

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

**NOTICE OF PROPOSED AWARD (NOPA)**

**Addressing Barriers to Wider Adoption of Near Zero Emission Natural Gas
Vehicles
GFO-17-503
January 30, 2018**

On September 26, 2017, the California Energy Commission (Energy Commission) released a competitive solicitation to fund transportation research projects that address specific barriers to wider beneficial adoption of natural gas vehicles. Up to \$3,400,000 in Natural Gas Research Program funding is available to fund applications in:

- Group 1: Heavy-Duty Natural Gas Hybrid-Electric Systems Optimization Research, Development, and Demonstration
- Group 2: Advanced Combustion Research for Large Displacement Natural Gas Engines for Off-Road Applications
- Group 3: On-Board Compressed Natural Gas Storage Improved Economics Research and Development

The Energy Commission received ten proposals by the due date of December 6, 2017. Each proposal was screened, reviewed, evaluated and scored using the criteria in the solicitation. Nine proposals passed the Stage One Application Screening.

The attached "Notice of Proposed Awards" identifies each applicant selected and recommended for funding by Energy Commission staff and includes the recommended funding amount and score. The total amount recommended is \$4,086,618.

Funding of proposed projects resulting from this solicitation is contingent upon the approval of these projects at a publicly noticed Energy Commission Business Meeting and execution of a grant agreement. If the Energy Commission is unable to timely negotiate and execute a funding agreement with an Applicant, the Energy Commission, at its sole discretion, reserves the right to cancel or otherwise modify the pending award, and award the funds to another applicant.

In addition, the Energy Commission reserves the right to: 1) add to, remove, or shift funding between the different groups if there are insufficient passing proposals in one group and 2) negotiate with successful applicants to modify the project scope, schedule, and/or level of funding.

This notice is being mailed to all parties who submitted an application to this solicitation and is also posted on the Energy Commission's website at:

www.energy.ca.gov/contracts/.

For information, please contact Phil Dyer at (916) 654-4651 or Phil.Dyer@energy.ca.gov.

Phil Dyer
Commission Agreement Officer



California Energy Commission

GFO-17-503

Addressing Barriers to Wider Adoption of Near-Zero Emission Natural Gas Vehicles

Project Group 1 - Heavy-Duty Natural Gas Hybrid-Electric Vehicle Systems Optimization Research, Development, and Demonstration

Notice of Proposed Awards

January 30, 2018

Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
Proposed Awards							
1	Efficient Drivetrains, Inc.	Near-Zero Emission Heavy-Duty Natural Gas Plug-In Hybrid-Electric Truck	\$1,087,237	\$1,087,237	\$332,820	95.70	Awardee
2	Transportation Power, Inc.	Demonstration of a CNG-Hybrid Electric Super-Truck (CHEST)	\$1,500,000	\$1,500,000	\$109,926	86.25	Awardee
3	Institute of Gas Technology dba Gas Technology Institute	Optimization and Demonstration of a Near-Zero, Heavy-Duty, Hybrid-Electric Truck	\$1,499,381	\$1,499,381	\$253,999	76.18	Awardee
Total Funding Recommended			\$4,086,618	\$4,086,618	\$696,745		
Did Not Pass							
	Quantum Fuel Systems LLC	Development and Demonstration of a Class 8 Compressed Natural Gas Plug-In Hybrid Electric Truck for Regional Drayage Service	\$1,499,458	\$0	\$1,888,971		Did Not Pass
	MAHLE Powertrain, LLC	Integration and Optimization of a Natural Gas Hybrid-Electric Powertrain for Medium- and Heavy-Duty Vehicles	\$1,500,000	\$0	\$740,975		Did Not Pass
	Southwest Research Institute	Heavy-Duty Natural Gas Hybrid-Electric Vehicle Systems Optimization Research, Development, and Demonstration	\$1,499,200	\$0	\$210,000		Did Not Pass
Total			\$4,498,658	\$0	\$2,839,946		
Grand Total			\$8,585,276	\$4,086,618	\$3,536,691		



California Energy Commission

GFO-17-503

Addressing Barriers to Wider Adoption of Near-Zero Emission Natural Gas Vehicles

Project Group 2 - Advanced Combustion Research for Large Displacement Natural Gas Engines for Off-Road Applications

Notice of Proposed Awards

January 18, 2018

Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
Did Not Pass							
	Energy Conversions, Inc.	Continued Development and Demonstration of Low Pressure Direct Injection Gas and Turbulent Jet Ignition Technology for Large Engines	\$1,492,819	\$0	\$1,495,637		Did Not Pass
	Southwest Research Institute	Thermo-Chemical Waste Heat Recovery to Increase Fuel and Combustion Efficiency in Large Displacement Natural Gas Engines	\$1,436,131	\$0	\$250,000		Did Not Pass
Total			\$2,928,950	\$0	\$1,745,637		
Disqualified							
	Sail D. White Enterprises, Inc. & Cyclone Power Technologies, Inc.	Design, Build & Test Large 16L Off-Road CNG-Diesel Engine	\$1,447,427	\$0	\$0		Disqualified
Total			\$1,447,427	\$0	\$0		
Grand Total			\$4,376,377	\$0	\$1,745,637		



California Energy Commission

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Addressing Barriers to Wider Adoption of Near-Zero Emission Natural Gas Vehicles
 Project Group 3 - On-Board Compressed Natural Gas Storage Improved Economics Research and Development

Notice of Proposed Awards

January 18, 2018

Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
Did Not Pass							
	Institute of Gas Technology dba Gas Technology Institute	On-Board Compressed Natural Gas Storage Improved Economics Research and Development	\$399,962	\$0	\$375,000		Did Not Pass
Total			\$399,962	\$0	\$375,000		
Grand Total			\$399,974	\$0	\$375,012		