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2014

Obama Climate Plan

J. David Aiken

University of Nebraska-Lincoln, daiken@unl.edu

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Cornhusker Economics

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Institute of Agriculture & Natural Resources
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University of Nebraska–Lincoln Extension

Obama Climate Plan

Market Report	Year Ago	4 Wks Ago	7/18
<u>Livestock and Products,</u>			
<u>Weekly Average</u>			
Nebraska Slaughter Steers, 35-65% Choice, Live Weight.	119.79	149.15	156.86
Nebraska Feeder Steers, Med. & Large Frame, 550-600 lb.	177.09	254.00	268.00
Nebraska Feeder Steers, Med. & Large Frame 750-800 lb.	151.94	207.17	270.55
Choice Boxed Beef, 600-750 lb. Carcass.	189.83	238.39	250.15
Western Corn Belt Base Hog Price Carcass, Negotiated.	98.72	120.03	127.60
Pork Carcass Cutout, 185 lb. Carcass 51-52% Lean.	99.13	124.66	135.23
Slaughter Lambs, Ch. & Pr., Heavy, Woolled, South Dakota, Direct.	117.38	154.75	154.38
National Carcass Lamb Cutout FOB.	278.62	359.20	358.21
<u>Crops,</u>			
<u>Daily Spot Prices</u>			
Wheat, No. 1, H.W. Imperial, bu.	6.86	6.56	5.72
Corn, No. 2, Yellow Nebraska City, bu.	7.04	4.43	3.53
Soybeans, No. 1, Yellow Nebraska City, bu.	15.61	14.05	12.37
Grain Sorghum, No.2, Yellow Dorchester, cwt.	11.50	7.73	6.18
Oats, No. 2, Heavy Minneapolis, Mn, bu.	3.87	3.80	3.76
<u>Feed</u>			
Alfalfa, Large Square Bales, Good to Premium, RFV 160-185 Northeast Nebraska, ton.	250.00	193.75	207.50
Alfalfa, Large Rounds, Good Platte Valley, ton.	180.00	*	100.00
Grass Hay, Large Rounds, Good Nebraska, ton.	150.00	100.00	100.00
Dried Distillers Grains, 10% Moisture Nebraska Average.	225.00	145.00	105.00
Wet Distillers Grains, 65-70% Moisture Nebraska Average.	85.00	52.00	35.00
* No Market			

States have been the policy leaders in establishing programs to reduce greenhouse gas (GHG) emissions from power plants in the US through state renewable energy programs and energy efficiency programs. However, US global warming policy may have turned an important corner during the Obama administration. In the US the two largest sources of GHG emissions are motor vehicles and coal-fired power plants. Significantly reducing US GHG emissions would require addressing these two issues. The Obama climate plan does so. The most contentious issue is reducing GHG emissions from existing power plants. But states will be able to do so through (1) renewable energy generation and (2) energy efficiency programs.

US motor vehicle fuel economy requirements. In the depths of the Great Recession, when Detroit auto manufacturers had taken US bailout funds to avoid bankruptcy, the Obama administration negotiated historic auto fuel economy requirements. The fleet average for new US automobiles will be 54.5 mpg by 2025. Automakers ordinarily would have opposed these requirements but were in a weakened political position due to the acceptance of federal bailout funds. The new fuel economy requirements put the US squarely in the middle of the pack for global fuel economy requirements and make a significant step forward in reducing US GHG emissions.



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Proposed new power plant rules. In 2013 the Obama Environmental Protection Agency (EPA) issued proposed regulations to require new coal-fired power plants to reduce their GHG emissions by 40% by installing carbon capture and storage (CCS) equipment. CCS technology is under development and the general technology is well tested, but it has not been installed at operating power plants yet. The CCS requirement essentially guarantees that any new fossil-fuel power plants will be fueled with natural gas, the price of which is low due to the current fracking boom in natural gas production. Current natural gas prices make new natural gas electricity plants economically competitive with new coal power plants, and much less expensive than new coal power plants with CCS. The fracking boom has made the proposed new power plant rule more palatable economically than would be the case if natural gas prices were higher and/or more variable. The final new power plant regulations will likely be tied up in court for years. However, they send a powerful signal to the industry and the rest of the world (especially coal-heavy China and India) that the US is getting serious about reducing its GHG emissions.

Proposed existing power plant rules. In 2014 the Obama EPA issued proposed regulations requiring states to reduce emissions from existing power plants by about 30% from 2005 levels. State plans to accomplish this are due June 30, 2016, but states may be eligible for a one-year extension. Reductions must be accomplished by 2030 with meaningful reductions occurring by 2020. These reductions can be made by converting coal-fired power plants to natural gas (not inexpensive but doable) or by installing CCS equipment (more expensive). The proposed regulations encourage states to consider using energy efficiency (EE) requirements and renewable portfolio standards (RPFs) also known as renewable energy standards (RESs) to meet the GHG reduction requirements, which are much less expensive than power plant retrofits.

Energy efficiency requirements. States may reduce GHG emissions by reducing electricity consumption through state and/or utility energy efficiency requirements. This is usually accomplished by utility cost-sharing with customers (business and residential) on high-efficiency heating and cooling systems, appliances, lighting, windows, home insulation, etc. Twenty states (not including Nebraska) have state energy efficiency (EE) requirements, requiring utilities to reduce electricity consumption between 0.5 and 1.5% per year. Another seven states have state EE goals (no penalties if utilities don't meet the goal). Utilities in 47 states provide cost-sharing assistance to customers to use more efficient electric appliances, buildings, windows, etc. Reduced electricity consumption means, on average, proportionally fewer GHG emissions from the power sector. And nationally EE programs cost less per kilowatt hour (kwh) saved than it typically costs to generate electricity. Saving electricity is usually cheaper than generating electricity. This means that EE programs are very cost-effective.

Renewable portfolio standards. Twenty-nine states (plus the District of Columbia) have state RPS requirements, requiring that a stated percentage of electricity must be generated through renewable energy production (e.g. wind, solar, etc.) by a stated date. Eight states have state RPS goals (no penalty if a utility does not meet the goal). A common RPS requirement would be 25% RPS by 2025. Normally the availability of wind or solar generation means that less electricity is needed from coal-fired power plants. A 30% RPS by 2030 coupled with a modest state EE requirement to slow or reverse any increase in electricity consumption should meet the proposed EPA existing power plant rule. US electricity use is already flat or declining, in part due to state EE programs (as well as federal appliance EE programs) and also because of reduced energy use during the Great Recession. So stabilizing US electricity consumption is already occurring.

State implications. About half of the states have both state EE requirements or goals and state RPS requirements or goals. They won't have as much to do to comply with the proposed EPA existing power plant rule. Nearly all states have one or the other. Only a handful of states including Nebraska have neither. Fortunately, in Nebraska, all three major electricity generating utilities — the Omaha Public Power District (OPPD), the Lincoln Electric System (LES) and the Nebraska Public Power District (NPPD) — have voluntary renewable energy goals and also have ongoing customer EE cost-sharing programs. OPPD and LES both have 30% RPS goals, while the NPPD RPS goal is 10%. Some states, like Nebraska will have further to go to meet the proposed existing power plant rule. But for many states it will be business as usual.

International implications. The US has not been a positive factor in global climate negotiations. The Obama fuel economy requirements, and power plant rules have overnight made the US a more credible actor in global climate politics. No other industrialized country has to date essentially banned new uncontrolled coal-fired power plants, which the proposed EPA new power plant effectively does. Prior to these positive developments, India and China could use US climate inaction as an excuse to not take more aggressive actions to limit GHG emissions — *if the US won't limit GHG emissions, why should we?* In fact, China's national renewable energy program is fairly aggressive. But in any event, the US moving forward to limit US GHG emissions will make it easier to adopt meaningful global GHG limits that could be enforced through trade sanctions, for example.

J. David Aiken, Professor
Water & Agricultural Law Specialist
Department of Agricultural Economics
University of Nebraska-Lincoln
(402) 472-1848
daiken@unl.edu