

COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF ENERGY RESOURCES (DOER)  
Meg Lusardi, Acting Commissioner

PON-ENE-2015-006



PROGRAM OPPORTUNITY NOTICE

MA Clean Vehicle Project  
Compressed natural gas (CNG) refueling station

DOER Issues PON	August 12, 2014
PON Response Due	September 5, 2014

<i>Applicant Name:</i>	<i>Web address:</i>
<i>Street:</i>	<i>Authorized Agent:</i>
<i>City &amp; State:</i>	<i>Authorized Agent's title:</i>
<i>Zip Code:</i>	<i>Authorized Agent's phone:</i>
<i>Main phone #:</i>	<i>Authorized Agent's email:</i>

## 1. Introduction

The Massachusetts Department of Energy Resources (DOER) and the MA Clean Cities Coalition (MA CCC) have long been at the forefront of efforts to diversify the types of motor fuels used in the Commonwealth, and to reduce greenhouse gas (GHG) emissions from the transportation sector. In keeping with these efforts, DOER is announcing a Program Opportunity Notice (PON) to encourage the development of additional compressed natural gas (CNG) refueling station infrastructure.

This MA Clean Vehicle Project PON utilizes the Congestion Mitigation and Air Quality (CMAQ) improvement program sponsored by the U.S Department of Transportation's Federal Highway Administration (FHWA). The CMAQ program provides funding through the federal government for surface transportation projects which result in improvements to air quality and roadway congestion mitigation. The main goal is to reduce emissions in areas designated as "nonattainment" and "maintenance" areas for criteria pollutants.

## 2. Agency

DOER is the state agency whose mandate includes the analysis and development of policies and programs to ensure that Massachusetts' transportation sector is aware of and adopting, alternative technologies and fuels available for vehicles today. To that end, DOER strives to create a clean energy future for the Commonwealth, which makes sense both economically and environmentally, with goals including:

- accelerating the deployment of clean alternative fuel vehicles;
- encouraging the development of additional alternative fuel infrastructure;
- increasing the awareness of what technologies are available today;
- working with fleets in the alternative fuel vehicle sector;
- providing information about the various alternative fuels and technologies to both public and private fleets;
- reducing the consumption of petroleum fuels in the transportation sector;
- reducing the amount of CO<sub>2</sub> emitted from the transportation sector; and
- reducing the barriers preventing effective use of alternative fuels, paving the way for expanded use of alternative-fueled vehicles powered transportation.

## 3. Purpose of the PON

The Purpose of this PON is to fund a number of full public-access fast-fill CNG stations in the Commonwealth. Up to \$400,000 is available for each CNG station site. The program is intended to

reduce the cost of a CNG station installation and therefore encourage more widespread deployment of CNG powered-vehicles.

Since the best air quality improvements are generated when medium- and heavy-duty gasoline or diesel powered vehicles are replaced with CNG-powered versions, preference will be given to CNG stations that serve the following fleets in this order:

- a. refuse and recycling fleet vehicles;
- b. transit and transportation vehicles;
- c. freight - intrastate and interstate vehicles;
- d. delivery vehicles (*e.g.*, beverage, package, linen, etc.); and
- e. light-duty vehicles

In addition, added preference will be given to CNG station proposals that include stations that offer other alternative fuels along with CNG at the same location. The list of alternative fuels are those officially recognized by the US Department of Energy (DOE) and the DOER.

Total funding amount for this PON is \$2,000,000.00.

#### 4. PON CNG Station Specifications

The CNG station fueling equipment shall be packaged on skids in a small footprint and use reliable components to reduce possible downtime. The skid-mounted equipment system shall be modular facilitating possible future expansion of compression and/or storage capacity. The CNG fueling system shall consist of, but is not limited to, the following **minimum** components:

1. One (1) compressor package with electric motor drive. Natural gas engine drives are not acceptable. Each compressor package must be rated to deliver a minimum of 300 standard cubic feet per minute (scfm). The package may consist of a single or dual compressor configuration. The compressor(s) shall be equipped with the following: closed-loop gas recovery system with ASME-rated vessel, electric motor (labeled for use in at least Class 1, Division 2 areas) with a reduced voltage motor starter, air-cooled intercoolers and after-cooler, condensate separator for the after-cooler with automatic dump system, inlet coalescing filter and pulsation dampener, high-pressure discharge coalescing filter, and other accessories. The CNG compressors, priority valve panel, station/compressor electrical breaker panel and PLC-Based Control Panel shall be installed on a common skid with an enclosure.
2. One (1) single-tower natural gas dryer with semi-automatic, manual, regeneration. Dryer skid must also contain pre- and post-filters for particulate removal.
3. One (1) dual-metered, twin-hose CNG dispenser with 3-bank sequencing valves.
4. One (1) programmable logic controller based electronic station control system, including priority valve control system and electronic ambient temperature compensation.

5. One (1) ASME 3-pack CNG storage assembly rated at 5,500 psig with a total storage capacity of a minimum of 36,372 standard cubic feet (scf).

6. One (1) card-activated fuel management system (FMS) for CNG dispenser authorization and transaction reporting. This will include public-access capabilities for Visa/MC/AMEX/WEX/PHH interface. A CNG station with public-access is a requirement for this PON.

7. All CGN station equipment and the entire packaged fueling system shall comply with the latest revisions of applicable codes and standards. All materials shall be new (i.e., not previously used and manufactured within six months of equipment delivery to each site). At a minimum, the equipment shall comply with the following codes and standards:

API: American Petroleum Institute (API)  
1220 L Street, Northwest  
Washington, DC 20005

ASME: American Society of Mechanical Engineers (ASME)  
345 East 47th Street  
New York, NY 10017

Boiler and Pressure Vessel (B&PV) Code  
a. Section VIII, Division I - Pressure Vessels  
b. Section V - Nondestructive Examination  
c. Section IX - Welding and Brazing Qualifications

ASNT: American Society for Nondestructive Testing (ASNT)  
3200 Riverside Drive  
Columbus, OH 43221  
a. SNT-TC-1A Recommended Practice

AWS: American Welding Society (AWS)  
550 NW Le Jeune Road  
Miami, NH 33135  
a. A5.1 Covered Carbon Steel Arc Welding Electrodes  
b. A5.5 Low Alloy Steel Covered Arc Welding Electrodes

NFPA: National Fire Protection Association (NFPA)  
Batterymarch Park  
Quincy, MA 02269

NFPA 52-2013, Compressed Natural Gas (CNG) Vehicular  
Fuel Systems  
NFPA 54-1996, National Fuel Gas Code  
NFPA 70-1999, National Electrical Code (NEC).

DOT: Department of Transportation, Specification 49 CFR,  
Section 192 - Latest Edition

OSHA: Occupational Safety and Health Administration  
Consultation and Compliance Section  
U.S. Department of Labor  
71 Stevenson St., Suite 415  
San Francisco, CA 94105

UL: Underwriters Laboratories, Inc. (UL)  
333 Pfingsten Road  
Northbrook, IL 60062

UL 508 Industrial Control Equipment  
UL 508A Industrial Control Panels  
UL 1604 Electrical Equipment for Use in Class I and II,  
Division, 2, and Class III Hazardous (Classified)  
Locations.

Commonwealth of Massachusetts  
527CMR26.00 - CNG station installations

## 5. Procurement

Applicants may not alter PON language or any PON component files. Those submitting a proposal must respond in accordance to the PON directions and complete only those sections that prompt an applicant for a response. Modifications to the body of this PON, specifications, terms and conditions, or which change the intent of this PON are prohibited. Any unauthorized alterations will disqualify a response.

The applicant will be required to execute the Commonwealth Standard Terms and Conditions and Standard Contract Forms prior to receiving funds. The contract will further establish terms and conditions and detail how and when payment will be made. To be considered for funding, applicants must supply a list of all costs associated with the project.

**Massachusetts Public Records Law.** All proposals and information submitted in response to this PON are subject to the Massachusetts Public Records Law, M.G.L., Chapter 66, Section 10, and to Chapter 4, Section 7, Subsection 26. Any statements in submitted proposals that are inconsistent with these statutes shall be disregarded.

**No Guarantee of Resulting Contract.** The Commonwealth and DOER make no guarantee that an award will result from responses to this PON or that any particular funding level will be awarded. All contracts shall be subject to available funding, whether through the appropriation and authorization of sufficient funds or the receipt of sufficient revenues.

**Costs.** By submitting a response, applicants agree that any cost incurred in responding to this PON, or in support of activities or presentations associated with this PON, shall be the sole responsibility of the submitting applicant. DOER shall not be held responsible for any costs incurred by applicants in preparing their respective responses to this PON.

**Review Rights.** DOER reserves the right to have a review performed of any and all responses to this PON, including materials presented at any presentations. Said review may be conducted by, but is not limited to, officials in DOER or any Massachusetts state agency and any independent consultants retained by DOER.

## 6. Applicant/recipient responsibilities

- Coordinate with a vendor that provides CNG station equipment and installation services.
- Submit a request for reimbursement that includes pertinent invoice and backup documentation.
- Maintain and operate the CNG station for a minimum of fifteen (15) years. Should the CNG station be taken out of service, scrapped, or transferred or sold out-of-state prior to the lapse of the fifteen-year period, DOER would be reimbursed for a pro-rated amount of the grant awarded to the public or private entity.
- Submit report of number of gasoline gallon equivalents (GGEs) dispensed annually for at least five (5) years from the completion of the project.
- The grant recipient is responsible for compliance with all competitive procurement principles and guidelines.
- Company or public entity personnel shall be trained to operate the CNG station and/or engage a qualified service provider.
- All awards are subject to strict adherence to the Federal Highway Administration's **Title 23**. (See APPENDIX)

**This includes but is not limited to the following sections:**

- **Sec. 313 "Buy American," and**
- **Sec. 113 "Prevailing Wage"**

## 7. Proposal Requirements

Each successful applicant will be awarded up to \$400,000 for a single CNG station site. Funds will be disbursed at the completion of the project, following DOER review and approval of proper documentation.

The following are requirements for the project proposal:

1. All proposals must include the Mandatory Criteria Chart below with an attached brief narrative addressing each point:

(A NO ANSWER WILL ELIMINATE APPLICANT)

	ITEM	YES	NO
A.	Must maintain and operate the CNG station on a 24/7/365 basis and have CNG fuel commitments of at least 10,000 gasoline gallon equivalents (GGEs) per month.		
B.	Applicant must demonstrate the ability to fund the balance of the CNG station cost.		
C.	Applicant must sign a state contract and therefore must be in compliance with all applicable terms and conditions.		

2. All proposals must include a list of the anticipated CNG customers and a description of the customers' fleets.

3. All proposals must include a detailed breakdown of all costs including, but not limited to, the cost of all station components. The applicant/recipient is directly responsible for the procurement of all technology used in this program.

4. All proposals must complete the AFLEET tool, found at [https://greet.es.anl.gov/afleet\\_tool](https://greet.es.anl.gov/afleet_tool), to determine the Fuel and Energy savings by replacing a conventional fuel powered vehicles. The AFLEET Tool tables must also be submitted annually to DOER for a five (5)-year period following the completion of the project, within two (2) months of the close of the previous calendar year.

5. All proposals must include a schedule with project start and end dates and a timeline with projected milestones. Stations must be completed within two years of award.

## 8. General Instructions

A. In pdf format, please provide the completed cover sheet of this PON followed by:

- A description of your fleet/customers' fleets and the basis of your expertise in offering a response to this PON.

**Please submit (a) three bound hard copies of the application and (b) an electronic copy, in the specified format above, to the contact person listed below.**

- B. All questions must be submitted to DOER, care of Michelle Broussard by email at [michelle.broussard@state.ma.us](mailto:michelle.broussard@state.ma.us)
- C. Questions and answers will be periodically posted on the DOER website and finalized on August 22, 2014.
- D. Response Submissions. All responses to this PON are due no later than 4:00 p.m. (EST) on September 5, 2014.
- E. Additional Information. DOER retains the right to request additional information from applicants, either individually or from all submitting vendors. DOER may, at its sole discretion, elect to request formal presentations from certain vendors of the products or services detailed in their response submissions.
- F. Contact Information: Please direct all communications, questions, and responses to the following contact:

Contact:	Michelle Broussard MA Department of Energy Resources (MA DOER) 100 Cambridge Street, Suite 1020 Boston, MA 02114
Telephone:	(617) 626-7377
E-mail:	<a href="mailto:michelle.broussard@state.ma.us">michelle.broussard@state.ma.us</a>
PON Name:	MA Grants: CNG station installation
PON File Number:	PON-ENE-2015-006

## **APPENDIX**

- **Title 23.** <http://www.fhwa.dot.gov/legsregs/title23.pdf>
- All awards are subject to strict adherence to **Title 23**, including but not limited to:
- **Title 23 Sec. 313:**
  - (a) Notwithstanding any other provision of law, the Secretary of Transportation shall not obligate any funds authorized to be appropriated to carry out the Surface Transportation Assistance Act of 1982 (96 Stat. 2097) or this title and administered by the Department of Transportation, unless steel, iron, and manufactured products used in such project are produced in the United States.
  - (b) The provisions of subsection (a) of this section shall not apply where the Secretary finds - (1) that their application would be inconsistent with the public interest;
  - (2) that such materials and products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or



(3) that inclusion of domestic material will increase the cost of the overall project contract by more than 25 percent.

(c) For purposes of this section, in calculating components' costs, labor costs involved in final assembly shall not be included in the calculation.

(d) The Secretary of Transportation shall not impose any limitation or condition on assistance provided under the Surface Transportation Assistance Act of 1982 (96 Stat. 2097) or this title that restricts any State from imposing more stringent requirements than this section on the use of articles, materials, and supplies mined, produced, or manufactured in foreign countries in projects carried out with such assistance or restricts any recipient of such assistance from complying with such State imposed requirements.

(e) Intentional Violations. If it has been determined by a court or Federal agency that any person intentionally:

(1) affixed a label bearing a "Made in America" inscription, or any inscription with the same meaning, to any product used in projects to which this section applies, sold in or shipped to the United States that was not made in the United States; or (2) represented that any product used in projects to which this section applies, sold in or shipped to the United States that was not produced in the United States, was produced in the United States; that person shall be ineligible to receive any contract or subcontract made with funds authorized under the Intermodal Surface Transportation Efficiency Act of 1991 pursuant to the debarment, suspension, and ineligibility procedures in subpart 9.4 of chapter 1 of title 48, Code of Federal Regulations.

(f) Limitation on Applicability of Waivers to Products Produced in Certain Foreign Countries. If the Secretary, in consultation with the United States Trade Representative, determines that -

(1) a foreign country is a party to an agreement with the United States and pursuant to that agreement the head of an agency of the United States has waived the requirements of this section, and

(2) the foreign country has violated the terms of the agreement by discriminating against products covered by this section that are produced in the United States and are covered by the agreement,

the provisions of subsection (b) shall not apply to products produced in that foreign country.

(g) Application to Highway Programs. The requirements under this section shall apply to all contracts eligible for assistance under this chapter for a project carried out within the scope of the applicable finding, determination, or decision under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), regardless of the funding source of such contracts, if at least 1 contract for the project is funded with amounts made available to carry out this title.

○ **Title 23 Sec. 113.** Prevailing rate of wage:

(a) The Secretary shall take such action as may be necessary to insure that all laborers and mechanics employed by contractors or subcontractors on the construction work performed on highway projects on the Federal-aid highways authorized under the highway laws providing for the expenditure of Federal funds upon Federal- aid highways, shall be paid wages at rates not less than those prevailing on the same type of work on similar construction in the immediate

locality as determined by the Secretary of Labor in accordance with sections 3141-3144, 3146, and 3147 of title 40.

(b) In carrying out the duties of subsection (a) of this section, the Secretary of Labor shall consult with the highway department of the State in which a project on any Federal-aid highway is to be performed. After giving due regard to the information thus obtained, he shall make a predetermination of the minimum wages to be paid laborers and mechanics in accordance with the provisions of subsection (a) of this section which shall be set out in each project advertisement for bids and in each bid proposal form and shall be made a part of the contract covering the project.

(c) The provisions of the section shall not be applicable to employment pursuant to apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting equal employment opportunity in connection with Federal-aid highway construction programs.