



THE GREAT PLAINS ALLIANCE FOR CLEAN ENERGY

A New Energy Frontier: Is Coal Old News?

Some questionable claims made by supporters of the Sunflower expansion, with responses:

Claim: "The Sunflower Electric expansion is necessary to provide power for Kansas – without it, Kansas faces blackouts."

- **Response:** No other utilities in the state are asserting that Kansas is in danger of blackouts due to lack of power any time in the immediate future.
- **Response:** The modest long term power needs in the Sunflower service area related to slowly increasing demand can already be met by power purchases from other Kansas power providers.
- **Response:** 1200 MW of the project total 1400 MW would be owned and used by utilities in Texas and Colorado and completely unavailable to Kansas customers or power providers.
- **Response:** Through modest increases in energy efficiency by existing energy providers, optimized power distribution, and maximizing renewable energy (esp. wind) Kansas' future power needs could be met without taking on the risky economic investment of Sunflower's project.

Claim: "The Sunflower Electric expansion would reduce electricity rates – it would keep energy cheap."

- **Response:** Electricity rates from all fuel sources are rising across the board. Ignoring pending carbon regulations and the increasing cost of burning fossil fuels like coal simply avoids responsible planning now and passes those huge costs on to customers in the future or to the state's taxpayers if Sunflower goes bankrupt again.
- **Response:** The days of cheap fossil fuels are over. Demand and cost are rising while supplies depleting. The cost of renewables is dropping, and investment in wind and solar has soared in recent years.
- **Response:** The cost of coal as a fuel is rising and uncertain - leaving rate-payers with little to rely on. The cost of wind as a fuel is known: Free (it's also abundant and inexhaustible).



THE GREAT PLAINS ALLIANCE FOR CLEAN ENERGY

Claim: "Without the Sunflower Electric expansion, Kansas faces price spikes."

- **Response:** The future will see increases in energy costs across the board. Wind and solar offer a carbon-free (and thereby regulation-free) hedge against the days of rising fuel costs. Wind, solar, and efficiency are the best, cheapest safeguards we have against price spikes.
- **Response:** Kansas faces the threat of price spikes WITH the Holcomb expansion. Price fluctuations can be caused by many factors, including increasing costs for coal, that a single power plant cannot address.

Claim: "Coal is cheap – wind and other renewables are expensive."

- **Response:** The costs of coal as a fuel, coal plant construction, water needed to make energy from coal, transporting the coal, and carbon emissions are all rising sharply. The immediate cost of new coal-fired energy and new wind power are now essentially equal. As coal-related costs increase, wind is likely to become a less expensive energy source.
- **Response:** Because the sun's energy is greatest at exactly the times of greatest peak energy demand (summer days), solar energy is an ideal, cost-effective way for utilities to "shave" their peak demand and avoid their most expensive power purchases.
- **Response:** Multiple pieces of carbon legislation have been introduced at the federal level, and both Presidential candidates have said they will take steps to mitigate carbon emissions - in which case the cost of coal-fired power will rise significantly. Investing in coal is a risk to ratepayers.
- **Response:** Currently, Kansas gets approximately 77% of its energy from coal, nearly 25% more than the national average. We pay to ship it, we pay to burn it, we pay for the water to make power from it, and eventually -we'll pay to reduce its emissions. Wind and solar are free and abundant. Kansas has the 3rd greatest potential for wind power in the nation - it's clean, domestic, and free.
- **Response:** Increased energy efficiency is the cheapest source of available electrical energy, beating all fuel sources on cost. Efficiency has none of the economic or environmental downsides of fossil fuels. In fact, it is often cheaper for utilities to pay for appliances, services, and technology to increase the efficiency of customers' energy use, than to purchase or create new energy to meet customer demand.



THE GREAT PLAINS ALLIANCE FOR CLEAN ENERGY

Claim: "Coal is dependable energy – wind and solar are unreliable and not up to utility scale. Holcomb will keep the lights on, while wind is a pipe-dream."

- **Response:** Coal will play a role in powering our homes for a long time to come, but it isn't more dependable if world demand for it (and thus its cost) continues to increase requiring increases in rates to pay for it and its emissions.
- **Response:** According to the Department of Energy, wind power grew by 46% in 2007, the highest rate of growth in the U.S. yet. Technology, manufacturing capacity, and capital investment is vastly improved in all renewable energy sectors - especially wind. More and more utilities are turning to renewable energy instead of coal.
- **Response:** Wind and solar are variable, NOT unreliable. The wind blows and the sun shines very reliably - our task is to harvest their energy and get it to where we need it.

Claim: "The Sunflower Electric expansion would provide needed economic development – in particular jobs."

- **Response:** Sunflower's expansion would have offered a number of temporary construction jobs (mostly filled by out-of-state workers) and a finite number (around 200) of long term jobs, with no prospect for future increase in the number of jobs. In fact, the Holcomb expansion would mostly benefit the single county where the plants would be located, while an equivalent amount of wind energy production would yield more jobs overall with impacts spread over multiple western Kansas counties.
- **Response:** The United States Department of Energy's National Renewable Energy Laboratories estimates that wind energy production equivalent to the output of Holcomb would generate \$2.9 billion in economic impact for the state, produce 8,000-10,000 construction jobs, and 1100-1400 permanent jobs in Kansas.
- **Response:** The U.S. DOE's NREL also estimates that if Kansas fulfills its projected contribution to President Bush's plan for 20% of the nation's electricity to come from wind by 2030, the state would produce 7158 MW of wind-generated electricity creating \$7.8 billion in economic impact statewide, 23,000 construction jobs, and 3,000 permanent jobs in Kansas.
- **Response:** A recent study done by the University of Oklahoma estimates that if Oklahoma met just 20% of its energy demand with wind, it could create roughly 15,000 jobs for residents of that state. Some Kansas utilities have already agreed that 20% of our electricity from wind is attainable.
- **Response:** Wind power can put \$5,000 - \$10,000 per turbine annually in the pockets of farmers, ranchers, and landowners, and would pay many rural communities



THE GREAT PLAINS ALLIANCE FOR CLEAN ENERGY

hundreds of thousands of dollars through tax payments or payments in lieu of taxes.

Claim: "Kansas coal (in particular, coal from southeast Kansas) could be used in the Sunflower Electric expansion as a fuel source."

- **Response:** Not true. If built, Holcomb would be contractually obligated to use coal from the Powder River Basin in Wyoming, from the same mines that Sunflower and Tri-States have a financial interest in. NO other coal could be use in the plants.
- **Response:** As designed, the proposed plants (and most new generation coal plants) cannot burn the relatively soft, sulfurous coal found in Kansas. Using current coal-fired technology, Kansas coal cannot be used in existing or proposed coal plants.

Claim: "The proposed Sunflower Electric expansion would be the cleanest power plant in the state and one of the cleanest in the nation."

- **Response:** The newest generation of coal plants can produce less mercury, sulfur dioxide, and nitrogen oxides than older generations of plants. However, the cleanest coal plant in the world still isn't as clean as wind and solar. And no existing coal plants can capture and sequester carbon dioxide emissions.
- **Response:** "Clean Coal" is a myth. The technology to remove carbon dioxide from coal emissions is neither affordable or effective and is at least 10-20 years away from implementation, if ever. It is a marketing term coined by the coal industry to fool voters and customers.
- **Response:** Renewable energy is reliable, abundant, and free. Why make rate payers pay for Sunflower to clean up its act when Kansas has the potential to be a national leader in clean, renewable energy? Kansas should maximize our potential for clean, abundant, and free energy sources like wind before binding us and our children to dirty, risky, and uncertain fossil fuels that have to be shipped into the state from elsewhere.

Claim: "The proposed Sunflower Electric expansion included an algae-reactor that would have scrubbed the CO₂ from its emissions."

- **Response:** Not true at all. The experimental algae reactor process was NOT part of Sunflower's permit request. Sunflower would not have been obligated in any way to make the algae-reactor functional, ever. Sunflower claims that a "bioenergy center" would reduce carbon emissions from the plants by 40% were completely unsubstantiated.
- **Response:** The algae-reactor discussed by Sunflower has never been tested at utility scale. Recent experiments to bring this promising process up to utility scale were abandoned by the Department of Energy and its partners as too expensive and



THE GREAT PLAINS ALLIANCE FOR CLEAN ENERGY

technologically infeasible at utility scale.

- **Response:** The proposed algae-reactor would require a body of water at least FIVE TIMES the size of Kanopolis Lake. Anyone familiar with western Kansas and water knows that our precious water is better saved for human consumption and irrigation of crops, even if such an amount of water were available to risk on an untested algae process.
- **Response:** Given the required size of an algae reactor at Holcomb, the materials and energy required to build and maintain it over a couple of decades of use would likely cost two to three times what the coal plants themselves would cost. Sunflower offered no proposal for where this money would come from.
- **Response:** Wind energy requires NO carbon sequestration technology - because it emits no carbon like coal plants (or mercury, or ozone, or particulate matter, or sulfur dioxide, or nitrogen oxides). Additionally, wind energy requires no water to produce power for electricity, saving our precious water supply for Kansas farms, ranches, and communities.

Claim: "The Sunflower Electric expansion is necessary in order to get the transmission infrastructure needed for wind energy."

- **Response:** Not true. In fact, several companies have already been approved to build large transmission projects in Kansas that will deliver wind-generated electrons from regions of rural and western Kansas.
- **Response:** The Southwest Power Pool - of which Kansas is a part and which governs energy distribution in the region - is already preparing for 40,000 MW of wind-generated electricity to come from the Texas and Oklahoma panhandles and from western Kansas. Oklahoma and Texas are both aggressively pursuing transmission infrastructure to help move this energy to where it's needed without building additional coal plants to get it done.