NOTICE OF PROPOSED AWARD (NOPA)
Off-Road Heavy-Duty Natural Gas Vehicle Research and Development
Grant Solicitation GFO-16-506
January 30, 2017

On October 21, 2016, the California Energy Commission (Energy Commission) released a competitive solicitation to fund research for the development, integration, and demonstration of advanced natural gas off-road vehicle applications. Up to $4,000,000 in Natural Gas Research Program funding was available to fund applications in research and development projects to integrate and demonstrate advanced natural gas vehicle technologies capable of achieving Tier 4 emission standards for off-road vehicles while meeting performance needs. As the Energy Commission reserves the right to increase or reduce the amount of funds available, the Energy Commission added $397,081 to this solicitation for a total funding amount of $4,397,081 for applications in:

- Group 1: Off-Road Research and Development- South Coast Air Basin
- Group 2: Off-Road Research and Development- San Joaquin Valley Air Basin
- Group 3: Off-Road Research and Development- California Ports and Military Bases

The Energy Commission received seven proposals by the due date of December 19, 2016. Each proposal was screened, reviewed, evaluated, and scored using the criteria in the solicitation.

The attached “Notice of Proposed Award” identifies each applicant selected and recommended for funding by Energy Commission staff and includes the recommended funding amount and score.

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 Angela Hockaday at (916) 654-5186, Angela.Hockaday@energy.ca.gov.

Angela Hockaday
Commission Agreement Officer
<table>
<thead>
<tr>
<th>Rank</th>
<th>Project Applicant</th>
<th>Title</th>
<th>Energy Commission Funds Requested</th>
<th>Energy Commission Proposed Award</th>
<th>Match Funds</th>
<th>Score</th>
<th>Award Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gladstein, Neandross &amp; Associates</td>
<td>Research and Development of Advanced Ultra-Low Emission Natural Gas Port Yard Trucks</td>
<td>$1,399,681</td>
<td>$1,399,681</td>
<td>$49,001</td>
<td>104.1</td>
<td>Awardee</td>
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<tr>
<td>2</td>
<td>Olson-Ecologic Engine Testing Laboratories</td>
<td>Research, Development and Demonstration of Low-Emission CNG Engines for Construction Vehicles</td>
<td>$1,500,000</td>
<td>$1,500,000</td>
<td>$1,970,000</td>
<td>93.3</td>
<td>Awardee</td>
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<td>3</td>
<td>Terzo Power Systems, LLC.</td>
<td>CNG Hybrid Electric Systems for Off-Road Agricultural Vehicles</td>
<td>$1,497,400</td>
<td>$1,497,400</td>
<td>$5,150</td>
<td>85.6</td>
<td>Awardee</td>
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<tr>
<td></td>
<td></td>
<td>Total Funding Recommended</td>
<td>$4,397,081</td>
<td>$4,397,081</td>
<td>$2,024,151</td>
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**Did Not Pass**

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<td>VeRail Technologies, Inc.</td>
<td>VeRail 4-Axle, 2,100 HP, Near-Zero Emissions CNG Switch Locomotive San Joaquin Valley Demonstration</td>
<td>$1,499,739</td>
<td>$0</td>
<td>$1,702,801</td>
<td></td>
<td>Did Not Pass</td>
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<tr>
<td>VeRail Technologies, Inc.</td>
<td>VeRail 4-Axle, 2,100 HP, Near-Zero Emissions CNG Switch Locomotive South Coast Air Basin Demonstration</td>
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GFO-16-506
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Notice of Proposed Award
January 30, 2017

Group 1: Off-Road Research and Development- South Coast Air Basin
Group 2: Off-Road Research and Development- San Joaquin Valley Air Basin
Group 3: Off-Road Research and Development- California Ports and Military Bases
### California Energy Commission

**GFO-16-506**

**Off-Road Heavy-Duty Natural Gas Vehicle Research and Development**

*Notice of Proposed Award*

January 30, 2017

Group 1: Off-Road Research and Development - South Coast Air Basin

Group 2: Off-Road Research and Development - San Joaquin Valley Air Basin

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<td></td>
<td>Optimized Fuel Technologies</td>
<td>Advanced Performance and Emission Reduction of Natural Gas Engines and Aftertreatment System with Optimized Fuel Technologies</td>
<td>$1,244,292</td>
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<td>$617,866</td>
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<td>Energy Conversions, Inc.</td>
<td>Tier 4 CNG Powered Mother-Slug Switcher Locomotive with Passive Fast Fill Refueling (Group 1)</td>
<td>$1,499,067</td>
<td>$0</td>
<td>$1,288,156</td>
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<td>Energy Conversions, Inc.</td>
<td>Tier 4 CNG Powered Mother-Slug Switcher Locomotive with Passive Fast Fill Refueling (Group 3)</td>
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**Total**

$7,241,964  
$6,599,780

**Grand Total**

$11,838,985  
$4,397,081  
$8,823,931