

Project Proposal Instructions for Electricity Storage Projects

New Technology Implementation Grant (NTIG) Program
Texas Emissions Reduction Plan (TERP)
Texas Commission on Environmental Quality (TCEQ)

Solicitation No: 582-23-41402-NG



This document provides guidance for preparing the project proposal and implementation plan to be submitted with TCEQ Application Form 20686 for a grant under the New Technology Implementation Grant (NTIG) Program.

If you have questions on how to complete a project proposal or implementation plan, please contact TERP staff at 512-239-4950 or TERP@tceq.texas.gov.

Key Events	Date and Time
Program Opening Date	February 3, 2023
Application Submission Deadline	April 4, 2023

PROJECT PROPOSAL INSTRUCTIONS

These instructions are designed to guide applicants in preparing a project proposal and implementation plan to be submitted with Application Form 20686 for a grant under the TCEQ New Technology Implementation Grant (NTIG) program.

All applications and project proposals for funding must be substantially complete and include:

- all pages of the application;
- all required attachments;
- applicant contact information;
- all required signatures; and
- all information necessary for TCEQ to review the application for selection according to the program requirements listed in the RFGA.

TCEQ will review applications and project proposals for completeness. If an application and/or project proposal is found to be incomplete, TCEQ will notify the applicant in writing and provide details about what is missing from the application and/or project proposal. Applicants will be provided a deadline of three (3) full business days to submit the missing information to TCEQ. The deadline will begin on the first full business day following the date the applicant was notified by TCEQ and will end at 5:00 p.m. CST on the third full business day. If the missing information is not received by TCEQ by 5:00 p.m. CST on the third full business day, the application will be determined ineligible by TCEQ.

SECTION 1: ELECTRICITY STORAGE PROJECT PROPOSAL OUTLINE

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 and how they align with the goals of the NTIG program.
3. Describe how this electricity storage project relates to renewable energy. Include documentation of ownership and operational control of both the electricity storage project and the renewable energy source.
4. Discuss the proposed technology's capability to provide reductions in emissions and any resulting potential air quality benefits.
5. Provide a description of the technologies to be implemented and work to be done including labor, major equipment, or capital purchases. Include the implementation status at the time of application.
6. Describe the degree to which the technology or product is innovative and unique.
7. Explain any testing and analysis procedures that will be used to validate the performance of the proposed technology.
8. 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.
9. 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 8.2.1 for instructions on computing cost effectiveness. Provide detailed explanations and calculations below.

10. 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	Duration of Discharge	Cost Per 1kWh Stored

11. Describe the energy efficiency attributes, if any, associated with this application.
12. Does this electricity storage project use natural resources originating or produced in the state of Texas? If yes, explain.
13. 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 TCEQ.
14. 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.
15. Please provide identifying numbers for the proposed project site, if any. This may include CN numbers, RN numbers, or any other identifying labels or numbers assigned by TCEQ, the Public Utility Commission of Texas, and the Railroad Commission of Texas. Include GPS coordinates and/or physical address of proposed project site.

II. Safety and Environmental Impact

1. Please include a full discussion of any safety issues and how they will be addressed. Include a safety plan for the energy storage system. Points may be subtracted if this information is inadequate or if there are outstanding safety issues.
2. 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 will be addressed. For battery energy storage projects please address any battery recycling plans. Points may be subtracted depending on how the technology will impact other areas of the environment.

III. Applicant Qualifications and Experience

1. 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. 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.
2. 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.
3. Please provide a description of your past and present compliance with environmental laws. Discuss any unresolved environmental compliance issues at the proposed site.
4. 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.

5. 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, describe the nature of the work for which a subcontractor will be needed. For each subcontractor, TCEQ will require the subcontractor's proposal or contract with the applicant including budget details that identify costs associated with each task to be performed by the subcontractor. Attach any letters of commitment from authorized officials of your subcontractor's organizations.
6. Please note that if a grant is awarded, the terms and conditions in the grant contract will be used and will 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 TCEQ may not agree to any or all of the changes and may award the contract based upon the sample grant contract.

IV. 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 proposal 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, annual operation reports for the duration of the grant, and a final operational report at the end of the contract life.

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. The renewable energy source must be operational and successfully connected and integrated with the energy storage system prior to reimbursement.

Costs related to the renewable energy source are not reimbursable but may be submitted for matching costs.

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 operation 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) 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. If the renewable energy source and/or land is not owned by the applicant, a lease agreement covering the duration of the TCEQ contract would be required.

Task 2: Secure permits as necessary to install and operate project (non-ERCOT)

- 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, all required permits including building permits, environmental permits, watershed permits, and 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)
1. Steps: Detailed steps to be taken
 2. Step 1 description
 3. Step 2 description
 4. Etc.
- B. Schedule: Deadline for completion
- C. Deliverables: Deliverables for this task should include the Interconnection Agreement with ERCOT.

Task 5: Execution of contracts and purchase of equipment

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

Task 6: Installation: construct and interconnection to the renewable energy source

- 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 the final issuance of the NTP).
- D. Deliverables: Deliverables for this task may include documentation of installation of equipment, and a report that includes an overview of the installation and commissioning of the site. TCEQ is not obligated to reimburse funds prior to the installation of the project at the specific project site and successful connection and integration with the renewable energy source.

Task 7: 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 the final NTP).
- D. Deliverables: Deliverables for this task may include any relevant reports or test procedures and results. If applicable include the ERCOT and/or Public Utility Commission (PUC) agreements to begin commercial operations.

Task 8: 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 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 Limited NTP date as issued by TCEQ.
- D. Deliverables: Submit quarterly progress reports and a final implementation report to TCEQ upon completion of this task. All reports will be made publicly available on TCEQ's website.

Task 9: 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 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 TCEQ upon completion of this task. All reports will be made publicly available on TCEQ's website.

V. 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.