



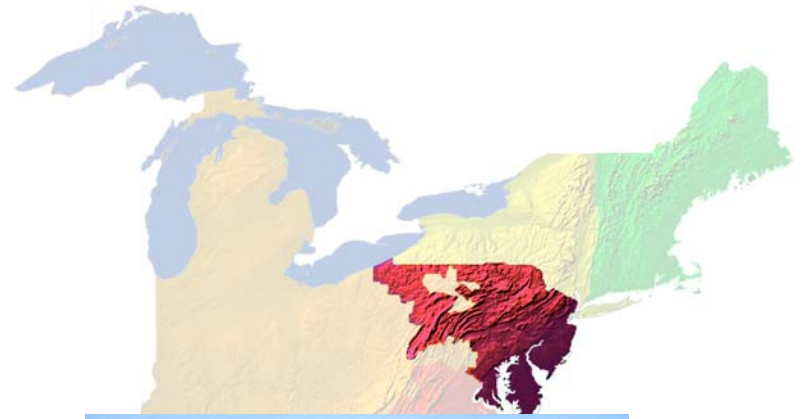
Calpine Northeast Region PJM Portfolio



Newark (NJ)
58 MW CHP



Parlin (NJ)
122 MW CHP



Ontelaunee Energy Center (PA)
550 MW CC





- Independent Power Producers of New York
- Northeast Regional Greenhouse Gas Coalition
- EPA Climate Leaders Partner
- Calpine Board Resolution Goals
 - Minimize CO₂ Per Megawatt Hour
 - Lead the Industry in Minimizing CO₂ Emissions
 - Add Only Baseload Power Plants With CO₂ Emissions Equal to or Lower Than From Modern Combined-Cycle Gas-Fired Power Plants





2003 CO2 EMISSIONS

Plant	Stationary (short tons)	Net MWHR	lbs CO2/MWHR
Androscoggin	464,484	796,172	1,167
Bethpage	287,616	440,454	1,306
Dighton	210,547	646,987	651
Kennedy (KIAC)	285,721	528,061	1,082
Newark	198,349	365,242	1,086
Ontelaunee	363,269	836,257	869
Parlin	63,605	77,764	1,636
Rumford	661,799	1,519,035	871
Stony Brook	316,877	334,369	1,895
Tiverton	705,927	1,101,039	1,282
Westbrook	1,356,905	3,244,159	837
TOTALS	4,915,098	9,889,539	994



APPORTIONMENT AMONG STATES

State	1990	1995	2000	2003
CT	10,336	6,415	11,106	8,481
DC	443	230	179	63
DE	6,560	6,768	6,273	5,379
MA	26,645	19,033	24,178	27,020
MD	26,705	27,549	30,651	32,602
ME	1,928	800	3,235	5,470
NH	5,019	4,442	4,595	5,834
NJ	12,212	9,413	24,124	21,848
NY	67,386	41,366	58,816	54,616
PA	105,277	100,339	134,377	139,646
RI	516	336	2,836	2,365
VT	43	18	112	21
Total	263,070	216,709	300,482	303,345
From Environment Northeast, 2004				
Units in thousands of tons CO2				

State CO2 Emissions Profiles have Changed Significantly Over Time





APPORTIONMENT BY NERC REGION

NERC Region	1990	1995	2000	2003
NEPOOL	44,487	31,044	46,062	49,191
NYPOOL	67,386	41,366	58,816	54,616
PJM	151,197	144,299	195,604	199,538
TOTAL	263,070	216,709	300,482	303,345
From Environment Northeast, 2004				
Units in thousands of tons CO2				

Choice of Baseline Year is Critical





CASE STUDY: MAINE & NEW YORK

State	1990	1995	2000	2003
ME	1,928	800	3,235	5,470
NY	67,386	41,366	58,816	54,616

Cap Basis	State Allocation Basis	Maine Allowances	NY Allowances	Maine Shortfall (Surplus)	New York Shortfall (Surplus)
7% Below 1990 Baseline	1990 CO2 Emissions	1,793	62,669	3,677	(8,053)
7% Below 1990 Baseline	2000 CO2 Emissions	3,009	54,699	2,461	(83)
7% Below 1990 Baseline	2003 CO2 Emissions	5,087	50,793	383	3,823
Shortfalls Compared To 2003 Emissions					

Allocation basis introduces significant variability among and between states



RECOMMENDATIONS

- RGGI Reduction Target Should Be Equally (as a percentage) Allocated to States Based On Fossil Generation Only
 - These are the units most affected by the program
 - Non-fossil generation will realize benefit from higher clearing prices driven by fossil generators
- The More Recent The State Allocation Basis The Better
 - More closely reflects current electricity markets and power plant distribution
 - Better Accuracy
- Update State Allocations Periodically to Accommodate Future Changes in Generation Distribution
- Consider Output Based Allocation (Fuel Specific or Not)
 - Rewards State Fossil Fleet Efficiency
 - Would Facilitate Output Based Allocation to Facilities within the States

