

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

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

**Electricity Storage Projects  
TCEQ – 20574c**

**Solicitation No. 582-17-70324**



**Application Deadline:  
NTIG grant applications due 5:00 p.m., Central Time, October 18, 2016**

**Implementation Grants Section (NTIG), MC-204  
Air Quality Division  
Texas Commission on Environmental Quality (TCEQ)  
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# NEW TECHNOLOGY IMPLEMENTATION GRANT (NTIG) PROGRAM

## Project Application Instructions: Electricity Storage Projects TCEQ – 20574c

### APPLICATION INSTRUCTIONS

These instructions are designed to guide applicants in preparing their grant application to apply for grants from the Texas Commission on Environmental Quality (TCEQ) New Technology Implementation Grant (NTIG) program. Upon submission, all proposals become the property of the State of Texas and as such become subject to public disclosure under the Texas Public Information Act (PIA), Texas Government Code, Chapter 552.

The project eligibility criteria and types of purchases eligible under this program are more fully explained in the TCEQ's *New Technology Implementation Grants: Guideline for Grants* (RG-484). In addition, the TCEQ will periodically issue a Request for Grant Applications (RFGA) which outlines the grant application deadlines and provides further instructions for applying for a grant. Applicants should first review the RFGA before completing the application forms.

Grant applicants must answer the questions contained in this document in a format of their own creation. Grant applicants are required to respond to each and every section and subsection following the directions herein. Do not modify these instructions other than providing ample written responses to required questions. In addition to filling out and submitting one of the Instructions documents (20574a, 20574b, or 20574c), the application submission **MUST** be submitted with a completed Excel Project Application Form 20686 and Excel Project Budget Form 20687. Applicants must also submit a completed W-9 form (Request for Taxpayer Identification Number and Certification Form) when submitting the application.

Do not submit any confidential / proprietary information anywhere in this application except as instructed in Section 4. You agree that you waive any claim of confidentiality you may have in any information you submit in any part of this application other than Section 4 even if you have marked it confidential.

Any information the applicant wishes to protect from public disclosure **MUST** be clearly marked ***“Confidential/ Proprietary: inform applicant & seek AG opinion before releasing”*** on every page and **MUST** be submitted as instructed in Section 13 of the application. Any information that is so marked and submitted in Section 4, if requested under the PIA, will be sent by the TCEQ to the Texas Attorney General (AG) for a decision on whether it may be withheld. Note that the AG may determine that the information is not confidential and therefore must be released. TCEQ will inform the applicant of the request for the AG's decision but will make no arguments in support of the request. It is the responsibility of the applicant to explain the basis for its claim that the information is confidential to the AG.

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**SECTION 1: PROJECT SUMMARY**

In a format of your own choosing, please provide full and complete answers to the following questions. Applicants may provide as much detail as necessary.

**Project Description**

1. Describe the project goals and objectives.
2. Describe how this electricity storage project relates to renewable energy.
3. Discuss the proposed technology's capability to provide significant reductions in emissions.
4. 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.
5. 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.)
6. Describe 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.
7. 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 Request for Grant Applications (RFGA, Section 3.3) for instructions on computing cost effectiveness. Provide detailed explanations and calculations below.
8. Please include the table below in your application. Complete the table, detailing the technology's performance and attach all calculations. Provide details about missing or non-applicable information.

Duration of Discharge (at maximum power level)	Rated Power	Response Time	Expected Number of Charge-Discharge Cycles Over Life of Technology	Round-Trip Cycle Efficiency	Estimated Lifetime (at 80% depth of discharge)

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

### **Safety and Environmental Impact**

13. 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.
14. 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**

15. 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.
16. 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.
17. Please provide a description of your environmental experience as well as information relating to past and present compliance with environmental laws.
18. Please provide information on your financial stability and the economic benefits and job creation potential associated with the project for review by the Texas Comptroller of Public Accounts. Please provide the following documents with the application package:

#### **For the financial stability of an existing business:**

- 3-5 years of audited financial statements
- 3-5 years of tax returns

#### **For the financial stability of a new business:**

- business plan
- pro forma 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)
- gross sales

19. 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 scope of work, 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.

20. Please provide evidence of insurance as required under Texas Govt. Code 2261.102:

*The contractor is required to carry director or officer liability insurance coverage in an amount not less than the value of the contract that is sufficient to protect the interests of the state in the event an actionable act or omission by a director or officer of the contractor damages the state's interests.*

If proof of such insurance is not provided with this application, it must be supplied before work may begin.

21. Please note that if a grant is awarded, the Terms and Conditions in the sample 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 below. If you need additional space please use an attachment. Please also note that the TCEQ may not agree to any or all of the changes and may award the contract upon the sample contract.

## **SECTION 2: SCOPE OF WORK**

In a format of your own choosing, 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.

**Scope of Work:** Please provide a complete, detailed Scope of Work (SOW) for the project. The scope 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. 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 the following elements:

- a detailed description of the work to be carried out under the task broken out into clear steps;
- the parties responsible for completing the task;
- the task completion date (i.e. the due date for deliverables); and
- the grant deliverables for each task.

The SOW 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 following SOW outline should be used. Additional instructions for using the SOW outline are listed below:

- 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 for all tasks. Try to include steps in chronological order by start date.
- Task deadlines should be timed from project start (e.g. 6 months from project start). It may be useful to include a start and end date for tasks.
- Deliverables should include all significant results from the work detailed in that stage (e.g. approved permit, final site plan) and any reasonable documentation of the completion of that stage (e.g. pictures of the installed equipment).

### **Sample Scope of Work Outline**

#### **Implementation Period**

##### **Task 1: Secure rights to location**

**(Note that grantees will not receive a Notice to Proceed authorizing reimbursement of the grant funds until this task is completed)**

- A. Goal: Description of goal of this phase
- B. Steps: Detailed steps to be taken
  1. Step 1 description
  2. Step 2 description
  3. Etc.
- C. Deadline: Deadline for completion
- D. Deliverables: Deliverables for this task

##### **Task 2: Secure all necessary permits to install and operate project**

- A. Goal: Description of goal of this phase

- B. Steps: Detailed steps to be taken
  - 1. Step 1 description
  - 2. Step 2 description
  - 3. Etc.
- C. Deadline: Deadline for completion
- D. Deliverables: Deliverables for this task

**Task 3: Specific project site preparation**

- A. Goal: Description of goal of this phase
- B. Steps: Detailed steps to be taken
  - 1. Step 1 description
  - 2. Step 2 description
  - 3. Etc.
- C. Deadline: Deadline for completion
- D. Deliverables: Deliverables for this task

**Task 4: Purchase and installation of project**

- A. Goal: Description of goal of this phase
- B. Steps: Detailed steps to be taken
  - 1. Step 1 description
  - 2. Step 2 description
  - 3. Etc.
- C. Deadline: Deadline for completion
- D. Deliverables: Deliverables for this task

**Task 5: Testing of final design**

- A. Goal: Description of goal of this phase
- B. Steps: Detailed steps to be taken
  - 1. Step 1 description
  - 2. Step 2 description
  - 3. Etc.
- C. Deadline: Deadline for completion
- D. Deliverables: Deliverables for this task

**Task 6: Reporting (identical for all grants)**

- A. Goal: The PERFORMING PARTY will prepare and submit quarterly detailed project reports and a final report while 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.
- C. Deadline: 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 report to complete this task within 2 years of the signed Notice to Proceed Date as issued by TCEQ.
- D. Deliverables: The PERFORMING PARTY shall submit quarterly progress reports with associated billing statements and a final implementation report to the TCEQ upon completion of this task.

### **Operation Phase**

#### **Task 7: Operate project for at least a five year period (identical for all grants)**

- A. Goal: The PERFORMING PARTY will operate the project for at least a five year period and report to the TCEQ on the status of the project operation.
- B. Deadline: Five years from the completion of the Implementation period.
- C. Deliverables: Annual operation status reports and final operations report.

**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. Grantees should be prepared to begin work soon after notification of award, contract execution, and receipt of a signed Notice to Proceed; however, the timeline for the proposed work should begin no sooner than three months after the close of the RFGA.

### **SECTION 3: PROPOSED BUDGET**

Submit a project budget using Form 20687. Include detailed information about both costs budgeted for TCEQ reimbursement with grant funds and costs proposed as cost share. ***Detailed information about all grant funded expenses is particularly important, including clear categorization and itemization of all grant expenses under the budget categories below.***

Complete and submit a project budget using the provided Excel worksheet. Include detailed information in the columns indicated for both costs budgeted for TCEQ reimbursement and the proposed cost share. 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 can 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 TCEQ prefers to reimburse costs for equipment and supplies and materials since these costs are easier to assess and subsequently reimburse than costs in other budget categories.

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.

### **Budget Categories (as listed in Form 20687)**

- A. 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 to be purchased must be identified and may become the property of the TCEQ. The purchase of testing equipment will not be funded through this program. 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 invoice and cancelled check as proof of payment will be required for reimbursement of all equipment costs. Equipment costs that do not involve an arms-length transaction (e.g. use of inventory without a proof of purchase) are not reimbursable.
- B. Supplies & Materials:** Supplies & 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.), office supplies, etc., are considered to be a cost of doing business and will not be funded. An invoice and cancelled check as proof of payment will be required for reimbursement of all supplies greater than \$500 in value. The TCEQ cannot reimburse for food or drink as Supplies.
- C. 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.
- D. Contract Services:** 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.
- E. Other Expenses:** Other expenses not falling under the other cost definitions should be itemized in this category. The TCEQ cannot reimburse for food or drink as 'Other.' Overhead expenses such as rent and utilities fall under Indirect Costs.

- F. 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, Section 4. The TCEQ cannot reimburse for salaries of lobbyists registered in the state of Texas. This category also includes costs for fringe benefits for employees of the applicant to be funded under the grant.
- G. 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://fm.xcpa.state.tx.us/fm/travel/travelrates.php>. As a default rate for budgeting purposes, for FY16 allow **\$85** per day for lodging; **\$36** per day for non-overnight meals, **\$51** per day for overnight meals, and **54 cents** per mile for personal vehicle use. 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.

## **SECTION 4: CONFIDENTIAL INFORMATION**

### **Confidential Information**

Information submitted to the TCEQ is subject to release under the Texas Public Information Act (PIA). Determinations regarding the release of information are made by the Office of the Attorney General (AG). Any submitted information the applicant wishes to protect from public disclosure **MUST** be clearly marked "**Confidential/Proprietary: inform applicant & seek AG opinion before releasing**" on every page and **MUST** be submitted in a brown envelope in Section 4 of the application and nowhere else. Any information that is so marked and submitted in Section 4, if requested under the PIA, will be sent by the TCEQ to the AG for a decision on whether it may be withheld. Note that the AG may determine that the information is not confidential and therefore must be released. The TCEQ will inform the applicant of the request for the AG's decision but will make no arguments in support of the request. It is the responsibility of the applicant to explain the basis for its claim that the information is confidential to the AG.