



AIR ISSUES & REGULATIONS COMMITTEE

A Committee of the Bay Area Clean Water Agencies

Committee Meeting

September 9, 2015

10:00 am – 1:00 pm

Introductions & Opening

Agenda

- Introductions and Opening
- Regulatory Updates
 - I. State Regulatory News
 - II. National Regulatory News
- Technical Resources
- Grant Opportunities
- CASA Energy Workgroup Updates
- AIR Business Items
- Closing



State Regulatory News

State Regulatory News

Low Carbon Fuel Standard Regulation Amendments

Low Carbon Fuel Standard (LCFS) Regulation Amendments

- Proposed regulatory action:
 - Reduce the average carbon intensity of transportation fuels by 10% by 2020, compared to 2010
 - Establish fuel pathways for two categories:
 - Tier 1: Conventionally-produced, first generation fuels
 - Tier 2: Fuels produced using emerging technologies and/or innovative production methods
- Public hearing is scheduled for September 24th
- Additional information is available at:
<http://www.arb.ca.gov/regact/2015/lcfs2015/lcfs2015.htm>



State Regulatory News

Alternative Diesel Fuels Regulation

Alternative Diesel Fuels Regulation

- Alternative Diesel Fuels Regulation:
 - Provide a pathway for alternative diesel fuels to enter the California market
 - Develop a uniform framework for standards, specifications, procedures, and other requirements applicable to various current and developmental alternative diesel fuels
- Biodiesel is considered the first alternative diesel fuel
- Proposed modified regulatory language is available in mark-up format only
- Public hearing is scheduled for September 24th
- Additional information is available at:
<http://www.arb.ca.gov/fuels/diesel/altdiesel/biodiesel.htm>



State Regulatory News

**Low Carbon Transportation
Investments & Air Quality
Improvement Programs**

Low Carbon Transportation Investments & Air Quality Improvement Programs

- Proposed Fiscal Year 2015-2016 funding plan for:
 - Low Carbon Transportation Investments
 - Air Quality Improvement Program (AQIP)
- Programs provide mobile source incentives to encourage development of advanced technology and clean transportation that reduces:
 - GHG Emissions
 - Criteria Pollutants
 - Air Toxics
- Up to \$23 million is currently budgeted, as considered for adoption on June 25th
- Additional information is available at:
<http://www.arb.ca.gov/msprog/aqip/aqip.htm>



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State Regulatory News

Changes to Carl Moyer Program Guidelines

Changes to Carl Moyer Program Guidelines

- Expand fleet size eligibility ≤ 10 vehicles
- Clarify funding amounts for limited use vehicles:

Maximum Funding Amounts for Carl Moyer On-Road Vehicle Projects

Project Type	Maximum
New Vehicle Purchase	25 percent
Repower	\$30,000
Retrofit: Highest Level particulate matter (PM)+ NOx	\$10,000
Retrofit: 2007 Engine Standard Equivalent*	\$20,000
TRU Retrofit	100 percent
Idling Reduction Retrofit	100 percent

* Including ARB verified selective catalytic reduction retrofits

- Clarify mileage emission factors for cost-effectiveness calculations:

Emission Standards for On-Road Heavy-Duty Diesel Engines (g/bhp-hr¹)

Model Year	NOx	PM
2007-2009	1.20 ²	0.01
2010 and later	0.20	0.01

¹ gram per brake horsepower-hour

² Between 2007-2009, U.S. EPA requires 50 percent of heavy-duty diesel engine family certifications to meet the 0.20 g/bhp-hr NOx standard. Averaging is allowed, and it is expected that most engines will conform to the fleet NOx average of approximately 1.20 g-bhp/hr.

- Additional information is available at:

<http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm>



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State Regulatory News

Risk Management Guidance for Stationary Sources of Air Toxics

Risk Management Guidance for Stationary Sources of Air Toxics

- Approved by the California Air Resources Board (CARB) and California Air Pollution Control Officer's Association (CAPCOA) on July 23rd
- Document is intended to:
 - Provide guidance for managing potential cancer and non-cancer health risks from various emission sources
 - Convey CARB's work plan for evaluating the Air Toxics Program in light of the new risk assessment methodology
 - Provide the updated Risk Management Policy for Inhalation Risk Assessments, which replaces CARB's Interim Risk Management Policy for Inhalation-based Residential Cancer Risk
- Additional information is available at:
<http://www.arb.ca.gov/toxics/rma/rma.htm>



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State Regulatory News

Proposed Near-Term Method for
Estimating Generation Fuel Displaced
by Avoided Use of Grid Electricity

Proposed Near-Term Method for Estimating Generation Fuel Displaced by Avoided Use of Grid Electricity

- This CEC document proposes a common method for estimating the amount of generation fuel displaced by avoided use of grid electricity through the use of preferred resources
- Preferred resources currently include:
 - Energy Efficiency
 - Demand Response
 - Renewable Electricity Generation
 - Combined Heat and Power Systems
- There is also an Excel Workbook with example method calculations
- This has not yet been finalized
- Additional information is available at:
<http://www.energy.ca.gov/chp/documents/index.html>



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State Regulatory News

Existing Buildings Energy Efficiency Action Plan

Existing Buildings Energy Efficiency Action Plan

- Final plan was released August 28th
- Provides a 10-year roadmap to dramatically increase energy efficiency in existing residential, commercial, and public buildings
- This plan is consistent with Governor Brown's goal to double energy efficiency in California's existing buildings by 2030
- The 5 goals of the plan:
 - Increased government leadership in energy efficiency
 - Data-driven decision making
 - Increased building industry innovation and performance
 - Recognized value of energy efficiency upgrades
 - Affordable and accessible energy efficiency solutions
- Additional information is available at:
<http://www.energy.ca.gov/ab758/>



National Regulatory News

National Regulatory News

Proposal to Change Sewage Sludge Incineration Units

Proposal to Change Sewage Sludge Incineration Units

- Proposes a Federal Plan to implement the emission guidelines (EG) for existing sewage sludge incinerators (SSI)
- Applies to SSI constructed on or before October 14, 2010
- The proposed SSI Federal Plan includes:
 - Emissions limits for all regulated pollutants
 - Visible emissions limit for ash handling operations
 - Requirements for annual inspections of emissions control devices
 - Annual testing, monitoring, recordkeeping, and reporting requirements
 - Procedures for submitting test data to USEPA
 - Schedule for compliance with the Federal Plan
 - Operating permit provisions
 - Delegation of authority provisions
- The final rule has not yet been released
- Additional information is available at:

<http://www.epa.gov/ttn/atw/129/ssi/ssipg.html>



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Additional Items

Additional Items

Technical Resources

CARB Diesel Vehicle and Equipment Training Courses

Course	Date	Location
#100A: The Fundamentals of Enforcement Visible Emissions Evaluation Online Training	Anytime	Interactive Training
#302: Portable Equipment Registration Program and Portable Diesel Engine Air Toxic Control Measures	Dec. 3	Fresno
#504: In-Use Off-Road Diesel Vehicle Regulation	Sept. 24	Webinar
	Sept. 28	San Leandro
#505: Large Spark-Ignition Fleet Regulation	Oct. 21	San Leandro
	Oct. 29	Santa Rosa
#511.2: Diesel Particulate Filter Operation & Maintenance	Oct. 28	Santa Rosa
#520: How To Comply with CARB Diesel Regulations	Sept. 10	West Sacramento
	Sept. 22	Webinar
	Oct. 27	Vallejo
#525: Compliance Overview: Truck & Bus Rule, Off-Road Regulation, and Portable Equipment	Oct. 28	Santa Rosa
#530: Diesel Truck Events	Sept. 30	King City

Additional course information is available at: <https://ssl.arb.ca.gov/training/courselist.php> 24

Energizing California's Communities with Renewables

- Workshop to showcase:
 - Recent successes
 - Future opportunities for local renewable energy development
 - Demonstration projects
 - Information on resources and funding to help communities pursue local renewables
- Bay Area Workshop:
 - Scheduled for September 17th in Oakland
 - Focuses on solar and urban resources in the Bay Area
- Additional information is available at:
<http://www.energy.ca.gov/research/notices/>



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Advanced Breakthrough and Piezoelectric-Based Systems

- Workshop to identify two areas to increase market penetration of distributed renewable generation:
 - Advance Breakthroughs in Renewable Energy Technologies
 - Develop Piezoelectric-Based Systems for Harvesting Energy
- The goal is to dramatically increase efficiencies, reduce costs, and enable additional renewable resources
- Approximately \$7,000,000 in funding is available
- Comments due September 18th
- Workshop scheduled for September 14th in Sacramento
- Additional information is available at:
<http://www.energy.ca.gov/research/notices/index.html#09142015>



Technology Merit Review Workshop

- Workshop is scheduled for September 18th in Sacramento
- Workshop will discuss biofuel and biomethane projects funded by the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP)
- Workshop will highlight the following:
 - Key ingredients for success
 - Lessons learned
 - Pitfalls to avoid from other funding recipients
- Additional information is available at:
http://docketpublic.energy.ca.gov/PublicDocuments/15-MISC-04/TN205829_20150825T161518_Notice_of_Lead_Commissioner_Technology_Merit_Review_Workshop_Bi.pdf



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Demand Response World Forum 2015

- 2nd Annual Demand Response World Forum 2015
 - October 6 – 8th
 - Costa Mesa, California
- Topics include:
 - Methods for optimizing
 - Generation
 - Distribution
 - Renewables
 - Integration and management of distributed energy resources
 - Market initiatives
 - Regulatory developments impacting demand response
- Additional information is available at:
<http://www.drworldforum.com/agenda.htm>



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USEPA Water & Climate Reports

- Green Infrastructure: Lessons from Science and Practice
 - Demonstrates the importance and limits to green infrastructure.
 - Report available at: <http://www.science-policy-exchange.org/gi-report>
- Catalog of Combined Heat and Power Technologies
 - Presents cost and performance characteristics, efficiency characteristics, and emissions and water use profiles for commercially available combined heat and power technologies
 - Report available at: <http://www.epa.gov/chp/technologies.html>
- Benchmarking & Transparency Policy and Program Impact Evaluation Handbook
 - Provides both a strategic planning framework and standard methodologies to measure the impacts of benchmarking programs and policies.
 - Report available at: <http://energy.gov/eere/slsc/downloads/benchmarking-and-transparency-policy-and-program-impact-evaluation-handbook>



USEPA Water & Climate Reports

- The Water-Energy Nexus: An Earth Science Perspective
 - Provides insight on the complex ways in which water and energy are interconnected and highlights the important issues that affect availability and sustainability of water and energy resources in the U.S.
 - Report available at: <http://pubs.usgs.gov/circ/1407/>
- Local Climate and Energy Program Model Design Guide: Enhancing Value and Creating Lasting Programs
 - Helps create or transition to designs that consider how programs create and deliver value, how they raise revenue, and how they can operate cost effectively in the long-term.
 - Report available at: <http://epa.gov/statelocalclimate/documents/pdf/csc-learn/CSC-EP-Program-Design-Guide-13-April-2015-508-v2.pdf>
- City-Level Energy Decision Making: Data Use in Energy Planning, Implementation, and Evaluation in U.S. Cities
 - Compares climate, sustainability, and energy plans to better understand where cities are taking energy-related actions and how they are measuring impacts.
 - Report available at: <http://www.nrel.gov/docs/fy15osti/64128.pdf>



USEPA ENERGY STAR® Webinars

- September 22nd: How to Apply for the ENERGY STAR
 - Application process for Portfolio Manager Certification
- September 23rd: Portfolio Manager 101
 - Introduce the core functionality of the ENERGY STAR Portfolio Manager tool
- September 29th: Portfolio Manager 201
 - Dive deeper into more advanced tool functions
- September 30th: Portfolio Manager 301
 - Get more advanced knowledge of tool functions and features

- Registration information is available at:

<http://www.energystar.gov/buildings/training>



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Additional Items

Grant Opportunities

Department of Energy Title XVII Clean Energy Loan Program

- Intends to fill funding gap of private lenders not ready to take technology risk
- New funding will support accelerated deployment of commercial-scale distributed energy projects
- Up to \$1 billion available in funding, split equally between:
 - Advanced Fossil Energy Projects
 - Renewable Energy & Efficient Energy Projects
- Also released updated guidance on the types of project structures, financial terms, and eligible technology supported
- Additional information is available at:
<http://energy.gov/lpo/innovative-clean-energy-projects-title-xvii-loan-program>



Water Energy Technology (WET) Program

- Intended to provide rebates for various industries in California to partially fund advanced water efficient technologies that reduce on-site water and energy use and GHG emissions
- **Phase 2: Industrial, Commercial & Residential**
 - Up to \$16M in funding is available
 - Grants: Innovative waterless and reduced water using systems and appliances; waste heat recovery and water reuse technologies
- **Phase 3: Desalination**
 - Up to \$3M in funding is available
 - Grants: Improvements to existing plants that result in energy reduction and increased water production
- Guidebook for rebate funding adopted July 8th
- Additional information is available at:

<http://www.energy.ca.gov/wet/documents/index.html#08262015>



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Natural Gas Vehicle Incentive Project (NGVIP)

- Provides incentives to reduce the purchase price of new on-road natural gas vehicles used in California
- Funding is available on a first-come, first-served basis
- Funding varies depending on the gross vehicle weight (GVW):

GVW (lbs.)	Incentive Amount
Up to 8,500	\$1,000
8,501 – 16,000	\$6,000
16,001 – 26,000	\$11,000
26,001 – 33,000	\$20,000
33,001 & greater	\$25,000

- Total funding available is approximately \$10M
- A single applicant can have a maximum of 30 incentives
- Incentive payment processing takes ~90 days
- Additional information is available at:

<https://ngvip.its.uci.edu/>



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Electric Vehicle Charging Station Financing Program

- Funded by the California Energy Commission (CEC)
- Funding for the design, development, purchase, and/or installation of qualified electric vehicle charging stations at small businesses
- Funding Details:
 - Up to \$500,000 per qualified borrower
 - Can be insured for up to four years (though the actual term of the loan can be longer)
 - An additional 10-30% of the principal balance may be contributed by California Capital Access Program if the installation is in a disadvantaged community
 - Borrowers may be eligible to receive a rebate of 10-15% of the enrolled loan amount

- Additional information is available at:

<http://www.treasurer.ca.gov/cpcfca/calcap/evcs/summary.asp>



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BAAMQD Electric Vehicle Fleet Grants

- \$14 million in grant funding to accelerate electric vehicle (EV) fleet adoption
- Funding is available to Bay Area businesses for the following:
 - Charge! Program: Expansion of the Bay Area's network of electric chargers at workplaces
 - \$5 million in funding is available
 - Min \$10,000 and max \$250,000 per project
 - Over \$13 million is available for all EV-related programs
 - Light Duty EVs in Fleets: Funding is available for the purchase or lease of zero-emissions light duty vehicles in high mileage fleets.
 - Heavy Duty EVs: Funding is available for the purchase or lease of zero-emissions heavy duty vehicles
- Applications due December 18th, or until funds are exhausted
- Additional information is available at: <http://www.baamqd.gov/grant-funding/public-agencies>



Additional Items

CASA Energy Workgroup Updates

CASA Energy Workgroup Updates

- CalRecycle's Composting and Anaerobic Digestion Regulations
 - Approved August 18th
 - Grant exemptions for POTWs receiving hauled in organic waste for co-digestion
 - Additional information is available at:
<http://www.calrecycle.ca.gov/Laws/Rulemaking/Compost/default.htm>
- Assembly Bill 341
 - Requires California to reduce 75% of solid waste generated by the year 2020 through source reductions and/or increased recycling and composting
 - CalRecycle report outlines the tools and pathways that will help achieve this goal
 - Additional information is available at:
<http://www.calrecycle.ca.gov/Publications/Detail.aspx?PublicationID=1538>
- Proposed Decision on Pipeline Biogas Interconnection Costs
 - Adopted by the California Public Utilities Commission (CPUC) on June 11th
 - Pipeline biogas interconnection costs under Assembly Bill 1900:
 - Allocates \$40 million to offset up to 50% of interconnection costs
 - Or up to \$1.5 million for each biomethane project built in California over the next 5 years

Additional Items

AIR Business Items

BACWA AIR Business Items

- Total budget for FY 2015/2016: \$52,000
 - Spent through Friday, September 4th:
 - Approximately \$4,400
 - 8% of budget
 - Changes in scope for this year:
 - One meeting per quarter
 - Digests provided once every 2 weeks
 - BACWA staff will maintain the BACWA AIR Committee Website
 - BACWA staff will update the AIR Issues Matrix
- Plan for remaining meetings:
 - Facility Field Trip (Fall/Winter 2015)
 - Routine Regulatory Meeting (Winter/Spring 2016)
 - Annual meeting with BAAQMD (Spring 2016)
- Other?



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Closing

Next Meeting: Wednesday, November 11, 2015

Volunteers for hosting a field trip?