

**Texas Commission on Environmental Quality (TCEQ)
Texas Emissions Reduction Plan (TERP)**

**NEW TECHNOLOGY IMPLEMENTATION GRANT (NTIG) PROGRAM
Project Application Instructions and Proposal**

**Electricity Storage Projects
TCEQ-20574c**

Solicitation No: 582-20-13118



A PROGRAM OF TCEQ

July 7, 2020

Applications will be accepted via mail, or electronic submission to TERP@tceq.texas.gov.

Regular Post Delivery

Texas Commission on Environmental Quality
Air Grants Division
NTIG, MC-204
P.O. Box 13087
Austin, Texas 78711-3087



Express Delivery

Texas Commission on Environmental Quality
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12100 Park 35 Circle
Austin, Texas 78753

PROJECT APPLICATION INSTRUCTIONS

These instructions are designed to guide applicants in preparing their grant application to apply for grants from the TCEQ New Technology Implementation Grant (NTIG) program.

Grant applicants are required to complete Application Form 20686 and the project implementation plan. Do not modify these instructions other than providing ample written responses to required questions. Applicants must also submit a completed W-9 form (Request for Taxpayer Identification Number and Certification Form) when submitting the application.

SECTION 1: APPLICATION FORM 20686

- Complete Application Forms 1, and 3 through 6 according to the instructions on those forms.
- Complete Application Forms 2 through 2.7 according to the instructions provided in Section 2: Budget Directions (below).

SECTION 2: BUDGET DIRECTIONS

Final budgets in the grant contracts will identify categories for which TCEQ has approved reimbursement.

- Detailed information about all grant funded expenses is particularly important, including clear categorization and itemization of all grant expenses under the budget categories listed in Section 2.1 below.
- Costs should be broken down so that partial funding could be considered for any grant.
- Include detailed information in the columns indicated for both costs budgeted for TCEQ reimbursement and the proposed matching costs.
- Expenses that are ineligible for reimbursement (e.g. indirect costs for for-profit institutions, food etc.) are not allowable as matching expenses.
- A supplemental budget for major subcontractors should also be included. This is particularly recommended for projects in which the subcontractor will be completing a major portion of the proposed grant-funded work.

The project budget cannot be held confidential for any reason. Applicants may supply supporting documentation for the budget that details confidential information, for example salaries or benefits for specific employees, but the overall budget must provide sufficient detail to demonstrate the eligibility of expenses and allow for clear connections to the supporting documentation for reimbursement.

SECTION 2.1: BUDGET CATEGORIES

The TCEQ will not reimburse any costs deemed to be ineligible. Please refer to Section 5 of the RFGA for more details.

In order to be eligible for reimbursement, costs documented on reimbursement forms must clearly be allocated to activities under the NTIG grant and fall under the categories shown below. An itemized invoice and proof of payment (cancelled check) will be required for reimbursement of all eligible costs. **The grantee is responsible for coordinating with the contractor to ensure any contractor's invoices provide this level of information.** In general, the categories of **Equipment** and **Supplies and Materials** allow for efficient allocation and reimbursement when compared to costs in other budget categories.

Eligible Budget Categories

- **Equipment:** Equipment is defined as non-construction related, tangible personal property having a unit acquisition cost of \$5,000 or more (including sales tax and delivery) with an estimated useful life of over one year. Equipment constructed with grant funds should be budgeted as equipment if the sum of the separate component parts (including tax and delivery) has an original value of \$5,000 or more. An itemized invoice and proof of payment (cancelled check) will be required for reimbursement of all equipment costs. At the sole discretion of the TCEQ equipment costs may be prorated for the project. Equipment costs that do not involve an arms-length transaction (e.g. use of inventory without a proof of purchase) are not reimbursable.
- **Supplies & Materials:** Supplies and materials are defined as non-construction related costs for goods and materials having a unit acquisition cost (including sales tax and delivery) of less than \$5,000. Basic items such as telephones, tools (wrenches, screwdrivers, etc.), and/or office supplies are considered to be a cost of doing business and will not be funded. Food and drink costs are not considered reimbursable expenses.
- **Construction:** Construction expenses are defined as the costs for enhancement or building of permanent facilities. Construction costs can include costs of planning, designing, and engineering; materials and labor connected with the construction, and any subcontracts including contracts for services in connection with the construction.
- **Contractual expenses:** Contractual expenses are defined as non-construction related costs for professional services or tasks provided by a firm or individual who is not employed by the applicant. Each subcontractor/consultant should be listed separately. Major subcontractors may need to submit a quote or itemized budget in support of the application budget.
- **Other Expenses:** Other expenses not falling under the other cost definitions should be itemized in this category.
- **Salaries & Fringe Benefits:** Include the costs of salaries for employees of the applicant to be funded under the grant. If you wish to keep the salaries of individual employees confidential you may complete the budget using position titles or roles rather than actual names, however you must also submit a legend of the actual names under the confidential portion. See Appendix C of the RFGA for more information. This category also includes

costs for fringe benefits for employees of the applicant to be funded under the grant.

- **Travel:** This category includes the cost of all travel by employees of the applicant to be funded under the grant. For governmental agencies and universities, travel costs may not exceed the charges normally allowed by the governmental unit under written travel policies. For non-governmental entities and governmental agencies that do not have an official travel policy that is consistent with the travel policies of the State of Texas, travel costs may not exceed the limits normally allowed for state employees under state travel regulations; current rates may be found at <https://fmx.cpa.state.tx.us/fm/travel/travelrates.php>. Regardless of the applicant's written travel policies, authorization must be requested from the TCEQ for reimbursement of expenses that exceed these amounts. Airfare costs should not exceed the customary standard (coach or equivalent) airfare. To be eligible for the maximum daily allowable rate, travel time must exceed 10 hours per day; beginning before 6:30 a.m. or ending after 6:30 p.m. Invoices or receipts will be required for reimbursement of all travel costs regardless of amount, and only actual expenses will be reimbursed.
- **Other Expenses:** Other expenses not falling under the cost definition above should be itemized in this category.

Non-Reimbursable Costs

The costs listed below will not be eligible for reimbursement as part of the total eligible project cost.

Indirect Costs include:

- overhead, rent, utilities, general and administrative expenses;
- general office supplies, telephones, tools (wrenches, screwdrivers, etc.) and other overhead costs that are considered to be a cost of doing business;
- costs not directly attributable to the grant-funded work, including facility improvements and equipment not directly associated with the equipment; or
- the purchase of testing equipment.

Other Costs include:

- permitting costs for TCEQ-issued permits;
- advertising or marketing costs, including the cost of the informational Internet webpage;
- costs related to the operation and maintenance of the grant-funded technology and projects required as SEPs;
- costs to reimburse the salary of any lobbyist registered in Texas;
- escalation, inflation, indeterminates and contingencies;
- insurance; or

- food or drinks.

SECTION 3: ELECTRICITY STORAGE PROJECT PROPOSAL OUTLINE

This outline is designed to guide applicants in preparing their project proposal for grants from the TCEQ NTIG program.

Grant applicants must answer the questions contained in this document. Please provide full and complete answers to the following questions. Applicants may provide as much detail as necessary. Applicants should submit a proposal using the sections and subsections below as an outline.

I. Project Summary

1. Please provide a brief summary of the project (150 words max).
2. Describe the project goals and objectives,
3. Describe how this electricity storage project relates to renewable energy.
4. Discuss the proposed technology's capability to provide reductions in emissions.
5. Provide a description of the technologies to be implemented and work to be done including labor, major equipment, or capital purchases. Describe the degree to which the technology or product is innovative and unique.
6. Explain any testing and analysis procedures that will be used to validate the performance of the proposed technology. (Though not required, the TCEQ may award points to applications that provide for a performance test on the proposed technology during the contract life.)
7. Describe and cite the existing research that supports the technical feasibility of the proposed technology. Discuss any challenges or limitations of the technology as identified by the research to date.
8. What is the capital cost per unit of energy storage capacity, \$ /kWh? What is the capital cost per unit of energy delivered, i.e., \$ / kWh? Please refer to the RFGA, Section 12.1 for instructions on computing cost effectiveness. Provide detailed explanations and calculations below.
9. Please include the table below in your proposal. Complete the table, detailing the technology's performance and attach all calculations.

Energy Storage Capacity	Technology Lifetime	Storage System Rated Power	Cycle Efficiency	Storage System Response Time	Cost Per 1kWh stored

10. Describe the energy efficiency attributes, if any, associated with this application.
11. Does this electricity storage project use natural resources originating or produced in the state of Texas? If yes, explain.
12. What is the implementation plan for this technology? Discuss how the applicant will operate and maintain the proposed technology during the contract term including the 5-year reporting period after final reimbursement is paid by the TCEQ.
13. Provide details about similar installations of the proposed technology (whether the applicant was directly involved or not). Discuss the success or failure of such installations.

Safety and Environmental Impact

14. Please include a full discussion of any safety issues and how they are addressed. Points may be subtracted if this information is inadequate or if there are outstanding safety issues.
15. Please include a full discussion of any potential impacts on the environment, such as increased emissions of pollutants or creation of hazardous waste and how they are addressed. Points may be subtracted depending on how the technology will impact other areas of the environment.

Applicant Qualifications and Experience

16. What qualifications does the applicant possess that will allow them to successfully complete the proposed project? Please identify any key personnel that will be involved on this project for the applicant. If the applicant is not the primary technology holder, describe the applicant's relationship to the primary technology holder and the technology holder's involvement in the project.
17. What prior experience does the applicant have with projects of this nature? What relevant prior experience do the key personnel have? Please clearly identify the number of relevant years of experience the applicant and the key personnel have with projects of this nature.
18. Please provide a description of your past and present compliance with environmental laws.
19. Please provide information on your financial stability and the economic benefits and job creation potential associated with the project. Please provide the documents listed below with the application package.

For the financial stability of an existing business, please include:

- 2-3 years of audited financial statements, including Single Audit, if applicable; and
- 2-3 years of tax returns.

For the financial stability of a new business, please include a:

- business plan; and
- proforma financial statement.

For information regarding economic benefits and job creation potential all applicants should include:

- NAICS code;
- payroll and benefits;
- number of employees (current and planned); and
- gross sales

20. Will the applicant be using any subcontractors? If so, please identify the subcontractors you anticipate using and the work they will do individually. If you have not currently identified a subcontractor for a particular task, then describe the nature of the work for which a subcontractor will be needed. Note that all subcontracts must be approved by the TCEQ prior to incurring contractual expenses. For each subcontractor, the TCEQ will require the subcontractor's implementation plan, names of key personnel, and budget detail which identifies the costs associated with each task to be performed by the subcontractor. Attach any letters of commitment from authorized officials of your subcontractor's organizations.

21. Please note that if a grant is awarded, the terms and conditions in the grant contract will be used and be controlling in the grant award. If there are any terms and conditions in the sample grant contract that you cannot agree to you MUST identify those in your application. Please also note that the TCEQ may not agree to any or all of the changes and may award the contract upon the sample grant contract.

II. Implementation Plan

Information provided in this section should focus exclusively on the project proposed for funding in this application. While it is appropriate in other portions of the application to discuss the broader or long-term plans for this technology, this section should only address work proposed for TCEQ funding.

Please provide a complete, detailed implementation plan for the project. The plan should include an introduction, project objectives, project schedule, and a work statement for each task under the project. The project should be broken down into a set of logical, specific tasks that are carried out sequentially or in parallel. Please note any significant decision points and the standard for determining project continuation or termination at these points.

The work statement for each task should explicitly identify:

- A detailed description of the steps to be completed under the task;
- The parties responsible for completing the task;
- The task timeline; and
- Grant deliverables for each task.

The implementation plan must also include the preparation and submission of detailed quarterly progress reports during the implementation period, a final implementation completion report, and annual operation reports for the duration of the grant.

The implementation plan outline provided below should be used as an example. The following instructions should be used when drafting the implementation plan:

- Add any necessary tasks not included in the outline by copying the same format as the included tasks and placing the new task in roughly chronological order by start date.
- Begin each task with a brief (sentence or two) description of the overall goal of the task. Provide more specific details than just the task title.
- Describe each step necessary to complete a task. Try to include steps in chronological order by start date. Task schedules should be timed from the project start (e.g. 6 months from project start). It may be useful to include a start and end date for tasks, but all other dates may be referenced in months as approximations.
- Deliverables should include all significant results from the work detailed in that stage (e.g. approved permit and/or final site plan) and any reasonable documentation of the completion of that stage (e.g. pictures of the installed equipment).

If the renewable energy source that will be tied to the electricity storage project is not constructed by the time of application submission, please include the construction and completion of the facility as a task within the implementation plan. Although the renewable energy source is material to timelines for the grant activities, it is not considered a reimbursable cost.

If the renewable energy source that will be tied to the electricity storage project is already constructed at the time of application, documentation showing proof of completion should be submitted with the application.

IMPLEMENTATION PLAN OUTLINE

Task 1: Secure rights to location

(Note: Grantees will not receive a final Notice to Proceed (NTP) authorizing reimbursement of the grant funds until Task 1 is completed and insurance coverage is received).

- A. Goal: Describe the goal of this task
- B. Steps: Detailed steps to be taken
 1. Step 1 description
 2. Step 2 description
 3. Etc.
- C. Schedule: Deadline for completion (e.g. 3 months from property rights being secured.)
- D. Deliverables: Deliverables for this task may include documentation of an executed lease agreement or proof of land ownership.

Task 2: Secure permits as necessary to install and operate project

- A. Goal: Describe the goal of this task
- B. Steps: Detailed steps to be taken
 1. Step 1 description

2. Step 2 description
 3. Etc.
- C. Schedule: Deadline for completion
- D. Deliverables: Deliverables for this task may include site plans, building permits, and/or proof of insurance.

Task 3: Specific project site preparation

- A. Goal: Describe the goal of this task
- B. Steps: Detailed steps to be taken
1. Step 1 description
 2. Step 2 description
 3. Etc.
- C. Schedule: Deadline for completion
- D. Deliverables: Deliverables for this task may include photographic documentation of physical site modifications or a report documenting all civil and structural work completed for delivery and setting of equipment.

Task 4: ERCOT Generation Interconnection

- A. Goal: Describe the goal of this task (e.g. apply for necessary interconnections, generation resource, and load resource)
- B. Steps: Detailed steps to be taken
1. Step 1 description
 2. Step 2 description
 3. Etc.
- C. Schedule: Deadline for completion
- D. Deliverables: Deliverables for this task should include Interconnection Agreement with ERCOT.

Task 5: Purchase of equipment and installation of project

- A. Goal: Describe the goal of this task
- B. Steps: Detailed steps to be taken
1. Step 1 description
 2. Step 2 description
 3. Etc.
- C. Schedule: Deadline for completion
- D. Deliverables: Deliverables for this task may include photographic evidence of equipment installation.

Task 6: Testing of final design

- A. Goal: Describe the goal of this task
- B. Steps: Detailed steps to be taken
 - 1. Step 1 description
 - 2. Step 2 description
 - 3. Etc.
- C. Schedule: Deadline for completion (e.g. 4 months from ERCOT generation interconnection)
- D. Deliverables: Deliverables for this task may include any relevant reports or test results.

Task 7: Implementation Period Reporting (identical for all grants)

- A. Goal: Prepare and submit quarterly detailed project implementation reports and a final implementation report while also ensuring compliance with all TCEQ program requirements
- B. Steps: Detailed steps to be taken
 - 1. Coordinate all project resources to ensure compliance with program requirements while providing deliverables on-schedule and on-budget.
 - 2. Generate quarterly progress reports and a final report verifying final completion of the facility.
 - 3. Create a webpage that describes the NTIG Grant project, funding, and point of contact for public inquiries.
- C. Schedule: Submit quarterly reports to the TCEQ on March 31, June 30, September 30, and December 31 of each year of the implementation period of the contract. Submit the final implementation report to complete this task within 2 years of the signed NTP date as issued by TCEQ.
- D. Deliverables: Submit quarterly progress reports and a final implementation report to the TCEQ upon completion of this task.

Task 8: Operation Period Reporting: Operate project for at least a five-year period (identical for all grants)

- A. Goal: Operate the project for at least a five-year period and report annually to the TCEQ on the status of the project operation
- B. Schedule: Fulfill this task for five years from the completion of the implementation period
- C. Deliverables: Submit annual operation status reports and final operations report to the TCEQ upon completion of this task. All reports will be made publicly available on TCEQ's informational website

Timeline: Please provide a Gantt chart or other timeline of all major project milestones and deliverables. All work must be completed within the time period specified in the

grant contract; therefore, the proposed timeline should allow adequate flexibility for meeting this deadline given any possible delays.