Dogwood Energy

Missouri Public Service Commission Workshop on Costs and Reliability Considerations of EPA's Clean Power Plan

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Overview

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Who is Dogwood Energy?

Commission's Role in Clean Power Plan Compliance

Ensuring the Reliable Supply of Electricity

Minimizing Missouri Consumers' Increased Costs

- Allocation of CO2 Emissions Allowances
- Addressing New Generation "Leakage"
- Operating Within Regional Energy Market Structures
- CO2 Allowance Trading – Multi-State and Regional

Who Is Dogwood Energy?

Majority Owner (52.2%) of a 650 MW Combined Cycle Generating Facility (the Dogwood Energy Facility or the "Facility")

The Facility is the largest combined cycle power plant in Missouri and is located near Kansas City, MO in Cass County. It is also the largest property tax payer in Cass County.

The Facility is approximately 3% of the total generating capacity and about 35% of the total combined cycle generating capacity in Missouri.

We are a customer of KCPL GMO and a member of SPP.

Why Is Dogwood Energy Here?

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Dogwood Energy wants the Facility to be a positive part of Missouri's solution to CPP compliance challenges.

We believe that our Facility could, under a properly designed state plan:

1. Contribute significantly to ensuring the reliable supply of electricity in Missouri;

2. Contribute 20-30% of the required CO2 emissions reductions required to comply with the 2022-2024 CPP emissions target; and

3. Help minimize Missouri consumers' CPP compliance costs.

Missouri Commission's Role in Clean Power Plan Compliance

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Generally, the Commission's purpose is to regulate Investor Owned Utilities (IOUs) with a mission of balancing Consumer and Utility interests and ensuring the reliable supply of electricity.

Suggested Principles for the Commission's Involvement in the Implementation of the Clean Power Plan.

The Missouri Commission should, while supporting Missouri's compliance with the CPP:

1. Act to Ensure the Reliable Supply of Electricity (No System *Crashes*);

2. Take Appropriate Steps to Minimize Compliance Cost Increases to Missouri Consumers (No *Cost Crunch* on Customers' Bills); and

3. Ensure that Missouri IOUs Have The Opportunity to Earn a Reasonable Return on Prudent Investment (No *Credit Crisis*).

Ensuring Reliability

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The Reliable Supply of Electricity to Missouri Consumers is Job #1

Many discussions occurring at SPP; NERC recently issued a report titled "Reliability Considerations for Clean Power Plan Development"

Generally, with adequate advance planning and coordination between Missouri, RTOs and Planning Coordinators, reliability can be maintained.

Minimizing Missouri Consumers' Costs

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The Missouri Commission's Two Levers on Minimizing Costs:

1. Base Rates (including Rate Base)
2. Energy Production Costs

Base Rates – Fixed operating costs and Return on Investment in utility facilities

Energy Production Costs – Variable costs of energy production (fuel and variable O&M), including any cost of trading CO2 allowances

The Missouri Commission's Goal Should Be to Minimize CPP-Related Increases in Base Rates and Energy Production Costs While Ensuring IOUs' Opportunity to Earn a Reasonable Return on Prudent Investment.

How to Minimize Increases In Utility Base Rates?

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Base Rates – Fixed operating costs and Return on Investment in utility facilities

Fixed Operating Costs –

Seek Prudent Reductions in Costs At Facilities with Reduced Operating Levels

Return on Investment in Utility Facilities –

Generally, new generating units cost more to build than it does to continue operating existing units. Therefore, **Rely on Existing Generating Units as Much as Possible**

After that, **Build New or Expand Existing Generation for CPP Compliance as a Last Resort and When There is a Clear Benefit Versus the Cost**

How to Minimize Increases In Energy Production Costs?

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Energy Production Costs – Variable costs of energy production (fuel and variable O&M), including any cost of trading CO2 allowances

Be Ready and Willing to Take Advantage of Cost Savings Through Regional Cooperation, but Also Make Sure that Missouri's CPP Plan is Solid and Will Ensure Compliance For the Lowest Reasonable Cost

1. Continue Missouri IOUs' Participation in Regional Energy Markets to Obtain Benefits from a Regional Economic, Least Cost Generation Dispatch;

2. Evaluate the Benefits of Trading CO2 Allowances with Other States and Advocate for a "Trading Ready" State Implementation Plan; and

3. Advocate to Minimize the Cost of Missouri's CO2 Allowances While Ensuring Missouri's Ability to Comply with the Clean Power Plan.

How to Minimize Increases In Energy Production Costs?

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Regional Cooperation

The Regional Energy Market allows for energy from outside of the State, such as renewables under contract to Missouri IOUs, to displace higher CO2-Emissions-Intensive Generation in Missouri.

The ability to trade CO2 Allowances with other states could provide value to Missouri consumers. This potential should be explored and utilized if beneficial. Preparing for this by ensuring Missouri's Plan is "Trading Ready" makes sense if not in conflict with other goals.

How to Minimize Increases In Energy Production Costs?

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Missouri's CPP Plan

Minimizing the cost of Missouri's CO2 Allowances while ensuring Missouri's ability to comply with the Clean Power Plan

What needs to be done?

Advocate for a CO2 Allowance Allocation mechanism that provides adequate Allowances to the Generators that are Actually Needed to Operate for Missouri to Comply With the Clean Power Plan.

This equalizes the supply of and demand for CO2 emission allowances in Missouri, thereby reducing the cost of CO2 emission allowances as much as possible. New generators should be included to reduce "leakage."

The Historical Grandfathering Allocations being discussed result in increased CPP Compliance Costs in comparison to an Actual Operation Allocation methodology in all scenarios analyzed.

How to Minimize Increases In Energy Production Costs?

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Historical Grandfathering Plans

These plans allocate a significant portion of CO2 allowances to Missouri power plants that won't be able to operate in the future. They provide no help to Missouri in meeting its CPP targets and no technology can currently be reasonably implemented to reduce their emissions and keep those plants running.

If the Grandfathering allocation allowance recipients do not have existing generating facilities that can be operated at greater output levels to ensure Missouri's compliance with the CPP, then the recipients of those allowances must sell them in order for Missouri to comply with the CPP, thereby increasing energy costs, which increases Missouri consumers' costs of CPP compliance in terms of energy costs.

Historical Grandfathering Plans are the WORST form of allowance allocation methodology for CO2 emissions, given that only shifting generation output from one facility to another can achieve compliance today.

How to Minimize Increases In Energy Production Costs?

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The Good News - Almost Any CO2 Allowance Allocation Method is Better Than Grandfathering for Reducing Costs

Best Allocation Plan In Terms of Lowest Cost of Compliance - Allocate Allowances to the Least CO2-Emissions-Intensive Fossil Fuel-Fired Facilities Consistent With Their Ability to Operate; **Least-Cost Compliance Assurance (LCCA) Method**

If compromises are needed in order to reach consensus on a method, any movement away from Historical Grandfathering can be helpful. Another allocation option for discussion could be a pro-rata allocation based on operating fossil fuel-fired generation capacity. This allocation solution is easy to understand, achieves lower costs of compliance for Missouri consumers than Grandfathering, and ensures that all fossil-fueled generators get an equitable share of available allowances.

Conclusions

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Stick to the Commission's Guiding Principles

Focus on:

1. Reliable Electricity Supply - No System *Crashes*

2. Minimize Consumers' Compliance Costs - No *Cost Crunch*

3. Fair Regulation of IOUs - No *Credit Crisis*

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