



Regional Greenhouse Gas Initiative

An Initiative of the Northeast & Mid-Atlantic States of the U.S.

Delaware's CO₂ Budget Trading Program Regulation 1147

RGGI Rule Development Workgroup
February 27, 2008

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Overview of Presentation

- Background
- RGGI Design Process
- 10-State Memorandum of Understanding (MOU)
- Model Rule Process

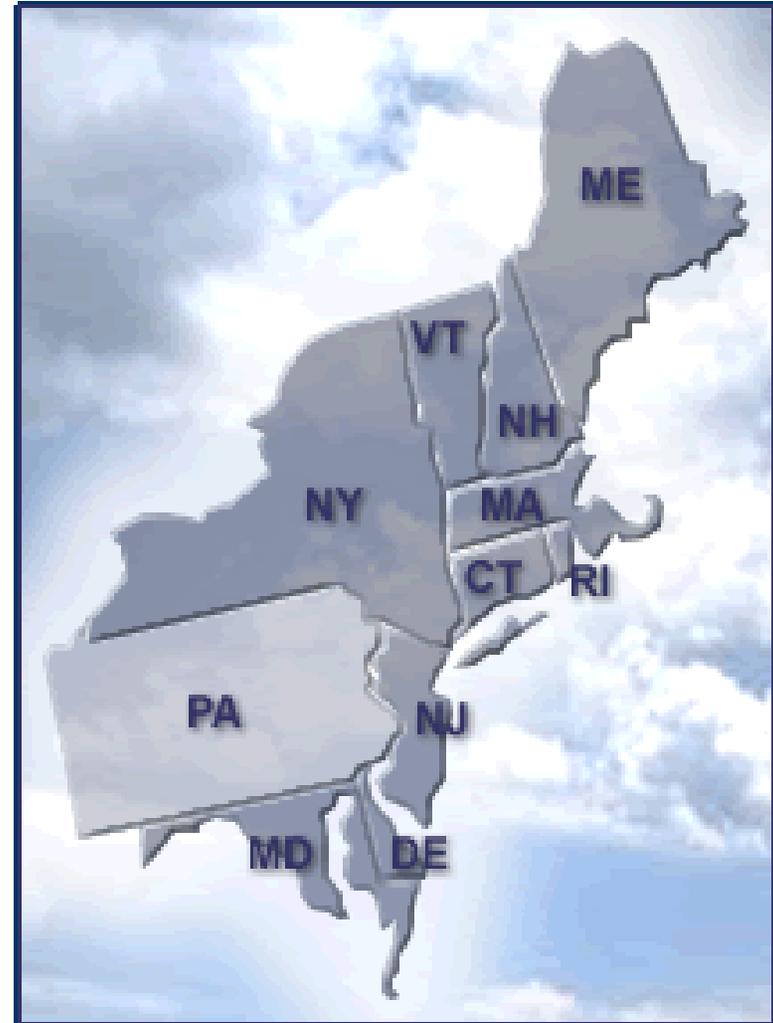


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Goal

- Design a Regional Cap and Trade Program Covering CO₂ Emissions from Power Plants
- Develop a “model rule” for adoption in each state



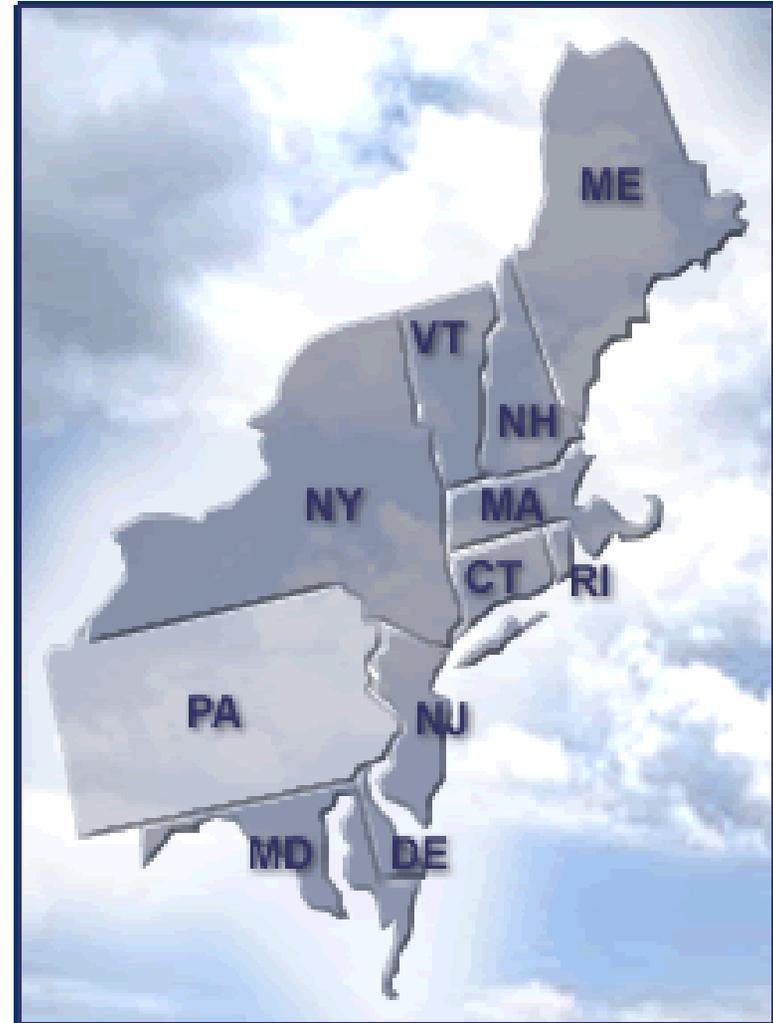


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Statistics

- 3rd Largest World Economy
- 14% of US GHG Emissions
- 3.2% of World GHG Emissions (\cong Germany)



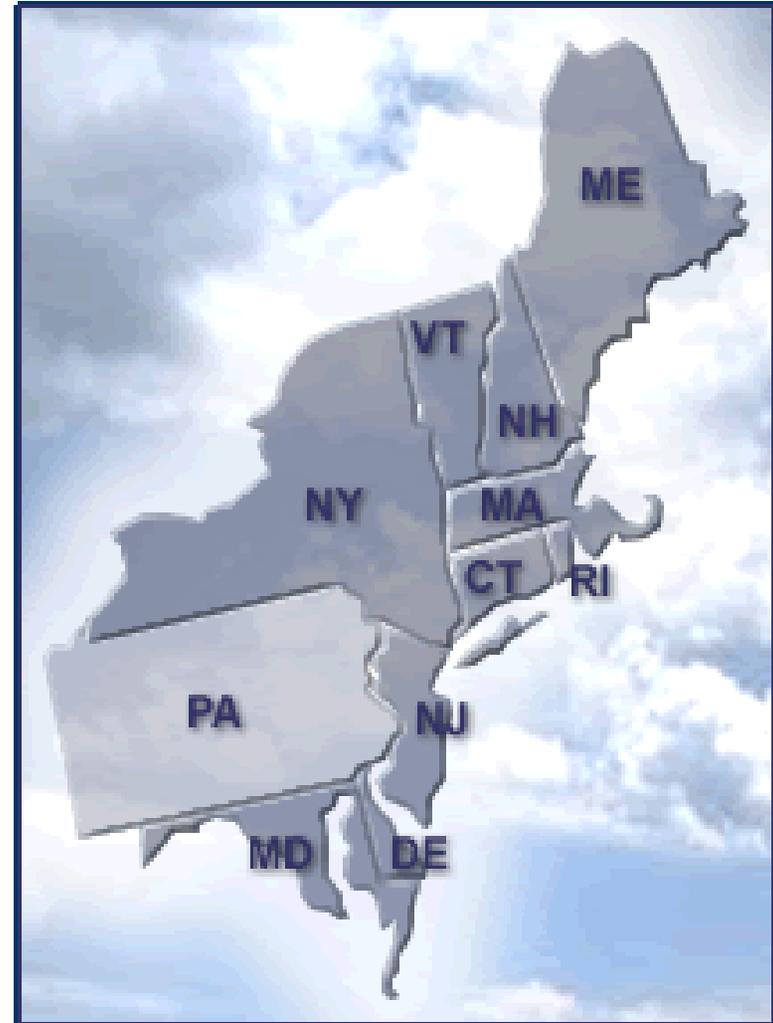


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Background

- April 2003 Invitation from NY Governor Pataki
- July 2003 Launch
- September 2003 Action Plan
- August 2005 Staff Working Group Package Proposal
- December 2005 Memorandum of Understanding signed by Governors
- August 2006 Model Rule





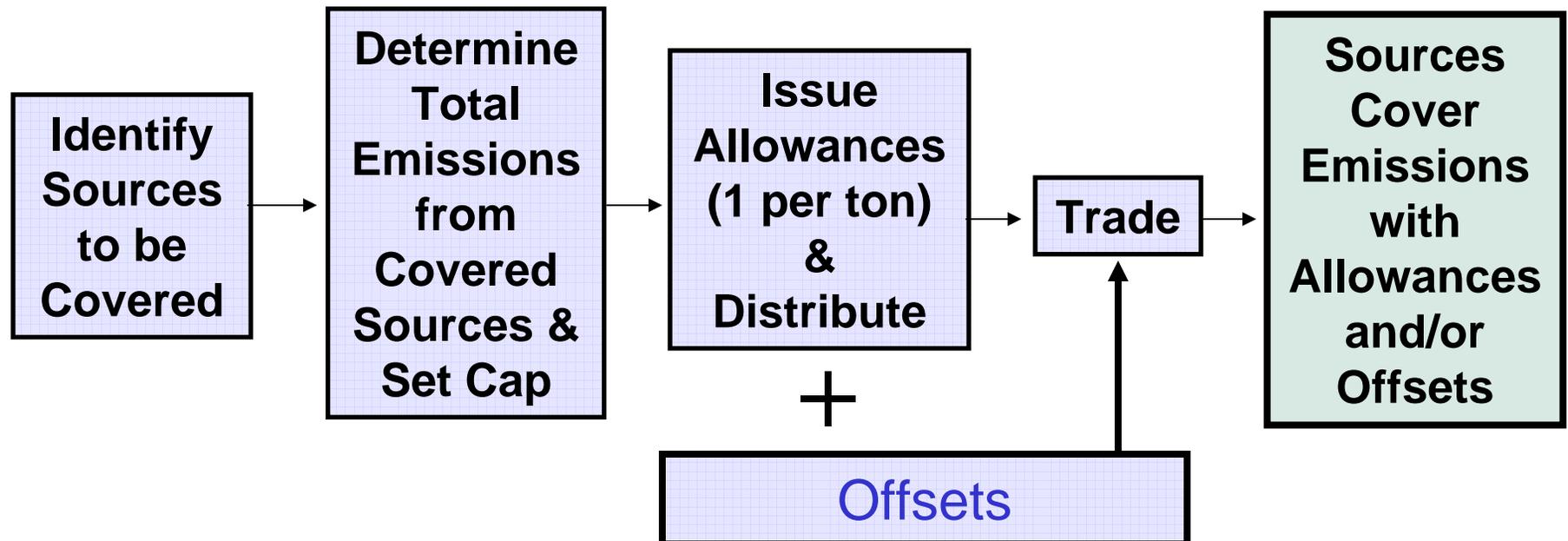
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RGGI Design Principles

- Reduce CO₂ with flexible, market-based program to achieve least cost reductions.
- Create model for federal program.
- Maintain electricity affordability, reliability and fuel diversity.
- Make expandable to other states.
- Build on programs in place.



Designing RGGI: A Cap-and-Trade Program



RGGI Program Components

- Start Date of January 1, 2009.
- Electric Generating Units 25 Megawatts+
- Two-Phase Cap
 - Stabilize Emissions through 2015
 - Reduce 10% by 2019.
- Comprehensive Review of Program in 2012.
- Offsets allowed to provide some flexibility.
- Price trigger safety valves to control costs.

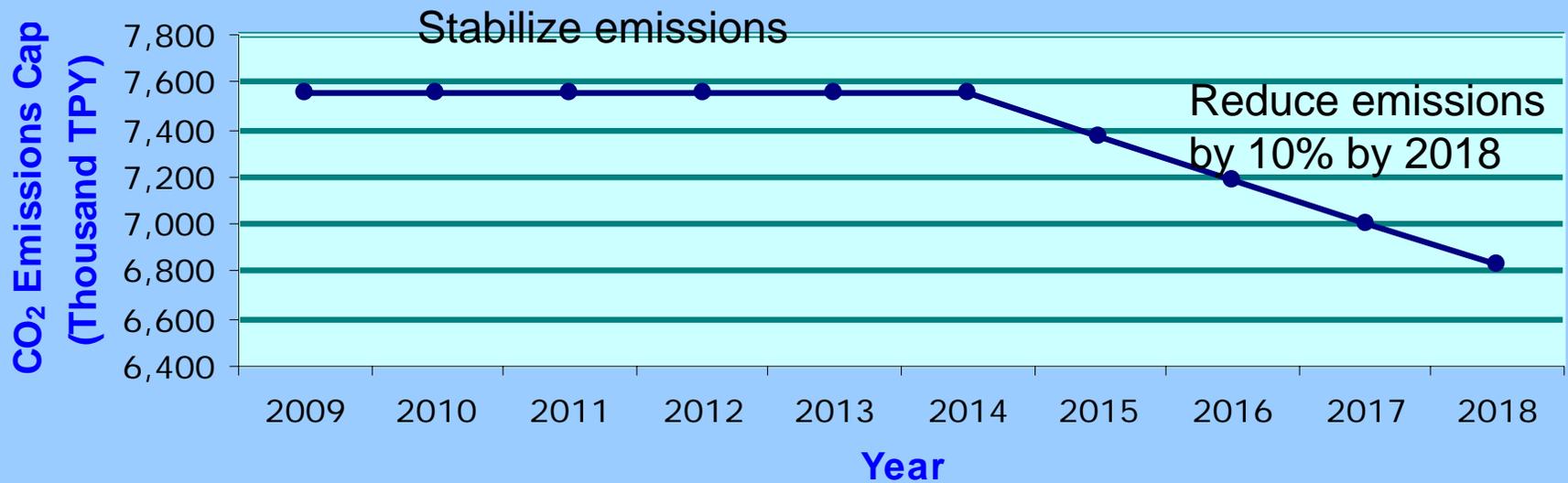
RGGI State Allocations

Connecticut:	10,695,036 tons
Delaware:	7,559,787
Maine:	5,948,902
Maryland:	37,503,983
Massachusetts:	26,660,204
New Hampshire:	8,620,460
New Jersey:	22,892,730
New York:	64,310,805
Rhode Island:	2,659,239
Vermont:	<u>1,225,830</u>
	188,076,976 tons

*Based on adjusted actual annual average emissions from all affected facilities (2000-2002)

Delaware's RGGI CO₂ Emissions Allocation

7,559,787 tons



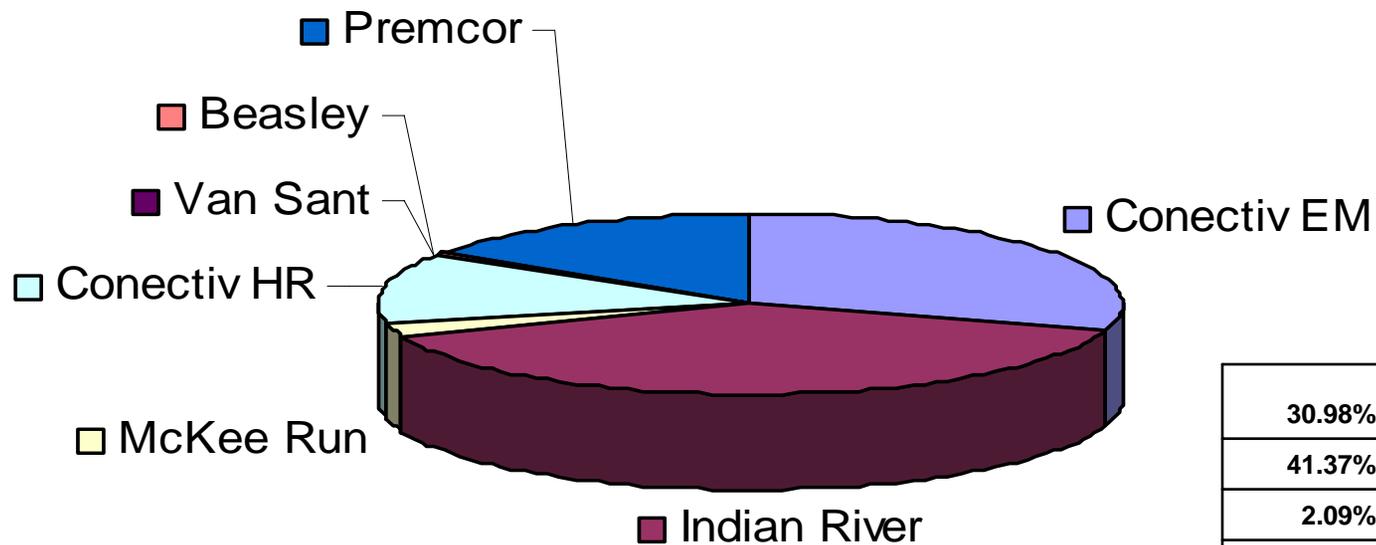
Delaware Power Plant Specifics

Facility (units)	Unit types	Generation (MGW)	Installation Year	Fuel type	2000-2002 Average CO ₂ Emissions (Tons/year)
NRG Indian River (4)	ST	82, 82, 177, 442	1957, 1959, 1970, 1980	Coal	3,063,258
Conectiv Edge Moor (3)	ST	75, 177, 446	1954, 1966, 1973	Coal (Residual Oil)	2,293,849
Conectiv Hay Road (8)	CC WH	115, 115, 115, 115, 122, 122, 195, 200	1989, 1990, 2001*	Pipeline Natural Gas/ waste heat	1,017,746
Dover - McKee Run (1)	ST	114	1975	Residual Oil	154,711
Dover - Van Sant (1)	CT	45	1991	Diesel Oil	5,290
DEMEC - W. Beasley (1)	CT	45	2002*	Natural Gas	13,946
NRG Dover (2)	CT	50, 50	2001*	Natural Gas	19,726
Premcor Refinery (6)	ST CT	28, 28, 63, 63, 90, 90	1956, 1961, 2000*	Residual Oil, Syn Gas	1,207,544

- Units over 25 MGW – nameplate capacity
- CC – Combined Cycle
- CT – Combustion Turbine
- WH – Waste Heat
- ST – Steam Turbine

*Non-Acid Rain Units

CO₂ emissions 2000-2002 from Delaware EGU's



30.98%	Conectiv EM
41.37%	Indian River
2.09%	McKee Run
13.37%	Conectiv HR
0.07%	Van Sant
0.27%	Beasley
16.31%	Premcor

RGGI Program Components

- Allocations:
 - 25% for Consumer Benefit and/or Strategic Energy Purpose
 - Remaining 75% of the allocations left to each state to allocate
- 3-Year Compliance Period
- Banking Allowed

RRGI Program Components

- **Offsets—project-based reductions:**
 - Types:
 1. Landfill methane capture & destruction.
 2. Reduction in emissions of sulfur hexafluoride (SF6)
 3. Reduction/avoidance of CO2 emissions from natural gas, oil or propane end-use combustion due to end use energy efficiency.
 4. Sequestration of carbon due afforestation
 5. Avoided methane emissions from agricultural manure management.

MOU Program Components

- **Safety Valves**
 - \$7.00 Trigger
 - Limit on offset use increased from 3.3% to 5% of a source's reported emissions
 - \$10.00 trigger
 - Offset limit goes to 10%
 - Retirement of international credits allowed
 - Compliance period may be extended 1 year
 - No program suspension, alternative compliance payments or additional allowances



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Model Rule

- Model Rule finalized August 2006 and corrected January 2007.
- States have begun to initiate state-specific legislative and/or rulemaking processes.

RGGI States and Their Rulemaking Status, 1/24/08

State	Cap & Trade Rule Status			Auction Rule Status		
	Proposed?	Adopted?	Comments	Proposed?	Adopted?	Comments
Connecticut	1/2008					No auction rule
Delaware			To propose 6/2008	N/A		Auction provisions within cap & trade rule
Maine	8/2007	12/2007				To propose 2/2008
Maryland	2/2008					To propose temp rule 3/08, perm rule 7/08
Massachusetts	8/2007		To finalize ~1/2008	8/2007		Next step: legislature review
New Hampshire			Legislation done, will draft rule	N/A		Auction provisions within cap & trade rule
New Jersey			To propose 2/2008	N/A		Auction provisions within cap & trade rule
New York	10/2007		To re-notice rule (delay)	10/2007		Plan to re-notice rule (delay)
Rhode Island	1/2008		Pre-proposal posted	1/2008		Pre-proposal posted
Vermont	10/2007		To finalize 6/2008			Rule or order? To be decided.

Delaware Rule Development

- Workgroup meetings
 - February 27th
 - March 26th
 - (April) May 1st
 - May 28th
- June ?? Public Workshop
- Proposed Rule
 - July 1, 2008 Delaware Register Public Notice
- Public Hearing
 - Sep 1, 2008 Delaware Register Public Notice
 - Sep 30, 2008
- Response to Comments
 - November 1, 2008 Final Document
- Final Rule
 - December 1, 2008 Delaware Register

RGGI Model Rule Sections

- Section 1 – General Provisions
- Section 2 – Authorized Account Representative
- Section 3 – Permits
- Section 4 – Compliance Certification
- Section 5 – Allowance Allocations
- Section 6 – Allowance Tracking System
- Section 7 – Allowance Transfers
- Section 8 – Monitoring and Reporting
- Section 9 – RESERVED
- Section 10 – Emission Offset Projects
- Section 11 – Auction

Section 1- General Provisions

1. Purpose.
2. Definitions.
3. Measurements, abbreviations, and acronyms.
4. Applicability.
5. Standard Requirements.
6. Computation of time.
7. Severability.

Section 2 – Authorized Account Representative

1. Authorization and responsibilities.
2. Alternate authorized account representative.
3. Changing account representative.
4. Account certificate of representation.
5. Objections concerning account representative.
6. Delegation by account representative and alternate account representative.

Section 3 - Permits

1. Permit requirements.
2. Submission of permit applications.
3. Information requirements for permit applications.

Section 4 – Compliance Certification

1. Compliance certification report.
2. Action on compliance certifications.

Section 5 – Allowance Allocations

1. Base Budget.
2. Timing requirements for allowance allocations.
3. Allowance allocations.

Section 6 – Allowance Tracking System

1. Allowance Tracking System accounts.
2. Establishment of accounts.
3. Allowance Tracking System responsibilities of authorized account representative.
4. Recordation of allowance allocations.
5. Compliance.
6. Banking.
7. Account error.
8. Closing of general accounts.

Section 7 – Allowance Transfers

1. Submission of allowance transfers.
2. Recordation.
3. Notification.

Section 8 – Monitoring and Reporting

1. General requirements.
2. Initial certification and recertification procedures.
3. Out-of-control periods.
4. Notifications.
5. Recordkeeping and reporting.
6. Petitions.
7. Budget units that co-fire eligible biomass.
8. Additional requirements to provide output data.

Section 9 - Reserved

Section 10 – Offset Projects

1. Purpose.
2. Definitions.
3. General Requirements.
4. Application Process.
5. Emission offset project standards.
6. Accreditation of independent verifiers.
7. Award of emissions offset allowances.

Section 11 – Delaware Auction Language

To be determined