MidAmerican
ENERGY
OBSESSIVELY, RELENTLESSLY AT YOUR SERVICE®

March 26, 2009

Mr. Dusty Johnson
Chairman, South Dakota Public Utilities Commission
500 East Capitol Avenue
Pierre, South Dakota 57501-5070

Dear Chairman Johnson:

MidAmerican Energy Company (MidAmerican) is an Iowa-based energy provider, serving more than 706,000 electric customers and more than 687,000 natural gas customers in Nebraska, South Dakota, Iowa and Illinois. In South Dakota, MidAmerican serves 4,075 electric customers. MidAmerican generates more than 6,000 megawatts of electricity using coal, natural gas, nuclear, oil, biomass, hydro, wind, and landfill gas. MidAmerican is committed to providing reliable energy while being a responsible steward of the environment.

MidAmerican appreciates the opportunity to respond to the written request from the South Dakota Public Utilities Commission (PUC), dated March 13, 2009, to provide the commission with information on how the proposed Lieberman-Warner[1] legislation would affect MidAmerican's electricity bills for South Dakota consumers[2]. In the following paragraphs and enclosed attachment, MidAmerican provides an overview and analysis of the legislation, details on how price impacts were determined, and a review of the actual pricing impacts on consumers. While the Lieberman-Warner legislation will likely be superseded by other proposals in Congress, it is the most studied proposal to date and provides a framework for estimating the impact of a cap and trade program.

For purposes of this analysis, MidAmerican reviewed the Lieberman-Warner bill, Senate Bill 2191, as reported to the full United States Congress on May 20, 2008. This analysis does not account for the subsequent Boxer substitute amendment from May 26, 2008. The primary goal of the Lieberman-Warner bill was to substantially reduce greenhouse gas emissions by the year 2050 by implementing a declining cap on carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, and perflurocarbons/hydroflurocarbons. This legislation would subject 87% of United States greenhouse gas emissions to the cap and trade program. Those specific entities required to submit emissions allowances

[1] The Lieberman-Warner *Climate Security Act*, Senate Bill 2191 as reported to the full United States on May 20, 2008.
[2] If requested, MidAmerican can also provide information on the actual impacts on electric rates ($ per kWh).

under the program would include facilities utilizing more than 5,000 tons of coal per year, natural gas producers/processors/importers, and petroleum processors and refiners. The actual cap and trade program would reduce greenhouse gas emissions from covered sectors by 4% below 2005 levels by 2012; 19% below 2005 levels by 2020; and 71% below 2005 levels by 2050. The bill would allocate 75.5% of all allowances for free in 2012 and the proportion of allowances auctioned would increase from 24.5% in 2012 to 58.75% by 2032.

Independent, third-party-verified modeling studies have been conducted on the Lieberman-Warner bill by federal governmental agencies, academic and advocacy groups, economic modeling consultants, and a manufacturing trade association[3]. These modeling results have been used to form the basis of MidAmerican's estimates of potential pricing impacts of climate legislation on consumers. Each of these modeling studies utilized different assumptions which resulted in variable price impacts on emissions allowances. Specifically, all of these modeling studies utilized response assumptions based on a national macro level perspective which do not necessarily account for the specific MidAmerican company responses to carbon pricing which may or may not mimic some of the federal responses. Although not company-specific, these studies offer the best available information on impacts. The primary variables leading to differences in allowance pricing impacts included: the schedule of deployment of new nuclear generation; the availability of carbon capture and storage for fossil fueled generation; the schedule, availability, and cost of new renewable generation; the availability and cost of carbon offsets; and natural gas prices to encourage the resulting fuel switching. Please note that all of these modeling studies project pricing impacts from 2015 out to 2030 and used 2005 dollars. For this reason we have not estimated impacts beyond 2030. Additionally, these modeling studies were from early 2008. Since that time, there has been a considerable economic downturn which could further impact key underlying assumptions including schedules for technological advancements (i.e. nuclear deployment) and the volume of off-system electric sales.

As discussed above, each of the modeling studies had different carbon dioxide price impacts based on the use of key underlying assumptions and variables. For purposes of summation, the prices for carbon dioxide allowances varied from $18 per ton to $76 per ton in 2015 (mean $42 per ton) and from $38 per ton to $271 per ton in 2030 (mean $105 ton).

Actual impacts on electricity consumers could be **significant**. For purposes of MidAmerican's estimate it is important to note that all pricing impacts are based on the current MidAmerican system-wide generation portfolio mix and emissions intensity. The low, mean, and high allowance prices estimated in the national models were added

[3] Lieberman-Warner modeling analyses were conducted by the United States Environmental Protection Agency, United States Energy Information Administration, Charles River Associates (on behalf of the Edison Electric Institute), Nicolas Institute at Duke University, Clean Air Task Force, Massachusetts Institute of Technology, and National Association of Manufacturers. As requested, all studies can be furnished to the PUC.

to the average monthly bills for residential, commercial, and industrial customers to determine actual percentage increases for each class of customer (i.e., residential, commercial, industrial) as reflected in **Attachment A**.

The PUC also asked for information on the potential impact of a 100% auction of allowances. To date, no publicly available modeling analyses have been released regarding a 100% auction and the resulting impacts on carbon dioxide pricing per ton of emissions. The Lieberman-Warner bill allocated over 75% of allowances for free in 2012 to mitigate the impact on prices. The proportion of allowances auctioned would increase from 24.5% in 2012 to 58.75% by 2032. It is reasonable to assume that an immediate 100% auction would lead to more severe short term pricing impacts on consumers. Some would argue, however, that longer term price impacts could be potentially mitigated as these higher near-term impacts would drive faster technological innovations, fuel switching and energy efficiency measures. MidAmerican has no independent analyses modeling these potential impacts.

In closing, MidAmerican appreciates the opportunity to provide the PUC with information on the estimated price impacts to South Dakota electric consumers of the proposed Lieberman-Warner climate legislation. If you have any questions or require additional information, please contact me at (515) 281-2754.

Sincerely,

Diane Munns

Diane Munns
Vice President of Regulatory Relations and Energy Efficiency

ATTACHMENT A

External Modeling Results of Lieberman-Warner bill (2005$)

	Business as Usual-Reference Case[1]	Charles River Associates Institute[2]	Nicholas Institute[4]	Clean Air Task Force	Massachusetts Institute of Technology[5]	National Association of Manufacturers[6] (2007$)	Environmental Protection Agency[7]	Energy Information Administration
GDP	$19.2 Trillion in 2020 $25.4 Trillion in 2030	-1.74% in 2020 ($336 B) -1.71% in 2030 ($442 B)	-0.74% in 2020 -0.93% in 2030	-0.7% in 2030	-0.78% in 2020 -0.38% in 2030	-0.8 to -1.1% in 2020 -2.6 to -2.7% in 2030	-0.7 to -2.5% in 2020 -0.9 to -3.8% in 2030	
Employment	159.6 Million in 2020 171.9 Million in 2030	-2.78 Million in 2020 -3.06 Million in 2030	N/A	N/A	N/A	-1.1 to -1.8M in 2020 -3 to -4M in 2030	N/A	
Cost Per Household	None	$1340 in 2020 $2373 in 2050	N/A	N/A	N/A	$739 – $2927 in 2020 $4000 – $6750 in 2030	$446-$608 in 2020 $4377 in 2050	
Electricity Prices[8]	7.9 in 2020 8.1 in 2030	+32% in 2020 +34% by 2030	+21% in 2020 +30% in 2030	10 in 2030	+65% in 2020 +57% by 2030	+28% – +33% in 2020 +101%–+129% in 2030	+35% in 2020 +44% in 2030	
Natural Gas Prices ($/tcf)	$7.29 in 2005 $5.07 in 2020 $5.80 in 2030	+20% by 2020 +9% in 2030	+18% by 2020 +21% by 2030	$9.93 in 2005 $10.40 in 2030	+39% by 2020 +64% in 2030	+26% – +36% in 2020 +108%–+146% in 2030	$7.51 in 2005 $9.09 in 2030	
Coal Consumption	27.3 quads in 2020 34.1 quads in 2030	-66% by 2020 -71% by 2030	-42% in 2020 (-11 quads) -51% in 2030 (-16 quads)	N/A		N/A	-52% in 2020 -44% in 2030	
Permit Prices ($/ton CO_2-e)	None	$48 in 2015 $76 in 2030	$18 in 2015 $38 in 2030	$18 in 2015 $50 in 2030	$48 in 2015 $86 in 2030	$55 – $64 in 2020 $227 – $271 in 2030	$29-$40 in 2015 $61-$83 in 2030	Range from $30 to $76 in 2015-2020 Range from $61 to $156 in 2030

[1] BAU = business as usual. Data in this column is taken from the Energy Information Administration's Annual Energy Outlook (AEO) 2007 reference case.

[2] Figures shown in the CRAI L-W Analysis column are from a CRAI analysis of L-W performed for EEI. CRAI also bases its reference case on the AEO 2007 reference case with some modifications to near-term electricity demand, gas prices, etc.

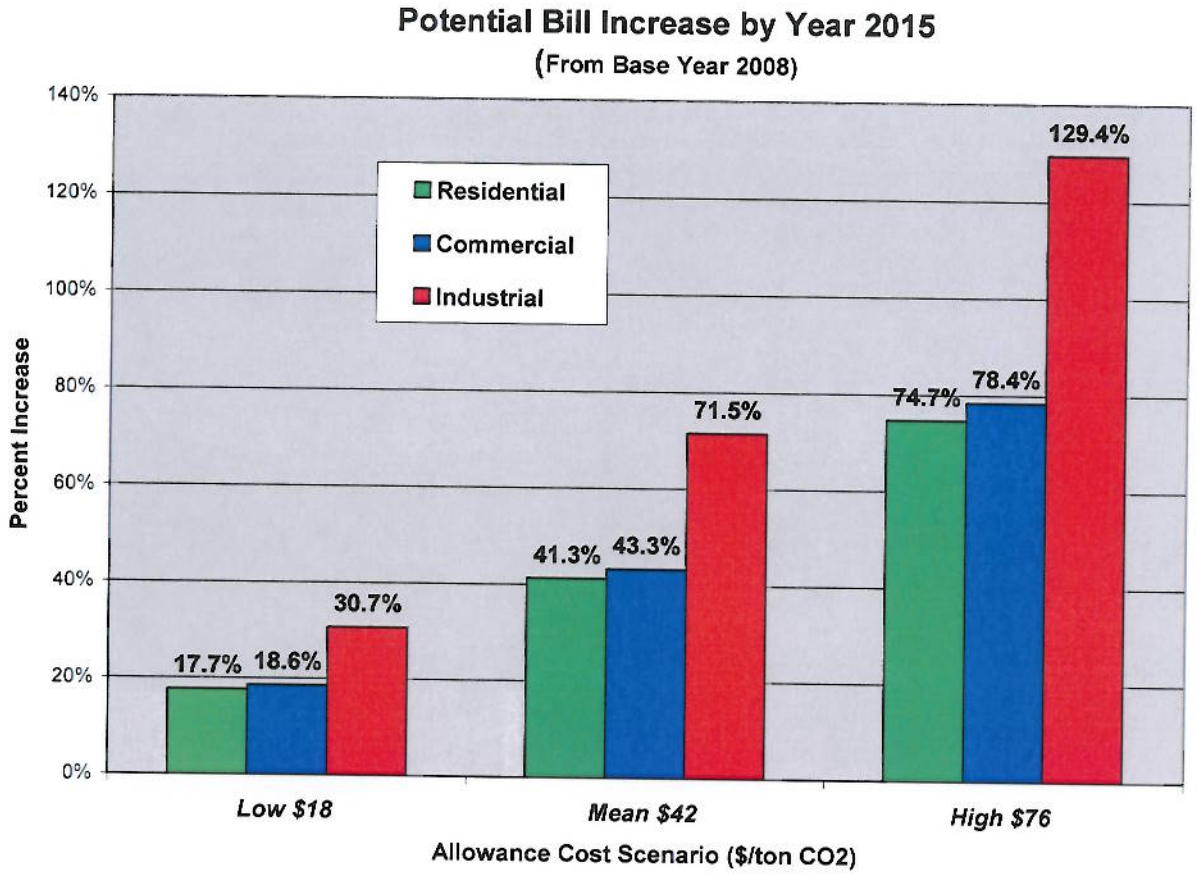
[4] Figures shown are in relation to a reference case developed using the ADAGE model, which the Nicholas Institute analysis used instead of the EIA AEO 2007 reference case.

[5] Figures shown are taken form "Lieberman-Warner, 15% Offsets and CCS Subsidy" case.

[6] Figures shown reflect range of results from Low Cost and High Cost cases. Figures shown are in 2007$.

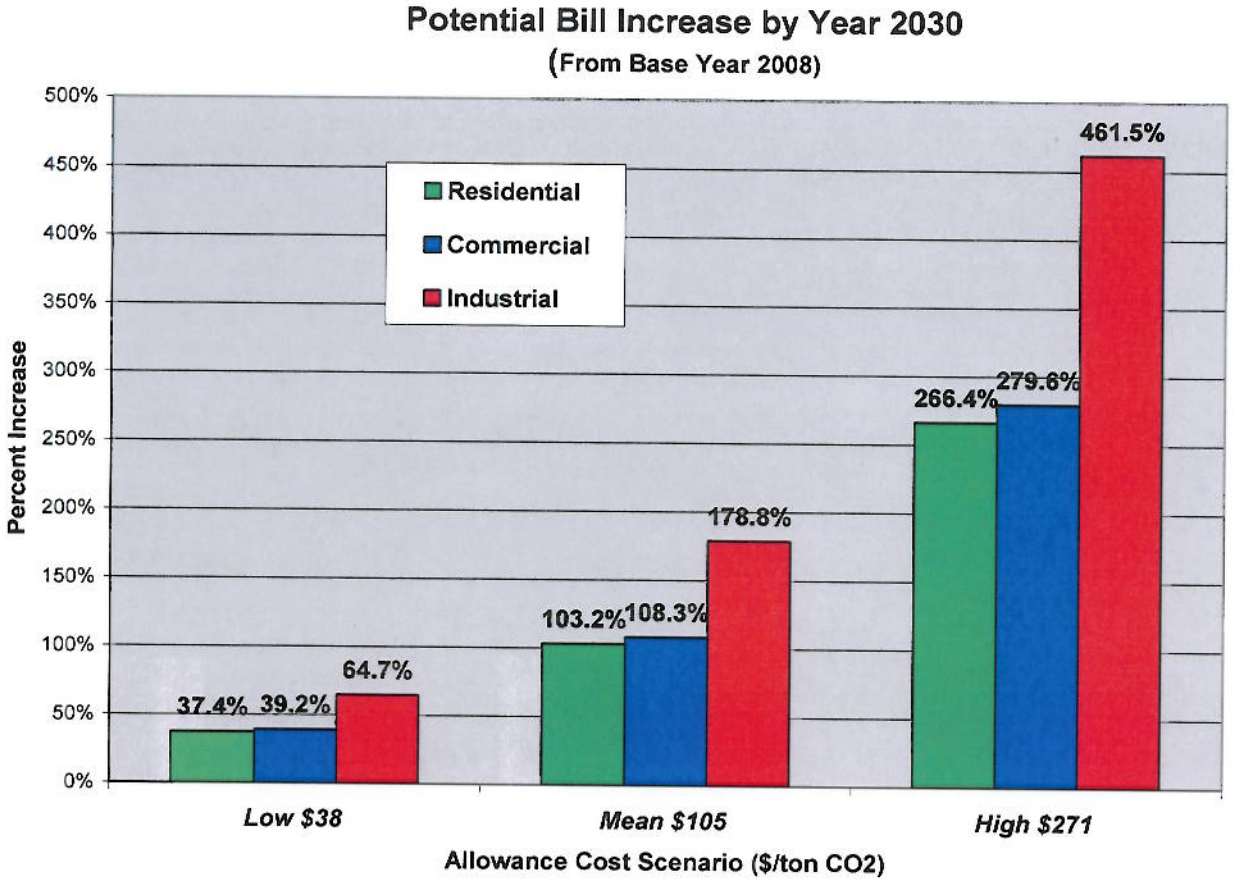
[7] Figures shown reflect EPA S. 2191 Scenario results. The EPA reference case was based on the AEO 2006 reference case assumptions.

[8] Figures shown are in cents per kilowatt hour



Average Residential bill is $74.71 per month (2008).
Average Commercial bill is $272.48 per month (2008).
Average Industrial bill is $20,801.61 per month (2008).[9]

[9] Average 2008 billing information is from FERC form No. 1, page 304.



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[10] Average 2008 billing information is from FERC form No. 1, page 304