

National Idling Reduction Network News

February 2011

SOLICITATIONS FOR FUNDING AND AWARDS

[Brown text indicates a new entry, or updated information, since last month.]

ORGANIZATION	PROJECT	FUNDING	DEADLINE	WEBSITE
California Air Resources Board (CARB)	Clean Vehicle Rebate Project	\$4.1 million	First come, first served.	http://energycenter.org/index.php/incentive-programs/clean-vehicle-rebate-project
CARB	On-Road Heavy-Duty Vehicle Loan Program	~\$48 million for loan guarantees	Rolling deadline until funds are awarded.	http://www.arb.ca.gov/ba/loan/on-road/documents/hdvloanprogram.pdf
Climate Trust	Greenhouse Gas Offset Projects	\$6 million (as of January 2011)	Rolling deadline until funds are awarded.	http://www.climatetrust.org/apply.html
Efficiency Maine	Small Business Low Interest Loan Program	Indeterminate	Rolling deadline until funds are awarded.	http://www.energymaine.com/at-work-for-small-business/loan-programs
Minnesota Pollution Control Agency	Small Business Auxiliary Power Unit (APU) Loan Program	\$192,000	Rolling deadline until funds are awarded.	http://www.pca.state.mn.us/programs/sbom_loan.html#evaluation
Owner-Operator Independent Drivers Association (OOIDA)	Financial assistance for the installation of ~240 APUs in U.S. Environmental Protection Agency's (EPA) Regions 6 and 7	\$1 million	Rolling deadline until funds are awarded.	(800) 444-5791
Pittsburgh Public Schools, the Heinz Endowments, Clean Water Action, Group Against Smog and Pollution, and the Clean Air Task Force	Pittsburgh Healthy School Bus Fund	\$500,000	Rolling deadline until funds are awarded.	http://www.dieselretrofitrebate.org
Metropolitan Washington Council of Governments (COG), in collaboration with the District Department of the Environment, the District Department of Transportation, and the Maryland Department of the Environment	Driver Recognition Program—2010 Diesel Idle Reduction Campaign	N/A	Rolling deadline—the 15th of every month.	http://www.turnyourengineoff.org/campaign_recognition.html

National Idling Reduction Network News

February 2011

ORGANIZATION	PROJECT	FUNDING	DEADLINE	WEBSITE
North Central Texas Council of Governments (NCTCOG)	Diesel Idling Reduction Program 2011	~\$100,000	Rolling deadline—the last Friday of each month	http://www.nctcog.org/trans/air/programs/idling/DieselFreightIdling.asp
NCTCOG	Heavy-Duty Vehicle and Equipment Grant Program	Indeterminate	Rolling deadline (March 11, April 8, and May 13, 2011, or until all funds have been awarded)	http://www.nctcog.org/aqfunding
Bay Area Air Quality Management District (California)	Goods Movement Emission Reduction Program: Ships-at-Berth Projects and Cargo Handling Equipment Projects	\$20 million	March 15, 2011	http://www.baaqmd.gov/?sc_itemid=42BEECC2-F011-42B3-A336-399CF8DB4DDD
NCTCOG	North Central Texas Clean School Bus Program—2011 Call For Projects	\$450,000	March 18, 2011	http://www.nctcog.org/trans/air/programs/schoolbus/index.asp
North Dakota Department of Health, Division of Air Quality	State Clean Diesel Grant Program	~\$580,000	March 31, 2011	http://www.ndhealth.gov/AQ/Notices.htm
Pennsylvania Department of Environmental Protection	Pennsylvania State Clean Diesel Grant Program	\$588,235	April 14, 2011	http://pabulletin.com/secure/data/vol41/41-7/260.html
Bay Area Air Quality Management District (California)	Goods Movement Emission Reduction Program: Truck Projects	\$8 million	April 30, 2011	http://www.baaqmd.gov/?sc_itemid=42BEECC2-F011-42B3-A336-399CF8DB4DDD
Cascade Sierra Solutions	Great SmartWay Rebate Program (Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut)	~\$600,000 (as of September 30, 2010)	May 31, 2011	https://secure.cascadesierrasolutions.org/
Climate Change Central	Trucks of Tomorrow Rebate Program (Alberta, Canada)	Can\$2 million	December 31, 2011	http://www.trucksoftomorrow.com/pages/trucking/index.php
Cascade Sierra Solutions	Shorepower Truck Electrification Project (STEP) Rebate Program	\$10+ million	March 31, 2013	https://csswebform.org/WebForm/TSE_home.aspx

REGULATORY NEWS

Four States Introduce 400-Pound Exemption Bills

The year 2011 opened with a surge of 400-pound exemption-bill activity. In Maryland, lawmakers introduced House Bill (HB) 110, a vehicle weight-limit bill that would permit trucks equipped with idling reduction equipment to weigh an additional 400 pounds in gross, axle, tandem, or bridge formula weight limits. Introduced in January, this bill would take effect October 1, 2011, if passed into law. The text of the bill as introduced is available at <http://mlis.state.md.us/2011rs/billfile/HB0110.htm>.

As mentioned in last month's newsletter, New Hampshire introduced HB117, which would allow an additional 400 pounds for vehicles equipped with idling reduction technology. Approved by the House, the bill now moves to the Senate. To follow the bill's status, please go to <http://www.gencourt.state.nh.us/legislation/2011/HB0117.html>.

The Massachusetts House is considering HB951, "An Act To Exempt the Weight of Idle Reduction Systems for Commercial Vehicles from Maximum

Weight Restrictions," a new bill with the same name as last session's failed HB3334. HB951 was referred to the Joint Committee on Transportation on February 15, 2011. For more information, please see <http://170.63.65.52/Bills/187/House/H00951>.

In Texas, the Senate is considering Senate Bill (SB) 493, which would permit an additional 400 pounds for idling reduction technology. The bill would also eliminate limitations on idling for heavy-duty vehicles equipped with a 2008 or newer diesel engine that has been certified by the EPA, or other state environmental agency, to emit no more than 30 grams/hour of nitrogen oxide emissions when idling. The bill has been referred to the Natural Resources Committee. The text of the bill can be found at <http://www.capitol.state.tx.us/BillLookup/Text.aspx?LegSess=82R&Bill=SB493>. For more information, please see http://www.landlinemag.com/todays_news/Daily/2011/Feb11/021411/021811-03.shtml.

Vermont and Oregon Introduce Bills to Restrict Idling

Vermont is currently the only state in the Northeast that does not have a law restricting the idling of heavy-duty trucks. If, however, recently introduced House Bill (H) 154 becomes law, the idling of such vehicles would be limited to 5 minutes per hour. Exemptions include idling to ensure driver or passenger safety.

H154 may be unique in that both the vehicle operator and the vehicle owner would be held responsible. A first violation would be met with a warning ticket for both the operator and owner. For repeat offenses within a 2-year period, the vehicle operator would be subject to a fine of up to \$150 and the owner a fine of up to \$500. If the operator is the owner, that

person would be subject to a single fine of up to \$500. On February 24, 2011, the Senate introduced a S82, a companion bill of the same name.

H154 is in committee. The text of the bill as introduced may be found at <http://www.leg.state.vt.us/docs/2012/bills/Intro/H-154.pdf>. The link http://www.landlinemag.com/todays_news/Daily/2011/Feb11/020711/020811-01.shtml contains more information.

Oregon is another state seeking to limit the idling of heavy-duty vehicles to 5 minutes within a 60-minute period. On January 10, 2011, the Oregon House heard HB2081, a measure on controlling trucking-related greenhouse

gas emissions. The bill includes a number of exceptions to the idling restriction, including a temporary (less than 3 years) allowance of idling for driver or passenger comfort. The bill also states that the state's Environmental Quality Commission may require truck stops or truck parking areas to provide substitute power, or the use of APUs, for trucks.

The bill is currently in the Transportation and Economic Development Committee. For bill status and text, please see <http://www.leg.state.or.us/11reg/measures/hb2000.dir/hb2081.intro.html>.

AWARDS AND RECOGNITION

RECIPIENT	SOURCE OF FUNDING	PURPOSE OF GRANT	FUNDING
Port of Oakland	Bay Area Air Quality Management District (California)	Installation of shoreside power technology at three berths	\$5 million
KLD Associates, Inc., Hauppauge, New York	New York State Energy Research and Development Authority (NYSERDA)	Work on software and sensor devices to create more efficient traffic flow via traffic-light control to reduce vehicle idling and commuting times	\$376,000
New York Water Taxi, Brooklyn, New York	NYSERDA	Work on the analysis and design of a vessel-docking system that would eliminate the need for ferry operators to run engines at high speed while loading and unloading passengers	\$150,000
Sensis Corporation, E. Syracuse, New York	NYSERDA	Work on software that enables more efficient sequencing of aircraft movements at airports to reduce the time airplanes idle on the tarmac	\$208,000
Oconomowoc Transport	Leonardo Academy (Madison, Wisconsin)	Purchase and installation of 15 direct-fired heaters for school buses	~\$78,000
Riteway Bus	Leonardo Academy (Madison, Wisconsin)	Purchase and installation of 11 direct-fired heaters for school buses	~\$57,000

MANUFACTURERS' NEWS

Bergstrom and Webasto Offer All-Season System

Bergstrom and Webasto are partnering to offer an all-season climate-control system for trucks. Early this spring, the Webasto Air Top 2000 ST will be available with Bergstrom's NITE system through Bergstrom's commercial-vehicle aftermarket distributors and truck dealers in the United States and Canada.

The Bergstrom's NITE system, which provides cooling, is powered by its own batteries. The Webasto Air Top 2000 ST air heater can run for 20 hours on 1 gallon of diesel fuel, according to the manufacturer. Both systems are CARB approved. The combined package offers integrated controls. For more information, please go to

<http://www.nitesystem.com/html/article.cfm?nid=47>.

UPCOMING MEETINGS AND EVENTS

[Brown text indicates a new entry since last month.]

MEETING	LOCATION	DATE	WEBSITE OR CONTACT
CARB One-Stop Truck Event	San Mateo, California—March 19, 2011 Fresno, California—March 26, 2011		http://www.arb.ca.gov/newsrel/newsrelease.php?id=191
Green Truck Summit	Indianapolis, Indiana	March 7–8, 2011	http://www.calstart.org/Events/CALSTART-Events/Green-Truck-Summit.aspx
2011 National Air Quality Conferences	San Diego, California	March 7–10, 2011	http://airnow.gov/index.cfm?action=airnow.news_item&newsitemid=52
2011 Mid-America Trucking Show	Louisville, Kentucky	March 31–April 2, 2011	http://www.truckingshow.com or http://www.truckingshow.com/general-info
2011 DOE Hydrogen Program and Vehicle Technologies Program Annual Merit Review and Peer Evaluation Meeting	Arlington, Virginia	May 9–13, 2011	http://annualmeritreview.energy.gov
Transportation Research Board (TRB) 2011 Transportation Planning, Land Use, and Air Quality Conference	San Antonio, Texas	May 10–11, 2011	http://www.trb.org/Calendar/Blurbs/2011_Transportation_Planning_Land_Use_and_Air_Qual_164465.aspx
Government Fleet Expo & Conference (GFX)	San Diego, California	June 6–8, 2011	http://www.governmentfleetexpo.com/
4th Annual Green Fleet Conference	Grapevine, Texas	October 3–4, 2011	http://www.greenfleetconference.com/

PARKING SPACES FOR TRUCKS

Missouri DOT Seeks To Increase Truck Parking

The Missouri Department of Transportation (MoDOT) is seeking to convert a number of old rest areas to truck parking sites. According to MoDOT, the conversion would help reduce the number of trucks that park on ramps during mandated rest periods. Additionally, the site conversions would decrease the renovation and upkeep costs associated with conventional rest areas. The operating costs of maintaining a truck rest area are about half that of maintaining a conventional rest area. According to *Land Line*, MoDOT’s plan is to demolish the current facilities at each of the two sites

located near the town of Fruitland on I-55 and add 15–20 additional truck spots to each. If all goes as planned, each site would have space for 30 trucks. MoDOT also plans to convert the northbound rest area at Marston to a truck parking facility. Please see http://www.landlinemag.com/todays_news/Daily/2011/Feb11/020711/021111-07.shtml and http://www.modot.org/southeast/news_and_information/public_meetings/documents/restareaconversion.pdf for more information.

PORTS

Port of Los Angeles: AMP Capability Now in Place for Multiple Cruise Ships

The Port of Los Angeles now has new Alternative Maritime Power (AMP) capability. Developed specifically for the Port's World Cruise Center, the system includes flexible power cables that have 100-foot lateral movement capability and a remote-control feature to enable adjustment of the cable crane arm in response to changing tides and the location of the ships' power connections. In recent weeks, ships from Disney Cruise Line, Princess Cruises, and Norwegian Cruise Line have all plugged in to the "AMP Mobile" technology.

The Port's three AMP Mobiles can accommodate cruise ships that use either 6.6-kilovolt (kV) or 11-kV electrical systems. According to the Port, the power demand of visiting cruise ships is between 8 and 13 megawatts (MW). A 7-MW load represents the power required to produce electricity for about 1,000 homes. For more information, please go to http://www.portoflosangeles.org/newsroom/2011_releases/news_022411_amp_mobile.asp.

RAILROADS

Diesel-Electric Locomotives Arrive at the MBTA

For the first time in more than 20 years, the Massachusetts Bay Transportation Authority's (MBTA) commuter line has new locomotives. The two diesel-electric locomotives, purchased for \$7 million from the Utah Transit Authority, prevent unnecessary idling and are the first of what are planned to be several new locomotives to replace the MBTA's aging fleet. For each of the new engines, the MBTA expects to save \$78,000 in fuel per year. The new locomotives are also expected to reduce emitted nitrogen oxide levels by 38.5 tons per engine annually.

In August 2010, MBTA and the Massachusetts Bay Commuter Railroad Company (MBCR) agreed to settle an enforcement action for excessive locomotive idling brought against them by the U.S. Department of Justice and the U.S. EPA. As part of the agreement, MBTA and MBCR agreed to pay a \$225,000 fine and make technology upgrades to reduce idling. For more information about the new diesel-electric locomotives, please see http://www.mbta.com/about_the_mbta/news_events/?id=21092&month=&year= ar. Source: Judith Weader, MBTA rider (Photo courtesy of MBTA)



Chicago Tribune: Metra Air Quality Test Results Worrisome

The *Chicago Tribune* reports that the results of Chicago Metra's air quality testing, performed in response to a *Tribune* investigation that showed high levels of black soot on train platforms and in commuter train cars, are higher than the agency originally suggested. The newspaper obtained Metra's test results through the Freedom of Information Act. According to the *Tribune*, the results disclosed at Metra's January board meeting appear to report average concentrations of recorded pollutant levels. This method of reporting may mask pollution spikes, such as a black carbon level of 357 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) of air measured in one Union Pacific North passenger car. Metra's air quality testing was performed in response to a *Tribune* investigation, in which a high value of 72 $\mu\text{g}/\text{m}^3$ was measured in one commuter car. Typical values on U.S. city streets are 1–2 $\mu\text{g}/\text{m}^3$.

Complicating the picture is the threat to funding for technology that would reduce emissions from Metra locomotives. If funding is rescinded under the new federal budget, Metra would stand to lose \$341,694 awarded last fall for the purchase of automatic shut-down/start-up devices for its locomotives (funding for which was granted through the U.S. DOT's Transportation Investment in Greenhouse Gas and Energy Reduction Program [TIGGER II]). For more information, please go to <http://www.chicagotribune.com/news/local/ct-met-metra-air-testing-20110213,0,164443.story> and http://articles.chicagotribune.com/2011-02-18/health/ct-metra-diesel-emissions-20110218_1_diesel-pollution-metra-trains-metra-officials.

OTHER NEWS OF INTEREST

DERA in the Crosshairs

Funding for the Diesel Emission Reduction Act of 2010 (DERA), an act with ample bipartisan support that was signed by President Obama on January 4, 2011, was "zeroed out" in the President's budget request for FY 2012. The reauthorization allowed for the expenditure of \$100 million annually for emissions reduction projects for fiscal years 2012–2016.

Under the President's proposal, DERA is just one of the program cuts slated for the U.S. EPA, which faces a 13% budget decrease. The President's proposed budget reflects sharply reduced funding overall for fossil-energy–related programs and research on hydrogen fuel-cell vehicles.

According to the *New York Times*, the DERA cut led to "rare outbursts of opposition" from the President's own party: "I am disappointed that just two months after reauthorizing this successful program, the administration

eliminated funding for it," said Senator Tom Carper (D-Del.). The Executive Director of the Diesel Technology Forum, Allen Schaeffer, said, "It's hard to imagine any program that has delivered more return on investment for the American People. According to EPA, DERA returns a minimum of \$13 for every dollar invested and by some estimates, as high as \$20 for every \$1 invested through environmental and public health benefits."

The budget proposed by the U.S. House of Representatives reduces, but does not eliminate, DERA funding. (An amendment to the House's proposed budget that would have nixed DERA funding failed to pass.) The Senate has not yet taken up the budget for FY 2011. For more information, please see <http://www.nytimes.com/cwire/2011/02/15/15climatewire-obama-budget-counters-republican-measure-lon-77720.html> and <http://www.dieselforum.org/>.

RECURRING FEATURES

Currently Available Idling Reduction Equipment

The Alternative Fuels and Advanced Vehicles Data Center (AFDC) of the DOE Office of Energy Efficiency and Renewable Energy (EERE) identifies manufacturers of idle reduction equipment and provides links to their websites. More information is available at http://www.afdc.energy.gov/afdc/vehicles/idle_reduction_equipment.html.

For EPA-verified idle reduction technologies in eight categories, please visit EPA's SmartWay Transport website at <http://www.epa.gov/smartway/transport/what-smartway/verified-technologies.htm>.

Status of the 400-Pound Weight Exemption for Idling Reduction Devices

[Ed. note: The Energy Policy Act of 2005 allowed for a national 400-pound exemption for the additional weight of idling reduction technology on heavy-duty vehicles. Each state can adopt this exemption, at its own discretion, without being subject to any penalty provision related to withholding of highway trust fund monies.] The following table is updated

as we become aware of changes. As time permits, we will provide URLs so that interested parties, such as trucking companies, can work with their state trucking associations to be sure that enforcement officials are aware of changes in the laws. Please feel free to provide us with updates.

State Recognition of the 400-Pound Auxiliary Power Unit Exemption to GVW Limit: 23 CFR 658.17(n)						
Alabama	<i>District of Columbia</i>	Kansas	Mississippi*	New York	South Carolina	West Virginia
Alaska	Florida	<i>Kentucky</i>	Missouri	<i>North Carolina</i>	South Dakota*	Wisconsin
Arizona	Georgia	Louisiana*	Montana*	North Dakota	<i>Tennessee</i>	Wyoming*
Arkansas*	<i>Hawaii</i>	Maine	Nebraska	Ohio*	Texas*	
<i>California</i>	Idaho*	Maryland*	Nevada*	Oklahoma	Utah*	
Colorado	Illinois*	Massachusetts*	New Hampshire*	Oregon	Vermont*	
Connecticut	Indiana	Michigan*	New Jersey*	Pennsylvania	Virginia	
Delaware	Iowa*	Minnesota	New Mexico	<i>Rhode Island</i>	Washington	

States in **black** allow the 400-lb weight exemption (asterisk means that the allowance is granted by enforcement policy rather than by state law); states in *gray* do not permit the exemption; and states in **brown** have legislation in process.

Summary of State and Municipal Idling Regulations

The most current information about idling regulations, for both states and municipalities, is available at http://atri-online.org/index.php?option=com_content&view=article&id=164&Itemid=70 and http://www.afdc.energy.gov/afdc/progs/all_state_summary.cgi?afdc/0.

If information for your state or municipality is outdated or erroneous, please let us know. This newsletter is also a place to let people know about possible changes in laws or regulations or the solicitation of comments related to such.

Incentives and Funding Opportunities for Idling Reduction Projects

The DOE Clean Cities initiative provides a listing of federal and state programs that offer incentives and funding for idling reduction projects. Information can be found at http://www.afdc.energy.gov/afdc/progs/fed_summary.php/afdc/US/0. Let us know if any information needs to be changed or updated. Additionally, the EPA Diesel Collaboratives offer news of available grant and loan programs. For the Northeast Diesel Collaborative (Regions 1 and 2), see <http://northeastdiesel.org/funding.html>; Mid-Atlantic Diesel Collaborative (Region 3), <http://www.dieselmideatlantic.org/diesel/funding.htm>; Southeast

Diesel Collaborative (Region 4), <http://www.southeastdiesel.org/funding.html>; Midwest Clean Diesel Initiative (Region 5), <http://www.epa.gov/midwestcleandiesel/grants/index.html>; Blue Skyways Collaborative (Regions 6 and 7 plus Minnesota), <http://www.blueskyways.org/funding/index.html>; Rocky Mountain Clean Diesel Collaborative (EPA Region 8), <http://www.epa.gov/region8/air/rmcdc/>; and West Coast Collaborative (EPA Regions 9 and 10 plus Canada and Mexico), <http://www.westcoastcollaborative.org/grants.htm>.

Tools Available to Calculate the Cost of Idling Reduction Equipment

There are a number of tools available to workplace and truck fleet managers, owner-operators, and locomotive engineers to help determine the costs and benefits of paying for and installing idle-reduction equipment. A site from Canada that quantifies the costs of workplace idling is also

included. The calculators are provided as tools of possible benefit; their accuracy has not been verified. Any new entry this month is shown in brown. If you are aware of other sources of information that may be of possible interest to newsletter readers, please let us know.

- Argonne National Laboratory (<http://www.transportation.anl.gov/pdfs/TA/361.pdf>)
- Autotherm (<http://autothermusa.com/wordpress/calculate-idling-costs-savings/>)
- Bergstrom (http://www.nitesystem.com/html/idle_calculator.cfm)
- DOE Clean Cities program (<https://www.afdc.energy.gov/afdc/prep/index.php>)
- EPA (<http://www.epa.gov/otaq/smartway/calculator/loancalc.htm>)

- Espar (<http://www.espar.com/html/service/calculator/calculator.html>)
- Fraser Basin Council (<http://web.memberclicks.com/mc/page.do;jsessionid=d0301a9d9869fa88bfd51e50592a377d5d48?sitePageId=40919&orgId=clcc>)
- Hotstart (<http://www.hotstart.com/fuel-consumption-calculator/>)
- Kenworth (<http://www.kenworth.com>)

- Kohler Power Systems (<http://www.kohlerpower.com/mobile/solutions/apucalculator.htm?sectionNumber=13361&nodeNumber=1&contentNumber=102>)
- LifeForce (<http://lifeforceapu.com/files/LifeforceCalculator.xls>)
- Natural Resources Canada (http://oee.nrcan.gc.ca/transportation/tools/calculators/Idling/idling_impact-workplace.cfm?attr=16)
- Odyssey Battery (<http://www.odysseybattery.com/fleet.html>)
- Thermo King (<http://www.thermoking.com/tripac/>)
- Webasto (http://www.techwebasto.com/calculators/heater/heater_fuel_calculator_us.htm)

Locations of Electrified Parking Spaces

In collaboration with the U.S. DOT, the DOE Clean Cities program offers a website showing the locations of public truck stops that have idling reduction facilities for heavy-duty trucks. These facilities are available in at least 16 states. AireDock, CabAire, EnviroDock, IdleAIR, and Shorepower Technologies installations are listed at http://www.afdc.energy.gov/afdc/progs/tse_listings.php.

Another resource is the EPA SmartWay Interactive Activity Map, which features data from SmartWay Partners, National Transportation Idle-Free

Corridors, National Clean Diesel Campaign Retrofit projects, School Bus USA projects, ethanol (E-85) and biodiesel fueling station projects, and other related sources. The maps enable visualization of the location of specific fuel consumption and pollution reduction projects. The maps also help users locate the nearest electrified truck stop and the nearest public alternative-fuel filling station. For more information, please go to http://epamap10.epa.gov/website/irim_us_map.asp.

How to Find Back Issues of *National Idling Reduction Network News*

All issues of *National Idling Reduction Network News* may be found at http://www1.eere.energy.gov/vehiclesandfuels/resources/fcvt_national_idling.html. Additionally, a compendium of all previous issues is available on the site; this PDF file is especially useful for conducting searches of all issues of the newsletter.

Please be mindful that web links may expire or move over time and that some sources require registration. If you have trouble opening a link, try copying and pasting it, or retyping the URL, in your browser window.

Editor

Terry Levinson, Argonne National Laboratory, (202) 488-2472, tlevinson@anl.gov

Writer

Patricia Weikersheimer, Argonne National Laboratory, (630) 252-3124, idlingreduction@anl.gov

Disclaimer

This newsletter was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor UChicago Argonne, LLC, nor any of their employees or officers, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or

represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof.