

# EPA's Clean Power Plan: Facts, Myths, and Impacts



*July 29, 2014*  
*2014 Wichita Program: Appraisal for Ad Valorem Taxation*

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## **Clean Power Plan**

- On June 2, 2014, the EPA issued the Clean Power Plan (“CPP”) to address the greenhouse gas emissions from *existing* power plants. It was the EPA’s first effort to address CO<sub>2</sub> emissions specifically at existing generators.
- In this presentation, we will examine:
  - What the Clean Power Plan is and what it is not
  - How the targets were calculated
  - How close is the sector to meeting the standard
  - The likely paths forward to implementation
  - The implications to power asset valuations
  - Potential considerations in assessments
- We will focus on different states at times throughout the presentation to illustrate the broad range in variation possible across jurisdictions.
- **Bottom Line: The CPP, in a manner similar to EPA’s previous regulations (MATS, etc) is likely to result in continued erosion of tax bases that consist primarily of large fossil-fueled generating units.**

## Overview

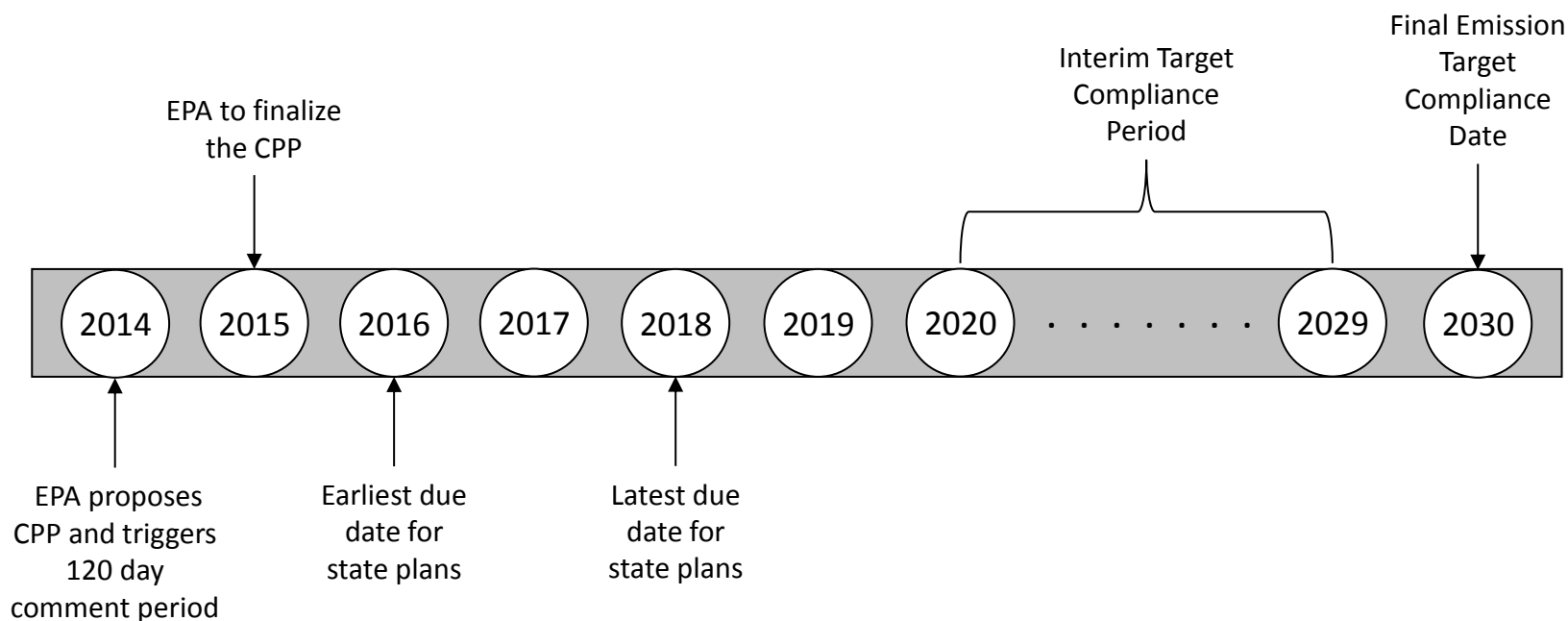
## What is the CPP?

- The CPP establishes state-level emission targets in terms of lbs of CO<sub>2</sub> per MWh of electricity generated.
- Because the CPP is an intensity standard, two paths are possible:
  - i)* Reduce carbon emissions at fossil fuel power plants
  - ii)* Increase generation from low- or zero-emitting resources
- EPA's emission targets for each state are based on the unique characteristics of each state's power sector.
  - They reflect each state's unique existing capacity profile (some being more carbon intensive than others).
  - They reflect each state's renewable portfolio standards ("RPS") that encourage the development of zero-emission generators (*e.g.*, wind and solar facilities).
  - They reflect state-by-state gas plant utilization and each state's prospects for coal-to-gas redispatch.

## CPP Compliance Timeline

- Following a 120-day comment period, the EPA expects to finalize the CPP by June 2015.
- And then there's the litigation...
  - Early thinking regarding the legal basis for the CPP suggests that the EPA has made overly broad interpretations of its legal authority – a position seemingly strengthened by the Supreme Court's recent decision in *Utility Air Regulatory Group v. EPA*.
  - In *UARG v. EPA*, the Supreme Court ruled that the EPA could not, as an exercise of its discretion, ignore or contradict the plain text of the Clean Air Act. This is relevant to the CPP because the EPA has acknowledged that a "literal reading" of the text would appear to bar the action the EPA is attempting to take.
- Assuming the EPA finalizes the CPP in June 2015, states will be required to submit their state implementation plans ("SIPs") shortly thereafter.
  - Individual state plans are due by June 2016
  - States pursuing a multi-state regional approach can request an extension and file a joint plan by June 2018.

- The rule specifies a final emission target for each state that must be achieved by 2030.
  - Recognizing that some states already implement programs that reduce carbon intensity, the EPA believes that some states can achieve short-term reductions in advance of the 2030 final target date.
  - As a result, the CPP also established an interim goal during a phase-in period between 2020-2029. Compliance is based on meeting the interim emission target, on average, over the ten-year period.



## Reductions in Pollution Intensity

- In the simplest terms, the EPA is proposing to cut carbon emissions from the future production of electricity.
- Instead of imposing specific limits on specific power plants, the CPP is designed to squeeze carbon emissions out of our power system with broad system-wide measures.
- With so few implementation details available at this point, the broad range of reductions proposed by the EPA has led to confusion.
  - Some states have been asked to cut their emissions by over 50% and as high as 70%.
  - Other states seem to have a low hurdle, with relatively lower reduction targets of about 20%.
  - Despite the glaring differences in the percentages, some states with high reductions may have an easier time than states with low reductions.
- In the face of this confusion, and to understand potential impacts on values and assessments, it's important also to consider what the CPP is *not*.



## What the CPP is Not

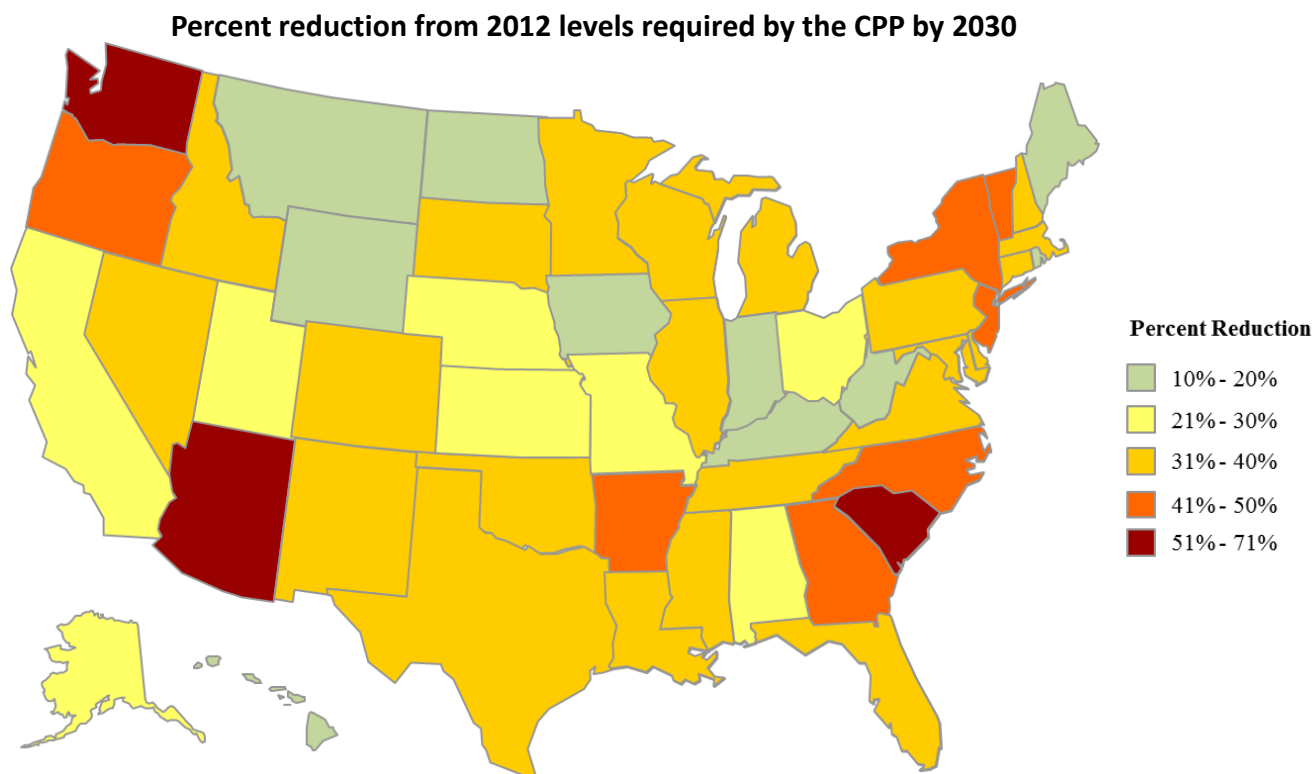
- **It is not a mass target.** Though the emission rate target can be converted to an equivalent mass basis, the CPP specifically establishes emission *rates*.
  - States can develop their implementation plans however they choose, including the use of explicit targets for tons of CO<sub>2</sub>, so long as the mass reduction also satisfies the lbs/MWh *rate* set by the EPA.
- **It is not direct control.** Contrary to the Mercury Air Toxics Standards (“MATS”), the CPP is not a direct control regulation.
  - The EPA is not explicitly requiring the retirement of specific coal units, nor is the EPA requiring existing units to install carbon capture and sequestration technology. The EPA is also not requiring specific power plants to meet specific emission limits.
  - Instead, the proposed rule sets the emission targets across the entire power sector and allows the states to decide how best to comply with those targets.
  - Flexibility is granted across the programs and policies that each state can adopt. States can also “team up” to form regional programs or trading markets to achieve their state targets.
- **The 2005 reduction baseline is misleading.** The proposed regulation states that “Nationwide, by 2030, this rule would achieve CO<sub>2</sub> emission reductions from the power sector of approximately 30 percent from CO<sub>2</sub> emission levels in 2005.”
  - This headline was well-received by the industry at first, since CO<sub>2</sub> emission (on a mass basis) peaked around this time.
  - The starting point used in EPA’s analysis, however, was 2012 – a banner year for CO<sub>2</sub> reductions.
  - The 30% reduction in emission levels relative to 2005 is simply an estimate of what *might* occur under the CPP. The CPP is not a limit on tons of CO<sub>2</sub> emissions, but rather on the CO<sub>2</sub> emission rate.

## One Size Does *Not* Fit All: How the EPA Developed the Emission Rate Targets

## One Uniform Approach to Establishing the Targets, Fifty Different Targets

- Under Section 111(d) of the Clean Air Act, the EPA is required to identify and apply the Best System of Emission Reduction (“BSER”) to determine the emission rate targets for each state. The EPA’s proposed state emissions rate targets are provided in the appendix to this presentation.
- Proposed solutions must be commercially available, technically feasible, and cost effective.
- In developing the emission rate targets under the CPP, the EPA identified four specific measures, together forming the BSER, that would result in significant emissions reductions at a reasonable cost.
- Although the methodology employed remained constant, the different circumstances particular to each state produced a diverse range of emissions targets.

- The map below highlights the widely diverse reductions required by the CPP.



- The BSER methodology starts with the historical fossil emission rate calculated as of 2012, the most recent full year of data that was available to the EPA.

$$\text{Historical Fossil Emission Rate} = \frac{\text{Total CO}_2 \text{ Emissions from Affected Sources}}{\text{Total MWh Generated from Affected Sources}}$$

- States depending more heavily on coal have the highest starting point.
  - Coal-intense states such as Nebraska, Wyoming, Kentucky, and West Virginia have historical fossil rates in excess of 2,000 lbs of CO<sub>2</sub>/MWh. On average, a coal plant has an emission rate of 2,200 lbs of CO<sub>2</sub> per MWh.
- In contrast, California has among the lowest historical fossil emission rates (900 lbs of CO<sub>2</sub>/MWh), due to previous state efforts to limit their dependence on coal-fired power generation. Other states with high reliance on renewables and natural gas, such as Idaho and Washington, have historical fossil emission rates below 1,000 lbs of CO<sub>2</sub>/MWh. Consider that a new gas combined cycle unit has an emission rate of approximately 800 lbs CO<sub>2</sub> per MWh.

#### Four “Building Blocks” of the BSER

- Starting with the historical fossil emission rates, the EPA then applies the BSER measures to each state to determine (in its opinion) what adjustments are possible:

- 1) Heat rate improvements to the affected units**
- 2) Substituting generation from high carbon-intensive affected units with generation from low carbon-intensive affected units**
- 3) Substitute generation from affected units with expanded use of low- or zero-carbon generation**
- 4) Reduce the total amount of generation required from the use of demand-side energy efficiency**

**Building Block 2: Coal-to-Gas Redispatch**

- Though technically presented as the second building block, we should consider the effect of this BSER measure first. We'll get to the *why* on the next slide.

**Building Block 2: Substituting generation from high carbon-intensive affected units with generation from low carbon-intensive affected units**

*Translation: The EPA assumes that new and existing natural gas combined cycle ("NGCC") units can be dispatched at a maximum 70% capacity factor. Any related increase in generation is directly substituted for generation from coal- and oil- and natural gas-fired boilers.*

- Essentially, the EPA is asking states to use their NGCC units to the fullest extent possible at the direct expense of higher carbon-intensive boilers.
  - In some states (*e.g.*, Arizona, California, and Mississippi), this may involve retirement of the state's *entire* coal fleet. Some of these states may have serious challenges reconfiguring their state electric profiles without improvements to supporting infrastructure (*e.g.*, natural gas pipeline and storage systems).
  - The economic (dis)incentive to induce these types of responses from the electric sector would most likely have to take the form of a carbon cost (via implementation of a carbon tax or a carbon allowance trading program). Such programs would be regulated either at the state level or regional level, but subject to federal approval.

**Building Block 1: Heat rate improvements to the affected units**

*Translation: The EPA assumes that coal plants can improve their heat rate by 6% through a variety of low-cost means, such as process and environmental control equipment modifications and reconfigurations and software upgrades.*

- The bottom line is that reducing coal consumption reduces carbon emissions. The 6% reduction in the heat rate results in a 6% reduction in the historical emission rate for coal plants.
- The reason we consider this measure *after* the coal-to-gas redispatch measure (Building Block 2) is that we want to be sure we are properly reflecting the interaction between these two measures:
  - For example, after substituting coal with NGCC, there may be no coal generation remaining in certain states and thus no reason to improve an idle (or retired) plant.



**Building Block 3: Substitute generation from affected units with expanded use of low- or zero-carbon generation**

*Translation: Instead of relying on fossil fuels, the EPA encourages states to expand the use of renewables and keep “at risk” nuclear facilities from retiring.*

- The EPA assigned each state to renewable energy regions where regional generation targets are modeled in a manner consistent with existing state RPS targets and schedules.
- States with comparatively aggressive RPS targets and ample renewable resources are expected to have a head start in meeting the reduction targets from this BSER measure.
  - In 2012, for example, Iowa generated 25% of its total generation from renewable resources and was assigned to a renewable region with only a 15% renewable generation target by 2030.
  - Iowa is over-compliant with respect to this measure and is therefore afforded the luxury of under-complying with other BSER measures.
- This BSER measure also assumes that nuclear units “at risk” of retirement remain in operation, which was estimated as 6% of the nation’s nuclear fleet. New nuclear units currently under construction – Watts Bar, Vogtle, and Summer – are also factored into this measure.

**Building Block 4: Reduce the total amount of generation required from the use of demand-side energy efficiency**

*Translation: the EPA assumes that state energy efficiency measures continue to expand from current levels until reaching an annual electricity savings of 1.5% by 2030 (or earlier in certain cases). The cumulative savings are treated as zero-emission generation that avoids using generation from affected sources.*

- Energy efficiency refers to those programs, technologies, and practices that reduce energy demand. These may include financial incentives (loans and rebates), technical services (audits and retrofits), building codes, energy efficient appliances, and demand response programs administered by regional power markets.
  - Often overlooked, demand-reducing programs have been responsible for nearly 50% of CO<sub>2</sub> reductions (in tons) over the last several years.
- Similar to the expanded use of renewables in the previous building block, the states with existing programs are expected to have a head start in meeting the reduction targets from this BSER measure.

## How does it all fit together?

- The CPP emission rate target incorporates each BSER building block into the formula below:

Emission Rate Target=

$$\frac{\text{Total CO}_2 \text{ Emissions from Affected Sources adjusted by Building Blocks 1 \& 2}}{\text{Total MWh Generated from Affected Sources adjusted by Building Blocks 1 \& 2} \\ + \text{New Nuclear and "At Risk" Generation (Building Block 3)} \\ + \text{Renewable Energy Generation (Building Block 3)} \\ + \text{Energy Efficiency Savings (Building Block 4)}}$$

Where

Building Block 1 = Heat Rate Improvements to the Coal fleet

Building Block 2 = Coal-to-Gas Redispatch

Building Block 3 = Expanded use of nuclear and renewables

Building Block 4 = Expanded use of energy efficiency

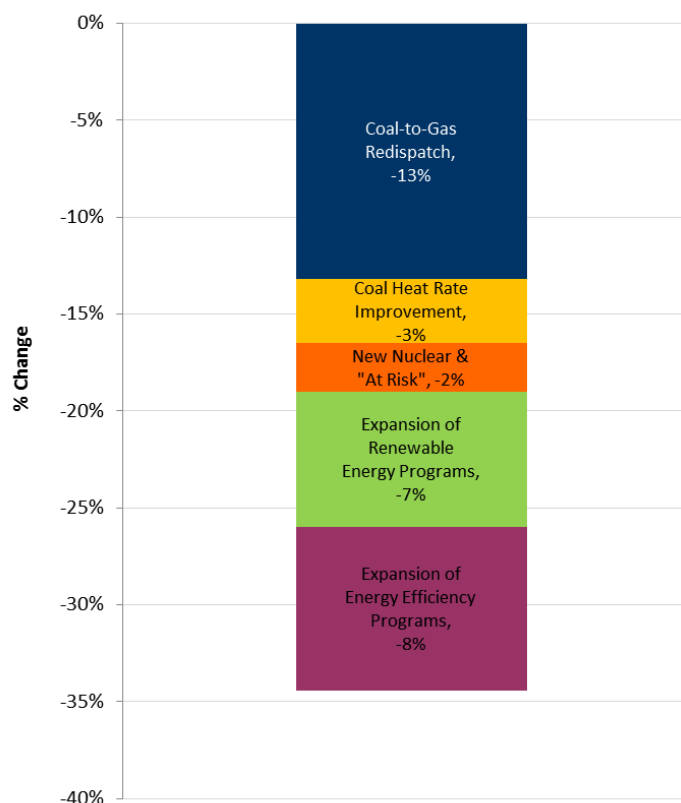
- On a nationwide basis, the EPA assumes that application of the four BSER building blocks will result in emission rates that are approximately one-third lower than the 2012 emission rate.

- The coal-to-gas redispatch measure is by far the largest component of the BSER.
- Implementation of a carbon cost is one of the most widely expected methods states will use to achieve these reductions.

- Detailed state impacts are provided as an appendix to the presentation, which shows how each building block affects the final emission target for each state.

- It is difficult to determine from the reduction percentages which states have it harder or easier than others. Like the application of the BSER, it all depends on the state.

### Impact of the BSER on the Final Emission Rate Target in 2030



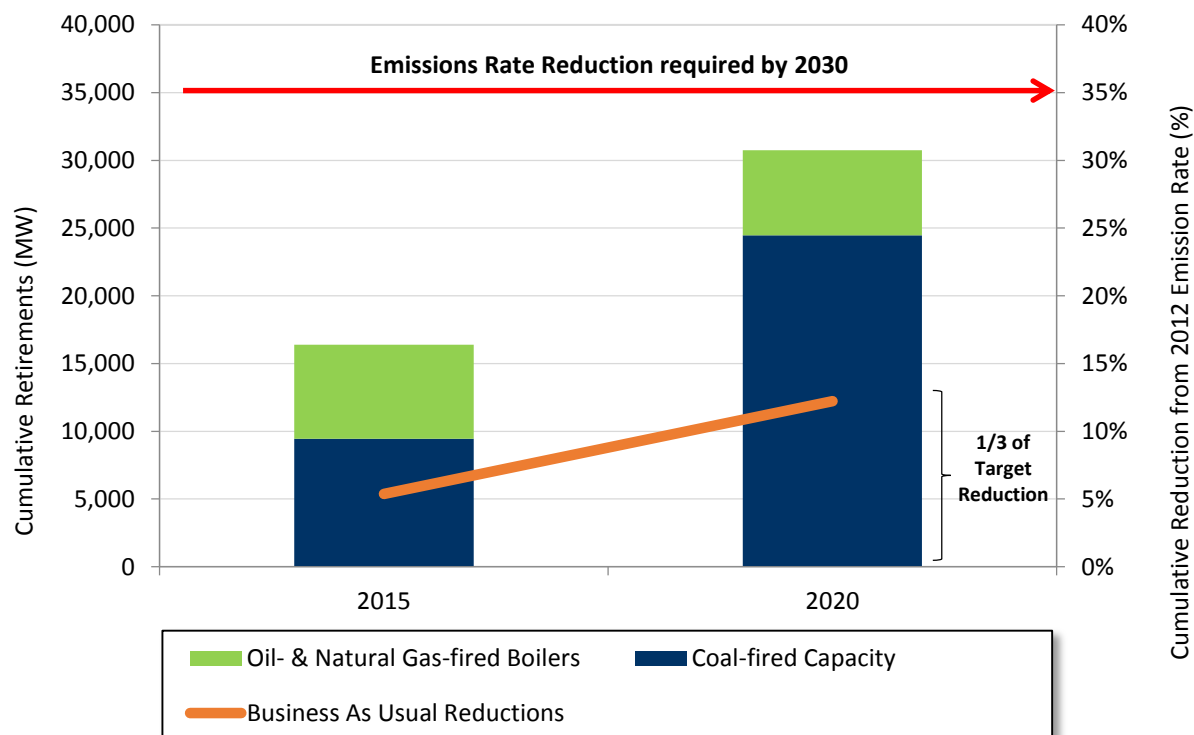
## BSER as a Guideline

- The BSER methodology contains the detailed assumptions behind the EPA's emission targets for each state.
- Note, however, that the BSER measures represent just one solution to a problem with many possible solutions. The BSER is meant to serve only as a *guideline*.
- The states are essentially co-regulators under the CPP and will likely propose implementation paths that are best suited to their electric profile. The SIPs ultimately submitted by states may likely vary widely, even among neighboring states.

## **Paths Forward and Likely Impacts**

## How Much Further Reduction is Necessary?

- For a variety of economic and regulatory challenges, approximately 33 GW of coal-fired generation and 13 GW of oil/gas-fired boilers either have or will retire between 2012 and 2020.
- These retirements alone – absent any other programs – will produce a roughly 12% decrease in the CO<sub>2</sub> emission rate by 2020.
- Together with other business-as-usual projections (e.g., existing state RPS and energy efficiency programs), these actual retirements and planned retirements will contribute emission reductions toward the target *without the need of additional measures and programs*, achieving one-third of the total reduction required by 2030.



## Achieving the Remaining Reductions: Implementing a Carbon Cost

- In addition to emphasizing renewables and efficiency programs, states could close the gap by introducing or joining a carbon allowance trading program.
  - The California Carbon Allowance trading program and Regional Greenhouse Gas Initiative (“RGGI”) in the northeast are two examples that the CPP cites as possible implementation paths for states.
- Under a carbon allowance trading program, the carbon costs are ultimately passed through to consumers via energy price increases.
  - Certain generators, such as newer natural gas-fired units, will mostly recover increased generating costs.
  - Coal plants, however, will realize unrecoverable carbon costs that will cut into operating margins. These increased costs could reduce coal generation and even hasten their retirement, thereby eliminating high carbon intensity generation.
  - Zero-emission technology, such as renewables and nuclear units, will capture higher operating margins due to the energy price uplift.
  - The size and timing of these responses ultimately depend on the cost of emitting CO<sub>2</sub>. The higher the cost, the greater the response.



## Estimates for Carbon Costs

- The EPA estimated that the level of coal-to-gas redispatch considered within the CPP would require a carbon cost of approximately \$30/ton of CO<sub>2</sub>. This estimate, however, ignores the impact of expanded renewable and new and “at risk” nuclear generation, meaning that it is likely overstated.
- Preliminary industry estimates for carbon compliance costs suggest that costs of less than \$10/ton of CO<sub>2</sub> would elicit the economic responses necessary to achieve the CPP targets.
  - This translates to an energy uplift of approximately \$3-10/MWh in energy prices, depending on the region.
- Though the uplift improves the economics of most zero- and low-emission technology, it is only a modest increase.
  - In a low natural gas price environment, this uplift is most likely insufficient to overcome the fixed costs weighing down nuclear plants.
  - Nor does this uplift free the renewable industry of its dependence on subsidies. Given its size relative to the \$23 PTC and 30% ITC, sustained growth in the renewables industry will continue to be driven by RPS-driven power purchase agreements and tax subsidies.

## Valuation Trends under the CPP

- To no one's surprise, coal- and oil-fired generators will suffer, while nuclear and renewable generators will be rewarded.
- However, the *degree* to which these penalties and rewards are realized will depend critically on each state's implementation plan. The best guideline at the moment may be the degree to which each state is expected to rely on coal-to-gas redispatch. The greater the reliance, the larger the unit cost impact.

Example: Arizona is expected to rely on coal-to-gas redispatch for 80% of its 53% emissions rate reduction target. As a result, the estimated CO<sub>2</sub> penalty required is \$9+/ton.

Pennsylvania is expected to rely on coal-to-gas redispatch for only 15% of its 33% emissions rate reduction target. As a result, the estimated CO<sub>2</sub> penalty required is ~\$4/ton.

The greater the need to incentivize switching, the larger the required CO<sub>2</sub> penalty.

- States that elect to initiate or increase renewable portfolio standards as a means of achieving compliance may see significant switching toward technologies that, in many areas currently receive favorable property tax treatment.
- **The CPP, in a manner similar to EPA's previous regulations (MATS, etc) is likely to result in continued erosion of tax bases that consist primarily of large fossil-fueled generating units.**

## Effects on Assessments

- In light of the CPP, appraisers must also reconsider application of the various approaches to valuation:
  - Income approaches should incorporate both the impact of carbon compliance costs, as they do now in California and New England, and also the impact on market-clearing energy prices of these incremental variable costs and the degree to which the impact is an uplift for the facility or whether some compliance costs are unrecovered.

Example: “Average” modern coal plant in Pennsylvania: FMV drops by approximately 10%

“Average” modern coal plant in Arizona: FMV drops by approximately 25%

Modern nuclear plant in Pennsylvania: FMV increases by approximately 8%

Modern nuclear plant in Arizona: FMV increases by approximately 10%

- Selecting the proper cohort in a sales comparison analysis carries even greater importance than before in terms of location. Simply looking within the broader region may over- or underemphasize trends occurring specifically within a state.
- Application of the cost approach will require detailed consideration of external/economic obsolescence that may result from compliance programs. For example, capitalization of income loss resulting from purchase of CO<sub>2</sub> allowances or reduction in generation. In addition, replacement cost assumptions may need to be revised in regard to both technology selection and also coal-to-gas redispatch targets.

## Summary

## Summary: Key Points and Open Challenges

- 1) The CPP is designed to lower the intensity of carbon emissions generated from electricity.
- 2) The reduction targets under the CPP vary widely across the states.
- 3) States will have the flexibility to choose exactly how they achieve the reduction targets.
- 4) Until State Implementation Plans are developed, it will be challenging to determine the *level* of the impact of the regulation on power plant values – even as it's clear that there *is* an impact.
- 5) Low and Non-CO<sub>2</sub>-emitting sources (nuclear, renewables, natural gas units) would likely benefit the most. Coal plants will likely suffer the most.
- 6) Although a “business-as-usual” scenario results in significant progress toward compliance in many states, the remaining changes are likely to be the most consequential and perhaps the most difficult and costly to implement.
- 7) States may consider attaching a direct cost to carbon emissions (*e.g.*, via an allowance program) to discourage coal generation.
- 8) Assessors should expect to reevaluate their property valuations across the board as the compliance deadlines approach, as clear winners and losers will emerge. It is worth noting that abatements granted to the “winners” (such as renewables) may become increasingly costly as many of the “losers” will be forced out of the market, leading to an erosion of the tax base.

## Introduction to DAI

## Who is DAI?

- Nuclear Industry Experts
  - Advisors to institutional investors in nuclear assets
  - Advisors to firms developing new nuclear power plants
- Energy Market Experts
  - Industry-leading clients
  - University-affiliated experts at the Carnegie Mellon University Electricity Industry Center
  - Published, peer-reviewed research
- Appraisal & Valuation Specialists
  - ASA-accredited senior appraisers
- Power & Energy Market Engineers
- Electric Market Economists
- Plant Managers & Operators
  - Gas Turbine Combined Cycle (DAI Oildale)
  - Hydroelectric (DAI Great Falls)

## Recognized Expertise

- American Society of Appraisers Certified
- Licensed Professional Engineer by National Council of Examiners for Engineering
- Published, peer-reviewed research
  - *The Appraisal Journal*
  - *Journal of Structured and Project Finance*
  - *Journal of Economic Behavior and Organization*
  - *Public Utilities Fortnightly*

## Decision Analysis

- Quantitative Risk Analysis (“QRA”)
- Electric and Fuel Market Studies
- Electric Market Forecasts
- Fuel Market Forecasts
- Statistical Analysis of Asset Performance
- Hedging Strategy Analysis
- Analysis of Capital Cost Uncertainty
- Default Analysis for Loan Guarantees
- Acquisition and Divestiture Advisory
- Valuation Litigation Support

## Engineering Consulting

- Independent Engineer Analysis
- New Technology Commercialization
- Power Plant Operation and Maintenance
- Portfolio Management
- Feasibility Studies
- Expert Witness Testimony/Consulting

## Appraisal & Valuation

- Equipment Fair Market Value Appraisal
- Residual Value Determination
- Liquidation Value Determination
- Tax Analysis/Support
  - Alternative Energy Property Allocations
  - Business Combinations (SFAS 141)
  - Goodwill and Intangible Assets (SFAS 142)
  - Gain or Loss from Acquisition (IRC 1060)

## Asset Management

- Acquisition and Divestiture Support
- Operations Efficiency Analysis
- Outage Management
- On-Site Operations and Maintenance
- Environmental Compliance Review
- Permitting, Licensing, and Accounting



## Industry-Leading Results for Industry-Leading Clients

**ABENGOA SOLAR****250 MW**

Appraisal to support purchase of member interests in solar thermal project

*September 2013***192 MW**

Appraisal to support sale of hydroelectric project

*April 2013*

The logo for Philip Morris Capital Corporation, featuring the company name in blue capital letters.

**150 MW**

Appraisal to support acquisition of the Alta VI wind project

*May 2012***65 MW**

Appraisal of multiple residential PV portfolios in three separate financings

*September-October 2012*

The J.P. Morgan logo in brown serif font.

**C\$364,000,000**

Valuation of company assets for a Substantial Issuer Bid

*August 2011***\$24,180,000**

Appraisal services for a sale-and-lease back transaction

*March 2011***\$1,200,000,000**

Valuation and appraisal services for lease financing of 570 MW wind project

*July 2010***ABENGOA SOLAR****\$1,450,000,000**

Valuation services in support of thermal solar project loan guarantee recipient

*December 2009*



SUNPOWER



SIEMENS



ARCLIGHT

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CAITHNESS ENERGY



## Detailed Breakdown of BSER Measures for each State

	2012 State Emission Rate	Incremental Impact by Building Block					Final 2030 State Emission Rate Target
		Coal-to-Gas Redispatch	Coal Heat Rate Improvement	New Nuclear & "At Risk"	Expansion of Renewable Energy	Expansion of Energy Efficiency Programs	
	(lbs/MWh)	%	%	%	%	%	(lbs/MWh)
Alabama	1,476	-9%	-3%	-2%	-8%	-5%	1,059
Alaska	1,351	-8%	0%	0%	-3%	-14%	1,003
Arizona	1,470	-42%	0%	-2%	-1%	-8%	702
Arkansas	1,661	-33%	-2%	-1%	-4%	-5%	910
California	691	-5%	0%	-1%	-5%	-11%	537
Colorado	1,700	-19%	-3%	0%	-6%	-7%	1,108
Connecticut	794	-4%	0%	-5%	-10%	-13%	540
Delaware	1,234	-19%	0%	0%	-8%	-4%	841
Florida	1,206	-26%	0%	-1%	-6%	-6%	740
Georgia	1,530	-16%	-3%	-15%	-5%	-6%	834
Hawaii	1,539	0%	-2%	0%	-2%	-12%	1,306
Idaho	332	0%	0%	0%	-12%	-19%	228
Illinois	1,970	-10%	-5%	-4%	-6%	-10%	1,271
Indiana	1,912	-3%	-5%	0%	-3%	-9%	1,531
Iowa	1,545	-11%	-5%	0%	12%	-11%	1,301
Kansas	1,970	0%	-6%	-1%	-9%	-8%	1,499
Kentucky	2,153	-3%	-6%	0%	-1%	-9%	1,763
Louisiana	1,476	-27%	-2%	-1%	-4%	-6%	883
Maine	428	-3%	0%	0%	8%	-17%	378
Maryland	1,909	-3%	-5%	-3%	-16%	-11%	1,187
Massachusetts	922	-11%	0%	-1%	-16%	-9%	576
Michigan	1,705	-13%	-4%	-2%	-3%	-10%	1,161
Minnesota	1,477	-29%	-3%	-1%	4%	-11%	873
Mississippi	1,145	-29%	0%	-1%	-5%	-5%	692
Missouri	1,974	-6%	-5%	-1%	-1%	-8%	1,544

	2012 State Emission Rate	Incremental Impact by Building Block					Final 2030 State Emission Rate Target
		Coal-to-Gas Redispatch	Coal Heat Rate Improvement	New Nuclear & "At Risk"	Expansion of Renewable Energy	Expansion of Energy Efficiency Programs	
	(lbs/MWh)	%	%	%	%	%	(lbs/MWh)
Montana	2,233	0%	-6%	0%	-7%	-7%	1,771
Nebraska	2,045	-5%	-5%	-2%	-7%	-8%	1,479
Nevada	982	-19%	0%	0%	-8%	-7%	647
New Hampshire	954	-22%	0%	-4%	-18%	-5%	486
New Jersey	984	-13%	0%	-5%	-20%	-9%	531
New Mexico	1,576	-16%	-3%	0%	-7%	-7%	1,048
New York	994	-15%	0%	-3%	-16%	-10%	549
North Carolina	1,692	-21%	-3%	-2%	-7%	-8%	992
North Dakota	1,994	0%	-6%	0%	0%	-4%	1,783
Ohio	1,847	-5%	-5%	-1%	-8%	-9%	1,338
Oklahoma	1,385	-22%	-2%	0%	-6%	-5%	895
Oregon	700	-21%	0%	0%	-14%	-11%	372
Pennsylvania	1,561	-5%	-4%	-3%	-14%	-7%	1,052
Rhode Island	900	0%	0%	0%	-4%	-9%	782
South Carolina	1,689	-11%	-4%	-27%	-6%	-6%	772
South Dakota	1,132	-34%	-2%	0%	15%	-14%	741
Tennessee	1,965	-6%	-5%	-18%	-4%	-8%	1,163
Texas	1,290	-22%	-2%	0%	-9%	-5%	791
Utah	1,801	-13%	-4%	0%	-2%	-7%	1,322
Virginia	1,354	-19%	-2%	-3%	-11%	-6%	810
Washington	742	-41%	0%	-1%	-17%	-11%	215
West Virginia	2,018	0%	-6%	0%	-10%	-3%	1,620
Wisconsin	1,823	-15%	-4%	-1%	-5%	-10%	1,203
Wyoming	2,114	-2%	-6%	0%	-9%	-3%	1,714
U.S.	1,508	-13%	-3%	-2%	-7%	-8%	989