

Written Testimony of William J. Fehrman
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Senate Environment and Public Works Committee

August 6, 2009

Chairman Boxer, Senator Inhofe, and members of the Committee: Thank you for inviting me to testify today before your committee. I am Bill Fehrman, president of MidAmerican Energy Company, which is the largest utility in Iowa, serving more than 720,000 electric customers in Iowa, Illinois, and South Dakota. Our generation capacity mix is about 50% coal, 20% renewables (including wind, hydro, and biomass), 20% natural gas, and 10% nuclear, and we lead the nation in utility ownership of wind generation.

Our parent company, MidAmerican Energy Holdings Company, is a subsidiary of Berkshire Hathaway and is also the parent company of our sister utility, PacifiCorp. PacifiCorp serves 1.7 million electric customers in California, Idaho, Oregon, Utah, Washington, and Wyoming and is the second largest utility owner of wind generation in the United States. Collectively, our two utilities own five times more wind generation than any other utility.

I thank you and your staff for your many climate change hearings, but there is a difference between climate change issues and a climate change bill. For this reason, my testimony focuses on H.R. 2454 (the Waxman-Markey bill) and the changes to this bill that are necessary to reduce greenhouse gas emissions efficiently and effectively.

MidAmerican will achieve whatever emission reduction goals that Congress establishes. We, like other regulated utilities, will work with our state regulators to develop plans to construct additional low- and zero-carbon emitting power plants and take other productive actions that will meet those goals at the lowest possible cost to our customers. This is a critical point to understand with respect to the implementation of federal climate change legislation: Whatever bill Congress passes will not provide a regulated utility with a plan for reducing emissions. That plan will be developed at the state level. Controlling costs while achieving emission reductions is critical because the slogan “Make the polluters pay” hides the fact that it is our customers – and your constituents – who actually will pay for whatever program is implemented.

I. The Double Cost of Cap-and-Trade

Cap-and-trade embraces two concepts. It is the declining caps in the bill that will force companies to reduce their greenhouse gas emissions. We strongly support reasonable emission reductions, although they will entail major new costs for additional energy efficiency programs, costs to physically reduce emissions from existing power plants (such as fuel switching to natural gas), and investments to add more renewable energy resources, transmission, and integration equipment to ensure a safe and reliable electricity system. What we oppose is the trade part of cap-and-trade, because the bill’s trading mechanism imposes an unnecessary and unproductive second cost on our customers – the cost of buying emission allowances for every ton of emissions, while at the same time paying for the new infrastructure to reduce those emissions. That is the hidden cost of the cap-and-trade system. It will require consumers to pay twice: first for emission allowances and then for the cost of the new infrastructure to reduce greenhouse gas emissions. Moreover, the trading mechanism forces highly regulated utilities to participate (and

spend customer funds) in a volatile and speculative allowance trading market. We don't need market signals to act – we only need the compliance targets.

The bill's allocation formula, which is split 50-50 between emissions and retail sales, ensures that customers of coal-dependent utilities will pay even more. By including a retail sales component instead of just focusing on emissions, the bill creates significant inequities across companies and customer classes and results in dramatic winners and losers. For example, as demonstrated in Attachment 1, MidAmerican will only receive 49% of the allowances needed to meet the bill's requirements. This creates a shortfall of over 11 million allowances in just the first compliance year. At \$25 per allowance, that translates into \$276 million in additional costs for our customers. And this penalty is not limited to Midwest utilities. Our parent company's Western utility, PacifiCorp, faces a shortfall of more than 20 million allowances – and more than \$500 million in customer costs in just the first year. The bill's 50-50 formula will result in a wealth transfer from customers of utilities with coal-fired generation to those with hydro- and nuclear-power stations – which don't need the allowances to comply with the cap. This formula guarantees inequities and dramatic transfers of wealth among utilities. In addition, another allocation of allowances – to merchant generators – will create an unlevel playing field for regulated utilities that make wholesale sales into the same market without allowances.

Regardless of the allocation formula, the bottom line is that these allowances will not reduce greenhouse gas emissions by one ounce. In fact, their cost will make it harder for customers to pay for the productive part of this bill – the cost of building the less carbon-intensive infrastructure to actually meet the caps.

It is important to understand that the act of procuring allowances is unproductive and will not reduce greenhouse gas emissions. In fact, the requirement to purchase allowances diverts dollars that could instead be used productively to actually reduce emissions by investing in the less carbon-intensive infrastructure necessary to meet the caps. And it is these investments that will ultimately achieve the necessary reductions in greenhouse gas emissions.

II. Alternative Compliance Mechanism: Cap and No Trade

In our view, there is no value added by imposing the costs of a market-based trading program on a highly regulated industry that will already have to make enormous long-term investments to reduce greenhouse gas emissions. The caps alone will force the industry to make the necessary and productive changes that add value to their customers. There is no need for utilities and their customers to incur the second cost – and risk – of the trading market, with its speculators, the new Wall Street products, and the hundreds of billions of dollars in auction revenues that will come from customers and be directed towards other programs that may not benefit them. You can achieve all of this by permitting each state, on a utility-by-utility basis, to either participate in the allocation and trading program or to develop an alternative mechanism working directly with their regulated utilities to meet the caps under a state implementation plan without the added cost of trading.

In both cases, the federal government would set the standards and enforce the penalties for non-compliance, as it does for many environmental programs, and industry would implement the program. There is plenty of precedent for this approach. This is not a perfect analogy, but when

Congress two years ago raised fuel economy standards, you gave the automakers some flexibility, but you basically set a simple understandable standard and told them to comply. No allowances, no offset, no trading, no borrowing, no banking – just a standard and a mandate to meet it.

Owners and users of electric generation need clear, certain and predictable rules, regulations and incentives in order to make sound long-term and least-cost decisions to implement legislation to reduce greenhouse gas emissions. Emitters should be offered an alternative compliance mechanism that does not involve speculation, trading, and the exchange of billions (or perhaps trillions) of dollars. The focus of electricity sector planning should be long-term price stability, not long-term price volatility.

I have attached draft language for MidAmerican's proposed alternative compliance mechanism as Attachment 2 to my testimony. This alternative compliance plan amendment retains the same greenhouse gas emissions caps for 2020, 2030 and 2050 as the Waxman-Markey bill, but it eliminates the need for customers to pay twice. It accomplishes this by allowing a state to choose to have its regulated utilities avoid the costs of the trading market and work directly with their state regulators to meet the caps – which the regulated utilities would have to do anyway.

There is nothing novel about this alternative approach. In fact, the amendment proposes the same approach for implementing and enforcing the emissions cap that is used in other federal environmental laws and that has been used in utility regulation for more than a century: Congress or state legislatures enact a legal requirement and then state regulators, regulated

companies, interested parties, and experts determine the most efficient way to meet the requirement.

Key aspects of our alternative compliance plan amendment include:

- States, not utilities, determine whether to participate in the trading market or to use the alternative compliance approach. The determination requires legislative action approved by the governor because the entire state will be impacted by this decision.
- To protect consumers, only electric utilities whose rates are regulated by the state can qualify for the alternative compliance approach.
- Utilities must meet the same 2020, 2030 and 2050 caps whether the state chooses the market trading approach or the compliance alternative offered by the amendment.
- The same penalties apply for non-compliance.
- Alternative compliance plans must contain details of the measures that will be undertaken to ensure compliance with the caps.
- Alternative compliance plans must be updated at least every four years.
- Alternative compliance plans adopted by the state must be filed with the state and federal environmental agencies that enforce the Clean Air Act amendments.
- Utilities that serve more than one state can be subject to an alternative compliance plan in one state and to the trading market in another state.

This alternative compliance amendment lets states choose to focus on pursuing the most efficient ways of reducing greenhouse gas emissions to meet the federal caps, while at the same time

protecting their citizens. This tackles the real problem – reducing greenhouse gas emissions – but eliminates costly and useless allowance trading.

III. Allowance Allocation Alternatives

The Waxman-Markey allocation formula in §783(b) (“Electricity Local Distribution Companies”) arbitrarily splits free allowances 50-50 between emissions attributable to retail electricity and retail electricity deliveries. This methodology ensures that customers of utilities that generate or purchase significant amounts of coal- and natural gas-fueled energy will receive far fewer allowances than needed to offset increased customer costs when compared to nuclear and hydro-dependent utilities whose actual emissions attributable to their retail electricity sales are minimal. The allocation of half of the free allowances based purely upon retail electricity deliveries will create wealth transfers from customers of utilities with coal-fired generation to those with hydro- and nuclear-power stations.

Customers of utilities with coal-fired generation begin the Waxman-Markey cap-and-trade program with insufficient free allowances because of three factors. First, the annual free allowance allocation to the electricity sector is already below actual sector emissions and the allocation declines annually. Second, as noted above, free allowances are not allocated based purely upon emissions, but rather split 50-50 with half allocated based upon retail electricity deliveries. And finally, some of the free allowances are allocated to merchant generators, which potentially create windfall profits because the savings are not passed on to their customers. Cumulatively all three of these factors place more of the Waxman-Markey cap-and-trade program’s costs disproportionately on customers of utilities with coal-fired generation.

There are ways to mitigate wealth transfers among utilities and avoid windfall profits to merchant generators. Some argue that §783(b)(4) (“Prohibition Against Excess Distributions”), which was added just before the final vote, solves these problems, especially the 50-50 split. This section states that “no electricity local distribution company shall receive a greater quantity of allowances . . . [for retail sales] than is necessary to offset any increased electricity costs to such company’s retail ratepayers, including increased costs attributable to purchased power costs, due to enactment of this title.”

While the intent of the section is encouraging and its title is well-intentioned, the functionality of the provision does not appear workable for several reasons, nor does it address the overall inequities that would occur across utilities and customers. Specifically:

1. The section does not prohibit excess free allowances to a utility beyond the costs it incurs as a result of emissions attributable to retail electricity. Instead, excess distributions are prohibited above what is necessary “to offset increased electricity costs.” Unfortunately the language lacks a focus on emissions driven costs and a method to ensure equity when analyzing electricity cost increases among utilities. That is a key distinction and one that must be resolved to avoid significant wealth transfers. Free allowances should be used to offset price increases incurred by a utility to reduce emissions attributable to its existing retail product.

2. It will be impossible to determine how electricity prices increase “due to enactment of this title” versus increases in electricity prices that may have occurred due to normal market forces.
3. The ambiguity of the term “increased electricity costs” provides opportunities for utilities to include a multitude of internal overheads, loadings, administrative costs, and other factors into the ultimate electricity price to serve its customers. There will be a clear incentive to make the calculations as favorable as possible in order to retain the full free allowance distribution.
4. Allowances for the next compliance year are required to be distributed by September 30th of the preceding year. As a result, there is no way to calculate the theoretical excess distributions for the next calendar year when the increases in electricity prices have yet to be realized by the utility.
5. In order for the provision to function, there would need to be a multi-year “look back” period. Under this scenario, potential over-allocations would need to be surrendered a year or more after the remaining utilities required them for compliance, thus driving up their costs. In addition, challenges would exist if certain utilities had already sold the excess allowances and passed on the windfall on to their customers. As a result, electric rates for some customers could vary widely from year to year.

If you remain wedded to the trading scheme in the Waxman-Markey bill, you must move to an emissions-based method of allocation to address the concerns of regional disparities and inequalities, the cost impact on and wealth transfers between different utility customers, and unintended consequences.

First, to make the program work more like the successful acid rain SO₂ cap-and-trade program it is supposed to be modeled after. Under the SO₂ program, the free allowances only went to the emitters that actually needed them for compliance. Under Waxman-Markey, utilities will receive billions of free windfall allowances for their nuclear and hydro generation – allowances they don't need for compliance or to offset emissions-related price increases, so they can turn around and sell them for windfall profits in the carbon market. The acid rain program gave out 97% of its allowances to the emitting sources, and the allowances are freely distributed over the life of the program. Under the SO₂ program, the proceeds from the auctions are redistributed to emitters that have actual compliance obligations. Not here. Under the SO₂ program, if an emitter met its emission reduction target, it met its compliance obligations. Under Waxman-Markey, a utility with coal-fueled resources could meet its emission reduction target and still be required to purchase millions of additional allowances costing customers billions of dollars, functioning more as a revenue generator than an emissions cap.

Second, if you want to retain an allocation of allowances for retail sales, take the advice of the California Public Utilities Commission and the California Energy Commission, which determined that “nuclear, hydro, and renewable sources ... do not need [free allowances].” CPUC-CEC Final Opinion at 159.

These agencies, which held many hearings and workshops on the implementation of California's own global warming legislation (A.B. 32), instead recommended adoption of a fuel-differentiated output-based allocation method, under which free allowances are allocated only to emitting resources. This formula, according to these California agencies, would "reduce, and could largely eliminate, wealth transfers [among different local distribution company customers]." They specifically recommended:

With a fuel-differentiated output-based allocation, allowances would be allocated only to deliverers of electricity from emitting resources, using weighting factors based on fuel type ... the use of weighting factors would reduce, and could largely eliminate, wealth transfers from customers of coal-dependent retail providers to customers of natural gas dependent retail providers. This reduction of wealth transfers would be accomplished by providing emitting deliveries with allocations that more closely reflect their emission levels. CPUC-CEC Final Opinion on Greenhouse Gas Regulatory Strategies (October 6, 2008) (CPUC Rulemaking 06-04-009) (CEC Docket 07-OIIP-01) ("CPUC-CEC Final Opinion") at 158. See http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/92591.pdf

To correct these inequities in the Waxman-Markey bill, you should:

1. Freely allocate allowances only to utilities in proportion to their emissions attributable to their retail sales. Such an allocation method avoids wealth transfers between utilities. Eliminate §783(b)(3) ("Distribution Based on Deliveries") of the Waxman-Markey bill.
2. Modify §783(b)(2) of the Waxman-Markey bill ("Distribution Based on Emissions") and rely upon an updating emissions-based allowance allocation method as a way to avoid complicated "historic emissions baseline" calculations; avoid penalizing new, more efficient fossil power plants; and address concerns expressed by hydro- and nuclear-dependent utilities that are growing beyond their current zero-carbon portfolio.

3. Use a simplified, less onerous emissions calculation methodology that relies on approved allowance allocation weighting factors based on fossil fuel types. For example, the California agencies (see p. 11, above) recommended weighting factors whereby coal units receive twice as many allowances for megawatt-hours produced than natural gas units. CPUC-CEC Final Opinion at 159. Such an approach has the added benefit of rewarding more efficient coal- and natural gas-fueled units compared to older, less efficient units, which would otherwise receive more allowances because they have higher average emissions rates.
4. Eliminate §783(c) (“Merchant Coal Units”) and §783(d) (“Long Term Contract Generators”) of the Waxman-Markey bill, which provide free allowance allocations to merchant coal units and long-term power generators. These sections create (a) an unlevel playing field for utilities that also have wholesale sales of excess power and (b) opportunities for windfall profits to merchant generators. Long-term contract generators with contracts that do not allow for the recovery of emissions-related compliance costs could simply be given the right to renegotiate the terms of such agreements with federal oversight.
5. As a heavily regulated sector, electric utilities are required to pass through any excess costs or revenues to their customers. Under an appropriate emission-based allocation methodology, extending the period of time and increasing the number of allowances that are freely distributed to electric utilities will not produce windfall profits for utilities.

Increase the Waxman-Markey's §782(a) annual free allowance budgets for the electricity sector to reflect the actual emissions reduction targets for specified sources identified within §703(a). Annual electricity sector free allowance budgets that are more stringent than the §703(a) emissions reduction targets obligate the sector to subsidize emissions reductions that would otherwise occur within other sectors of the economy or transform the cap-and-trade program into merely a new revenue stream for the federal government. These inequities, coupled with the very strong likelihood of other sectors achieving their mandated emission reductions through electrification (i.e., transportation), unfairly places the majority of the burden and cost for reducing emissions or raising revenues economy-wide on electricity customers.

IV. Reward Early Action

Utilities around the country have built thousands of megawatts of renewable energy resources in the past decade. Our company, for example, has installed almost 1,300 megawatts of wind since 2004. We are the largest utility owner of wind generation in the country, and we are proud of this accomplishment which has greatly reduced our carbon intensity. How does the bill treat our customers for this early action to reduce carbon emissions? It penalizes them. That early action reduced our historic emissions intensity, thus reducing our allowance allocations and forcing us to buy even more allowances in the market. Attachment 3 to my testimony demonstrates MidAmerican's decreasing carbon dioxide emission intensity. The allowance trading mechanism in this bill thus penalizes our customers for every kilowatt-hour produced by those wind generators. If the goal of the trading program is to incentivize generators to build low- and zero-emission power plants, it makes no sense whatsoever to penalize the customers of early movers

who did exactly that – before the bill’s enactment. Such voluntary investments made prior to any state or federal mandate should be recognized by the cap-and-trade program by converting excess renewable energy certificates into a form of carbon offset.

V. Ensure a Robust Offsets Market

Offsets – credits for emission reductions from sources outside the cap – have the potential to produce significant cost savings in the Waxman-Markey cap-and-trade program. Preliminary economic modeling conducted by PacifiCorp with the Electric Power Research Institute suggests that the volume of compliance eligible carbon offsets will have a dramatic impact on the price of allowances. For example, in 2012, assuming a supply of 2 billion offsets available every year through 2030 (which is the amount authorized by the bill) – one allowance (representing one metric ton of carbon dioxide) is forecast to be about \$17.55. However, if the carbon offsets market is illiquid and only slowly grows to about 500 million compliance eligible carbon offsets available by 2030, the price of carbon beginning in 2012 is estimated to be closer to \$91.03 and increasing thereafter. Such a dramatic swing in the price of allowances directly reflects what one assumes is the annual supply of compliance eligible carbon offsets.

These findings are consistent with the recent Environmental Protection Agency study, which assumes that the full availability of offsets allowed under the bill will be utilized each and every year. If they are not, allowance prices would increase by nearly 90% by 2015. It is therefore critical to ensure the existence of a robust offsets market from the onset of the program – or to permit the use of other categories of offsets, such as excess renewable energy credits that utilities have accumulated under the renewable electricity standard provisions in the bill.

VI. Market Manipulation

Due to the expected magnitude of the carbon allowance market, market abuses are a real possibility. Under the Waxman-Markey bill, utilities – the ones that actually need the allowances for compliance – will be forced to compete with Wall Street investment banks, hedge funds and speculators. As §724(b) makes absolutely clear, the “privilege of purchasing, holding, selling, exchanging, transferring, and requesting retirement of emission allowances, compensatory allowances, or offset credits shall not be restricted to the owners and operators of covered entities, except as otherwise provided in this title.” (Emphasis added.) Those entities do not generate electricity and do not need allowances for compliance; they want them for commissions. If we have learned anything from securitized mortgage trading and credit default swaps, it is that market regulation has unfortunately not prevented abuses, no matter how aggressive the oversight. The easiest way to cure this problem is simply to delete the word “not” from §724(b).

We only need to look back a few years in the SO₂ allowance market to see the impact that speculators can have on the market price of allowances. During the fourth quarter of 2005, SO₂ allowance prices quickly doubled from around \$800 to over \$1,600 as a number of speculators began acquiring significant allowance positions. Within three months, the volatile allowance market dropped back to around \$800 as profitable positions were liquidated, thus requiring those utilities that acquired allowance positions at the top of the market to write off millions of dollars in lost value.

The magnitude of the carbon market, however, will far exceed that of the sulfur market. In fact, the allocation of carbon allowances in 2016 will be over 600 times greater than the allocation of sulfur allowances under the acid rain program. According to several market analysts, if the Waxman-Markey bill is passed into law, the global carbon market could become the largest commodity in the world – larger than the crude oil and natural gas markets combined. In fact, the Commodities Futures Trading Commission projects a \$2 trillion carbon futures market within five years, with up to 180 million private contracts per year.

VII. Technology Discussion

If the goal is to actually reduce emissions, we must advance the construction of renewable energy projects, significantly enhance energy efficiency programs, change customer behaviors, develop carbon capture and storage and other new technologies, and expand the nuclear power fleet.

If there's no technology to "trade" for, cap-and-trade is really a tax. Cap-and-trade can only work when there is something to trade. If low-carbon technologies are not available, utilities just pay compliance costs, which is a fancy term for a tax. Meanwhile, the emissions are unchanged. As outlined in the graph in Attachment 1, even if all of MidAmerican Energy's coal-fueled units were converted to combined cycle combustion turbine units burning natural gas (a much higher cost fuel), the 83% target would still not be close to being achieved. With 70% of our nation's electricity generated from fossil fuels, buying allowances or offsets is the only short-term answer. As I have noted, addressing climate change will require massive long-term new infrastructure and very significant technological innovation.

VIII. Conclusion

Most important, Chairman Boxer, I urge this committee to hold these types of hearings after you release your draft bill but before you mark it up. Many stakeholders have valuable input and different insights – some quite different from ours – so the more you hear reactions to an actual bill the better your final product will be. Even better, consider holding several work sessions prior to releasing the bill to address these critical issues. We would be pleased to support these work sessions in any way that is helpful. It is critical that greenhouse gas reductions be done right – in an equitable and least cost manner to mitigate impacts on those who will ultimately pay the bill – our customers and your constituents.