MANE-VU Future Year Inventories

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MARAMA/ MANE-VU

RPO Technical Meeting

June 9-10, 2005

MANE-VU Control Scenario Definitions

- On the Books – OTB – Controls that are on the books as of a specified date (MANE-VU revising OTB in June 2005)
- On the Way – OTW – Proposed controls and regulations not yet implemented
- Beyond on the Way – BOTW – Control scenario(s) not yet defined by MANE-VU

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On the Books Control Strategies (as of Feb. 17 2005)

CONTROL STRATEGY	NATIONAL/ REGIONAL	STATE
Current state/local regulations to meet Phase I/II NOx SIP Call	X	
Current state/local regulations to meet NOx Budget Trading Program	X	
Current state/local regulations to meet RACT	X	
Title IV for Phase I and II EGUs	X	
VOC 2-, 4-, 7-, and 10-year MACT Standards	X	
Combustion Turbine MACT	X	
Industrial Boiler/Process Heater/RICE MACT	X	
Heavy Duty Diesel Engine Standard/Low Sulfur Fuel	X	
Large Spark Ignition and Recreational Vehicle Rule	X	
Tier 2 Tailpipe/Low Sulfur Fuel (CALEV for participating states)	X	
Nonroad Diesel Rule	X	
CALEV (California Car) and ZEV Program		NJ
Mercury Rule		NJ
Distributed Generation Standards		NJ, CT, ME, RI
Enforcement Actions		NJ
State Multi-P Requirements		MA, NY

On the Books Control Strategies (cont.)

CONTROL STRATEGY	NATIONAL/ REGIONAL	STATE
OTC Model Rules for Solvent Cleaning		MA, DE, ME
OTC Model Rules for Autorefinishing		CT, DC, DE, ME, MD, NY, PA
OTC Model Rules for Portable Fuel Containers		CT, DC, DE, ME, MD, NY, PA
OTC Model Rules for Additional Point Sources		CT, NY
OTC Model Rules for Consumer Products		DC, DE, ME, MD, NY, PA
OTC Model Rules for AIM		DC, DE, ME, NY, PA
Municipal Waste Combustor NOx Regulations		CT
Stage II Gasoline Service Station Pressure-Vent Valves		CT
OBD II Enhanced I/M		CT
On-Board Diagonistics		NH
On-Board Refueling Vapor Recovery		NH
Expanded Inspection & Maintenance Rule		NC
Stage I for gasoline service stations - Statewide		NC, CT
Expanded and improved vehicle emissions inspection		PA
Heavy-Duty Diesel Engine Requirements - CA certification		CT
Locomotive Emission Standards		MD
New Hampshire Clean Power Act and companion regulation (Env-A 2900)		NH
Open Burning		NH, NC
State NOx Budget Unit SO2 standard (this is only useful for PM fine)		CT
Non-ozone season NOx Budget Unit NOx limitations		CT
CA Stage II requirements for gasoline service stations		CT

On the Way Control Strategies

CONTROL STRATEGY	NATIONAL/ REGIONAL	STATE
Measures in EPA's proposed O3/PM implementation guidance	X	
8-hr attainment plans (e.g., NOx RACT)	X	
CAIR/ CAMR implementation	X	
OTC Model Rules for AIM		NJ, MA, CT, NH, NC, RI, WV
OTC Model Rules for Consumer Products		NJ, MA, CT, NH, NC, RI, WV
OTC Model Rules for Autorefinishing		NJ, MA, NC, RI, WV
OTC Model Rules for Portable Fuel Containers		NJ, MA, NH, NC, RI, WV, VT
OTC Model Rules for Additional Point Sources		NJ, MA, DC, ME, MD, NH, NC, PA, RI
Tighten Diesel Inspection/Maintenance Program and remove exemptions to current idling standard.		NJ
Diesel Retrofit Legislation		NJ
State Multi-P Requirements		DE
Lightering		DE
Truck Stop Electrification		DE
Distributive Generation (Regulation 44)		DE, NY
Anti-Idling		DE
Facility Shutdowns		DE
Motiva Consent Decree		DE
Chip Reflash for Heavy Duty Diesel		NH
NY, OTC Tier 2 Rule for fuel; to be adopted 3/2005		NY

Beyond on the Way

- MANE-VU work to be completed in the Fall 2005

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MANE-VU Emissions Projection Work

<u>EGU inventory projection for 2009, 2012, and 2018</u>

- Running IPM in conjunction with MRPO, VISTAS and CENRAP
- Run years: 2008, 09, 12, 15, 18, 20, 2026
- Each RPO updated NEEDS input data for IPM and developed crosswalk to link IPM input/output data to RPO inventories
- Stakeholder review of assumptions and NEEDS
- RPOs agreed upon a specific set of global assumptions
- IPM runs begin May 2005
- Base case and CAIR/CAMR policy case results for 2009 and 2018 due in June/ July

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MANE-VU Emissions Projection Work

<u>EGU inventory projection for 2009, 2012, and 2018 (cont.)</u>

- Further sensitivity analysis and control scenario IPM runs – Summer/ Fall 2005
- Currently defining sensitivity analysis
  - Analysis based on RGGI work

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MANE-VU Emissions Projection Work

Area, Nonroad, and Non-Energy Point emission projections

- OTB, OTW and BOTW for 2009, 2012, and 2018
  - NON-ENERGY POINT & AREA sources- Utilizing EGAS 5.0 as default, supplementing with state data when available
    - Fire – develop typical fire year
      - Develop ratios of long term acreage to 2002 acreage.
      - Use ratio to estimate a “typical” fire year by “growing” 2002 emissions to the level represented by the “typical” ratio
      - Evaluate whether or not increases in prescribed burning are anticipated in future years
    - Ammonia from Agriculture sources – develop emissions forecasts based on EPA data

MANE-VU Emissions Projection Work

Area, Nonroad, and Non-Energy Point emission projections

- NONROAD sources – using Nonroad model
  - Commercial marine vessels, railroads, and airplanes – using state data when available, or modified CAIR projection data
- SMOKE Growth and Control Packets due: August 2005
- Projected Emissions Inventory due: September 2005

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MANE-VU Emissions Projection Work

Mobile emission projections

- On the Books (OTB) and On the Way (OTW) for 2009, 2012, and 2018
  - Using MOBILE6 with SMOKE application
  - States providing Mobile 6 inputs and projected VMT data
  - Completion date: September 2005

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QUESTIONS?

Acadia National Park