

# THE EMISSIONS CORNER

by Dr. Michael J. Readey  
Aeris Analytics LLC



Number 11  
April 2, 2010

## A Big Couple of Weeks for Air Quality

The last few weeks have seen major changes in legislation supporting air quality, clean technologies and economic development. In Colorado, two major bills were approved that will increase our use of renewable energy, and likely convert some coal-fired power plants to natural gas (presumably Colorado Natural Gas). At the national level, the EPA flexed its new GHG muscles by partnering with the Department of Transportation for new fuel economy standards for cars and trucks. With so much happening so fast, let's take a look in more detail.

### 1. Colorado Passes the Clean Air-Clean Jobs Act

Perhaps the most well known legislative action is the new rule impacting coal-fired power plants here in Colorado. Known as House Bill 1365, the Clean Air-Clean Jobs Act, the law requires Xcel Energy to reduce pollutant emissions (NO<sub>x</sub>, particulates, mercury) and greenhouse gas emissions (CO<sub>2</sub>) from some of its Front Range power plants, in line with requirements from the federal Clean Air Act. Options include retiring older coal-fired plants, retrofitting them with emission controls systems, or replacing them with facilities powered by cleaner-burning natural gas. The bill received tremendous support from both sides of the political aisle, along with natural gas companies, environmentalists and Xcel.

The way the law works is that electricity generating companies (like Xcel) must submit an emissions reduction plan for certain coal-fired power plants to the Colorado Public Utility Commission (PUC) by 8/15/10, with PUC approving the plan by year end. Any action (e.g., retire, retrofit or repower with natural gas) must be completed by 2017. While companies like Xcel are required to reduce emissions anyway as part of EPA regulation, the bill allows power companies to enter into long-term contracts for natural gas – thus reducing financial risk as well as price volatility of natural gas relative to more stable pricing for coal. The other carrot in the bill is that the higher cost of natural gas (relative to coal) can be offset with increases in utility rates. These factors make switching to natural gas a financially attractive option for Xcel, while also benefiting Colorado's natural gas industry, which is expected to respond with more drilling and exploration.

### 2. Colorado Passes Bill to Increase Renewable Portfolio Standard

On March 22, Colorado Governor Ritter signed into law House Bill 1001, which calls for increasing the state's renewable energy requirements from 20 to 30% by 2020. The increase in the Renewable Portfolio Standard, or RPS, was supported by Democrats, Republicans, Environmentalists and even Xcel Energy, and puts Colorado among the top states in the country to adopt such aggressive standards. Under the law, 3% of the state's energy must be provided by solar electric installations, which could mostly come from residential rooftop installations. Other technologies that meet the requirement include wind energy, geothermal, biomass (notably methane from landfills and animal wastes as well as wood chips and other plant waste), and new hydroelectric installations.

### 3. EPA Establishes CO<sub>2</sub> Limits for Cars & Light Trucks

On April 1, 2010, the EPA in partnership with the National Highway Transportation Safety Administration, signed a new rule that increases the fuel economy of cars and light trucks to new levels by 2016. Starting in 2012, the rule requires automakers to increase their fleet-average fuel economy levels to 33.8mpg for passenger cars and 25.7mpg for light trucks – corresponding to carbon dioxide (CO<sub>2</sub>) emissions of 295 grams per mile. The fuel economy standards increase to 39.5 mpg for passenger cars and 29.8mpg for light trucks by 2016 – reducing CO<sub>2</sub> emissions to 250 grams per mile. The significance of the new rule is that it is the first time the EPA has set standards for greenhouse gases, or GHGs. GHGs from transportation are second only to electric power generation, making cars and light trucks a prime target for regulation. Expect more to come on GHG regulations.

So it has been a big month for changes in air quality standards. With the economy picking up, we're likely to see more in the near future. Until next time, enjoy the cleaner air!