



# NATIONAL IDLING REDUCTION NETWORK NEWS

## August 2006

#### **SOLICITATIONS FOR FUNDING AND AWARDS**

Organization	Project	Funding	Deadline	Website
New York State Energy Research and Development Authority (NYSERDA)	Advanced vehicle R&D for new product development and for the siting or expansion of manufacturing facilities to produce innovative on-road vehicle components or systems in New York State	\$5 million	October 4, 2006, and February 21, 2007	http://www.nyserda.org/includes/funding_content_pop.asp?i=PON%201090
Society of Automotive Engineers (SAE)	Environmental Excellence in Transportation (E2T) Award	None	October 15, 2006	http://www.sae.org/news/awards/list/e2t/
U.S. Environmental Protection Agency (EPA) Region 3	Mid-Atlantic Diesel Collaborative	\$300,000	October 30, 2006	http://www.epa.gov/region03/grants/RFP_Diesel _Collaborative_R3APD.pdf
Federal Highway Administration (FHWA)	Pilot program for State and local governments to create more long-term parking spaces for trucks on or near the National Highway System	\$5.385 million	November 27, 2006	http://a257.g.akamaitech.net/7/257/2422/01jan2 0061800/edocket.access.gpo.gov/2006/pdf/E6- 14254.pdf
EPA Region 8	Region 8 Clean School Bus USA	\$415,000 with 5- percent cost share	November 30, 2006	http://www.epa.gov/region8/air/Reg8CSBRFP20 06Rev3.pdf
	Rocky Mountain Clean Diesel Collaborative	\$100,000		http://www.epa.gov/region8/air/NCDCRFP2006 Rev3.pdf



#### UPCOMING MEETINGS AND PRESENTATIONS FROM PAST MEETINGS

Meeting	Location	Date	Website
Rocky Mountain Clean Diesel Conference	Denver, Colorado	November 1-2, 2006	http://www.cleanairfleets.org/conference.html
Tools & Incentives for Green Diesel Technology: Lower Emissions, Higher Profits	Chicago, Illinois	September 6-7, 2006	http://www.epa.gov/midwestcleandiesel/publications/index.htm l#il06financeprz
Diesel Engine-Efficiency and Emissions Research Conference	Detroit, Michigan	August 20-25, 2006	http://www.cemamerica.com/doeevents/DEER/presentations.html (this URL will be accessible for the next few week,s and then the presentations will be available on the U.S. Department of Energy [DOE] website, which is undergoing extensive maintenance)

#### **REGULATORY NEWS**

#### Cars and Trucks Can't Idle in Vancouver, British Columbia

The Vancouver, British Columbia, City Council enacted an idle-free bylaw on July 18, 2006, that applies to parked vehicles and prohibits idling for more than 3 minutes in a 60-minute period. Violators will incur a \$50 fine for idling passenger vehicles or \$100 fines for heavy trucks and unlocked, unattended vehicles. Vehicles idling in order to power equipment for a commercial purpose, such as a refrigerated truck, or public service, such as a fire truck responding to an emergency, are exempt. September 12, 2006, is when a 6-month education effort of warning tickets and informational postcards will begin, and repeat or problem offenders will face fines. Vancouver's idling complaint hotline to report frequent offenders is being widely advertised. City officials feel that most enforcement will come as a

result of citizen complaints. The City of North Vancouver has a similar idling bylaw.

The British Columbia Trucking Association complains that the bylaw is discriminatory because it applies a higher fine against truckers and does not allow for idling a truck to heat or cool the vehicle for cab comfort of the driver. For more information, please see <a href="http://vancouver.ca/ctyclerk/NewsReleases2006/NRidlingbylaw.htm">http://vancouver.ca/ctyclerk/NewsReleases2006/NRidlingbylaw.htm</a> and

http://todaystrucking.com/news.cfm?intDocID=16541&CFID=1115806 &CFTOKEN=91692472



## CARB Updates Diesel Web Pages

The California Air Resources Board (CARB) has revised the organization and readability of its home page on diesel programs and

activities. Please go to <a href="http://www.arb.ca.gov/diesel/diesel.htm">http://www.arb.ca.gov/diesel/diesel.htm</a> to see these improvements.

#### MANUFACTURERS' NEWS

## New Financing Option for Thermo King APU

Thermo King and GE Capital Solutions are now offering financing for owner-operators on the TriPac auxiliary power unit system. TriPac provides cost savings by reducing unnecessary idling, which in turn extends truck engine maintenance intervals and reduces wear on the truck engine, according to the APU manufacturer. TriPac now offers a 1,000-hour maintenance interval, which coincides with maintenance

on the tractor. Thermo King has created a payback calculator, which helps calculate potential savings when a TriPac is installed. For more information, please go to <a href="https://www.thermoking.com">www.thermoking.com</a>. Source: Fleet Owner, August 28, 2006,

http://fleetowner.com/news/thermo king apu financing owner opera tor ge 082806/

## Canadian Company Idle-Kleen Offers New Compact, Lightweight Hitchhiker APU

The *Hitch*hiker APU and HVAC system manufactured by Idle-Kleen Inc. of Cambridge, Ontario, provides independent all-electric heating and air-conditioning to reduce unnecessary engine idling. It is lightweight at 220 pounds (100 kg) and sits on the frame rails of the truck. The system runs on 115-volt AC power, which is supplied by the *Hitch*hiker unit or a shore-power connection. Models are available in 10,000 and 14,000 BTU/hr sizes, with 1.5, 2.0 or 2.5 kW of electric heating capacity run by a single-cylinder, air-cooled diesel engine.

Idle-Kleen says the *Hitch*hiker will supply ample power for all electrical needs while drawing nothing from the truck's batteries. Two duplex receptacles mounted in the cab supply 110-volt AC household power to run appliances such as computers, coffee makers, and microwaves. Continuous trickle charging of the truck's batteries helps to ensure a positive engine start while extending battery life too. The company states that fuel savings over 1 year will cover the cost of the unit. For more information, please go to http://www.idle-kleen.com/.



Source: Today's Trucking Online, August 2, 2006, <a href="http://todaystrucking.com/products.cfm?intDocID=16535&CFID=1115">http://todaystrucking.com/products.cfm?intDocID=16535&CFID=1115</a>

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## Modine Introduces Fuel Cell Anti-Idling Device

Modine Manufacturing Company recently unveiled a new fuel cell idle-off system that heats and cools the cabin in a heavy-duty truck. The new  $CO_2$  air-conditioning and heating system was designed internally by Modine at its research and development facility in Racine, Wisconsin. Using a  $CO_2$  heat pump to heat the cabin in cold weather conditions is more energy efficient than using other conventional heating products, according to the company. The fuel cell power pack

is manufactured by General Hydrogen Corporation and uses hydrogen gas as the fuel with the only byproduct being water. It was specifically designed for a truck APU and produces electrical energy continuously for more than 10 hours. The thermal management system was designed and built by Modine's fuel cell products group. For more information, please go to <a href="http://www.modine.com">http://www.modine.com</a>. Source: Heather McKee, U.S. Army TARDEC

#### Carrier Promotes Eduardo Andrade as New Head of APU Business Unit

Carrier's new business unit for APU's has a new head, Eduardo Andrade, who now has the title of Business Manager – Special Products. Mr. Andrade has been with Carrier for more than 10 years and has actively pursued an APU business for the company, a unit of United Technologies. His accomplishments culminated in this year's announcement that Carrier would be the exclusive worldwide

distributor of APUs manufactured by Teleflex Inc., under the new ComfortPro™ name. For more information, please go to <a href="http://www.trucktrailer.carrier.com/Files/TruckTrailer/Local/US-en/trucktrailer/EduardoAndrade.pdf">http://www.trucktrailer.carrier.com/Files/TruckTrailer/Local/US-en/trucktrailer/EduardoAndrade.pdf</a>. Source: Tom Cunningham, Carrier Transicold

## Freightliner Introduces Prototype Hybrid Utility Truck

A Freightliner proof-of-concept prototype vehicle was put on display at the recent Great America Trucking Show as an example of how Freightliner has integrated a diesel engine, powertrain, and other vehicle functions in a medium-duty hybrid vehicle for possible use as a utility truck. The Class 7 Business Class® M2 106 prototype is a full-parallel hybrid, similar to hybrid electric cars, with regenerative braking that recharges the batteries and electric launch functionality. It has an integrated electric motor in line with the engine and



transmission, enabling operation with electric or diesel power, either separately or in combination. The truck launches with electric power and the diesel engine provides additional torque as required.

Of special interest to utility customers, the prototype vehicle on display integrates the Hybrid Electric Vehicle (HEV) system with hydraulics for electric power takeoff (ePTO) operation. On a jobsite, the engine remains off for the majority of the operation with the hydraulics being run by batteries. When the batteries get low, the engine automatically turns on to recharge them. This takes approximately 5 minutes and, when the batteries are fully recharged, the engine automatically turns itself off. Work is not interrupted during this process. Besides the significant fuel savings, this prototype vehicle features additional advantages for utility customers. Because of the ePTO operation, utility companies will be able to perform their

duties with significantly less idle time, meaning lower levels of noise, heat, and exhaust emissions.

Pending final results of tests currently underway with this proof-of-concept vehicle, Freightliner is considering implementing the hybrid system in a variety of medium-duty trucking segments, including beverage, school bus, and pick-up and delivery applications. Freightliner is collaborating with the Hybrid Business Unit of Eaton Corporation on this effort. For more information, please go to <a href="http://www.freightliner.com/news/press-release-detail.aspx?id=554">http://www.freightliner.com/news/press-release-detail.aspx?id=554</a> and

http://fleetowner.com/news/freightliner\_hybrid\_utility\_truck\_m2\_106\_082506/.

#### HYBRID VEHICLE NEWS

## MoDOT and UPS Test Hybrid Truck Prototypes

The Missouri Department of Transportation (MoDOT) plans to test three hybrid bucket trucks over the next 18 months at district offices in Kansas City, St. Louis, and Joplin. MoDOT received two trucks in July and is the first government agency in the country to test a dieselhybrid truck. Hybrid diesel-electric technology in utility trucks uses electric power to raise the hydraulic arm to lift maintenance workers in the air to install signs, fix traffic signals, or replace streetlights. This allows the conventional engine to be turned off and reduces fuel consumption and smog-forming emissions. The hybrid truck is manufactured by International Truck Corporation and Eaton Corporation and is powered by a conventional diesel engine, electric motor, and lithium-ion battery pack.

Conventional bucket trucks at MoDOT consume on average 2,176 gallons of diesel per year; the hybrids are expected to improve fuel efficiency by 50 percent. Further, the agency will use a B20 blend of biodiesel (20 percent biodiesel, 80 percent petroleum) in the trucks. MoDOT officials estimate potential savings of approximately \$3,134 a year per vehicle replaced, with 106 conventional bucket trucks in the MoDOT fleet.

MoDOT's hybrid truck demonstration is part of the Utility Hybrid Truck Pilot Program spearheaded by California-based WestStart-CALSTART. Thirteen other utility companies across the Nation will participate in this demonstration program. Source: National Clean Bus Update, August 2006,



http://www.eesi.org/publications/Newsletters/Clean%20Bus%20Updat

e/August2006.htm

#### SCHOOL BUSES

## Sources of Information for Signage for School Buses and Trucks

Whether you are a school official, a concerned parent, or an interested citizen, you may want to know how to promote idle-free zones around schools. Below is a listing of signage and other materials from people who have responded to my request for these materials and some that I have found by searching on Google for "anti-idling signs." The Canadians seem to be especially active in this area.

Below are examples of signs from Indiana (top left), Connecticut (top right), Manitoba (bottom left), and North Carolina (bottom right). If you know of more, please let me know, and I'll include that information in a future issue.

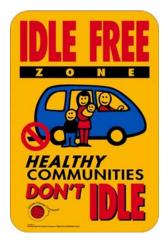


http://www.in.gov/idem/programs/air/dieselwise/projects.html



http://dep.state.ct.us/air2/diesel/antiidle.htm





http://www.climatechangeconnection.org/pages/subpages/idlefree\_sign03.html



http://www.co.forsyth.nc.us/EnvAffairs/triadair/idle-free-pledge-form.pdf#search+%22anti-idling%20signs%22



Item	Website	Contact
Car magnets (restrictions on the material – please contact the agency)	http://www.airshare.info/index.cfm/1650	Debbie Avalone-King Maine Department of Environmental Protection (207) 287-7028 debbie.j.avalone-king@maine.gov
Sign (restrictions on the material – please contact the agency)	http://www.airshare.info/index.cfm/1651	Debbie Avalone-King Maine Department of Environmental Protection (207) 287-7028 debbie.j.avalone-king@maine.gov
Signs in English and Spanish	http://www.nj.gov/dep/stopthesoot/sts-no-idle-sign.htm	
Signs and promotional material (credit would be appreciated)		Glenn Krocheski-Meyer Minnesota Pollution Control Agency (651) 215-0231 glenn.meyer@state.mn.us
Fact sheets, signs		Halida Hatic EPA Region 1 (617) 918-1680 hatic.halida@epa.gov
Signs	http://www.asthmaregionalcouncil.org/about/BusToolkit.htm	
Signs	http://www.climatechangeconnection.org/pages/subpages/idlefree_sign03.html	Rachel Van Caeseele (204) 943-4836 climate.connection@mts.net
Signs and other materials		Kathy Brockett New Hampshire Department of Environmental Services <a href="mailto:kbrockett@des.state.nh.us">kbrockett@des.state.nh.us</a> (603) 271-6284



Item	Website	Contact
Signs	http://www.in.gov/idem/programs/air/dieselwise/idling.html	Dona J. Bergman Evansville Environmental Protection Agency 812/435-6145 dbergman@evansvillegov.org
Links to resources available from many State school bus programs	http://www.epa.gov/cleanschoolbus/antiidling.htm	
Sign and resources	http://www.mass.gov/dep/air/community/schbusir.htm	
16" X 16" signs available upon request		Joseph J. Iannotti New York State Department of Environmental Conservation Division of Air Resources (518) 402-8292 jjianott@gw.dec.state.ny.us

#### TRUCK STOP ELECTRIFICATION

## IdleAire Reports It's on Track to Build over 13,000 Parking Spots

Executives of IdleAire released the company's second quarter financial report on August 16, 2006. Despite a net loss of almost \$14 million on revenues of over \$2.5 million, the company plans to complete its nationwide plan to build over 13,000 parking spaces in 35 States. It also plans to improve its operating performance in 2007.

One focus for the company will be to increase its utilization rate, currently about 24 percent, to somewhere in the high 30-percent rate. That will most likely happen as more installations are in place and truckers use the service on a regular basis.

While IdleAire is a privately held company, it now has enough shareholders that it must file financial statements with the Security and Exchange Commission. Hundreds of investors in the Knoxville area have bought shares in IdleAire through private offerings. For more information, please read

http://www.knoxnews.com/kns/business/article/0,1406,KNS\_376\_492 2099,00.html and http://www.idleaire.com/investor\_relations/



#### **NEWS ABOUT PORTS**

## Holland America Plugs in Dockside in Seattle

Two Holland America Line cruise ships, the *Oosterdam* and the *Westerdam*, have been retrofitted to use shore power ("cold ironing") at the Port of Seattle in Washington State. The total cost to retrofit each ship is nearly \$1 million. In addition, approximately \$1.5 million has been spent dockside to establish hook-ups and install a transformer. Other than a \$25,000 grant from EPA and the Puget Sound Clean Air Agency, Holland America Line has assumed all these costs.

After docking under their own power, the *Oosterdam* and *Westerdam* are hooked up to shore power within 20-30 minutes. Power

generation is transferred back to the ship shortly before departure. The Port estimates a ship will use about the same amount of electricity per call as the Columbia Tower uses each weekday. The approximate cost for shore power each time a ship plugs in is \$5,000.

The cruise line plans to retrofit the *Noordam* for its 2007 cruises from Seattle to Alaska. For more information, please read <a href="http://www.cruisecritic.com/news/news.cfm?ID=1759">http://www.cruisecritic.com/news/news.cfm?ID=1759</a> and <a href="http://hollandamerica.com/media/newsRelease.do?fileName=/200608/18\_Corporate\_02.xml">http://hollandamerica.com/media/newsRelease.do?fileName=/200608/18\_Corporate\_02.xml</a>

#### **NEWS ABOUT RAILROADS**

## New Clean Air Technology Tested at Roseville Rail Yard

Union Pacific Railroad unveiled an innovative technology to capture and treat emissions from diesel locomotives in its Roseville, California, rail yard on August 2, 2006. The system, called "Advanced Locomotive Emission Control System," or ALECS, will apply technology used to capture emissions from industrial plants to locomotives that are near stationary in the rail yard. The ALECS includes a stationary emissions treatment unit that is connected to diesel locomotives with flexible ducts and a hood designed to fit over and attach to the exhaust stacks. Diesel-related emissions are then captured and treated rather than being released into the air. The system will be used on locomotives that are idling or undergoing

engine load tests, and will allow for some train movement so that there is minimal disruption to maintenance and testing operations.

ALECS is expected to reduce sulfur dioxide by 99 percent, particulate matter by 99 percent, nitrogen oxide by 95 percent, and water-soluble volatile organic compounds by 50 percent from captured and treated locomotive emissions. If proven effective through the demonstration project, the system could be used more extensively at the Roseville facility or similar railroad operations throughout the country.



Following this \$1.75 million demonstration project in Roseville, the system will be reconfigured as an Advanced Maritime Emissions Control System at the Port of Long Beach to demonstrate its effectiveness in capturing and treating emissions from ships loading and unloading cargo in port.

The demonstration project will take place at Union Pacific's 950-acre J.R. Davis Rail Yard in Roseville, which services more than 30,000 locomotives annually, making it the largest service and maintenance rail yard in the West. Partners in the project include the Placer County Air Pollution Control District, Advanced Cleanup

Technologies, Inc.(the developer of the ALECS), Union Pacific Railroad, EPA, Sacramento Metropolitan Air Quality Management District, South Coast Air Quality Management District, the City of Roseville, and the California Air Resources Board. More information can be found at

http://www.thepresstribune.com/articles/2006/08/05/news/top\_stories/ 01clean.txt. Sources: Lisa Fasano, EPA Region 9, and Joe Tario, NYSERDA

#### OTHER NEWS OF INTEREST

### DOE Seeks Input on Idling Reduction Education

As part of its ongoing efforts to educate truckers about the benefits of idling reduction, DOE's Argonne National Laboratory has prepared a worksheet to enable truck owners to estimate their savings and payback when using idling reduction equipment. Argonne would like potential users to try it and make any suggestions about how to make the worksheet easier to use and more meaningful to truck operators. The worksheet is valid for on-board equipment ranging from generators and auxiliary power units to fuel-fired heaters and battery-

powered air-conditioners, and is also applicable to truck stop electrification. It allows owners to compare savings from alternative devices.

The worksheet can be found at <a href="http://www.transportation.anl.gov/pdfs/EE/361.pdf">http://www.transportation.anl.gov/pdfs/EE/361.pdf</a>. Please send any comments about the worksheet to Dr. Linda Gaines at Argonne (<a href="mailto:lgaines@anl.gov">lgaines@anl.gov</a>).

#### STANDARD FEATURES

## New URL for Back Issues of National Idling Reduction Network News

If you are a new subscriber or have misplaced an issue of this newsletter, all issues are now located at

http://www1.eere.energy.gov/vehiclesandfuels/resources/fcvt national idling.html. Please update your bookmarks accordingly.



## Summary of State Anti-Idling Regulations

The most up-to-date lists of anti-idling regulations in States and municipalities are available at <a href="http://www.atri-online.org/2005.ATRI.IdlingCompendium.pdf">http://www.atri-online.org/2005.ATRI.IdlingCompendium.pdf</a> and <a href="http://www.epa.gov/smartway/documents/420b06004.pdf">http://www.epa.gov/smartway/documents/420b06004.pdf</a>. If your State or municipality has changed anything listed here or if it is in

error, please let us know, and we'll make sure to inform our readership. This newsletter is also a place to let people know that you are thinking of adding or changing regulations and are soliciting comments.

## Incentives and Funding Opportunities for Idling Reduction Projects

The U.S. Department of Energy's Clean Cities program provides a listing of Federal and State programs that offer incentives and funding for idling reduction projects. Further information can be found at <a href="http://www.eere.energy.gov/cleancities/idle/incentives.html">http://www.eere.energy.gov/cleancities/idle/incentives.html</a>. Please let us know if the information needs to be changed or updated.

The West Coast Diesel Collaborative has a comprehensive listing of grant and loan programs available from many States to purchase or apply for a loan for on-board idling reduction equipment. For the listing of these programs, please go to <a href="http://www.westcoastdiesel.org/programs.htm">http://www.westcoastdiesel.org/programs.htm</a>.

#### Clean Cities Web Site Now Offers TSE Locator

The DOE Clean Cities web site now displays the locations of public truck stops that have idling reduction facilities for heavy-duty trucks. These facilities are available in 11 States (Alabama, Arkansas, California, Georgia, Maryland, North Carolina, New Jersey, New York,

South Carolina, Tennessee, and Texas). Both IdleAire and Shurepower installations area listed in this locator. For more information, please go to http://www.eere.energy.gov/cleancities/idle/station\_locator.html.

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