Professional Services	.00	135,000.00	135,000.00	.00	135,000.00	.00	.00	100	.00
5130	Equipment	.00	2,365,000.00	2,365,000.00	.00	.00	.00	2,365,000.00	0	.00
	Activity <b>1329 - Energy Management</b> Totals	\$0.00	\$2,500,000.00	\$2,500,000.00	\$0.00	\$135,000.00	\$0.00	\$2,365,000.00	5%	\$0.0
	Organization 0370 - HUD Sustainable Community Grant	\$0.00	\$2,500,000.00	\$2,500,000.00	\$0.00	\$135,000.00	\$0.00	\$2,365,000.00	5%	\$0.0
	Totals Organization 0373 - Home Electricity Expo									
	Activity 1329 - Energy Management									
1200	Temporary Pay	.00	1,375.00	1,375.00	.00	.00	1,375.00	.00	100	.00
2430	Contracted Services	.00	1,616.00	1,616.00	.00	.00	1,616.35	(.35)	100	1,380.68
2500	Printing	.00	1,679.00	1,679.00	.00	.00	1,678.97	.03	100	995.00
2950	Governmental Services	.00	330.00	330.00	.00	.00	330.00	.00	100	124.3
2330	Activity 1329 - Energy Management Totals	\$0.00	\$5,000.00	\$5,000.00	\$0.00	\$0.00	\$5,000.32	(\$0.32)	100%	\$2,500.00
	Organization 0373 - Home Electricity Expo Totals	\$0.00	\$5,000.00	\$5,000.00	\$0.00	\$0.00	\$5,000.32	(\$0.32)	100%	\$2,500.00
		\$0.00	\$5,000.00	\$3,000.00	\$0.00	\$0.00	\$5,000.32	(\$0.32)	100%	\$2,500.00
	Organization 0381 - Utility Pole Chargers									
2420	Activity 1329 - Energy Management	00	12 000 00	12.000.00	00	00	7 756 00	4 222 00	C 4	27 465 0
2430	Contracted Services	.00	12,089.00	12,089.00	.00	.00	7,756.00	4,333.00	64	27,465.03
5130	Equipment	.00	.00.	.00	.00	.00	.00	.00	+++	14,446.00
	Activity <b>1329 - Energy Management</b> Totals	\$0.00	\$12,089.00	\$12,089.00	\$0.00	\$0.00	\$7,756.00	\$4,333.00	64%	\$41,911.03



Fund   00MG - Major Grants Programs   EXPENSE   Fund   00MG - Major Grants Programs   EXPENSE   EXPENSE   EXPENSE TOTALS   Support   EXPENSE TOTALS   EXPENSE			Adopted	Budget	Amended	<b>Current Month</b>	YTD	YTD	Budget - YTD	% Used/	
EXPENSE   Agency   29 - Sustainability & Innovation   Grganization   0381 - Utility Pole Chargers Totals   S0.00   \$12,089.00   \$12,089.00   \$0.00   \$0.00   \$7,756.00   \$4,333.00   64%   \$41,911.00   \$12,911.00   \$12,089.00   \$12,089.00   \$12,089.00   \$12,089.00   \$0.00   \$0.00   \$7,756.00   \$4,333.00   64%   \$41,911.00   \$12,089.00   \$12,	Account	Account Description	Budget	Amendments	Budget	Transactions	Encumbrances	Transactions	Transactions	Rec'd	Prior Year Total
Agency	Fund 0	OMG - Major Grants Programs									
Organization 0381 - Utility Pole Chargers Totals         \$0.00         \$12,089.00         \$0.00         \$0.00         \$7,756.00         \$4,333.00         64%         \$41,911.00           Activity 1329 - Energy Management           2430         Contracted Services         .00         .00         .00         .00         .00         .00         .00         .00         +++         8,500.0           Organization 0383 - Polar Pump Training & Support Totals         50.00         \$0	EXPE	NSE									
Crysnization   0.382 - Heat Pump Training & Support   Activity   1.329 - Energy Management   Totals   Support   Su	Ag	ency 029 - Sustainability & Innovation									
Activity 1329 - Energy Management Totals		Organization 0381 - Utility Pole Chargers Totals	\$0.00	\$12,089.00	\$12,089.00	\$0.00	\$0.00	\$7,756.00	\$4,333.00	64%	\$41,911.03
Contracted Services		Organization 0382 - Heat Pump Training & Support									
Activity 1329 - Energy Management Totals Organization 0382 - Heat Pump Training & Support Totals Organization 0383 - 2024 CEM Grant (80% Fed, 20% St)  Activity 1329 - Energy Management Totals Organization 0383 - 2024 CEM Grant (80% Fed, 20% St)  Activity 1329 - Energy Management Totals Organization 0383 - 2024 CEM Grant (80% Fed, 20% St)  Activity 1329 - Energy Management Totals Organization 0383 - 2024 CEM Grant (80% Fed, 20% St)  Activity 1329 - Energy Management Totals Organization 0383 - 2024 CEM Grant (80% Fed, 20% St)  Activity 1329 - Energy Management Totals Organization 0383 - 2024 CEM Grant (80% Fed, 20% St) Totals Organization 0383 - 2024 CEM Grant		Activity 1329 - Energy Management									
Organization 0382 - Heat Pump Training & Support Totals Organization 0383 - 2024 CEM Grant (80% Fed, 20% St) Activity 1329 - Energy Management  Activity 1329 - Energy Management Totals Organization 0383 - 2024 CEM Grant (80% Fed, 20% St) Activity 1329 - Energy Management Totals Organization 0383 - 2024 CEM Grant (80% Fed, 20% St) Organization 0383 - 2024 CEM Grant (80% Fed, 20% St) Totals Organization 0383 - 2024 CEM Grant (80% Fed, 20% St) Totals Organization 0383 - 2024 CEM Grant (80% Fed, 20% St) Totals Agency 029 - Sustainability & Innovation Totals EXPENSE TOTALS  Fund 00MG - Major Grants Programs Totals EXPENSE TOTALS  On 13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.65  Fund 00MG - Major Grants Programs Totals EXPENSE TOTALS  On 13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.65  Fund 00MG - Major Grants Programs Totals  EXPENSE TOTALS  On 13,161,885.00 \$13,62,85.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.65  EXPENSE TOTALS  On 13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.65  Fund 00MG - Major Grants Programs Totals  EXPENSE TOTALS  On 13,161,885.00 \$9,225,638.00 \$9,225,638.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.65  Fund 00MG - Major Grants Programs Totals  EXPENSE TOTALS  ON 9,225,638.00 \$9,225,638.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.65  Fund 00MG - Major Grants Programs Totals  EXPENSE TOTALS  ON 9,225,638.00 \$9,225,638.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.65  Fund 00MG - Major Grants Programs Totals  EXPENSE TOTALS  ON 9,225,638.00 \$9,225,638.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.65  Fund 00MG - Major Grants Programs Totals  Fund 00MG - Major Grants Programs Totals  EXPENSE TOTALS  ON 9,225,638.00 \$9,225,638.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.65  Fund 00MG - Major Grants Programs Totals  Fund	2430	Contracted Services	.00	.00	.00	.00	.00	.00	.00	+++	8,500.00
Organization 0383 - 2024 CEM Grant (80% Fed, 20% St) Activity 1329 - Energy Management  2430 Contracted Services		Activity 1329 - Energy Management Totals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+++	\$8,500.00
Activity 1329 - Energy Management  Activity 1329 - Energy Management  Activity 1329 - Energy Management Totals  \$0.00 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.64 \$19.64			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+++	\$8,500.00
Contracted Services   .00   70,000.00   70,000.00   .00											
Activity 1329 - Energy Management Totals Organization 0383 - 2024 CEM Grant (80% Fed, 20% St) Totals Agency 029 - Sustainability & Innovation Totals EXPENSE TOTALS  REVENUE TOTALS Fund 00MG - Major Grants Programs Totals EXPENSE TOTALS Fund 00MG - Major Grants Programs Totals  REVENUE TOTALS  Grand Totals  Grand Totals  REVENUE TOTALS  Grand		Activity 1329 - Energy Management									
Organization 0383 - 2024 CEM Grant (80% Fed, 20% St) Totals Agency 029 - Sustainability & Innovation Totals EXPENSE TOTALS  Fund 00MG - Major Grants Programs Totals EXPENSE TOTALS  EXPENSE TOTALS  Fund 00MG - Major Grants Programs Totals  REVENUE TOTALS EXPENSE TOTALS  Fund 00MG - Major Grants Programs Totals  REVENUE TOTALS  EXPENSE TOTALS  Fund 00MG - Major Grants Programs Totals  EXPENSE TOTALS  EXPENSE TOTALS  EXPENSE TOTALS  EXPENSE TOTALS  SO.00 9,225,638.00 9,225,638.00 (23,196.19)00 401,246.30 8,824,391.70 4% 645,219.60 (45,219.	2430	Contracted Services	.00	70,000.00	70,000.00	.00	.00	.00	70,000.00	0	.00
Agency 029 - Sustainability & Innovation Totals EXPENSE TOTALS \$0.00 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 \$37% \$645,219.60 \$13,161,885.00 \$13,161,885.00 \$13,161,885.0		Activity 1329 - Energy Management Totals	\$0.00	\$70,000.00	\$70,000.00	\$0.00	\$0.00	\$0.00	\$70,000.00	0%	\$0.00
EXPENSE TOTALS \$0.00 \$13,161,885.00 \$13,161,885.00 \$43,948.05 \$4,306,147.62 \$507,134.54 \$8,348,602.84 37% \$645,219.60  Fund OOMG - Major Grants Programs Totals REVENUE TOTALS		3	\$0.00	\$70,000.00	\$70,000.00	\$0.00	\$0.00	\$0.00	\$70,000.00	0%	\$0.00
Fund 00MG - Major Grants Programs Totals  REVENUE TOTALS EXPENSE TOTALS Fund 00MG - Major Grants Programs Totals  Grand Totals  REVENUE TOTALS  O0 9,225,638.00 9,225,638.00 (23,196.19) 00 401,246.30 8,824,391.70 4% 645,219.60 (45,2		Agency 029 - Sustainability & Innovation Totals	\$0.00	\$13,161,885.00	\$13,161,885.00	\$43,948.05	\$4,306,147.62	\$507,134.54	\$8,348,602.84	37%	\$645,219.60
REVENUE TOTALS		EXPENSE TOTALS	\$0.00	\$13,161,885.00	\$13,161,885.00	\$43,948.05	\$4,306,147.62	\$507,134.54	\$8,348,602.84	37%	\$645,219.60
EXPENSE TOTALS		Fund <b>00MG - Major Grants Programs</b> Totals									
Fund <b>00MG - Major Grants Programs</b> Totals \$0.00 (\$3,936,247.00) (\$3,936,247.00) (\$67,144.24) (\$4,306,147.62) (\$105,888.24) \$475,788.86 \$0.00 Grand Totals  REVENUE TOTALS .00 9,225,638.00 9,225,638.00 (23,196.19) .00 401,246.30 8,824,391.70 4% 645,219.6  EXPENSE TOTALS .00 13,161,885.00 13,161,885.00 43,948.05 4,306,147.62 507,134.54 8,348,602.84 37% 645,219.6		REVENUE TOTALS	.00	9,225,638.00	9,225,638.00	(23,196.19)	.00	401,246.30	8,824,391.70	4%	645,219.60
Grand Totals  REVENUE TOTALS .00 9,225,638.00 9,225,638.00 (23,196.19) .00 401,246.30 8,824,391.70 4% 645,219.6  EXPENSE TOTALS .00 13,161,885.00 13,161,885.00 43,948.05 4,306,147.62 507,134.54 8,348,602.84 37% 645,219.6		EXPENSE TOTALS	.00	13,161,885.00	13,161,885.00	43,948.05	4,306,147.62	507,134.54	8,348,602.84	37%	645,219.60
REVENUE TOTALS .00 9,225,638.00 9,225,638.00 (23,196.19) .00 401,246.30 8,824,391.70 4% 645,219.6  EXPENSE TOTALS .00 13,161,885.00 13,161,885.00 43,948.05 4,306,147.62 507,134.54 8,348,602.84 37% 645,219.6		Fund <b>00MG - Major Grants Programs</b> Totals	\$0.00	(\$3,936,247.00)	(\$3,936,247.00)	(\$67,144.24)	(\$4,306,147.62)	(\$105,888.24)	\$475,788.86		\$0.00
EXPENSE TOTALS .00 13,161,885.00 13,161,885.00 43,948.05 4,306,147.62 507,134.54 8,348,602.84 37% 645,219.6		Grand Totals									
		REVENUE TOTALS	.00	9,225,638.00	9,225,638.00	(23,196.19)	.00	401,246.30	8,824,391.70	4%	645,219.60
Grand Totals \$0.00 (\$3,936,247.00) (\$3,936,247.00) (\$67,144.24) (\$4,306,147.62) (\$105,888.24) \$475,788.86 \$0.00		EXPENSE TOTALS	.00	13,161,885.00	13,161,885.00	43,948.05	4,306,147.62	507,134.54	8,348,602.84	37%	645,219.60
		Grand Totals	\$0.00	(\$3,936,247.00)	(\$3,936,247.00)	(\$67,144.24)	(\$4,306,147.62)	(\$105,888.24)	\$475,788.86		\$0.00

# ADDITIONAL ATTACHMENTS

Table 1. Annu	al Cash Flows (Benefits are Positive, Costs are Negative)	INPUTS																
Inflation %	Net Benefit Categories								Yea	ırs								Totals
illiation /6	Net beliefft Categories	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Totals
	Utility Customer Impacts (\$)														·			
	Total Capital Expenses, per Elevate	(61,200)																(61,200
2.00%	Net Avoided Operating Costs (electricity), per Toolkit	667	680	694	708	722	736	751	766	781	797	813	829	846	863	880	898	12,432
2.00%	Net Avoided Operating Costs (on-site fuel), per Toolkit	137	140	143	145	148	151	154	157	161	164	167	170	174	177	181	184	2,554
2.00%	Resiliency, per 5 Lakes Energy	28	28	29	29	30	30	31	32	32	33	34	34	35	36	36	37	515
	Total Net Benefits	(60,368)	848	865	883	900	918	937	955	974	994	1,014	1,034	1,055	1,076	1,097	1,119	(45,699
	Benefit/Cost Ratio																	0.25
	Societal Impacts (\$)																	
	Total Capital Expenses	(61,200)																(61,200
	Electric Utility Financial Impacts (\$)																	
2.00%	Net Avoided Energy Costs, per Toolkit	351	358	365	372	380	388	395	403	411	419	428	436	445	454	463	472	6,542
2.00%	Net Avoided Capacity Costs, per Toolkit	314	320	327	333	340	347	354	361	368	375	383	390	398	406	414	423	5,853
	Health Impacts (\$)																	
2.00%	Net Avoided Outdoor Emissions (electricity), per Toolkit	158	161	164	167	170	174	177	181	185	188	192	196	200	204	208	212	2,936
2.00%	Net Avoided Outdoor Emissions (on-site fuel), per Toolkit	94	96	98	100	102	104	106	108	110	112	115	117	119	122	124	127	1,752
	Social GHG Impacts (\$)																	
2.00%	Net Avoided Carbon Emissions (electricity), per Toolkit	372	379	387	395	403	411	419	427	436	445	453	463	472	481	491	501	6,934
2.00%	Net Avoided Carbon Emissions (on-site fuel), per Toolkit	198	202	206	210	214	219	223	227	232	237	241	246	251	256	261	266	3,691
	Economic Impacts (\$)																	

30

1,639

30

1,672

31

1,705

32

1,739

32

1,774

33

1,810

34

1,846

34

1,883

35

1,920

36

1,959

36

1,998

45,867

515

1.21

1.10

12,889

37

2,038

Discount %	Net Benefit Categories								Yea	rs								Totals
Discourit /6	Net beliefft Categories	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOtals
	Utility Customer Impacts (\$)	•					·					,						
	Total Capital Expenses, per Elevate	(61,200)																(61,200)
4.00%	Net Annual Operating Expenses (electricity), per Toolkit	667	654	642	629	617	605	594	582	571	560	549	539	528	518	508	498	9,263
4.00%	Net Annual Operating Expenses (on-site fuel), per Toolkit	137	134	132	129	127	124	122	120	117	115	113	111	109	106	104	102	1,903
4.00%	Resiliency, per 5 Lakes Energy	28	27	27	26	26	25	25	24	24	23	23	22	22	21	21	21	384
	Total Net Benefits	(60,368)	816	800	785	769	755	740	726	712	698	685	672	659	646	634	621	(49,651)
	Benefit/Cost Ratio																	0.19
	Societal Impacts (\$)	<u> </u>						<u> </u>										
	Total Capital Expenses	(61,200)																(61,200)
	Electric Utility Financial Impacts (\$)																	
5.84%	Net Avoided Energy Costs, per Toolkit	351	338	326	314	303	292	281	271	261	252	243	234	225	217	209	202	4,319
5.84%	Net Avoided Capacity Costs <i>, per Toolkit</i>	314	303	292	281	271	261	252	242	234	225	217	209	202	194	187	180	3,863
	Health Impacts (\$)																	
2.50%	Net Avoided Outdoor Emissions (electricity), per Toolkit	158	157	156	155	154	154	153	152	151	151	150	149	149	148	147	146	2,430
2.50%	Net Avoided Outdoor Emissions (on-site fuel), per Toolkit	94	94	93	93	92	92	91	91	90	90	90	89	89	88	88	87	1,450
	Social GHG Impacts (\$)																	
2.50%	Net Avoided Carbon Emissions (electricity), per Toolkit	372	370	368	367	365	363	361	359	358	356	354	353	351	349	347	346	5,739
2.50%	Net Avoided Carbon Emissions (on-site fuel), per Toolkit	198	197	196	195	194	193	192	191	190	189	189	188	187	186	185	184	3,055
	Economic Impacts (\$)																	
	Income Added, per Elevate	45,867																45,867
	Other Impacts (\$)																	
2.50%	Resiliency, per 5 Lakes Energy	28	27	27	27	27	27	27	27	27	26	26	26	26	26	26	26	426
	Total Net Benefits	(13,819)	1,486	1,458	1,432	1,406	1,381	1,357	1,334	1,311	1,289	1,268	1,248	1,228	1,208	1,189	1,171	5,949

Benefit/Cost Ratio

Income Added, per Elevate

Resiliency, per 5 Lakes Energy

Other Impacts (\$)

2.00%

45,867

(13,819)

**Total Net Benefits** 

Benefit/Cost Ratio

28

28

1,544

29

1,575

29

1,607

Inflation %	Net Benefit Categories								Years									Totals
miation %	Net beliefft Categories	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	iotais
	Utility Customer Impacts (\$)										-	-	-				·	
	Total Capital Expenses, per Elevate	(3,060,000)																(3,060
2.00%	Net Avoided Operating Costs (electricity), per Toolkit	33,350	34,017	34,697	35,391	36,099	36,821	37,558	38,309	39,075	39,856	40,653	41,467	42,296	43,142	44,005	44,885	621,
2.00%	Net Avoided Operating Costs (on-site fuel), per Toolkit	6,850	6,987	7,127	7,269	7,415	7,563	7,714	7,868	8,026	8,186	8,350	8,517	8,687	8,861	9,038	9,219	127
2.00%	Resiliency, per 5 Lakes Energy	1,381	1,409	1,437	1,466	1,495	1,525	1,555	1,587	1,618	1,651	1,684	1,717	1,752	1,787	1,823	1,859	25
	Total Net Benefits	(3,018,419)	42,413	43,261	44,126	45,009	45,909	46,827	47,764	48,719	49,693	50,687	51,701	52,735	53,790	54,866	55,963	(2,284
	Benefit/Cost Ratio																	
	Societal Impacts (\$)																	
	Total Capital Expenses	(3,060,000)																(3,060
	Electric Utility Financial Impacts (\$)																	
2.00%	Net Avoided Energy Costs, per Toolkit	17,550	17,901	18,259	18,624	18,997	19,377	19,764	20,159	20,563	20,974	21,393	21,821	22,258	22,703	23,157	23,620	327
2.00%	Net Avoided Capacity Costs, per Toolkit	15,700	16,014	16,334	16,661	16,994	17,334	17,681	18,034	18,395	18,763	19,138	19,521	19,911	20,310	20,716	21,130	292
	Health Impacts (\$)																	
2.00%	Net Avoided Outdoor Emissions (electricity), per Toolkit	7,875	8,033	8,193	8,357	8,524	8,695	8,869	9,046	9,227	9,411	9,600	9,792	9,987	10,187	10,391	10,599	146
2.00%	Net Avoided Outdoor Emissions (on-site fuel), per Toolkit	4,700	4,794	4,890	4,988	5,087	5,189	5,293	5,399	5,507	5,617	5,729	5,844	5,961	6,080	6,202	6,326	87
	Social GHG Impacts (\$)	-																
2.00%	Net Avoided Carbon Emissions (electricity), per Toolkit	18,600	18,972	19,351	19,738	20,133	20,536	20,947	21,366	21,793	22,229	22,673	23,127	23,589	24,061	24,542	25,033	346
2.00%	Net Avoided Carbon Emissions (on-site fuel), per Toolkit	9,900	10,098	10,300	10,506	10,716	10,930	11,149	11,372	11,599	11,831	12,068	12,309	12,556	12,807	13,063	13,324	184
	Economic Impacts (\$)			·														
	Income Added, per Elevate	2,293,360																2,293
	Other Impacts (\$)																	
2.00%	Resiliency, per 5 Lakes Energy	1,381	1,409	1,437	1,466	1,495	1,525	1,555	1,587	1,618	1,651	1,684	1,717	1,752	1,787	1,823	1,859	25
															,	,	,	
2.0070	Total Net Benefits	(690,934)	77,220	78,765		81,947	· ·			88,702	90,476	92,285	94,131	96,014	97,934	99,893	101,891	644,
	Total Net Benefits  Benefit/Cost Ratio  Inted Annual Cash Flows (Benefits are Positive, Costs are Negative)	(690,934)	77,220	78,765	80,340	81,947	83,586	85,258	86,963	88,702	90,476	92,285	94,131	96,014	97,934	99,893	101,891	644
able 2. Discou	Benefit/Cost Ratio		77,220	78,765		81,947	· ·			88,702	90,476							
able 2. Discou	Benefit/Cost Ratio  Inted Annual Cash Flows (Benefits are Positive, Costs are Negative)  Net Benefit Categories	(690,934)	77,220	78,765		81,947	· ·		86,963	88,702	90,476	92,285	94,131	96,014	97,934	99,893	101,891	
able 2. Discou	Benefit/Cost Ratio  Inted Annual Cash Flows (Benefits are Positive, Costs are Negative)  Net Benefit Categories  Utility Customer Impacts (\$)	0	1	2	80,340	4	· ·	85,258	86,963	8	90,476		11	12			15	Totals
able 2. Discou Discount %	Renefit/Cost Ratio  Inted Annual Cash Flows (Benefits are Positive, Costs are Negative)  Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate	(3,060,000)	1 0	2	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>Years 7</b>	8	9 0	10	11 0	<b>12</b>	<b>13</b>	14	<b>15</b>	Totals (3,060
able 2. Discou Discount % 4.00%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit	(3,060,000) 33,350	1 0 32,709	<b>2</b> 0 32,080	<b>3</b> 0 31,463	<b>4</b> 0 30,858	<b>5</b> 0 30,264	<b>6</b> 0 29,682	Years 7 0 29,111	8 0 28,552	9 0 28,003	10 0 27,464	11 0 26,936	12 0 26,418	13 0 25,910	14 0 25,412	15 0 24,923	(3,060 463
able 2. Discount %  4.00% 4.00%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit	(3,060,000) 33,350 6,850	0 32,709 6,718	0 32,080 6,589	<b>3</b> 0 31,463 6,462	0 30,858 6,338	5 0 30,264 6,216	6 0 29,682 6,097	Years 7 0 29,111 5,979	8 0 28,552 5,864	9 0 28,003 5,752	0 27,464 5,641	0 26,936 5,533	0 26,418 5,426	13 0 25,910 5,322	14 0 25,412 5,219	15 0 24,923 5,119	(3,060 463 95
able 2. Discou Discount %  4.00%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy	(3,060,000) 33,350 6,850 1,381	0 32,709 6,718 1,355	0 32,080 6,589 1,329	3 0 31,463 6,462 1,303	0 30,858 6,338 1,278	5 0 30,264 6,216 1,253	6 0 29,682 6,097 1,229	Years 7 0 29,111 5,979 1,206	8 0 28,552 5,864 1,183	9 0 28,003 5,752 1,160	0 27,464 5,641 1,137	0 26,936 5,533 1,116	0 26,418 5,426 1,094	13 0 25,910 5,322 1,073	14 0 25,412 5,219 1,052	0 24,923 5,119 1,032	(3,060 463 95
able 2. Discou Discount % 4.00% 4.00%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits	(3,060,000) 33,350 6,850	0 32,709 6,718	0 32,080 6,589	<b>3</b> 0 31,463 6,462	0 30,858 6,338	5 0 30,264 6,216	6 0 29,682 6,097	Years 7 0 29,111 5,979	8 0 28,552 5,864	9 0 28,003 5,752	0 27,464 5,641	0 26,936 5,533	0 26,418 5,426	13 0 25,910 5,322	14 0 25,412 5,219	15 0 24,923 5,119	(3,060, 463, 95, 19,
able 2. Discou Discount % 4.00% 4.00%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits Benefit/Cost Ratio	(3,060,000) 33,350 6,850 1,381	0 32,709 6,718 1,355	0 32,080 6,589 1,329	3 0 31,463 6,462 1,303	0 30,858 6,338 1,278	5 0 30,264 6,216 1,253	6 0 29,682 6,097 1,229	Years 7 0 29,111 5,979 1,206	8 0 28,552 5,864 1,183	9 0 28,003 5,752 1,160	0 27,464 5,641 1,137	0 26,936 5,533 1,116	0 26,418 5,426 1,094	13 0 25,910 5,322 1,073	14 0 25,412 5,219 1,052	0 24,923 5,119 1,032	(3,060) 463, 95,
able 2. Discou Discount % 4.00% 4.00%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits Benefit/Cost Ratio Societal Impacts (\$)	(3,060,000) 33,350 6,850 1,381 (3,018,419)	0 32,709 6,718 1,355	0 32,080 6,589 1,329	3 0 31,463 6,462 1,303	0 30,858 6,338 1,278	5 0 30,264 6,216 1,253	6 0 29,682 6,097 1,229	Years 7 0 29,111 5,979 1,206	8 0 28,552 5,864 1,183	9 0 28,003 5,752 1,160	0 27,464 5,641 1,137	0 26,936 5,533 1,116	0 26,418 5,426 1,094	13 0 25,910 5,322 1,073	14 0 25,412 5,219 1,052	0 24,923 5,119 1,032	(3,060 463 95 19 (2,482
able 2. Discount %  4.00% 4.00%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits Benefit/Cost Ratio Societal Impacts (\$)  Total Capital Expenses	(3,060,000) 33,350 6,850 1,381	0 32,709 6,718 1,355	0 32,080 6,589 1,329	3 0 31,463 6,462 1,303	0 30,858 6,338 1,278	5 0 30,264 6,216 1,253	6 0 29,682 6,097 1,229	Years 7 0 29,111 5,979 1,206	8 0 28,552 5,864 1,183	9 0 28,003 5,752 1,160	0 27,464 5,641 1,137	0 26,936 5,533 1,116	0 26,418 5,426 1,094	13 0 25,910 5,322 1,073	14 0 25,412 5,219 1,052	0 24,923 5,119 1,032	(3,060 463 95 19 (2,482
4.00% 4.00% 4.00%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits Benefit/Cost Ratio  Societal Impacts (\$)  Total Capital Expenses Electric Utility Financial Impacts (\$)	(3,060,000) 33,350 6,850 1,381 (3,018,419)	1 0 32,709 6,718 1,355 40,782	0 32,080 6,589 1,329 <b>39,997</b>	3 0 31,463 6,462 1,303 39,228	0 30,858 6,338 1,278 38,474	5 0 30,264 6,216 1,253 37,734	6 0 29,682 6,097 1,229 37,008	Years 7 0 29,111 5,979 1,206 36,297	8 0 28,552 5,864 1,183 35,599	9 0 28,003 5,752 1,160 34,914	0 27,464 5,641 1,137 <b>34,243</b>	0 26,936 5,533 1,116 33,584	0 26,418 5,426 1,094 32,938	13 0 25,910 5,322 1,073 32,305	14 0 25,412 5,219 1,052 31,683	15 0 24,923 5,119 1,032 31,074	(3,060 463 95 19 (2,482
4.00% 4.00% 4.00% 5.84%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits Benefit/Cost Ratio  Societal Impacts (\$)  Total Capital Expenses Electric Utility Financial Impacts (\$) Net Avoided Energy Costs, per Toolkit	(3,060,000) 33,350 6,850 1,381 (3,018,419) (3,060,000)	1 0 32,709 6,718 1,355 40,782	0 32,080 6,589 1,329 <b>39,997</b>	80,340 3 0 31,463 6,462 1,303 39,228 15,708	0 30,858 6,338 1,278 38,474	5 0 30,264 6,216 1,253 37,734	6 0 29,682 6,097 1,229 37,008	Years 7 0 29,111 5,979 1,206 36,297	8 0 28,552 5,864 1,183 35,599	9 0 28,003 5,752 1,160 34,914	10 0 27,464 5,641 1,137 34,243	11 0 26,936 5,533 1,116 33,584	0 26,418 5,426 1,094 32,938	13 0 25,910 5,322 1,073 32,305	14 0 25,412 5,219 1,052 31,683	0 24,923 5,119 1,032 <b>31,074</b>	(3,060 463 95 19 (2,482 (3,060
4.00% 4.00% 4.00% 5.84%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits Benefit/Cost Ratio  Societal Impacts (\$)  Total Capital Expenses Electric Utility Financial Impacts (\$) Net Avoided Energy Costs, per Toolkit Net Avoided Capacity Costs, per Toolkit	(3,060,000) 33,350 6,850 1,381 (3,018,419)	1 0 32,709 6,718 1,355 40,782	0 32,080 6,589 1,329 <b>39,997</b>	3 0 31,463 6,462 1,303 39,228	0 30,858 6,338 1,278 38,474	5 0 30,264 6,216 1,253 37,734	6 0 29,682 6,097 1,229 37,008	Years 7 0 29,111 5,979 1,206 36,297	8 0 28,552 5,864 1,183 35,599	9 0 28,003 5,752 1,160 34,914	0 27,464 5,641 1,137 <b>34,243</b>	0 26,936 5,533 1,116 33,584	0 26,418 5,426 1,094 32,938	13 0 25,910 5,322 1,073 32,305	14 0 25,412 5,219 1,052 31,683	15 0 24,923 5,119 1,032 31,074	(3,060 463 95 19 (2,482
4.00% 4.00% 4.00% 5.84%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits  Benefit/Cost Ratio  Societal Impacts (\$)  Total Capital Expenses  Electric Utility Financial Impacts (\$) Net Avoided Energy Costs, per Toolkit Net Avoided Capacity Costs, per Toolkit Health Impacts (\$)	(3,060,000) 33,350 6,850 1,381 (3,018,419) (3,060,000) 17,550 15,700	1 0 32,709 6,718 1,355 40,782 16,913 15,130	2 0 32,080 6,589 1,329 39,997 16,300 14,581	3 0 31,463 6,462 1,303 39,228 15,708 14,052	0 30,858 6,338 1,278 38,474 15,138 13,543	5 0 30,264 6,216 1,253 37,734 14,589 13,051	6 0 29,682 6,097 1,229 37,008	Years 7 0 29,111 5,979 1,206 36,297	8 0 28,552 5,864 1,183 35,599 13,058 11,682	9 0 28,003 5,752 1,160 34,914 12,584 11,258	10 0 27,464 5,641 1,137 34,243 12,128 10,849	11 0 26,936 5,533 1,116 33,584 11,688 10,456	12 0 26,418 5,426 1,094 32,938 11,264 10,076	13 0 25,910 5,322 1,073 32,305 10,855 9,711	14 0 25,412 5,219 1,052 31,683 10,461 9,358	15 0 24,923 5,119 1,032 31,074 10,082 9,019	(3,060 463 95 19 (2,482 (3,060
4.00% 4.00% 4.00% 4.00% 5.84% 5.84%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits Benefit/Cost Ratio  Societal Impacts (\$)  Total Capital Expenses Electric Utility Financial Impacts (\$) Net Avoided Energy Costs, per Toolkit Net Avoided Capacity Costs, per Toolkit Health Impacts (\$) Net Avoided Outdoor Emissions (electricity), per Toolkit	(3,060,000) 33,350 6,850 1,381 (3,018,419) (3,060,000) 17,550 15,700	1 0 32,709 6,718 1,355 40,782 16,913 15,130 7,837	2 0 32,080 6,589 1,329 39,997 16,300 14,581	3 0 31,463 6,462 1,303 39,228 15,708 14,052	0 30,858 6,338 1,278 38,474 15,138 13,543	5 0 30,264 6,216 1,253 37,734 14,589 13,051	6 0 29,682 6,097 1,229 37,008 14,060 12,578	Years 7 0 29,111 5,979 1,206 36,297  13,550 12,121 7,610	8 0 28,552 5,864 1,183 35,599 13,058 11,682	9 0 28,003 5,752 1,160 34,914 12,584 11,258 7,536	10 0 27,464 5,641 1,137 34,243 12,128 10,849 7,499	11 0 26,936 5,533 1,116 33,584 11,688 10,456 7,463	12 0 26,418 5,426 1,094 32,938 11,264 10,076 7,426	13 0 25,910 5,322 1,073 32,305 10,855 9,711 7,390	14 0 25,412 5,219 1,052 31,683 10,461 9,358 7,354	15 0 24,923 5,119 1,032 31,074 10,082 9,019 7,318	(3,060 463 95 19 (2,482 (3,060 215 193
4.00% 4.00% 4.00% 5.84%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits  Benefit/Cost Ratio  Societal Impacts (\$)  Total Capital Expenses  Electric Utility Financial Impacts (\$) Net Avoided Energy Costs, per Toolkit Net Avoided Capacity Costs, per Toolkit Health Impacts (\$) Net Avoided Outdoor Emissions (electricity), per Toolkit Net Avoided Outdoor Emissions (on-site fuel), per Toolkit	(3,060,000) 33,350 6,850 1,381 (3,018,419) (3,060,000) 17,550 15,700	1 0 32,709 6,718 1,355 40,782 16,913 15,130	2 0 32,080 6,589 1,329 39,997 16,300 14,581	3 0 31,463 6,462 1,303 39,228 15,708 14,052	0 30,858 6,338 1,278 38,474 15,138 13,543	5 0 30,264 6,216 1,253 37,734 14,589 13,051	6 0 29,682 6,097 1,229 37,008	Years 7 0 29,111 5,979 1,206 36,297	8 0 28,552 5,864 1,183 35,599 13,058 11,682	9 0 28,003 5,752 1,160 34,914 12,584 11,258	10 0 27,464 5,641 1,137 34,243 12,128 10,849	11 0 26,936 5,533 1,116 33,584 11,688 10,456	12 0 26,418 5,426 1,094 32,938 11,264 10,076	13 0 25,910 5,322 1,073 32,305 10,855 9,711	14 0 25,412 5,219 1,052 31,683 10,461 9,358	15 0 24,923 5,119 1,032 31,074 10,082 9,019	(3,060 463 95 19 (2,482 (3,060
4.00% 4.00% 4.00% 4.00% 5.84% 5.84% 2.50% 2.50%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits Benefit/Cost Ratio  Societal Impacts (\$)  Total Capital Expenses  Electric Utility Financial Impacts (\$) Net Avoided Energy Costs, per Toolkit Net Avoided Capacity Costs, per Toolkit Health Impacts (\$) Net Avoided Outdoor Emissions (electricity), per Toolkit Net Avoided Outdoor Emissions (on-site fuel), per Toolkit Social GHG Impacts (\$)	(3,060,000) 33,350 6,850 1,381 (3,018,419) (3,060,000) 17,550 15,700 7,875 4,700	1 0 32,709 6,718 1,355 40,782 16,913 15,130 7,837 4,677	2 0 32,080 6,589 1,329 39,997 16,300 14,581 7,798 4,654	3 0 31,463 6,462 1,303 39,228 15,708 14,052 7,760 4,632	15,138 13,543 7,722 4,609	\$3,586 0 30,264 6,216 1,253 37,734 14,589 13,051 7,685 4,586	6 0 29,682 6,097 1,229 37,008 14,060 12,578 7,647 4,564	Years 7 0 29,111 5,979 1,206 36,297  13,550 12,121 7,610 4,542	13,058 11,682 7,573 4,520	9 0 28,003 5,752 1,160 34,914 12,584 11,258 7,536 4,498	10 0 27,464 5,641 1,137 34,243 12,128 10,849 7,499 4,476	11 0 26,936 5,533 1,116 33,584 11,688 10,456 7,463 4,454	12 0 26,418 5,426 1,094 32,938 11,264 10,076 7,426 4,432	13 0 25,910 5,322 1,073 32,305 10,855 9,711 7,390 4,411	14 0 25,412 5,219 1,052 31,683 10,461 9,358 7,354 4,389	10,082 9,019 7,318 4,368	(3,060 463 95 (2,482 (3,060 215 193
4.00% 4.00% 4.00% 4.00% 5.84% 5.84% 2.50% 2.50%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits Benefit/Cost Ratio  Societal Impacts (\$)  Total Capital Expenses Electric Utility Financial Impacts (\$) Net Avoided Energy Costs, per Toolkit Net Avoided Capacity Costs, per Toolkit Net Avoided Outdoor Emissions (electricity), per Toolkit Net Avoided Outdoor Emissions (on-site fuel), per Toolkit Social GHG Impacts (\$) Net Avoided Carbon Emissions (electricity), per Toolkit	(3,060,000) 33,350 6,850 1,381 (3,018,419) (3,060,000) 17,550 15,700 7,875 4,700 18,600	1 0 32,709 6,718 1,355 40,782 16,913 15,130 7,837 4,677	2 0 32,080 6,589 1,329 39,997 16,300 14,581 7,798 4,654	3 0 31,463 6,462 1,303 39,228 15,708 14,052 7,760 4,632	15,138 13,543 7,722 4,609	\$3,586 0 30,264 6,216 1,253 37,734 14,589 13,051 7,685 4,586 18,151	6 0 29,682 6,097 1,229 37,008 14,060 12,578 7,647 4,564	Years 7  0 29,111 5,979 1,206 36,297  13,550 12,121  7,610 4,542  17,974	3,058 11,682 7,573 4,520	9 0 28,003 5,752 1,160 34,914 12,584 11,258 7,536 4,498 17,799	10 0 27,464 5,641 1,137 34,243 12,128 10,849 7,499 4,476 17,712	11 0 26,936 5,533 1,116 33,584 11,688 10,456 7,463 4,454 17,626	12 0 26,418 5,426 1,094 32,938 11,264 10,076 7,426 4,432 17,540	13 0 25,910 5,322 1,073 32,305 10,855 9,711 7,390 4,411 17,454	14 0 25,412 5,219 1,052 31,683 10,461 9,358 7,354 4,389 17,369	15 0 24,923 5,119 1,032 31,074 10,082 9,019 7,318 4,368 17,285	(3,060 463 95 (2,482 (3,060 215 193
4.00% 4.00% 4.00% 4.00% 5.84% 5.84% 2.50% 2.50%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits Benefit/Cost Ratio  Societal Impacts (\$)  Total Capital Expenses Electric Utility Financial Impacts (\$) Net Avoided Energy Costs, per Toolkit Net Avoided Capacity Costs, per Toolkit Net Avoided Outdoor Emissions (electricity), per Toolkit Net Avoided Carbon Emissions (electricity), per Toolkit Net Avoided Carbon Emissions (electricity), per Toolkit Net Avoided Carbon Emissions (on-site fuel), per Toolkit Net Avoided Carbon Emissions (on-site fuel), per Toolkit	(3,060,000) 33,350 6,850 1,381 (3,018,419) (3,060,000) 17,550 15,700 7,875 4,700	1 0 32,709 6,718 1,355 40,782 16,913 15,130 7,837 4,677	2 0 32,080 6,589 1,329 39,997 16,300 14,581 7,798 4,654	3 0 31,463 6,462 1,303 39,228 15,708 14,052 7,760 4,632	15,138 13,543 7,722 4,609	\$3,586 0 30,264 6,216 1,253 37,734 14,589 13,051 7,685 4,586	6 0 29,682 6,097 1,229 37,008 14,060 12,578 7,647 4,564	Years 7 0 29,111 5,979 1,206 36,297  13,550 12,121 7,610 4,542	13,058 11,682 7,573 4,520	9 0 28,003 5,752 1,160 34,914 12,584 11,258 7,536 4,498	10 0 27,464 5,641 1,137 34,243 12,128 10,849 7,499 4,476	11 0 26,936 5,533 1,116 33,584 11,688 10,456 7,463 4,454	12 0 26,418 5,426 1,094 32,938 11,264 10,076 7,426 4,432	13 0 25,910 5,322 1,073 32,305 10,855 9,711 7,390 4,411	14 0 25,412 5,219 1,052 31,683 10,461 9,358 7,354 4,389	10,082 9,019 7,318 4,368	(3,060 463 95 19 (2,482 (3,060 215 193
4.00% 4.00% 4.00% 4.00% 5.84% 5.84% 2.50% 2.50%	Inted Annual Cash Flows (Benefits are Positive, Costs are Negative)  Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate  Net Annual Operating Expenses (electricity), per Toolkit  Net Annual Operating Expenses (on-site fuel), per Toolkit  Resiliency, per 5 Lakes Energy  Total Net Benefits  Benefit/Cost Ratio  Societal Impacts (\$)  Total Capital Expenses  Electric Utility Financial Impacts (\$)  Net Avoided Energy Costs, per Toolkit  Net Avoided Capacity Costs, per Toolkit  Health Impacts (\$)  Net Avoided Outdoor Emissions (electricity), per Toolkit  Net Avoided Outdoor Emissions (on-site fuel), per Toolkit  Net Avoided Carbon Emissions (electricity), per Toolkit  Net Avoided Carbon Emissions (on-site fuel), per Toolkit  Economic Impacts (\$)	(3,060,000) 33,350 6,850 1,381 (3,018,419) (3,060,000) 17,550 15,700 7,875 4,700 18,600 9,900	1 0 32,709 6,718 1,355 40,782 16,913 15,130 7,837 4,677	2 0 32,080 6,589 1,329 39,997 16,300 14,581 7,798 4,654	3 0 31,463 6,462 1,303 39,228 15,708 14,052 7,760 4,632	15,138 13,543 7,722 4,609	\$3,586 0 30,264 6,216 1,253 37,734 14,589 13,051 7,685 4,586 18,151	6 0 29,682 6,097 1,229 37,008 14,060 12,578 7,647 4,564	Years 7  0 29,111 5,979 1,206 36,297  13,550 12,121  7,610 4,542  17,974	3,058 11,682 7,573 4,520	9 0 28,003 5,752 1,160 34,914 12,584 11,258 7,536 4,498 17,799	10 0 27,464 5,641 1,137 34,243 12,128 10,849 7,499 4,476 17,712	11 0 26,936 5,533 1,116 33,584 11,688 10,456 7,463 4,454 17,626	12 0 26,418 5,426 1,094 32,938 11,264 10,076 7,426 4,432 17,540	13 0 25,910 5,322 1,073 32,305 10,855 9,711 7,390 4,411 17,454	14 0 25,412 5,219 1,052 31,683 10,461 9,358 7,354 4,389 17,369	15 0 24,923 5,119 1,032 31,074 10,082 9,019 7,318 4,368 17,285	(3,060 463 95 (2,482 (3,060 215 193 121 72 286 152
4.00% 4.00% 4.00% 4.00% 5.84% 5.84% 2.50% 2.50%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits  Benefit/Cost Ratio  Societal Impacts (\$)  Total Capital Expenses  Electric Utility Financial Impacts (\$) Net Avoided Energy Costs, per Toolkit Net Avoided Capacity Costs, per Toolkit Health Impacts (\$) Net Avoided Outdoor Emissions (electricity), per Toolkit Net Avoided Carbon Emissions (electricity), per Toolkit Net Avoided Carbon Emissions (on-site fuel), per Toolkit Economic Impacts (\$) Income Added, per Elevate	(3,060,000) 33,350 6,850 1,381 (3,018,419) (3,060,000) 17,550 15,700 7,875 4,700 18,600	1 0 32,709 6,718 1,355 40,782 16,913 15,130 7,837 4,677	2 0 32,080 6,589 1,329 39,997 16,300 14,581 7,798 4,654	3 0 31,463 6,462 1,303 39,228 15,708 14,052 7,760 4,632	15,138 13,543 7,722 4,609	\$3,586 0 30,264 6,216 1,253 37,734 14,589 13,051 7,685 4,586 18,151	6 0 29,682 6,097 1,229 37,008 14,060 12,578 7,647 4,564	Years 7  0 29,111 5,979 1,206 36,297  13,550 12,121  7,610 4,542  17,974	3,058 11,682 7,573 4,520	9 0 28,003 5,752 1,160 34,914 12,584 11,258 7,536 4,498 17,799	10 0 27,464 5,641 1,137 34,243 12,128 10,849 7,499 4,476 17,712	11 0 26,936 5,533 1,116 33,584 11,688 10,456 7,463 4,454 17,626	12 0 26,418 5,426 1,094 32,938 11,264 10,076 7,426 4,432 17,540	13 0 25,910 5,322 1,073 32,305 10,855 9,711 7,390 4,411 17,454	14 0 25,412 5,219 1,052 31,683 10,461 9,358 7,354 4,389 17,369	15 0 24,923 5,119 1,032 31,074 10,082 9,019 7,318 4,368 17,285	(3,060 463 95 (2,482 (3,060 215 193 121 72 286 152
4.00% 4.00% 4.00% 4.00% 5.84% 5.84% 2.50% 2.50% 2.50%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits Benefit/Cost Ratio  Societal Impacts (\$)  Total Capital Expenses Electric Utility Financial Impacts (\$) Net Avoided Energy Costs, per Toolkit Net Avoided Capacity Costs, per Toolkit Net Avoided Outdoor Emissions (electricity), per Toolkit Net Avoided Outdoor Emissions (on-site fuel), per Toolkit Net Avoided Carbon Emissions (electricity), per Toolkit Net Avoided Carbon Emissions (on-site fuel), per Toolkit	(3,060,000) 33,350 6,850 1,381 (3,018,419) (3,060,000) 17,550 15,700 7,875 4,700 18,600 9,900 2,293,360	1 0 32,709 6,718 1,355 40,782 16,913 15,130 7,837 4,677 18,509 9,852	2 0 32,080 6,589 1,329 39,997 16,300 14,581 7,798 4,654 18,419 9,804	3 0 31,463 6,462 1,303 39,228 15,708 14,052 7,760 4,632 18,329 9,756	15,138 13,543 7,722 4,609 18,240 9,708	30,264 6,216 1,253 37,734 14,589 13,051 7,685 4,586 18,151 9,661	6 0 29,682 6,097 1,229 37,008 14,060 12,578 7,647 4,564 18,062 9,614	Years 7  0 29,111 5,979 1,206 36,297  13,550 12,121  7,610 4,542  17,974 9,567	13,058 11,682 7,573 4,520 17,886 9,520	9 0 28,003 5,752 1,160 34,914 12,584 11,258 7,536 4,498 17,799 9,474	10 0 27,464 5,641 1,137 34,243 12,128 10,849 7,499 4,476 17,712 9,428	11 0 26,936 5,533 1,116 33,584 11,688 10,456 7,463 4,454 17,626 9,382	12 0 26,418 5,426 1,094 32,938 11,264 10,076 7,426 4,432 17,540 9,336	13 0 25,910 5,322 1,073 32,305 10,855 9,711 7,390 4,411 17,454 9,290	14 0 25,412 5,219 1,052 31,683 10,461 9,358 7,354 4,389 17,369 9,245	10,082 9,019 7,318 4,368 17,285 9,200	(3,060 463 95 19 (2,482 (3,060 215 193 121 72 286 152
4.00% 4.00% 4.00% 4.00% 5.84% 5.84% 2.50% 2.50% 2.50%	Net Benefit Categories  Utility Customer Impacts (\$)  Total Capital Expenses, per Elevate Net Annual Operating Expenses (electricity), per Toolkit Net Annual Operating Expenses (on-site fuel), per Toolkit Resiliency, per 5 Lakes Energy  Total Net Benefits  Benefit/Cost Ratio  Societal Impacts (\$)  Total Capital Expenses  Electric Utility Financial Impacts (\$) Net Avoided Energy Costs, per Toolkit Net Avoided Capacity Costs, per Toolkit Health Impacts (\$) Net Avoided Outdoor Emissions (electricity), per Toolkit Net Avoided Carbon Emissions (electricity), per Toolkit Net Avoided Carbon Emissions (on-site fuel), per Toolkit Economic Impacts (\$) Income Added, per Elevate	(3,060,000) 33,350 6,850 1,381 (3,018,419) (3,060,000) 17,550 15,700 7,875 4,700 18,600 9,900	1 0 32,709 6,718 1,355 40,782 16,913 15,130 7,837 4,677	2 0 32,080 6,589 1,329 39,997 16,300 14,581 7,798 4,654	3 0 31,463 6,462 1,303 39,228 15,708 14,052 7,760 4,632	15,138 13,543 7,722 4,609	\$3,586 0 30,264 6,216 1,253 37,734 14,589 13,051 7,685 4,586 18,151	6 0 29,682 6,097 1,229 37,008 14,060 12,578 7,647 4,564	Years 7  0 29,111 5,979 1,206 36,297  13,550 12,121  7,610 4,542  17,974	3,058 11,682 7,573 4,520	9 0 28,003 5,752 1,160 34,914 12,584 11,258 7,536 4,498 17,799	10 0 27,464 5,641 1,137 34,243 12,128 10,849 7,499 4,476 17,712	11 0 26,936 5,533 1,116 33,584 11,688 10,456 7,463 4,454 17,626	12 0 26,418 5,426 1,094 32,938 11,264 10,076 7,426 4,432 17,540	13 0 25,910 5,322 1,073 32,305 10,855 9,711 7,390 4,411 17,454	14 0 25,412 5,219 1,052 31,683 10,461 9,358 7,354 4,389 17,369	15 0 24,923 5,119 1,032 31,074 10,082 9,019 7,318 4,368 17,285	(3,060 463 95 19 (2,482 (3,060 215 193

120 238 237 236 236 235 235 234 233 233 232 232 231 230 230 229 229

Social Cost of Carbon (\$/MT)

CO2e savings (MT)

This is the result for a single home. These results should be multiplied by 50.

Customer	Utility	Bill Im	pacts
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Gas Bill Savings	137		
Electric Bill Savings	667	584	83 461.1111
Utility Financial Impacts			
Net Avoided Capacity Costs	314		
Net Avoided Energy Costs	351		
GHG Social Impact			
Benefit from on-site fuel use reduction	198		
Benefit from grid-level coal combustion reduction	197		
Benefit from grid-level natural gas combustion reduction	175		
	372		

Health Impacts (Contiguous US)	low-estimate	high-estimate
Benefits from on-sit fuel use reduction	58	3 130
Benefit from grid-level coal combustion reduction	59	9 133
Benefit from grid-level natural gas combustion reduction	38	85
	9.	7 218

Average On-Site 94

Average Grid 157.5

CLEAN ENERGY JOBS REPORT	Michigan		
Jobs Summary		Income Summary	
Direct	14.96	Direct	1,289,397.36
General Economy	15.89	General Economy	1,003,962.91
Jobs Added	30.86	Income Added	2,293,360.27
Jobs Lost	15.06	Income Lost	1,402,706.85
Net Job Effect	15.80	Net Income Effect	890,653.42
Top-Gaining Industries and Occupations			
Industry		Jobs Gained	
Manufacturing	10.02	7.95	
Construction	6.22	4.89	
Professional, Scientific, and Technical Services	2.33	1.82	
Finance and Insurance	0.18	0.15	
Federal, State, and Local Government, excluding state	0.14	0.12	
Occupation		Jobs Gained	
Production Occupations	5.90	4.68	
Construction and Extraction Occupations	4.00	3.14	
Office and Administrative Support Occupations	1.60	1.27	
Management Occupations	1.30	1.03	
Business and Financial Operations Occupations	1.15	0.91	

#### **Top-Gaining Positions**

Industry	Occupation	<b>Adjusted Jobs</b>	Median Annual Wage
Manufacturing	<b>Production Occupations</b>	5.12	\$ 41,410.00
Construction	Construction and Extracti	c 2.29	\$ 51,140.00
Manufacturing	Transportation and Mate	o.65	\$ 38,230.00
Manufacturing	Office and Administrative	0.61	\$ 44,630.00
Manufacturing	Management Occupation	s 0.58	\$ 123,600.00

Source: "The Economic Impacts of Michigan's Unreliable Power Grid", Local Solar for All

odice. The Economic Impacts of Michigan's Officiable Fower and , Eocal Solar for All								
E:	Estimated Impact of Michigan 2020 Reliability Performance							
Sector	Customers	Cost Per Event (\$)	Total Cost (\$)	Total Cost (\$)/Customer				
Residential	3,976,729	10.29	56,279,976	14.15				
Small C&I	198,572	2,886.72	788,179,430	3,969.24				
Medium and Large C&I	22,488	18,878.62	583,745,719	25,958.10				
Total	4,197,789	247.44	1,428,205,125	340.23				
Washtenaw County	155,407		53,100,769	341.69				
Wayne County	718,221		176,410,028	245.62				

Source: "The Economic Impacts of Michigan's Unreliable Power Grid", Local Solar for All

Estimated Impact of Michigan 2021 Reliability Performance						
Sector	Customers	Cost Per Event (\$)	Total Cost (\$)	Total Cost (\$)/Customer		
Residential	3,976,729	16.77	109,855,711	27.62		
Small C&I	198,572	6,237.53	2,039,971,193	10,273.21		
Medium and Large C&I	22,488	36,127.69	1,338,087,725	59,502.30		
Total	4,197,789	504.49	3,487,914,629	830.89		

Source: "The Economic Impacts of Michigan's Unreliable Power Grid", Local Solar for All

	2020	0	2021			
Footprint	SAIDI (minutes)	SAIDI (hours)	SAIDI (minutes)	SAIDI (hours)		
Michigan	416.7	6.9	890.9	14.8		
DTE Energy	351.8	5.9	927.4	15.5		

Source: Michigan CUB 20	22	Computed
Footprint	2020 SAIFI	Hours/Event
Michigan	1.38	5.03
DTE Energy	1.29	4.55

2021 SAIFI unavailable,
so assume 2020
average hours/event.

EcoWorks Project Battery Specs				
Building ID	Building Type	Resiliency	Hours of Battery Autonomy	
1264 Meldrum	ComStock Full Service Restaurant	(3) 10 kWh Batteries	3.0	
4390 Conner	ComStock Full Service Restaurant	(3) 10 kWh Batteries	2.0	
19470 Lenore	ResStock Single Family Detached	(1) 10kWh batteries	7.0	
19470 Winston	ResStock Single Family Detached	(1) 10kWh batteries	7.0	

Ann Arb	oor Home Battery
Battery kWh	Hours of Battery Autonomy
13.5	9.5

		Input Data for NPV Tables	
Notes	Building	Annual Resilience Benefit (\$)	
Hours/Event > Battery Autonomy (Partial Annual Benefit)	1264 Meldrum	6,780	
Hours/Event > Battery Autonomy (Partial Annual Benefit)	4390 Conner	4,520	
Hours/Event < Battery Autonomy (Full Annual Benefit)	19470 Lenore	27.62	
Hours/Event < Battery Autonomy (Full Annual Benefit)	19470 Winston	27.62	
lours/Event < Battery Autonomy (Full Annual Benefit)	Ann Arbor 50 house	27.62	

# Renewable Energy and Electrification Infrastructure Enhancement and Development (EIED) Grant Bidder Name: City of Ann Arbor Submission Date: 2/16/2024

Please insert actual proposed budget amounts in the blank table provided below. Extra lines may be added as appropriate.

Line Item	Budget Category	TOTAL GRANT REQUEST
1	Administrative Expenses	
2	Administrative Personnel (Grant Administration Staff)	
3	Salary	
4	N/A	\$ 0
5	N/A	\$ 0
6	Total Salary	\$ 0
7	Fringe Benefits	
8	Employee 1 (Job Title) ( Hrs. @ \$xxxx/hour)	\$
9	Employee 2 (Job Title) ( Hrs. @ \$xxxx/hour)	\$
10	Total Fringe Benefits	\$
11	Total Administrative Personnel	\$
12	Administrative Supplies, Materials, and Equipment	
13	General Office Supplies	\$
14	Total Administrative Supplies, Materials, & Equipment	\$
15	Total Administrative Expenses	\$
16	Contractual Services	
17	Contractual Services Personnel Salary	
18	Salary	
19	Dr. Lesli Hoey (Associate Professor in Urban and Regional Planning)	\$ 50,000
20	N/A	\$ 0
21	Total Salary	\$ 50,000
22	Fringe Benefits	
23	Dr. Lesli Hoey (Associate Professor in Urban and Regional Planning)	\$ 0
24	N/A	\$ 0
25	Total Fringe Benefits	\$ 0
26	Total Contractual Services Personnel Salary	\$ 50,000
27	Contractual Services Supplies, Materials, and Equipment	
28	Supplies, Materials, and Equipment	\$0
29	Total Contractual Services Supplies, Materials, and Equipment	\$0
30	Total Contractual Services Expenses	\$50,000

31	Sub-contractual Services, Large Equipment, Customer Rebates, Other Direct Costs	
32	Sub-contractual Services	
33	To be determined Insulation Contractor	\$ 375,000
34	To be determined Solar Installation Contractor	\$ 800,000
35	To be determined Battery Energy Storage Contractor	\$ 650,000
36	To be determined Window Installation Contractor	\$ 250,000
37	To be determined Electrician to upgrade electrical panels	\$150,000
38	To be determined Electric Induction Range Vendor and Installer	\$250,000
39	To be determined Flooding Remediation Contractor	\$360,000
40	To be determined Heat Pump Water Heater Vendor and Installer	\$150,000
41	To be determined heat Pump Dryer Vendor and Installer	\$75,000
42	Total Sub-contractual Services	\$ 3,060,000
43	Large Equipment Costs (Infrastructure Grants)	
44	Covered above	\$ 0
45	Total Large Equipment Costs	\$ 0
46	Customer Rebates (Program Grants)	
47	Not applicable	\$0
48	Not applicable	\$0
49	Total Customer Rebates	\$
50	Other Direct Costs	
51	Stipends for resident participation in engagement activities	\$5,600
52	Total Other Direct Costs	\$5,600
53	Total Sub-Contractual Services, Large Equipment, Customer Rebates, Other Direct Costs Expenses	\$3,065,600
54	Total Direct Cost	\$ 3,115,600
55	Indirect Costs	
56	Indirect Cost (0.10) – May not exceed 10% of total direct costs.	\$ 0
57	Total Indirect Costs	\$0
58	TOTAL GRANT FUNDS REQUESTED	\$ 3,115,60

#### **ATTACHMENT B - BUDGET NARRATIVE**

The narrative below may be updated with the applicant's own line description as appropriate. If extra lines were added in the Budget Table, add them in the narrative as well. Include a budget narrative for each partnering organization or subcontractor working on the project.

1	Administrative Expenses
2	Administrative Personnel (Grant Administration Staff) Not applicable
3	Salary Not applicable
4	Employee 1 Name (Job Title)  Not applicable – all staffing is being provided as an in-kind contribution.
5	Employee 2 Name (Job Title)  Not applicable – all staffing is being provided as an in-kind contribution.
6	Total Salary = \$0
7	Fringe Benefits (Fringe benefit for Employees should match named salary employees listed above)
8	Employee 1 Name (Job Title)  Not applicable – all staffing is being provided as an in-kind contribution.
9	Employee 2 Name (Job Title)  Not applicable – all staffing is being provided as an in-kind contribution.
10	Total Fringe Benefits = \$0
11	Approximate Total Administrative Personnel = \$0
12	Administrative Supplies, Materials, and Equipment
13	Not applicable – any required office supplies and materials are being provided as an in-kind contribution.
14	Approximate Total Administrative Supplies, Materials, and Equipment = \$0
15	Total Administrative Expenses = \$0 (Lines 6, 10, 14)
16	Contractual Services
17	Contractual Services Personnel Salary
	In the event that any necessary travel is anticipated, all expenses must be reflected in the applicant(s) hourly rate.

18	Salary
	<name of="" organization=""><services by="" contractor="" provided="" this=""> Organization's full time workweek is <e.g. 37.5="" 40="" or=""> hours. All employees are full time unless otherwise stated.</e.g.></services></name>
19	Dr. Lesli Hoey, Associate Professor in Urban and Regional Planning
	Dr. Lesli Hoey and her graduate student will provide evaluation services for this work, conducting pre and post evaluation assessments with residents in the Bryant neighborhood to ensure the project is aligned with residents needs and desires. Dr. Hoey's evaluation will be used to inform any necessary project modifications. Dr. Hoey's team will provide 330 hours of work on this grant at a rate of \$150/hour for a total project cost of \$50,000.
20	Employee 2 Name (Job Title)  Not applicable – Elevate and Community Action Network's time are provided as an in-kind match and will be covered via existing contracts the City has with both entities.
21	Total Contractual Services Salary = \$50,000
22	Fringe Benefits
23	Dr. Lesli Hoey
	No fringe benefits will be taken as part of this budget request but are provided in-kind / as a match.
24	Employee 2 Name (Job Title)
	Not applicable - Elevate and Community Action Network's time are provided as an in-kind match and will be covered via existing contracts the City has with both entities.
25	Total Fringe Benefits = \$0
26	Approximate Total Contractual Services Personnel Salary = \$50,000
27	Contractual Services Supplies, Materials, and Equipment
28	Not applicable
29	Approximate Total Contractual Services Supplies, Materials, and Equipment = \$0
30	Total Contractual Services Expenses = \$50,000 (Lines 21, 25, 29)
31	Sub-contractual Services, Large Equipment, Customer Rebates, and Other Direct Costs
32	Sub-Contractual Services

#### 33 | Vendor 1

To be determined (via competitive procurement) insulation contractor. Costs are estimated at \$7,500 per home for insulation services x 50 homes. Cost estimates are based on quotes received for existing work taking place in the neighborhood and at the local community center.

Total approximate cost for this line item is \$375,000.

#### 34 Vendor 2

To be determined (via competitive procurement) solar installer. Costs are estimated at \$16,000 per solar array, inclusive of labor, x 50 homes. Cost estimates are based on existing work taking place in the neighborhood and quotes received by contractors.

Total approximate cost for this line item is \$800,000.

#### 35 | Vendor 3

To be determined (via competitive procurement) battery energy storage contractor. Costs are estimated at \$13,000 per system plus installation x 50 homes. Cost estimates are based on existing work taking place in the neighborhood and quotes received by contractors.

Total approximate cost for this line item is \$650,000.

#### 36 Vendor 4

To be determined (via competitive procurement) window replacement contractor. Costs are estimated at \$5,000 per home for windows, installation, and disposal services x 50 homes. Cost estimates are based on quotes received for existing work taking place in the neighborhood and at the local community center.

Total approximate cost for this line item is \$250,000.

#### 37 Vendor 5

To be determined (via competitive procurement) electrician to upgrade residential electrical panels to handle full electrification upgrades. Costs are estimated at \$3,000 per panel x 50 homes. Cost estimates are based on quotes received for existing work taking place in the neighborhood and at the local community center.

Total approximate cost for this line item is \$150,000.

#### 38 | Vendor 6

To be determined (via competitive procurement) range replacement vendor and contractor (replacing fossil gas cooktops with induction cooktops). Costs are estimated at \$5,000 per range plus installation x 50 homes. Cost estimates are based on quotes received for existing work taking place in the neighborhood combined with a rapid market analysis.

Total approximate cost for this line item is \$250,000.

#### 39 | Vendor 7

To be determined (via competitive procurement) flooding remediation contractor. Costs are estimated at \$18,000 per home based on previous experience with flooding remediation costs in the neighborhood x 20 homes.

Total approximate cost for this line item is \$360,000.

estimated at \$3,000 per unit, inclusive of installation and recycling of prior unit x 50 homes. Cost estimates are based on quotes received for existing work taking place in the neighborhood combine with a rapid market analysis.  Total approximate cost for this line item is \$150,000.  Vendor 9  To be determined (via competitive procurement) heat pump dryer vendor and installer. Costs are estimated at \$1,500 per system plus installation and recycling of prior unit x 50 homes. Cost estimat are based on quotes received for existing work taking place in the neighborhood combined with a ramarket analysis.  Total approximate cost for this line item is \$75,000.  42	40	Vendor 8
estimates are based on quotes received for existing work taking place in the neighborhood combine with a rapid market analysis.  Total approximate cost for this line item is \$150,000.  41 Vendor 9 To be determined (via competitive procurement) heat pump dryer vendor and installer. Costs are estimated at \$1,500 per system plus installation and recycling of prior unit x 50 homes. Cost estimate are based on quotes received for existing work taking place in the neighborhood combined with a ramarket analysis.  Total approximate cost for this line item is \$75,000.  42 Approximate Total Sub-Contractual Services = \$3,060,000  43 Large Equipment Costs (Infrastructure Grants)  44 All equipment will be purchased through competitive bidding and done, to the fullest extent, in bull such, equipment costs are included under the sub-contractual services category.  45 Approximate Total Large Equipment Costs = \$0  46 Customer Rebates (Program Grants)  47 Payments to Residential Customers  No fund are being requested for rebates as the majority of the work will need to be directly paid for through the grant given the nature of working in a low-income neighborhood with nearly all residen unable to front the significant capital necessary to make the identified improvements.  48 Payments to Commercial Customers  Not applicable  49 Approximate Total Customer Rebates = \$0  50 Other Direct Costs  51 Other Direct Costs  51 Other Direct Costs Detailed  52 Stipends for resident advisors. Includes \$25/hr for 8 advisors to participate in an estimated 18 meet each lasting 1 hour = 25 x 8 x 18 or \$3,600.  Includes stipends for residents participating in the public engagement activities at \$20/hour x 100 h of engagement or \$2,000 dollars.		To be determined (via competitive procurement) heat pump water heater vendor and installer. Costs are
with a rapid market analysis.  Total approximate cost for this line item is \$150,000.  Vendor 9  To be determined (via competitive procurement) heat pump dryer vendor and installer. Costs are estimated at \$1,500 per system plus installation and recycling of prior unit x 50 homes. Cost estimat are based on quotes received for existing work taking place in the neighborhood combined with a ramarket analysis.  Total approximate cost for this line item is \$75,000.  42		
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Total approximate cost for this line item is \$5,600.		5. c., 6. 6. 72,000 dollars.
		Total approximate cost for this line item is \$5,600.
52 Approximate Total Other Direct Costs = \$5,600	52	Approximate Total Other Direct Costs = \$5.600

53	Total Sub-Contractual Services, Large Equipment, Customer Rebates, and Other Direct Cost Expenses = \$ 3,065,600
54	Total Direct Costs = \$X 3,115,600
55	Indirect Costs
56	Indirect Cost (0.1)
	No indirect costs are being requested as part of this grant. Any indirect costs that are incurred will be covered via an in-kind contribution.
57	Total Indirect Costs = \$0
58	Total Grant Funds Requested (direct plus indirect costs) = \$3,115,600

#### **Federal Provisions Addendum**

This addendum applies to purchases that will be paid for in whole or in part with funds obtained from the federal government. The provisions below are required and the language is not negotiable. If any provision below conflicts with the State's terms and conditions, including any attachments, schedules, or exhibits to the State's Contract, the provisions below take priority to the extent a provision is required by federal law; otherwise, the order of precedence set forth in the Contract applies. Hyperlinks are provided for convenience only; broken hyperlinks will not relieve Contractor from compliance with the law.

#### 1. Equal Employment Opportunity

If this Contract is a "**federally assisted construction contract**" as defined in <u>41 CFR Part 60-1.3</u>, and except as otherwise may be provided under <u>41 CFR Part 60</u>, then during performance of this Contract, the Contractor agrees as follows:

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.
- (4) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The Contractor will comply with all provisions of <u>Executive Order 11246</u> of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The Contractor will furnish all information and reports required by <a href="Executive Order 11246">Executive Order 11246</a> of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in <a href="Executive Order 11246">Executive Order 11246</a> of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in <a href="Executive Order 11246">Executive Order 11246</a> of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

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(8) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of <a href="Executive Order 11246">Executive Order 11246</a> of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided*, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

#### 2. Davis-Bacon Act (Prevailing Wage)

If this Contract is a **prime construction contracts** in excess of \$2,000, the Contractor (and its Subcontractors) must comply with the Davis-Bacon Act (40 USC 3141-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"), and during performance of this Contract the Contractor agrees as follows:

- (1) All transactions regarding this contract shall be done in compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable. The contractor shall comply with 40 U.S.C. 3141-3144, and 3146-3148 and the requirements of 29 C.F.R. pt. 5 as applicable.
- (2) Contractors are required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor.
- (3) Additionally, contractors are required to pay wages not less than once a week.

#### 3. Copeland "Anti-Kickback" Act

If this Contract is a contract for construction or repair work in excess of \$2,000 where the Davis-Bacon Act applies, the Contractor must comply with the Copeland "Anti-Kickback" Act (40 USC 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"), which prohibits the Contractor and subrecipients from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any

part of the compensation to which he or she is otherwise entitled, and during performance of this Contract the Contractor agrees as follows:

- Contractor. The Contractor shall comply with 18 U.S.C. §874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.
- (2) <u>Subcontracts</u>. The Contractor or Subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA or the applicable federal awarding agency may by appropriate instructions require, and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
- (3) <u>Breach</u>. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a Contractor and Subcontractor as provided in 29 C.F.R. § 5.12.

#### 4. Contract Work Hours and Safety Standards Act

If the Contract is **in excess of \$100,000** and **involves the employment of mechanics or laborers**, the Contractor must comply with <u>40 USC 3702</u> and <u>3704</u>, as supplemented by Department of Labor regulations (<u>29 CFR Part 5</u>), as applicable, and during performance of this Contract the Contractor agrees as follows:

- (1) Overtime requirements. No Contractor or Subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section the Contractor and any Subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and Subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.
- (3) Withholding for unpaid wages and liquidated damages. The State shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or Subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.
- (4) <u>Subcontracts</u>. The Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

#### 5. Rights to Inventions Made Under a Contract or Agreement

If the Contract is funded by a federal "funding agreement" as defined under 37 CFR §401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with 37 CFR Part 401, "Rights to Inventions Made by

Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

#### 6. Clean Air Act and the Federal Water Pollution Control Act

If this Contract is **in excess of \$150,000**, the Contractor must comply with all applicable standards, orders, and regulations issued under the Clean Air Act (42 USC 7401-7671q) and the Federal Water Pollution Control Act (33 USC 1251-1387), and during performance of this Contract the Contractor agrees as follows:

#### Clean Air Act

- 1. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
- The Contractor agrees to report each violation to the State and understands and agrees that the State will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency or the applicable federal awarding agency, and the appropriate Environmental Protection Agency Regional Office.
- The Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA or the applicable federal awarding agency.

#### Federal Water Pollution Control Act

- The Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
- 2. The Contractor agrees to report each violation to the State and understands and agrees that the State will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency or the applicable federal awarding agency, and the appropriate Environmental Protection Agency Regional Office.
- The Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA or the applicable federal awarding agency.

#### 7. Debarment and Suspension

A "contract award" (see <u>2 CFR 180.220</u>) must not be made to parties listed on the government-wide exclusions in the <u>System for Award Management</u> (SAM), in accordance with the OMB guidelines at <u>2 CFR 180</u> that implement <u>Executive Orders 12549</u> (51 FR 6370; February 21, 1986) and 12689 (54 FR 34131; August 18, 1989), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than <u>Executive Order 12549</u>.

(1) This Contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the Contractor is required to verify that none of the Contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

- (2) The Contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- (3) This certification is a material representation of fact relied upon by the State. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the State, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- (4) The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

#### 8. Byrd Anti-Lobbying Amendment

Contractors who apply or bid for an award of \$100,000 or more shall file the required certification in Exhibit 1 – Byrd Anti-Lobbying Certification below. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

#### 9. Procurement of Recovered Materials

Under <u>2 CFR 200.322</u>, Contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act.

- (1) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—
  - Competitively within a timeframe providing for compliance with the contract performance schedule;
  - 2. Meeting contract performance requirements; or
  - 3. At a reasonable price.
- (2) Information about this requirement, along with the list of EPA- designated items, is available at EPA's Comprehensive Procurement Guidelines web site, <a href="https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program">https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program</a>.
- (3) The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.

#### 10. Additional FEMA Contract Provisions.

The following provisions apply to purchases that will be paid for in whole or in part with funds obtained from the Federal Emergency Management Agency (FEMA):

- (1) Access to Records. The following access to records requirements apply to this contract:
  - a. The Contractor agrees to provide the State, the FEMA Administrator, the

Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

- b. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- c. The Contractor agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.
- d. In compliance with the Disaster Recovery Act of 2018, the State and the Contractor acknowledge and agree that no language in this contract is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.

#### (2) Changes.

See the provisions regarding modifications or change notice in the Contract Terms.

#### (3) DHS Seal, Logo, And Flags

The Contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

#### (4) Compliance with Federal Law, Regulations, and Executive Orders

This is an acknowledgement that FEMA financial assistance will be used to fund all or a portion of the contract. The Contractor will comply with all applicable Federal law, regulations, executive orders, FEMA policies, procedures, and directives.

#### (5) No Obligation by Federal Government

The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the State, Contractor, or any other party pertaining to any matter resulting from the Contract."

#### (6) Program Fraud and False or Fraudulent Statements or Related Acts

The Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Contractor's actions pertaining to this contract.

#### **Exhibit 1 - Byrd Anti-Lobbying Certification**

Contractor must complete this certification if the purchase will be paid for in whole or in part with funds obtained from the federal government and the purchase is greater than \$100,000.

#### APPENDIX A, 44 C.F.R. PART 18 - CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

- 1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100.000 for each such failure.

The Contractor,	, certifies or affirms the
truthfulness and accuracy of each statement of its Contractor understands and agrees that the provis	certification and disclosure, if any. In addition, the ions of 31 U.S.C. Chap. 38, Administrative
Remedies for False Claims and Statements, apply	to this certification and disclosure, if any.
Signature of Contractor's Authorized Official	
Name and Title of Contractor's Authorized Official	
Date	

## FEDERAL STATE and LOCAL FISCAL RECOVERY FUNDS (SLFRF) PROJECT SPECIFIC REQUIREMENTS

The funding being used for this project is Federal State and Local Fiscal Recovery Funds (SLFRF). As a result, additional provisions apply and are included in this Attachment.

Each primary contracted contractor with the DTMB must register with the Federal System for Award Management (SAM) must register prior to contract execution. The SAM website is <a href="https://sam.gov/content/home">https://sam.gov/content/home</a>. The direct hyperlink for SAM.gov registration is <a href="https://sam.gov/content/entity-registration">https://sam.gov/content/home</a>. The direct hyperlink for SAM.gov registration is <a href="https://sam.gov/content/entity-registration">https://sam.gov/content/home</a>.

As of April 4, 2022, the Federal government will use a Unique Entity Identifier (UEI) created in SAM.gov as the official subrecipient identifier. All primary contracted contractors with the DTMB will be required to maintain an active registration on SAM.gov. To receive payment, all primary contracted vendors need to have a Unique Entity Identifier (UEI) number and have the UEI entered in their SIGMA account. Information on the UEI and sign up can be obtained at: <a href="https://www.gsa.gov/about-us/organization/federal-acquisition-service/office-of-systems-management/integrated-award-environment-jae/jae-systems-information-kit/unique-entity-identifier-update</a>

#### § 200.322 Domestic Preferences for Procurements

- (a) As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.
- (b) For purposes of this section:
  - (1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
  - (2) "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

Contractor is to fill in and provide the following documentation for use in SLFRF reporting prior to Contract Execution for use in the reporting requirements:

Contractor's UEI	
Contractor's Full Legal Nar	ne
Primary Point-of-Contact E	mail Address
Business Address	
City Business is located	
State Business is located	
US Zip Code + 4 digits	