

New Technology Implementation Grant (NTIG) Program

NTIG Applicant Workshop





NTIG Purpose

The primary objective of the NTIG program is to assist with the implementation of new technologies to reduce the emissions from facilities and other stationary sources in Texas.
(Texas Health and Safety Code, Section 391.002)



NTIG Objectives



SO₂ scrubbers installed at power plant in Texas

- Facilitate the implementation of new technologies to reduce emissions from facilities and other stationary sources in Texas
- Help Texas become a leader in new technologies that can solve the state's environmental challenges while creating new business and industry in the state
- Maintain the quality of air in Texas in order to meet standards established under the Federal Clean Air Act



NTIG Project Categories

- Advanced Clean Energy
- New Technology
- Electricity Storage



Advanced Clean Energy

Definition:

Projects that reduce emissions from point sources involving the use of coal, biomass, petroleum coke, solid waste, natural gas, or hydrogen fuel cells in the generation of electricity or the creation of liquid fuels while co-generating electricity (Texas Health and Safety Code, Section 382.003)



Advanced Clean Energy (continued)

Emissions reductions requirements:

- **Sulfur dioxide (SO₂)**

- 99% or greater reduction of sulfur dioxide (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, an 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 Hg emission rate that complies with applicable federal requirements



Advanced Clean Energy (continued)

Emissions reductions requirements (continued):

- **Nitrogen oxides (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 and sequester not less than 50% of the carbon dioxide (CO₂) stream associated with the project.



Advanced Clean Energy (continued)

Applicant must:

- be the owner or licensed operator of the facility located in Texas or have received written approval from the TCEQ to apply for a grant; and
- use the program-designated baseline example for all emission reduction calculations, if the facility is new.

Project must:

- involve the use of coal, biomass, natural gas, petroleum coke, solid waste, or fuel cells that use derived hydrogen; and
- meet the minimum emissions reductions requirements listed on the previous slides.

TCEQ must have received:

- on or after January 1, 2008, and before January 1, 2020, an application for a permit, or for an authorization to use a standard permit, for the facility in this application.



New Technology

Definition:

New Technology Projects that reduce emissions of regulated pollutants from point sources

Power plant in Cleburne, Texas





New Technology (continued)

Applicant must:

- be the owner or licensed operator of a facility located in Texas or have 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 (HAP);
- any other pollutants regulated under the Federal Clean Air Act; and
- any other pollutants subject to requirements under TCEQ rules, regulations, permits, orders of the commission, or court orders.



Electricity Storage

Definition:

Electricity Storage Projects related to the storage of power from renewable energy to be released back into the grid





Electricity Storage (continued)

Examples:

- Compressed Air Energy Storage (CAES)
- Pumped Hydropower (PHS)
- Thermal Storage (hot water, molten salt, phase change, etc.)
- Chemical (Hydrogen production, dehydration of Methanol)
- Lithium-ion Batteries
- Flywheels
- Superconducting Magnetic Energy Storage



Electricity Storage (continued)

Applicant must:

- be the owner or licensed operator of a facility located in Texas or have received written approval from the TCEQ to apply for a grant;
- propose an electricity storage project related to renewable energy in Texas; and
- clearly demonstrate how the electricity storage project is “related to renewable energy.”



Eligible Applicants

The owner of a facility located in Texas may apply for a grant.

All applicants must provide evidence of operational control AND that the entity is in compliance with all applicable Texas laws.



*If the applicant is not the owner of the facility located in Texas, the TCEQ may allow a person other than the owner to apply for and receive a grant.



Application Process

Prior to filling out application,
we recommend reviewing the following

- NTIG Guidelines
- Request for Grant Applications
- NTIG Example Contract

Information available at terpgrants.org





Application Submittal

Be sure to submit:

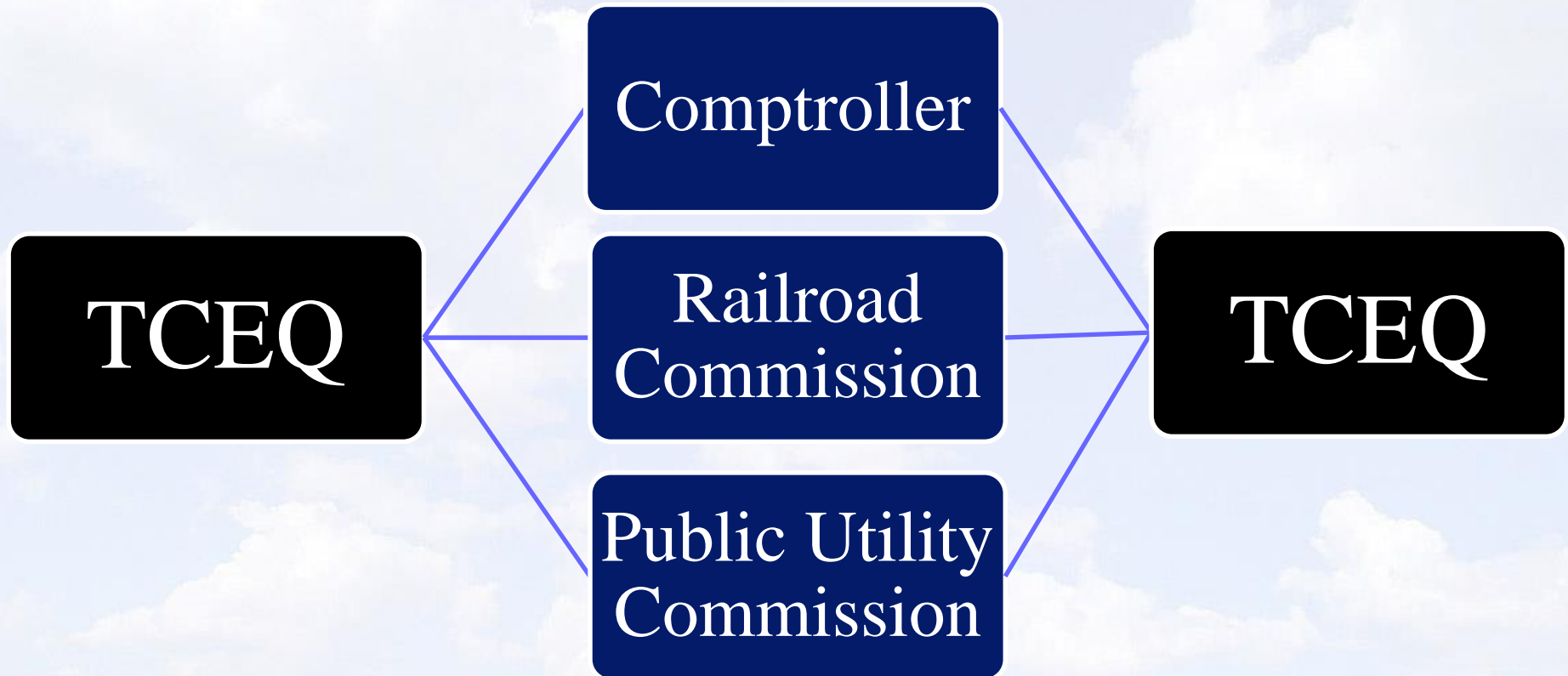
- 1 signed paper copy of all forms
- 1 electronic copy via a Compact Disc

Label and separate confidential information and submit according to instructions provided in the RFGA.





Application Review





State Agency Duties



The Texas Comptroller of Public Accounts:

- assesses the financial stability of the applicant; and
- assesses the economic benefits and job creation potential associated with the project.



The Public Utility Commission of Texas:

- assesses the reliability of the proposed technology; and
- assesses the feasibility and cost-effectiveness of electric transmission associated with the project.



The Railroad Commission of Texas:

assesses availability and cost of the fuel involved with the project.



Applications

Provide clear and extensive details regarding the:

- emissions reductions capability;
- testing protocols (if applicable);
- activities planned;
- technical merits of the technology; and
- Implementation Plan.



Applications (continued)

To avoid application rejection ensure that:

- matching funds (minimum 50%) are identified;
- the applicant is the owner of facility or has received written authorization from TCEQ to apply;
- a timeline in which work is completed before **May 31, 2019** is submitted; and
- the project meets the requirements for the category selected.



Applications (continued)

Strengthening applications:

- Provide technical support for all claims.
- Identify decision points in scope of work & timeline.
- Distinguish between implementation and operation/maintenance costs.
- Provide feasible implementation plan.





Implementation Plan

Please describe:

- the technology or technologies to be implemented;
- the ability of the applicant to operate/maintain the technology beyond the terms of the contract;
- the cost-effectiveness of the project;
- the timelines for implementing the project; and
- any partnerships that will be established for the project's implementation.





Confidential Information

- **MUST** be submitted separately

- Separate envelope
- Every page marked:

“Confidential/Proprietary: inform applicant & Seek AG opinion before releasing”

- **DO NOT** submit electronically

- Supporting information
only





Funding

There is a total of \$3.5 million in funding available for this grant round

- There is no maximum award amount per project.
- All funds awarded in Fiscal Year 2016 must be used by May 31, 2019.
- Matching funds must be reported in the Request for Reimbursement (RFR), but not at same level of verification as reimbursement costs.
- NTIG Grants adhere to Uniform Grant Management Standards (UGMS).





Contract

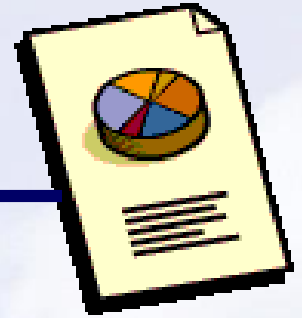
Contract Shell on Website – Please Review!

Notable Terms:

- Reporting requirements
 - Status reports
 - Financial reporting
- Uniform Grant Management Standards (UGMS) and eligible expenses
- Intellectual property language



Reporting



1. Implementation Period

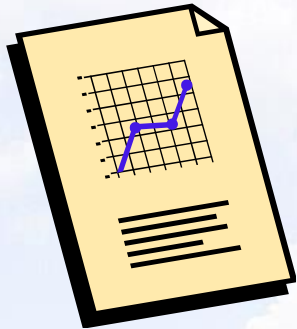
- Quarterly Status Reports

2. Wrap Up of Implementation

- Final Status Report

3. Five-Year Reporting Period

- Annual Status Reports





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