

# *Xcel's Proposed Pueblo Coal Plant:*

## *What is Wrong With It?*

### *Let's Count the Ways—Or At Least Get Started...*

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Clean Energy Action's Website is [www.coloradocleanenergy.org](http://www.coloradocleanenergy.org) )

#### **I. Environmental Issues**

A. We have more carbon dioxide in the atmosphere than we've had in at least the last 650,000 years—The plant would add about 6 million tons a year until at least 2060

B. Pueblo already bears almost half of the state's mercury emissions. The plant would add over 100 pounds of mercury to the environment every year until at least 2060.

C. The Arkansas River Basin is already projected to have a shortfall in 2030. The plant would consume about 5 million gallons of water a day out of the Arkansas River until at least 2060.

D. While Xcel has agreed to clean up emissions of SO<sub>2</sub> and NO<sub>x</sub> from the existing Units 1 and 2, the proposed plant would have the potential to emit thousands of tons of other pollutants including particulates, carbon monoxide, volatile organic compounds and hazardous pollutants like nickel, lead, cobalt, arsenic, benzene and sulfuric acid mist.

E. The plant would produce massive quantities of ash containing hazardous materials.

#### **II. Legal Issues at the Public Utilities Commission (PUC)**

A. Xcel and the PUC ignored clearly cheaper alternatives despite the mandate to develop a "Least Cost" Plan (PUC Least Cost Planning Rule 3610 (f))

B. All plants over 250 MW are supposed to go out to bid. (PUC Least Cost Planning Rule 3610 (b)) Xcel's proposed Pueblo coal plant would be 750 MW but they are not putting it out to bid.

C. The PUC failed to give the fullest possible consideration to clean energy solutions like efficiency, wind and solar as required by Colorado Law (C.R.S. 40-2-123). Not only are they cleaner, Xcel's own modeling (which was ignored) shows they are cheaper!

D. The PUC was not supposed to issue a "Certificate of Public Convenience and Necessity" as part of the Least Cost Plan proceeding. They did.

(The appeal (called a RRR) of the PUC decision can be read at [www.coloradocleanenergy.org](http://www.coloradocleanenergy.org), but these issues couldn't be challenged in court because you had to have been a party to the proceeding.)

#### **III. Legal Issues at the Department of Public Health and the Environment**

A. The existing Units 1 and 2 in Pueblo are under a Notice of Violation from the EPA. The CDPHE is obligated to investigate claims of air pollution violations (C.R.S. 25-7-115). CDPHE never did.

B. Xcel's "netting" proposal was not properly evaluated.

C. The plants are having a serious impact on visibility and this would continue even after clean up.

D. The CDPHE didn't do a proper Best Available Control Technology (BACT) analysis.

(The lawsuit against CDPHE can be read at [www.coloradocleanenergy.org](http://www.coloradocleanenergy.org) under PUC/Legal Issues.)

## IV. Economic Issues

A. Steel and concrete prices have gone up dramatically since Xcel modeled the cost of the plant at \$1.3 billion. Coal plants use a lot of steel and concrete so the cost is likely to be much higher.

B. The cost of coal has gone up steadily from when Xcel modeled the cost of the plant. Between January 2005 and January 2006 the spot price for Powder River Basin coal from Wyoming (which Xcel wants to use in the coal plant) more than tripled.

C. The costs of carbon regulation are completely unknown at this time but are likely to become very serious between now and 2060. In addition there may be large liabilities related to the cost of climate-induced disasters.

D. Xcel has a poor credit rating so they want their ratepayers to finance the coal plant and be responsible for all construction, fuel cost and operational expenses while they intend to send the profits on to their shareholders. Interesting business plan, eh?

## What are the Clean Energy Alternatives?

**I. Efficiency:** The Alliance to Save Energy has reported that Colorado is #3 in the country for untapped efficiency resources. Efficiency is clean and cheap. Xcel has an excellent efficiency program in Minnesota which typically saves over 100 MW a year in demand. Efficiency is typically the cleanest and cheapest form of energy often costing only about 3 ¢ per kilowatt hour (kwh).

**II. Wind:** According to the American Wind Energy Association, Colorado has over 50,000 MW of wind potential and only a little over 200 MW of installed wind turbines. Clearly there is room to improve!

**III. Distributed Solar Energy:** The sun shines down on the roofs of homes and businesses approximately 300 days of the year in Colorado. In Germany with a small fraction of Colorado's sunshine, they installed 300 MW of solar panels in 2004 alone. If Colorado just meets its Amendment 37 goals we will have installed less than 100 MW of solar energy by 2015. Clearly we can set a higher goal!

**IV. Concentrating Solar Power (CSP):** According to the National Renewable Energy Laboratory there is enough solar potential to produce all of the Southwest United States electricity many times over using concentrating solar power technologies—even with very stringent criteria for siting! These technologies are already very close to cost competitive. In August and September 2005, Southern California Edison and San Diego Gas and Electric signed contracts for 500 and 300 MW of Sterling Engine solar electricity. Sterling Engines heat an enclosed liquid or gas that drives a piston generating electricity with no emissions and no use of water!

**V. Biomass :** There are many sources of biomass and they can be converted to electricity and other forms of energy quite easily. Moreover, biomass resources are "dispatchable," meaning the utility can call on them when they need electricity regardless of whether the sun is shining or the wind is blowing.

**VI. Vehicles to Grid (V2G):** As hybrid car technology develops the batteries in hybrid cars can be used as storage devices for the electric grid, helping to match supply and demand.

Clearly There are Many Ways to Meet Our Energy Needs in a Clean and Affordable Fashion.

## We Just Have to Decide to Do It!