

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of a Workshop File to Explore)
Legislative and Regulatory Means to Improve)
and Clarify Missouri’s Renewable Energy)
Standard Law, Mo. Rev. Stat. §§ 393.1020 to)
393.1030.)

File No. EW-2011-0031

COMMENTS of the Missouri Solar Energy Industries Association (MOSEIA)

NOW COMES MOSEIA filing joint comments, pursuant to the Order issued by the Missouri Public Service Commission (“Commission”) on August 5, 2010.

MOSEIA is a not-for-profit organization comprised of in-state and national solar organizations, dedicated to strengthening and expanding the solar industry and establishing a sustainable energy future for all Missourians. Our Board of Directors and members are comprised of solar designers, developers, installers, distributors and manufacturers, both from within Missouri and nationally as well. All MOSEIA members sign a code of ethics promising to adhere to strict professional, ethical guidelines.

MOSEIA has 23 member organizations, and currently puts on conferences and trainings in Missouri to advance the solar industry, and advocates for sensible solar policy for the state of Missouri.

STATEMENT OF POSITION

MOSEIA applauds the Missouri PSC for its elaboration of effective rules for Missouri’s RES. Various improvements could have been included, such as the PSC having a direct role in establishing SREC prices, the requirement of a Standard Offer Contract for SREC purchases from customers who wish to install their own solar, and a tiered approach to ensure steady growth of various market segments – and these specific comments are fully detailed in the formal rulemaking comments for the RES.

Today's workshop is predicated only by JCAR's questioning of the "...sold to Missouri consumers" language. Their decision to call this into question was shocking, both because of the direct nature of the statute, as because its impact (if ratified by the general assembly would be to result in a situation where rates are raised for Missourians with no benefit for Missourians. Clearly this was not the intent of the voters when they overwhelmingly passed Proposition C, the Clean Energy Initiative, on November 4th, 2008. Their intent, and the intent of the statute, was in fact to require utilities to ramp up their sourcing of renewable energy up to 15% of their portfolio by the year 2021.

Although imperfect, MOSEIA's position is that the RES statute and RES rule, if JCAR's attempt to remove all benefits to Missouri is unsuccessful, are sufficiently enforceable and allow utilities ample room to comply with assurance of reasonable cost recovery, while providing assurance to Missouri consumers that the impact on their rates will be minimal.

Ameren Missouri's recent request for an across-the-board 10% rate hike to account for increases in coal costs highlights the very vulnerable position of Missouri's energy scenario. Depending on coal and natural gas for over 92% of our electricity puts us on track for disastrous financial implications as inevitable carbon regulations are implemented and those finite resources are depleted. Diversification of our energy sources, and utilization of the plentiful wind, solar, and other renewable resources available at our fingertips, is important and urgent for environmental, economic, and financial reasons.

RESPONSES TO QUESTIONS

The purpose of this docket is to gather information and explore legislative proposals for clarification of the geographic sourcing sections of the RES rule, sections 2(A) and 2(B)2, as well as clarify "other areas of uncertainty" that directly impact the geographic sourcing question.

The docket further elaborates four different scenarios to analyze separately, from a legal, economic, and public policy perspective, and to discuss the operation of the 1% retail rate impact language.

MOSEIA agrees with the legal analysis of Renew Missouri, as well as the economic impact analysis of Vote Solar, both submitted under this same docket. Scenario A, requiring all energy to be sourced from within Missouri, is unrealistic due to its federal Commerce Clause confliction, as well as the RES statute specifically allowing for out-of-state sourcing. Scenarios C & D both allow for REC purchases associated with energy that has nothing to do with Missouri, which would effectively render the RES useless to Missouri's economy while helping other states' economies with Missouri utility revenue.

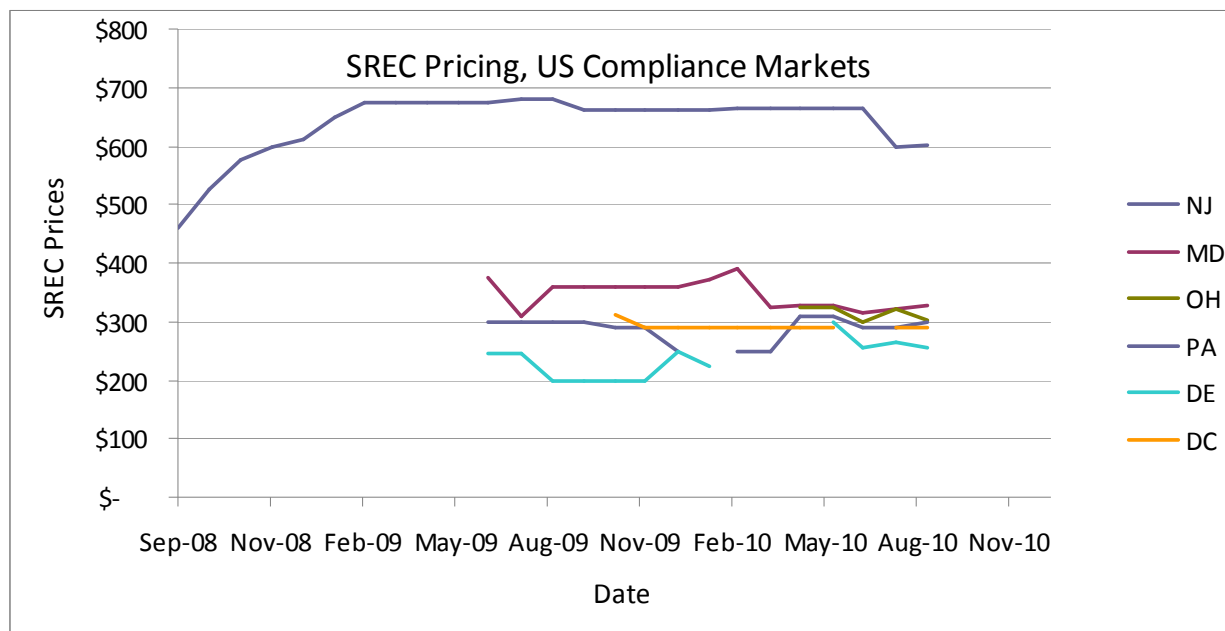
Scenario B matches verbatim the language and spirit of the RES: Gradually increasing Missouri's electricity portfolio (ie the electricity actually "sold to Missouri consumers") while keeping costs under control, ultimately providing more rate protection with every megawatt of renewable energy constructed in Missouri,

WHAT'S AT STAKE

For solar, the contrast in the impact of this "sold to" language could not be more dramatic. As Vote Solar's submission points out, what's on the line for the state of Missouri is 4,733 construction jobs, 95 long-term jobs, \$560million in economic activity and \$282million in sales and property taxes – all for compliance with the 2% solar carve-out alone.

	Sold-to Missouri	RECs from Anywhere
Economic Activity	\$560 million	\$0
Missouri Taxes	\$282 million	\$0
Jobs	4,828	0

This dramatic difference exists because of the plethora of inexpensive SRECs (Solar RECs) that exist on the national market today. In states with an RES and a solar carve-out, REC prices fluctuate between \$250 and \$350 today, as shown below.



If Missouri is allowed to comply by buying SRECs from “wherever”, however, utilities will be forced to purchase cheap SRECs from faraway states that have nothing to do with Missouri.

Bonneville Environmental Foundation quotes \$10/SREC for voluntary-compliance markets; utilities would surely be forced to choose this over Missouri development in this case, which would not only do nothing for reducing our vulnerability to fossil fuel price fluctuations and environmental impacts, but would also sacrifice hundreds of millions of dollars of economic activity and thousands of jobs, leaving Missouri in the dark ages while the rest of the country develops their the Clean Energy Economy.

LOAD BALANCING DISCUSSION

The purpose of the Missouri Clean Energy Initiative is expressed in several locations in the statute. Some interested parties have asserted that the purpose is simply to comply with the law through acquisition of Renewable Energy Credits (RECs). However, the statutory language repeatedly refers to “electricity” and “power” as the objective, as shown by the following citations:

393.1030.1 The commission shall, in consultation with the department [of Natural Resources], prescribe by rule a portfolio requirement for all electric utilities to generate or purchase electricity generated from renewable energy resources.

...

The portfolio requirements shall apply to all power sold to Missouri consumers whether such power is self-generated or purchased from another source in or outside of this state.

393.1030.2 The department shall, in consultation with the commission, establish by rule a certification process for electricity generated from renewable resources and used to fulfill the requirements of subsection 1 of this section.

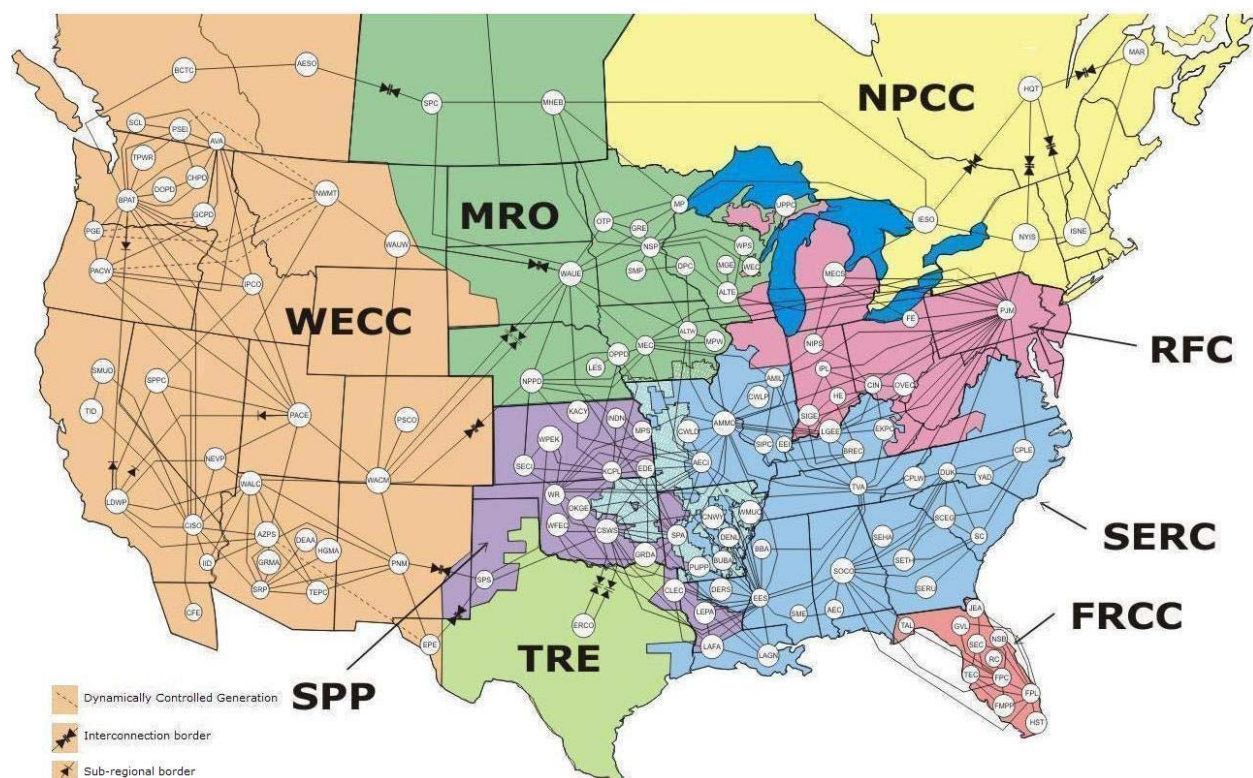
The desirable benefits that would result from locating clean energy in Missouri is covered elsewhere. The purpose of this section is to establish as fact that electricity generated significantly outside of Missouri’s distribution system will not be delivered to Missouri or “sold to Missouri consumers” as required by the statute. Establishment of this truism appears to be necessary because several credible sources have asserted that electricity can be delivered

anywhere on the grid system of the United States¹. While this may be technically true under certain circumstances, those circumstances are not likely to occur except as a result of catastrophic failure of our generation resources.

LOAD BALANCING AUTHORITIES

In order to maintain the reliability of the electric grid, the Federal Energy Regulatory Commission has established sub-regional “Load Balancing Authorities” to monitor their sector of the grid and order the generation plants in their area to “throttle up” or “throttle down” to satisfy demand in their area of control.

The map below shows how numerous these Load Balancing Authorities are across the country and the Midwest surrounding Missouri.



SOURCE: “NERC Balancing Authorities Reference Card” published by NERC August 2007.

¹ Ameren’s Renewables Manager stated in a formal presentation at the recent “Renewables Summit” at Ameren headquarters that “power generated in Missouri can end up in Florida”.

Twelve LBA's exist in Kansas and Oklahoma. The purpose of these LBA's is to intervene whenever grid demand changes and respond by either reducing or ramping up generation (or shedding load, if such an option exists). Therefore, any electric demand in Missouri will be satisfied by generation in Missouri or one of the surrounding states. There is no possibility that electricity generated very far outside of Missouri will find its way to Missouri consumers. The impossibility of generating electricity in one location and transmitting it to another location significantly far away was confirmed by Rick Farace, a grid specialist with the U.S. Energy Information Agency. The following is an excerpt from an e-mail exchange with Mr. Farace that took place on June 23 of this year.

J. Parker: "What is the likelihood that electricity generated in New Mexico will arrive in Missouri and not be consumed midway?"

R. Farace: "It is highly unlikely that electricity generated at a specific location in New Mexico will arrive at a specific bus in Missouri which is the exact reason for the existence of balancing authorities..."

One can see from the above that electrical generation and consumption is a relatively local phenomenon. If every generation facility between Missouri and New Mexico were to be unavailable for some reason, then it is possible that electricity generated there could make its way to Missouri. Short of such a catastrophic scenario, however, no electricity generated significantly far away from Missouri's state line will be delivered or sold to Missouri consumers as required by the statute.

Therefore, in order to comply with the statute, any RECs submitted for compliance with the Missouri Clean Energy Initiative must be sourced close to or within Missouri so that the electricity such RECs are associated with can plausibly be sold to Missouri consumers.

From September 20th, 2010 issue of "Buildings Magazine", P. 16

Google Invests in Wind Farm to Power Data Centers

Google has recently entered into a deal to buy wind power for the next 20 years. The deal has allowed Google to already start purchasing that clean energy as of July 30, 2010. The purchase comes as part of Google's efforts to become carbon neutral.

"On July 30 we will begin purchasing the clean energy from 114 megawatts of wind generation at the NextEra Energy Resources Story County II facility in Iowa at a predetermined rate for 20 years," says Google Vice President Urs Hoelzle in Google's blogspot.

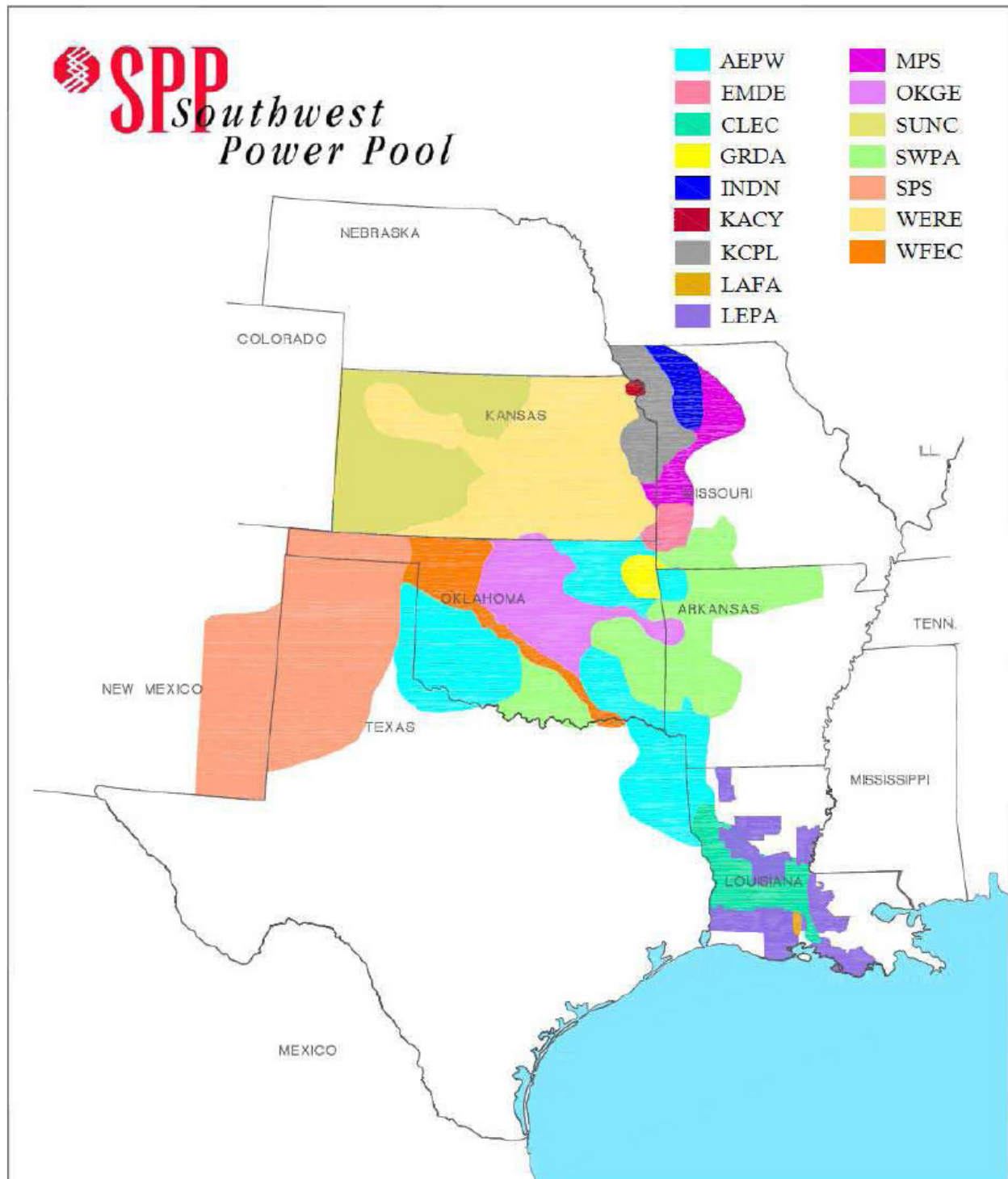
Using the Google Energy unit, the company is able to purchase wholesale energy directly from the wind farm rather than through Renewable Energy Certificates (RECs) from third parties. However, because Google can't directly use the energy, it is reselling the energy to the grid in the regional spot market.

"By obtaining RECS through the purchase of green power, our deal has a greater impact on the renewable industry than simply buying 'naked' RECs from third parties," says a press release from Google. "Our long-term commitment directly frees up capital for the developer to build more wind projects."

By purchasing wholesale, Google has been able to combine cost-efficiency with a commitment to carbon-neutrality in this transaction. The wind energy will be enough to power several Google data centers.



APPENDIX 2. Southwest Power Pool Balancing Authorities



Source: SPP