

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

**NEW TECHNOLOGY IMPLEMENTATION GRANT (NTIG) PROGRAM
Request for Grant Applications (RFGA) Fiscal Year (FY) 2017**

Solicitation No. 582-17-70324



**July 18, 2016
Return Applications to:
Implementation Grants Section (NTIG), MC-204
Air Quality Division
Texas Commission on Environmental Quality (TCEQ)
P.O. Box 13087
Austin, Texas 78711-3087
1-800-919-TERP (8377)**

This page intentionally left blank

Applications will be accepted for consideration during this grant period only if received at the front desk, Room 1301, 1st floor of Building F on the premises of the TCEQ (12100 Park 35 Circle, Austin, TX, 78753) by no later than 5:00 p.m. Central Time, October 18, 2016. Applications received in the TCEQ mail room on this date are not guaranteed to be delivered to Room 1301 by the required deadline, so applicants are encouraged to plan their submissions accordingly.

This page intentionally left blank

1.0 INVITATION	1
1.1 PURPOSE.....	1
1.2 NTIG GOALS	1
1.3 PROGRAM GUIDELINES.....	1
1.4 PROGRAM ALIGNMENT	1
1.5 ELIGIBLE APPLICANTS	2
1.6 ELIGIBLE PROJECT CATEGORIES	2
1.6.1 <i>ADVANCED CLEAN ENERGY PROJECTS FOR NEW OR MODIFIED SOURCES</i>	2
1.6.2 <i>NEW TECHNOLOGY PROJECTS THAT REDUCE EMISSIONS OF REGULATED POLLUTANT FROM POINT SOURCES</i>	3
1.6.3 <i>ELECTRICITY STORAGE PROJECTS RELATED TO RENEWABLE ENERGY</i>	4
1.7 ADOPTED BASELINE FOR EMISSIONS REDUCTIONS COMPARISON FOR NEW FACILITIES	4
1.8 EMISSIONS REDUCTIONS CAPABILITY.....	5
1.9 INTELLECTUAL PROPERTY AND PATENTS.....	5
1.10 PROJECT IMPLEMENTATION.....	5
1.11 CONFIDENTIALITY OF TEST RESULTS	6
1.12 ELIGIBLE ACTIVITIES AND COSTS.....	7
1.13 MARKETABLE EMISSION REDUCTION CREDITS	7
1.14 PROOF OF INSURANCE.....	8
1.15 GRANT ADMINISTRATION AND REIMBURSEMENT OF EXPENSES	8
1.16 INDIRECT COSTS.....	9
1.17 FUNDING	9
1.18 ADDITIONAL REQUIREMENTS.....	10
2.0 APPLICATION PROCESS	10
3.0 SELECTION SCORING CRITERIA	12
3.1 ADVANCED CLEAN ENERGY PROJECTS FOR NEW OR MODIFIED SOURCES	12
3.2 NEW TECHNOLOGY PROJECTS THAT REDUCE EMISSIONS OF REGULATED POLLUTANT FROM POINT SOURCES	15
3.3 ELECTRICITY STORAGE PROJECTS RELATED TO RENEWABLE ENERGY	18
4.0 APPLICATION REVIEW AND SELECTION PROCESS	20
APPENDIX A: LIST OF NONATTAINMENT AREAS AND AFFECTED COUNTIES	21

This page intentionally left blank

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

**NEW TECHNOLOGY IMPLEMENTATION GRANT (NTIG) PROGRAM
Request for Grant Applications (RFGA) Fiscal Year (FY) 2017**

1.0 INVITATION

The Texas Commission on Environmental Quality (TCEQ) invites applications for the three categories under the NTIG program; Advanced Clean Energy, New Technology, and Electricity Storage projects.

1.1 PURPOSE

The primary objective of the NTIG program is to offset the incremental cost of the implementation of existing technologies that reduce the emission of pollutants from facilities and other stationary sources which may also include energy storage projects in Texas.

1.2 NTIG GOALS

The goals of the NTIG are to:

- Improve the quality of air in Texas in order to meet federal standards established under the Federal Clean Air Act (42 U.S.C. Section 7407).
- Facilitate the implementation of new technologies to reduce emissions from facilities and other stationary sources in this state.
- Adequately fund the implementation of new technologies that will make the state a leader in new technologies that can solve the state's environmental challenges while creating new business and industry in the state.

1.3 PROGRAM GUIDELINES

The guidelines, grant application forms, and a sample contract may be viewed and downloaded from the TERP website at < www.terpgrants.org>. The materials may also be obtained by calling the Texas Emissions Reduction Plan (TERP) program at 1-800-919-TERP (8377).

To be eligible for funding consideration, grant applications must be prepared and submitted in accordance with this notice, the guidelines, and the instructions included with the application form.

1.4 PROGRAM ALIGNMENT

The TCEQ will evaluate project proposals based on the applicant's responses in the NTIG application forms 20686 and 20574a, 20574b, or 20574c. During the review and scoring process, projects that are most aligned with program goals will receive more program alignment points (Section 3.1 Scoring Criteria). The elements of program alignment include the emissions reductions capability, the implementation plan, the compliance history of the applicant and other related facilities, and the extent to which the proposed project would advance NTIG and air quality goals, outlined in Section 1.2 of this document.

1.5 ELIGIBLE APPLICANTS

The owner of a facility located in Texas who intends to implement an Advanced Clean Energy project, New Technology project, or Electricity Storage project related to renewable energy in Texas may apply for a grant. However, in some circumstances, the TCEQ may allow a person other than the owner to apply for and receive a grant. Applicants must provide evidence of operational control of the facility in the application and for the duration of the contract after the TCEQ has paid final reimbursement. If an applicant is unable to provide evidence of operational control of the facility, the applicant must contact the TCEQ to determine whether the applicant may be considered eligible for a grant before submitting the application. The TCEQ may consider an application or award a grant prior to receipt of evidence of operational control of the facility and may issue a limited Notice to Proceed pending proof of operational control by the applicant. All applicants must certify that the entity is in compliance with all applicable Texas laws.

If the applicant plans to subcontract any work, applicants are encouraged to identify activities that could be performed by historically underutilized businesses (HUB). The TCEQ's Purchasing Section and HUB Development Section maintain current lists of certified HUB vendors and can assist applicants in identifying potential HUB subcontractors.

1.6 ELIGIBLE PROJECT CATEGORIES

1.6.1 ADVANCED CLEAN ENERGY PROJECTS FOR NEW OR MODIFIED SOURCES

Applications under this category must meet the following minimum requirements:

- TCEQ must have received on or after January 1, 2008, an application for a permit, or for an authorization to use a standard permit, for the facility in this application.
- Applicant must be the owner or licensed operator of the facility located in Texas, or has received written approval from the TCEQ to apply for a grant.
- Applicant must use the program-designated baseline example for all emission reduction calculations, if a new facility.
- Project must involve the use of:
 - Coal,
 - Biomass,
 - Natural gas,
 - Petroleum coke,
 - Solid waste, or
 - Fuel cells which use derived hydrogen,in the generation of electricity, or the creation of liquid fuels outside of the existing fuel production infrastructure while co-generating electricity.

- Project must meet the minimum emissions reductions requirements listed directly below:
 - **Sulfur dioxide (SO₂)**
 - 99 percent (%) or greater reduction of SO₂ emissions on an annual basis, or
 - if the project is designed for the use of feedstock, substantially all of which is sub-bituminous coal, an emission rate of 0.04 lbs SO₂ or less per million British thermal units (MMBtu) as determined by a 30-day average, or
 - if the project is designed for the use of one or more combustion turbines that burn natural gas, a SO₂ emission rate that meets best available control technology requirements as determined by TCEQ.
 - **Mercury (Hg)**
 - 95% or greater reduction of Hg emissions on an annual basis, or
 - if the project is designed for the use of one or more combustion turbines that burn natural gas, a mercury emission rate that complies with applicable federal requirements.
 - **Nitrogen oxide (NO_x)**

An annual average NO_x emission rate of:

 - 0.05 lbs or less per MMBtu, or
 - if the project uses gasification technology, 0.034 lbs or less per MMBtu, or
 - if the project is designed for the use of one or more combustion turbines that burn natural gas, two parts per million by volume.
 - An annual average emission rate for filterable particulate matter (PM) of 0.015 lbs or less per MMBtu.
 - Projects in this category must also capture not less than 50% of the carbon dioxide (CO₂) in the portion of the emissions stream from the facility that is associated with the project and sequester that captured CO₂ by geologic storage or other means.

1.6.2 NEW TECHNOLOGY PROJECTS THAT REDUCE EMISSIONS OF REGULATED POLLUTANT FROM POINT SOURCES

Applications under this category must meet the following minimum requirements:

- Applicant must be the owner or licensed operator of the facility located in Texas or has received written approval from the TCEQ to apply for a grant.
- Project must reduce emissions of regulated pollutants from point sources. Regulated pollutants include but are not limited to:
 - Criteria pollutants
 - Hazardous air pollutants (HAPs)
 - Any other pollutants regulated under the Federal Clean Air Act
 - Any other pollutants subject to requirements under TCEQ rules, regulations, permits, orders of the commission, or court orders

1.6.3 ELECTRICITY STORAGE PROJECTS RELATED TO RENEWABLE ENERGY

Applications under this category must meet the following minimum requirements:

- Applicant must be the owner or licensed operator of the facility located in Texas or has received written approval from the TCEQ to apply for a grant.
- Applicant must propose an Electricity Storage project related to renewable energy in Texas. These projects may include electricity storage produced from wind and solar generation that provide efficient means of making the stored energy available during periods of peak energy use.
- Applicant must clearly demonstrate how the Electricity Storage project is “related to renewable energy.”
- Applicant must propose an Electricity Storage project with rated power of one megawatt (MW) or greater.

1.7 ADOPTED BASELINE FOR EMISSIONS REDUCTIONS COMPARISON FOR NEW FACILITIES

An application to the NTIG program must demonstrate an achieved reduction from the baseline emissions adopted by the TCEQ for the relevant source. If one does not exist, the TCEQ shall adopt an appropriate baseline emissions level for comparison purposes. This is applicable only for the Advanced Clean Energy and New Technology project categories.

For an existing facility, the projected emissions, with the advanced pollution control technologies installed, shall be compared to the historical emissions of that particular facility.

For a new facility, the projected emissions, with the advanced pollution control technologies installed, shall be compared to the baseline adopted by the TCEQ, detailed below. Only new facilities can use this baseline for comparison purposes. This baseline covers only those pollutants in section 1.6.1 of this document that require a percentage reduction. Other pollutants in section 1.6.1 require a specific, target emissions rate, and are not covered by this baseline.

Baseline emissions levels:

Mercury (Hg) – 95% reduction from **[1.75 * 10E-4] pounds per million British thermal units (lbs / MMBtu)**

Sulfur dioxide (SO₂) – 99% reduction from **[4.0 lbs / MMBtu]**

1.8 EMISSIONS REDUCTIONS CAPABILITY

An application for an Advanced Clean Energy or New Technology project under this NTIG solicitation must show reasonable evidence that the proposed technology is capable of providing a significant reduction in emissions. In performing emissions reductions calculations or emissions calculations in general, NTIG applicants may refer to the Environmental Protection Agency's (EPA) AP-42 *Compilation of Air Pollutant Emission Factors* for guidance. The TCEQ acknowledges that each grant proposal may be unique, so the applicant may select the best available and most accurate methodology to provide calculations. The TCEQ's Office of Permitting and Registration will review all emissions data provided by the applicant and will assess the accuracy of the data and whether the applicant used an appropriate methodology.

For emissions reductions capability, applicants should also address the processes used by the facility, the fuel or feedstock used, and other attributes of the project that enhance this capability. Any claims of emissions reductions must be supported by the information provided in the application. All calculations should be thoroughly documented in the application.

1.9 INTELLECTUAL PROPERTY AND PATENTS

The TCEQ does not intend to fund the development of any technologies under the NTIG program.

If grant funds awarded through this program are used to develop a technology which is later patented, including the payment of fees associated with obtaining the patent, all ownership rights in any technology developed will remain with the grantee. However, the TCEQ will require the grantee to grant the TCEQ a permanent, royalty-free license pursuant to the terms and conditions in the sample contract (see Intellectual Property provision), so that the TCEQ would not subsequently be required to pay license fees for its own use of a product created or developed with the use of TCEQ funding. The same requirements apply to other forms of intellectual property protection, such as computer software code protected by copyright.

PLEASE NOTE: The sample contract contains terms and conditions which are standard provisions for grants awarded in the NTIG program. The TCEQ may negotiate terms and conditions with the grantee under circumstances which may allow for certain modifications or additions. Applicants **MUST** identify in the application any concerns with terms and conditions in the sample contract.

1.10 PROJECT IMPLEMENTATION

The primary purpose of this program is to facilitate the implementation of existing technologies that may be used to achieve approvable emission reductions under the TERP and/or State Implementation Plan. To that end, the TCEQ requires applicants to provide a substantial project implementation plan to maximize the likelihood that the technology will be implemented in Texas as soon as practicable after the date of the application for funding. The project implementation plan must also demonstrate the applicant's ability to operate and maintain the technology for the duration of the contract including the five-year reporting period after TCEQ has paid final reimbursement.

Regardless of the implementation schedule contained within the project implementation plan, the TCEQ will require the grant-funded project to be implemented by May 31, 2019. The project implementation plan must provide project information and education to the public in the areas subject to public notice under federal and state permitting requirements for the proposed project until completion of the permitting process. The plan must provide for a publicly accessible informational Internet website.

The TCEQ will not require the repayment of grant money except in the case of non-compliance with certain grant requirements. It is a grant requirement that a grantee proceed in good faith with all steps towards project implementation, as outlined in its Approved Application, and with all other reasonable steps necessary to ensure the project's successful implementation. In order to monitor the grantee's progress with its implementation plan, the TCEQ will monitor progress with the implementation plans and quarterly progress reports. Additionally, the TCEQ and the Texas Comptroller of Public Accounts may audit a grantee's progress at any time during the grant. If the TCEQ determines that a grantee is not making sufficient progress towards the goal of implementation, the TCEQ may require a revised implementation plan to demonstrate how implementation will be achieved given the current circumstances of the project. If, after reviewing the revised implementation plan, the TCEQ determines in its reasonable judgment that implementation is no longer likely, or the grantee so advises the TCEQ, the TCEQ may invoke the grant contract provisions governing failure to implement.

1.11 CONFIDENTIALITY OF TEST RESULTS

All information received by the TCEQ in connection with the application for a grant and the completion of grant activities, including testing to establish the actual quantities of air contaminants being emitted into the atmosphere, becomes the property of the State of Texas and, as such, is subject to public disclosure under the Texas Public Information Act (PIA), Texas Government Code, Chapter 552. Application materials such as budgets and scopes of work cannot be held confidential. Any information regarding testing, including summary results of testing, which is necessary for the verification and certification and the administration of this grant program will be subject to public disclosure. The TCEQ also intends to publish reports and test results on its webpage.

If the grantee believes that there is any confidential and/or proprietary information contained in its test results or any other material submitted to the TCEQ, the grantee must follow the same procedures laid out for the submittal of confidential and/or proprietary information in its application. All confidential and/or proprietary information **MUST** be clearly marked "**Confidential/Proprietary: inform applicant & seek AG opinion before releasing**" on every page, and must be submitted separately from all other material. Any information that is so marked, 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.

1.12 ELIGIBLE ACTIVITIES AND COSTS

An activity is not eligible if it is required by state or federal law, rule, regulation, memorandum of agreement, or other binding document, unless approved by the TCEQ.

Eligible activities are those that are directly related to the success of the project. All costs should be specifically detailed in the application package.

The TCEQ will not pay for any costs related to the operation and maintenance of the grant-funded technology. The TCEQ will also not pay for any projects required as Supplemental Environmental Projects (SEP). At the sole discretion of the TCEQ, equipment costs may be prorated for the project. Other items such as telephones, tools (wrenches, screwdrivers, etc.), office supplies, and other overhead costs are considered to be a cost of doing business and will not be covered. The TCEQ will not pay for any advertising or marketing costs, including the cost of the informational Internet website.

Generally, any cost incurred prior to the issuance of a Notice to Proceed (NTP) will not be considered as eligible for funding, including the cost of preparation of the project application. However, the TCEQ reserves the right, in its sole discretion, to fund certain costs incurred prior to the NTP or even prior to signature of a grant agreement, on a case-by-case basis, if those costs have been clearly identified in the application and doing so will further the objectives of the NTIG program. The TCEQ provides no assurances that a project will be awarded a grant, and the TCEQ has no liability for expenses incurred by an applicant prior to the execution of a grant contract, unless and until those activities and expenses are selected for a grant and included under a signed grant contract.

TCEQ funds cannot be expended for food or lobbying purposes. As a result, no grant funds may be used to reimburse the salary of any lobbyist registered in Texas. All grant funds must be expended in a manner consistent with all applicable cost principles from 30 TAC 14.10 and the Uniform Grant Management Standards (UGMS) 34 TAC Chapter 20, Sections 20.421-32. The TCEQ particularly encourages applicants to review the UGMS when developing application budgets.

1.13 MARKETABLE EMISSION REDUCTION CREDITS

A project involving implementation of emission reduction technology that would otherwise generate marketable credits under state or federal emissions reduction credit averaging, banking, or trading programs is not eligible for funding under this program unless:

- 1) the project includes the transfer of the reductions that would otherwise be marketable credits to the State Implementation Plan or the owner or operator as provided by Section 386.056, Texas Health and Safety Code (THSC); and
- 2) the reductions are permanently retired.

1.14 PROOF OF INSURANCE

The applicant will be required to supply proof that it is insured for project completion, replacement, and liability. Project completion/replacement insurance shall be sufficient to cover lost equipment and time/effort in case of a disaster. The sample contract shell contains examples of the types and amounts of insurance required for a project funded under the NTIG program. These examples are given for illustrative purposes only and are not intended to comprise the final, comprehensive list of insurance requirements, which are subject to negotiation depending on the risk concerns of a specific project.

1.15 GRANT ADMINISTRATION AND REIMBURSEMENT OF EXPENSES

- a. Entities selected to receive grant funding will be required to sign a contract with the TCEQ. All services or work carried out under a contract awarded as a result of this RFGA must be completed within the scope, time frame, and funding limitations specified in this contract. A copy of the contract shell is available on the NTIG web page.
- b. In order to ensure that all revenue received by the TCEQ for this program is used, the TCEQ may select projects and award contracts that may ultimately exceed the amount of revenue received. Grant contracts will include a "Notice to Proceed" (NTP) clause and will specify that reimbursements are contingent upon the TCEQ receiving sufficient revenue to cover the grant. The TCEQ will provide a written NTP to the grantee when/if revenue is available to cover the grant. Any expenses incurred by the grantee prior to receiving the NTP will be at the grantee's own risk.
- c. Payments will be made on a reimbursement basis for eligible expenses incurred by the grantee. There will be no pre-payment of expenses by the TCEQ. Requests for reimbursement may be submitted to the TCEQ no more frequently than monthly. Grantees will be required to provide documentation to show that equipment or services have been received and the expenses incurred, before reimbursement is provided by the TCEQ. For a cost to have been incurred, it must actually have been paid unless the grant contract specifically authorizes the grantee to use accrual-based accounting (which must be in accordance with Generally Accepted Accounting Principles (GAAP) and the grantee's regular accounting system). The grant contract will also specify other requirements which must be met to document costs.
- d. Reports on the progress of completing the project activities will be required on a quarterly basis, or as specified by the contract, even if no expenses are submitted for reimbursement during that time. Reports should be easily understood by the general public although technical attachments may also be included as necessary. All reports will be posted to the TCEQ website. Reports should include a brief overview of the project, identification number, date of the report, the status of the project at the end of the reporting period, and a forecast of the work remaining to be performed. Any issues that have been identified that may affect the budget, timeline, or implementation of the project should be brought to the attention of the Grant Manager as soon as possible.
- e. Applicants must notify the TCEQ of any termination or change in the project.

- f. Activities funded under this RFGA must be completed and all costs must be incurred by May 31, 2019. The grantee must notify the TCEQ in writing if a project is expected to require a longer period of time to be completed.
- g. The grantee must complete and obtain from the TCEQ final written approval/acceptance of all project activities and deliverables before the end of the grant contract term and prior to payment of the final reimbursement request. All final requests for reimbursement must be submitted by July 15, 2019.

1.16 INDIRECT COSTS

The decision to allow indirect charges rests solely with the TCEQ. Indirect costs may be authorized only if the TCEQ determines that allowing indirect costs (in whole or in part) will significantly enhance the project's benefit to the state in terms of the schedule for or effectiveness of implementation, or similar factors directly related to the statutory objectives of the program.

For the purposes of this RFGA indirect costs will only be allowed, either as reimbursement or matching funds, for academic institutions and governmental agencies that have an audited or approved indirect rate. The maximum indirect rate reimbursed with NTIG grant funds will be 15%. Actual or audited indirect costs above this amount may be included in the budget for academic institutions and governmental entities only as matching funds.

If indirect costs are authorized by the TCEQ, the grantee shall comply with all applicable cost principles from 30 TAC 14.10 and the UGMS, and the TCEQ Allowable Cost Principles. Indirect cost requirements may be obtained by contacting the NTIG Program Coordinator.

1.17 FUNDING

The potential funding available under this RFGA is \$3.5 million for FY 2017, of which \$1 million will be set aside for Electricity Storage projects related to renewable energy. The TCEQ will not be obligated to select project proposals to cover the full amount of available funding and reserves the right to cancel the RFGA without awarding any grant funds.

Applications under this grant will be required to have a minimum cost share or matching funds of 50% of all costs (THSC §391.204). Grantees will be required to report on the actual expenditure of these matching funds but will not be required to submit the same supporting documentation as for costs for reimbursement.

Project funding may not be moved from one budget category to another, without written approval by the TCEQ.

1.18 ADDITIONAL REQUIREMENTS

The following requirements apply to the selection, award, and subsequent grant contracts in addition to all other requirements described in this RFGA.

- a. The TCEQ may make selection for funding contingent upon agreement by the applicant with additional conditions or changes to the project pertaining to equipment, logistical considerations, expenses and/or other program elements.
- b. The TCEQ may select parts of a proposal for funding and may offer to fund smaller amounts of money than requested in a proposal.
- c. Based on the number and types of applications received, and the expected available funding, the TCEQ may establish a cut-off level for the project scores, under which projects will not be funded or may be held until a later date.
- d. The TCEQ is not obligated to fund a proposal from an applicant that has demonstrated marginal or unsatisfactory performance on previous grants and contracts with the TCEQ and other state agencies.
- e. The TCEQ is not obligated to fund a proposal from an applicant that is considered to be high risk, based on the financial condition of the applicant and other risk factors as determined by the TCEQ. The TCEQ may also include additional controls in a grant contract to address the risks that may be involved with providing a grant to an applicant considered to be high risk.
- f. The TCEQ may consider an applicant's environmental compliance in making a funding decision.
- g. The TCEQ is not obligated to fund a proposal from an applicant with an overall compliance history classification of Unsatisfactory (55.01 or greater) on the TCEQ's Compliance History Database for applicants that are subject to the rating.
- h. The TCEQ may give preference to recipients who meet or exceed any state or federal environmental standards, including voluntary standards, relating to air quality.

2.0 APPLICATION PROCESS

All applications for funding must be administratively and technically complete according to the NTIG application instructions, and must be submitted within the required deadline. Incomplete applications may delay the review process or be rejected as ineligible or unresponsive. The complete requirements and instructions are included in the guidelines and the application forms.

- a. Required Forms. Application forms and complete guidelines and criteria on the activities eligible for funding under this program may be viewed and downloaded from the TCEQ web page identified in Section 1.3 of this document or by contacting the TERP program at 800-919-TERP (8377).
- b. Grant Workshop. The TCEQ will post the schedule for the NTIG Workshop on the TERP webpage at www.terpgrants.org.

- c. Application Submission. To apply for funding, applicants must complete and submit a grant application which includes the required information described in the instructions included with the application forms. One paper copy and one electronic copy (Microsoft Word or Adobe PDF format) of the completed forms must be submitted to:

Regular Mail:

Implementation Grants Section (NTIG), MC-204
Air Quality Division
Texas Commission on Environmental Quality (TCEQ)
P.O. Box 13087
Austin, TX 78711-3087
1-800-919-TERP (8377)

Express Mail:

Implementation Grants Section (NTIG), MC-204
Air Quality Division
Texas Commission on Environmental Quality (TCEQ)
12100 Park 35 Circle
Austin, TX 78753
1-800-919-TERP (8377)

- d. Deadline for Submission. Proposals will be accepted for consideration for this RFGA only if received at the TERP front desk, Room 1301, 1st floor of Building F on the premises of the TCEQ (12100 Park 35 Circle, Austin, TX, 78753) as directed herein by no later than 5:00 p.m. Central Time on October 18, 2016.
- e. Additional Program Information. Individuals desiring further information are encouraged to call the TERP program at 800-919-TERP (8377).
- f. Status of Application. 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. All information will be deemed not to be proprietary or confidential even if it has been marked proprietary or confidential unless it is submitted as an attachment per Section 4 of the application. Any information the proposer 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 according to the instructions in Section 4 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 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.

3.0 SELECTION SCORING CRITERIA

The TCEQ may give priority to projects that use natural resources originating or produced in Texas, contain an energy efficiency component, or include the use of solar, wind, or other renewable energy sources.

Each different project should be submitted as a separate request. Costs should be broken down so that partial funding could be considered for any grant.

Proposals will be scored based on information provided in the applications. The review committee scoring will include the following criteria:

- 3.1 Advanced Clean Energy Projects (100 point scale) - advanced clean energy projects for new and modified sources, as defined by Section 382.003 of the Texas Health and Safety Code.
- 3.2 New Technology Projects (100 point scale) - new technology projects that reduce emissions of regulated pollutants from point sources.
- 3.3 Electricity Storage Projects (90 point scale) - electricity storage projects related to renewable energy.

3.1 ADVANCED CLEAN ENERGY PROJECTS FOR NEW OR MODIFIED SOURCES

Minimum Requirements: These items determine basic eligibility for the Advanced Clean Energy projects category. If any of the questions, directly below, are answered with “no,” then the project will be disqualified for funding. For basic eligibility, the TCEQ will evaluate the responses to the relevant questions on the NTIG application form 20574a.

1. To be eligible for a grant, the proposed project must be capable of achieving the following emissions reductions for each listed pollutant emitted by the new or modified source (Yes/ No):
 - **SO₂**
 - 99% or greater reduction; or
 - 0.04 lbs or less per MMBtu, determined by a 30-day average, if the project is designed to use feedstock substantially, all of which is sub-bituminous coal; or
 - if the project is designed for the use of one or more combustion turbines that burn natural gas, a SO₂ emission rate that meets best available control technology requirements as determined by TCEQ. For a new facility, use 4.0 lbs/MMBtu as the baseline for comparison.
 - **Hg**
 - 95% reduction of Hg emissions on an annual basis; or
 - if the project is designed for the use of one or more combustion turbines that burn natural gas, a mercury emission rate that complies with applicable federal requirements. For a new facility, use 1.75*10E-4 lbs/MMBtu as the baseline for comparison.

- **NO_x**
 - 0.05 lbs or less per MMBtu; or
 - 0.034 lbs or less per MMBtu if the project uses gasification technology; or
 - if the project is designed for the use of one or more combustion turbines that burn natural gas, two parts per million by volume.
 - **PM** – 0.015 lbs per MMBtu.
 - **CO₂** – 50% capture of the carbon dioxide in the portion of the emissions stream from the facility that is associated with the project and sequesters that captured carbon dioxide by geologic storage or other means.
2. Applicant is able to provide at least 50% of the cost of implementing the project. **(Yes/No)**
 3. The project is an eligible facility for which TCEQ received a permit application or for an authorization to use a standard permit, on or after January 1, 2008. **(Yes/No)**

Maximum Points

Scoring Criteria

25 points **Program Alignment:** Up to 25 points may be awarded based on how clearly the proposed project is aligned with the NTIG program. Specifically, the project will be evaluated on the emissions reductions capability, the implementation plan, the compliance history of the applicant and other related facilities, and the extent to which the proposed project would advance NTIG and air quality goals.

25 points **Emissions Reductions Capability of Pollution Control Technologies:** Up to 25 points may be awarded based on the strength of the evidence provided by the applicant that the proposed technology is capable of providing a significant reduction in emissions. The level of validation of the proposed technology will be considered in this score (see examples below). The TCEQ will score this item based on the information provided for NTIG application form 20574a, Project Description, Item 7. The TCEQ will assign more weight to reductions of NO_x. See Section 1.8 of this document for guidance.

Examples of validation include, but are not limited to, the following:

- Tested – emissions reductions capability of each technology has been verified or certified by the EPA, or has been tested in a laboratory that meets EPA requirements and standards
- Guaranteed – by the manufacturer of the technology
- Experimental – each of the technologies may have been tested, but testing was not conducted in a laboratory that meets EPA requirements and standards.

15 points Cost-Effectiveness of Project: Using the formula given below, divide the annual grant amount requested, averaged over 5 years of operation, by the sum of the projected emissions reduced of all Advanced Clean Energy projects pollutants (see section 1.6.1 of this document) in tons-per-year (TPY), over a one-year period. Be sure to multiply the TPY amounts by the appropriate weighing factor given in the formula below:

Formula for cost-effectiveness calculation:

$$\frac{(\text{Total Grant Amount Requested } \$) / 5 \text{ years}}{(1 \cdot \text{TPY of NO}_x \text{ reduced}) + (1000 \cdot \text{TPY of Hg reduced}) + (0.8 \cdot \text{TPY of SO}_2 \text{ reduced}) + (0.6 \cdot \text{TPY of PM reduced}) + (0.01 \cdot \text{TPY of CO}_2 \text{ captured})}$$

The projected emissions reductions must be calculated as only those reductions resulting from the implementation of the technologies proposed in this grant application. The TCEQ will score this item based on the information provided for NTIG application form 20574a, Project Description, Item 11.

15 points Testing Protocol: The score assigned for Testing Protocol will depend on whether a testing protocol is identified in the application and if one is present, the extent to which it has been developed and approved (e.g., by the EPA). Testing may include, but is not limited to, stack sampling and/or continuous emissions monitoring. Testing protocols must be developed considering a broad range of interests (the original equipment manufacturer, the developer of the new technology, testing entity, potential manufacturers or installers of the new equipment, etc.) which must reach agreement about how the test will be conducted.

10 points Project Location: Up to 10 points may be awarded based on the project location and status of the facility. The matrix below indicates the scoring possibilities for these criteria. Modifications to existing facilities in Texas nonattainment areas will receive maximum points for Project Location. (See Appendix A for list of Texas nonattainment areas and affected counties)

Project scoring (Yes/ No)	Nonattainment area	Affected county	Neither
Modification to an existing facility	10	5	0
New facility	4	2	0

- 5 points** **Potential CO₂ capture and sequester:** The TCEQ may award 1 point for every 10% capture of CO₂ greater than the 50% requirement for the Advanced Clean Energy projects category. For example, a project that captures 61% of the CO₂ would receive 1 point, since the initial 50% capture is a minimum requirement.
- 5 points** **Applicant qualifications, including previous experience with similar types of projects:** Points may be awarded based on the extent and relevance of the qualifications and experience of the applicant and any project partners. The TCEQ will especially look for experience with similar types of projects and experience conducting emissions testing.
- (100)** **Discussion of safety issues:** The applicant must include a full discussion of any safety issues and how they are addressed in the application form. Up to 100 points may be deducted if this information is inadequate or if safety issues raise potential concerns.
- (100)** **Creation of other environmental problems:** The applicant must include a full discussion of any potential impacts on the environment and how they are addressed in the application form. Up to 100 points may be deducted depending on how the technology will impact other areas of the environment.

Other reviews: All applications will be reviewed by the following state agencies. The TCEQ may take these reviews into account when scoring the applications:

Review by Comptroller: The applicant will be required to provide information regarding its financial stability and the economic benefits and job creation potential associated with the project.

Review by the Public Utility Commission of Texas: The applicant will be required to provide information regarding the reliability, feasibility, and cost effectiveness of electric transmission associated with the project.

Review by the Railroad Commission of Texas: The applicant will be required to provide information regarding the availability and cost of the fuel involved with the project

3.2 NEW TECHNOLOGY PROJECTS THAT REDUCE EMISSIONS OF REGULATED POLLUTANT FROM POINT SOURCES

Minimum Requirements: These items determine basic eligibility for the New Technology projects category. If any of the questions, directly below, are answered with “no,” then the project will be disqualified for funding. For basic eligibility, the TCEQ will evaluate the responses to the relevant questions on the NTIG application form 20574b.

1. Applicant is able to provide at least 50% of the cost of implementing the project. (Yes/No)
2. Project identifies new technology that reduces emissions of regulated pollutants from point sources. (Yes/No)

**Maximum
Points**

Scoring Criteria

25 points **Program Alignment:** Up to 25 points may be awarded based on how clearly the proposed project is aligned with the NTIG program. Specifically, the project will be evaluated on the emissions reductions potential, the implementation plan, the permit history of the proposed project facility and other related facilities, and the extent to which the proposed project would advance NTIG and air quality goals.

30 points **Emissions Reductions Capability of Pollution Control Technologies:** Up to 30 points may be awarded based on the strength of the evidence provided by the applicant that the proposed technology is capable of providing a significant reduction in emissions. The level of validation of the proposed technology will be considered in this score (see examples below). The TCEQ will score this item based on the information provided for NTIG application form 20574b, Project Description, Item 6. The TCEQ will assign more weight to reductions of NO_x. See Section 1.8 of this document for guidance.

Examples of validation include, but are not limited to, the following:

- Tested – emissions reductions capability of each technology has been verified or certified by the EPA, or has been tested in a laboratory that meets EPA requirements and standards
- Guaranteed – by the manufacturer of the technology
- Experimental – each of the technologies may have been tested, but testing was not conducted in a laboratory that meets EPA requirements and standards.

15 points **Cost-Effectiveness of Project:** Using the formula given below, divide the annual grant amount requested, averaged over 5 years of operation, by the sum of the projected emissions reduced of all regulated pollutants (see section 1.6.2 of this document), in tons-per-year (TPY), over a one-year period. Be sure to multiply the TPY amounts by the appropriate factor given in the formula below. If the project does not reduce all of the pollutants in the formula below, then perform calculations only including the pollutants relevant to the project. If the project reduces a pollutant not mentioned in the formula below, then apply a factor of “1” to the TPY amount of that pollutant.

Formula for cost-effectiveness calculation:

$$\frac{(\text{Total Grant Amount Requested } \$) / 5 \text{ years}}{(1*\text{TPY of NO}_x \text{ reduced}) + (1000*\text{TPY of Hg reduced}) + (0.8*\text{TPY of SO}_2 \text{ reduced}) + (0.6*\text{TPY of PM reduced}) + (1*\text{TPY of other pollutants reduced})}$$

The projected emissions reductions must be calculated as only those reductions resulting from the implementation of the technologies proposed

in this grant application. The TCEQ will score this item based on the information provided for NTIG application form 20574b, Project Description, Item 10.

10 points **Testing Protocol:** The score assigned for Testing Protocol will depend on whether a testing protocol is identified in the application and if one is present, the extent to which it has been developed and approved (e.g., by the EPA). Testing may include, but is not limited to, stack sampling and/or continuous emissions monitoring. Testing protocols must be developed considering a broad range of interests (the original equipment manufacturer, the developer of the new technology, testing entity, potential manufacturers or installers of the new equipment, etc.) which must reach agreement about how the test will be conducted.

10 points **Regulated Pollutants Reduced:** Up to 10 points may be awarded based on the number of different, regulated pollutants reduced by this proposed project. To receive points, a pollutant must be a regulated pollutant (see section 1.6.2 of this document).

5 points **Project Location:** Up to 5 points may be awarded based on the project location and status of the facility. The matrix below indicates the scoring possibilities for these criteria. Modifications to existing facilities in Texas nonattainment areas will receive maximum points for Project Location. (See Appendix A for list of Texas nonattainment areas and affected counties)

Project scoring (Yes/ No)	Nonattainment area	Affected county	Neither
Modification to an existing facility	5	3	0
New facility	2	1	0

5 points **Applicant qualifications, including previous experience with similar types of projects:** Points may be awarded based on the extent and relevance of the qualifications and experience of the applicant and any project partners. The TCEQ will especially look for experience with similar types of projects and experience conducting emissions testing.

(100) **Discussion of safety issues:** The applicant must include a full discussion of any safety issues and how they are addressed in the application form. Up to 100 points may be deducted if this information is inadequate or if safety issues raise potential concerns.

(100) Creation of other environmental problems: The applicant must include a full discussion of any potential impacts on the environment and how they are addressed in the application form. Up to 100 points may be deducted depending on how the technology will impact other areas of the environment.

Other reviews: All applications will be reviewed by the following state agencies. The TCEQ may take these reviews into account when scoring the applications:

Review by Comptroller: The applicant will be required to provide information regarding its financial stability and the economic benefits and job creation potential associated with the project.

Review by the Public Utility Commission of Texas: The applicant will be required to provide information regarding the reliability, feasibility, and cost effectiveness of electric transmission associated with the project.

Review by the Railroad Commission of Texas: The applicant will be required to provide information regarding the availability and cost of the fuel involved with the project.

3.3 ELECTRICITY STORAGE PROJECTS RELATED TO RENEWABLE ENERGY

Minimum Requirements: These items determine basic eligibility for the Electricity Storage projects category. If any of the three questions are answered with “no”, then the project will be disqualified for funding. For basic eligibility, the TCEQ will evaluate the responses to the relevant questions on the NTIG application form 20574c.

1. The project is related to renewable energy. (Yes/No)
2. The applicant is able to provide at least 50% of the cost of implementing the project. (Yes/No)
3. The minimum rated power is one megawatt (MW) or greater. (Yes/No)

Maximum Points	Scoring Criteria
-----------------------	-------------------------

25 points	Program Alignment: Up to 25 points may be awarded based on how clearly the proposed project is aligned with the NTIG program. Specifically, the project will be evaluated on the emissions reduction potential, the implementation plan, the proposed project’s relation to renewable energy, the proposed project’s ability to make the stored energy available during peak energy use, and the extent to which the proposed project would advance NTIG goals.
------------------	--

10 points	Energy Storage Capacity (MWh): Up to 10 points may be awarded based on the initial rated capacity of the storage technology or the maximum theoretical amount of electricity/energy the technology can store.
------------------	--

- 10 points** **Lifetime at 80% Depth of Discharge (DoD):** Up to 10 points may be awarded based on the number of complete charge / discharge cycles the storage technology can perform before its nominal (actual) capacity falls below 80% of its initial rated capacity.
- 10 points** **Cycle Efficiency:** Up to 10 points may be awarded based on the amount of energy output from the storage technology per unit of energy input.
- 10 points** **Duration of Discharge:** Up to 10 points may be awarded based on the total length of time that the storage technology can discharge, at its rated power output, without recharging.
- 10 points** **Response Time:** Up to 10 points may be awarded based on the total length of time for the storage technology to bring its output from zero to its rated power output.
- 10 points** **Cost-effectiveness of the project:** The cost-effectiveness of the technology is determined using two methods. Applicants must provide estimates for both methods described below, and show all computations. The TCEQ will score this item based on the information provided for NTIG application form 20574c, Project Description, Item 7.
- Divide the total implementation costs* by the maximum storage capacity of the technology and express the cost-effectiveness in dollars per unit power, e.g., \$ dollars/kW; and
- Divide the total implementation costs* by the maximum, cumulative amount of delivered electricity, based on the technology's cycle efficiency, useful life, and expected number of charge-discharge cycles across its useful life. Express the cost-effectiveness in dollars per unit energy, e.g., \$ dollars/kWh.
- *total implementation costs: the purchase price of the proposed technology plus the cost of the installation, labor, capital purchases, or other costs directly related to the implementation of the proposed technology.*
- 5 points** **Applicant qualifications, including previous experience with similar types of projects:** Points may be awarded based on the extent and relevance of the qualifications and experience of the applicant and any project partners.
- (90)** **Discussion of safety issues (documentation or other):** The applicant must include a full discussion of any safety issues and how they are addressed for NTIG application form 20574c. Up to 90 points may be deducted if this information is inadequate or if safety issues raise potential concerns.
- (90)** **Creation of other environmental problems:** The applicant must include a full discussion of any potential impacts on the environment and how they are addressed for NTIG application form 20574c. Up to 90 points may be deducted depending on how the technology will impact other areas of the environment.

Other reviews: All applications will be reviewed by the following state agencies. The TCEQ may take these reviews into account when scoring the applications:

Review by Comptroller: The applicant will be required to provide information regarding its financial stability and the economic benefits and job creation potential associated with the project.

Public Utility Commission: The applicant will be required to provide information regarding the reliability, feasibility, and cost effectiveness of electric transmission associated with the project.

4.0 APPLICATION REVIEW AND SELECTION PROCESS

- a. Application Review: The TCEQ will review the application's eligibility and completeness and may notify applicants of any needed changes or additional information.
- b. Grant Award and Contracting: Each application will be scored individually. A TCEQ scoring committee may review and score all applications and send those scores and recommendations for awards to Executive Management. The TCEQ's Executive Management may make the final project selections. Of the available grant funds, \$1 million is reserved for Electricity Storage Projects.
- c. The TCEQ may select projects and issue contracts based on the estimated amount of revenue that the TCEQ will have received by the end of the 2016/2017 fiscal biennium.
- d. A sample contract will be available on the NTIG web page. Applicants should download and review a copy of the sample contract as soon as it is available.
- e. Successful applicants will be notified by phone or other means of their selection and the amount of grant funds that may be awarded. At that time, the applicant will need to confirm for the TCEQ their intent to accept the grant. A grant contract will be developed and provided to the applicant to sign and return to the TCEQ. The letter transmitting a grant contract will specify the amount of time allowed for the prospective grantee to sign and return the grant contract to the TCEQ. Upon signature of the contract by the TCEQ, a copy of the signed contract will be returned to the applicant, at which time the grant will be considered awarded.
- f. **Notice to Proceed:** Signing the contract will not be the final commitment by the TCEQ to provide the funds. A subsequent "Notice to Proceed" will be issued to the grantee when sufficient funds become available. Any otherwise eligible expenses incurred prior to receipt of this notice will be at the grantee's own risk. The "Notice to Proceed" may also include authorization for a lesser reimbursement amount than originally approved in the contract, based on the amount of funds available.

APPENDIX A: LIST OF NONATTAINMENT AREAS AND AFFECTED COUNTIES

TEXAS NONATTAINMENT AREAS

Dallas-Fort Worth Area: Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties

El Paso Area: El Paso County

Houston-Galveston-Brazoria Area: Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties

AFFECTED COUNTIES

Austin Area: Bastrop, Caldwell, Hays, Travis, and Williamson Counties

Beaumont-Port Arthur Area: Hardin, Jefferson, and Orange Counties

Corpus Christi Area: Nueces and San Patricio Counties

Dallas-Fort Worth Area: Henderson, Hood, and Hunt counties

San Antonio Area: Bexar, Comal, Guadalupe, and Wilson Counties

Tyler-Longview Area: Gregg, Harrison, Rusk, Smith, and Upshur Counties

Victoria Area: Victoria County