These comments are turned in before the deadline of August 22, 2012. Thank you for including them in the overall comments on the Draft Environmental Impact Statement on the SunZia project.

These comments have been published on Blog For Arizona (at <a href="http://www.blogforarizona.com/blog/2012/08/sunzia-the-making-of-a-slave-state-first-power-then-transmission.html">http://www.blogforarizona.com/blog/2012/08/sunzia-the-making-of-a-slave-state-first-power-then-transmission.html</a>) and on <a href="https://www.SafeEnergyAnalyst.org">www.SafeEnergyAnalyst.org</a> (at <a href="https://www.SafeEnergyAnalyst.org">www.SafeEnergyAnalyst.org</a>)

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SunZia: The Making of a Slave State, First Power then Transmission

## Why does Arizona tolerate it? Why do its citizens tolerate it? Who benefits by creating a slave-state status for Arizona?

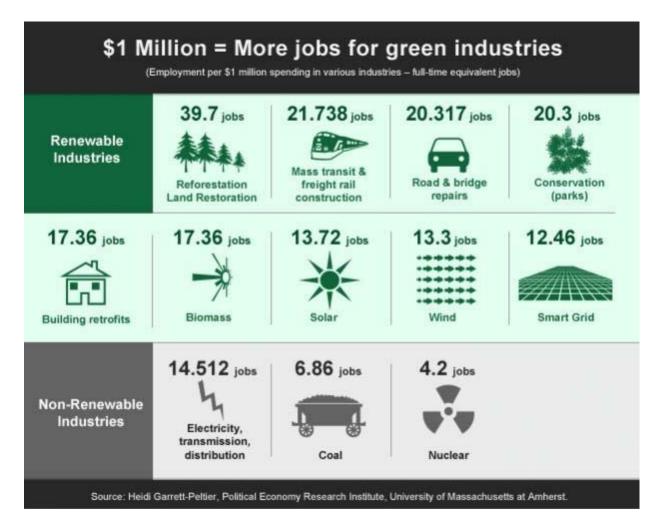
by Russell Lowes, www.SafeEnergyAnalyst.org and Energy Chair for the Sierra Club Rincon Group

Some states in this fine nation export goods in such a way as to benefit all or many within the state. Let's take the examples of maple syrup from Vermont, fish catch from Alaska, honey from Utah, or high-technology solutions from California. All of these examples incur some handsome benefits for many or all of the state population in export revenue. That revenue can come in the form of tax revenue or in the form of business income, and perhaps high numbers of jobs provided or even more intangible benefits, like crop pollination.

Not so with energy exports of Arizona. With more than a third of our electricity being exported, there is very little benefit to any significant population of this state. Sure there are some construction jobs that actually don't go to out-of-state construction workers, and really do go to in-state residents. Sure there are some maintenance jobs for running these plants that also go to in-state residents of Arizona.

However, there are a scant number of jobs in coal, gas or nuclear power production. For every million invested in coal production, only 6 jobs are produced. <u>Fossil</u>-fuel and nuclear plants are capital intensive industries, where the money goes largely for capital-intensive power plant and construction components, many of which are produced overseas.

In contrast to 6.9 jobs for coal and 4.2 jobs per million dollars spent on nuclear energy, solar energy installation produces about 13 jobs per million dollars spent. Whenever you put money toward low job-producing options, you deplete funds for higher jobs-producing options. To put money into coal and nukes reduces overall employment, because that money would have gone to other projects, or perhaps even just into more discretionary spending, which has a much higher jobs output than 4.2 or 6.9 jobs per million dollars spent.



Energy exports from Arizona are not taxed in any significant way that would bring further benefits to the state, except for property taxes that benefit the local areas a bit. We do not tax the payroll that goes for power plant components from out-of-state — and mostly out-of-country — workers who create these parts and machinery for the coal, nuclear and natural gas plants. We do not put a sales tax on the exported energy. We do not tax the income of the out-of-state corporations like Bechtel, GE-Hitashi, Toshiba-Westinghouse or others who build these plants.

Then comes SunZia, which some think of as Sunzilla, a monster transmission facility. This system would transport electricity from coal and natural gas producing plants right through Arizona. The company behind SunZia, SouthWestern Power Group, would have you believe that the 16-story high transmission lines would primarily transmit renewable energy. However, every one of their many options for routing their transmission lines goes by a planned fossil-fuel plant in southeastern Arizona.

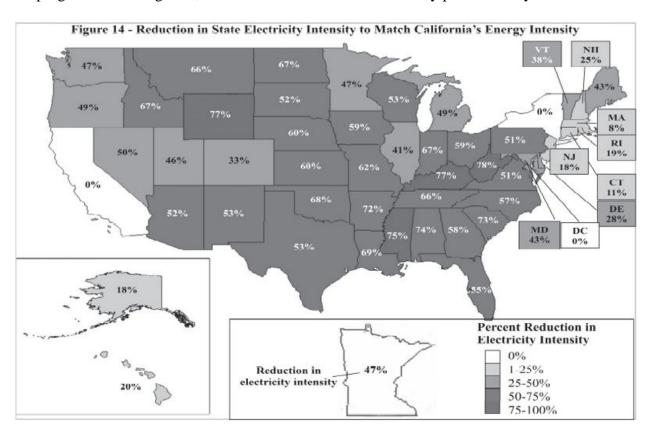
The owners of the Bowie fossil-fuel plant and SunZia apparently own no renewable energy facilities to speak of. This is a good example of green-washing, where they promise renewables and then you actually deliver dirty energy. Explicitly put, they are using renewables as a cover to deliver their dirty fossil fuel plant.

It is SouthWestern Power Group, in fact, that wants to build a large natural gas plant north of the Chiricahua Mountains, near Bowie. It would pollute the air of Chiricahua National Monument, the Coronado National Forest lands, the Wilcox Playa and the Wilcox area. This plant is east of Tucson, toward the New Mexico boundary line.

The wind from this facility would blow pollutants to Tucson during our hot summer months. This fossil-fuel plant would pollute a large region including parts of Arizona, New Mexico and Mexico. Of course, winds don't stop at boundary lines, so the pollution, like all pollution of fossil and nuclear plants, would thin out and spread globally.

There is no need for this huge transmission line. Instead, there is a large precedent for energy efficiency improvement in the U.S., in the Southwest and in Arizona. The <u>Arizona Corporation Commission</u>, which is a top regulator for electricity and its transmission in Arizona, has established a requirement for Arizona of 22% reduction in power production in Arizona by 2020. This large electricity reduction is going to make new transmission lines much less viable. On the other hand, to build transmission lines essentially refocuses attention on production, rather than reaching our energy efficiency potential.

All the while, if Arizona were to use its energy as efficiently as California, which has focused on EE programs for a long time, it would reduce its overall electricity production by 52%!



Source: *New Rules Project*, Energy Self-Reliant States, October 2009, p. 25. <a href="http://www.newrules.org/sites/newrules.org/files/ESRS.pdf">http://www.newrules.org/sites/newrules.org/files/ESRS.pdf</a>

With all this energy reduction going on, why would it be beneficial to build SunZia? It is highly beneficial for out-of-state and overseas corporations. For typical Arizona residents, it is the opposite of beneficial.

Arizona stands to lose environmental quality, and the economic negatives that go along with these environmental quality reductions. The towers and lines themselves contribute to visual blight of the beautiful natural settings of Arizona, and New Mexico. The lines will contribute to transporting more electricity from natural gas – an absolute certainty, with the tie-in to the natural gas plant near Bowie.

Economically, this is not the way to go. Many studies have been done on the average cost of natural gas electricity, on <u>coal electricity</u>, on wind and on the cost of energy efficiency. Here are rough cost estimates for each of these delivered electricity options, or in the case of energy efficiency, saved electricity costs:

## Costs Per <u>Kilowatt-Hour</u> of Newly Constructed Power Plant Electricity Delivered or Electricity Saved

Coal 13 cents per kilowatt-hour

Natural Gas11 centsNuclear24 centsSolar PV12-18 centsWind11 cents

Energy Saved/Efficiency 3 cents (yes, as in one-eighth the cost of nuclear energy or

one-fourth of coal)

We have enough base load electricity generators for our current use in Arizona, regionally and nationwide, on average, already. We will have even more than enough base load electricity generation with the reduction in load that will occur with nation-wide and state-wide energy efficiency portfolios.

The least-cost approach is energy efficiency. The next least-cost approach is EE mixed with renewables that are distributed generation, in other words, renewables that are generated and distributed locally.

The federal Bureau of Land Management is the agency that is controlling this environmental impact statement (EIS) process. The Draft EIS for SunZia has been done now. It is very biased. For example it makes the claim that this line is for renewable energy transmission, without any significant justification for this claim. The BLM is clearly in cahoots with the company promoting this highly profitable but destructive energy system.

I ask the BLM to clarify what the cost is of the "no-build" option for Arizona and New Mexico, compared to the cost of the SunZia project. I want the BLM to go back to the drawing board and get perspectives on what a no-build option would ultimately do to the total energy cost outlay

from the citizens of Arizona and the region. The BLM should contract with reputable firms that do not have a hand in perpetuation of the 20th Century technologies of coal, nuclear and natural gas electricity production. They should consider companies like Synapse, the New Rules Project and others that are not enmeshed in the technologies of the past.

The BLM knows that this system has variable boundaries, as electricity marries electricity, once it gets on the western grid system. However, the BLM also knows that it can reasonably quantify what electricity will cost with a system that is unneeded versus what it will cost with a grid system that is not unnecessarily expanded. The BLM knows that if we put the energy dollars into energy efficiency and distributed generation renewables, the overall cost of energy to citizens in the West will be lower.

So, is Arizona headed to becoming a resource-depleted slave state, a third-world country-like state? Is this beautiful state going to be beholden to outside interests that profit from this potential deterioration? Or is Arizona going to start taking the reins in hand and steer away from this outside domination?

Do we want to go down the tired path of fossil and nuclear energy, or do we want to ramp up our energy efficiency and blend it with renewables, cleaning our environment and reaping economic benefits of cheaper energy costs and more jobs?