

**COMMISSIONERS**  
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0000094175

**ARIZONA CORPORATION COMMISSION**

February 27, 2009

To: Docket Control

**ORIGINAL**

RE: Sulphur Springs Valley Electric Cooperative, Inc. - Customer Comments  
Docket No. E-01575A-08-0328

Please docket the attached 3 customer comments regarding the 69kV line in the above filed rate case.

Customer comments can be reviewed in E-docket under the above docket number.

Filed by: Utilities Division – Consumer Services

Arizona Corporation Commission

**DOCKETED**

FEB 27 2009

DOCKETED BY	<i>MM</i>
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AZ CORP COMMISSION  
DOCKET CONTROL

2009 FEB 27 P 3:55

**RECEIVED**

SSVEC E-01575A-08-0328

-----Original Message-----

From: Jeanne & Rob Horsmann [<mailto:bugle2@earthlink.net>]

Sent: Tuesday, February 24, 2009 9:06 PM

Subject: Statement and request to SSVEC Board of Directors

Hello Chairman Mayes and Commissioners,

Tomorrow I will have the following statement read to SSVEC's Board of Directors at their monthly meeting. Unfortunately I will be unable to attend as I will be working.

Jeanne Horsmann. Comments to be read to the SSVEC Board of Directors, 25 February 2009.

Last year, in the 'Constructive Point Paper', we presented 3 alternatives and 2 backup alternatives to the Sonoita Reliability Project.

1. Replace the existing poles, re-conductoring, and double circuiting the existing line.
2. Interconnect the existing line with the SWTC 115kV line where they cross 8 miles east of Sonoita.
3. Interconnect the existing line with the TEP 46kV line where they cross on either SR 82 or SR 83 3 miles east of Sonoita.

Backup power alternatives

4. Interconnect the existing line with the TEP 46kV line and use the TEP line as a backup circuit.
5. Interconnect SSVEC's line in Patagonia with UNSE, within one mile south of Patagonia and use the UNSE line as a backup circuit.

But, options are available now that weren't available when this project was presented to the community last year. Due to the passage of the American 'Recovery and Reinvestment Act' we present these additional alternatives for SSVEC's consideration. These new alternatives will improve local reliability and reduce the need for higher voltage lines to the Elgin, Sonoita, and Patagonia areas.

6. Renewable Energy Sources on Individual Homes and Businesses. Due to net metering, rebates, and improved tax credits, homes and businesses will be installing solar and/or wind generators, which will greatly expand local renewable electricity generation.
7. Renewable Energy Sources in the Sonoita and Patagonia areas. The installation of several 1-5 MW solar, bio-mass, and wind stations to feed directly into the local grid.

We have talked with members of the Sonoita Crossroads Community Forum, the Patagonia Area Business Association, the Sonoita-Elgin Chamber of Commerce, the Patagonia-Sonoita Rotary Club, and members of the community at large, and they have expressed great interest in the renewable resource alternatives listed as numbers 6 and 7.

We are serious about working with SSVEC to provide locally generated reliable energy from renewable resources.

Many of us will be attending the Sustainability and Energy Expo in Tucson, March 6 & 7. We will be bringing information back to the above-mentioned organizations and the community about up-to-the-moment solar and energy technologies available for southern Arizona.

Please pause and consider discontinuing all work on the Sonoita Reliability Project 69kV line, while an in-depth analysis of all the alternatives and backup alternatives is conducted. Work with the community to provide locally generated energy from renewable resources. We know this will be a WIN for SSVEC and a WIN for the community. Let's work together and not apart for the best cooperative solution.

I have attached a list of questions that I would like SSVEC to respond to.

ATT759278.txt

Because I have received no response from SSVEC to my rebuttal of their response to my previous questions, I will be presenting them with these questions I would also like answers to.

## Questions

1. What alternatives did SSVEC research before deciding on the proposed route? Please include all routes considered, not just that portion of the proposed route through and adjacent to the Sonoita Hills residential area.
2. Where is the data analysis or trade-off study that shows the proposed 69kV line will improve reliability more than the other alternatives considered in question 1?
3. Show how the results of this study can claim that the proposed route is more reliable than the other alternatives considered in question 1.
4. What is the detailed cost breakdown for this route, from the Huachuca substation to the Sonoita substation in terms including engineering, right-of-way, transmission line equipment, the 69kV substation, line construction, and other common cost categories?
5. How does the proposed cost breakdown compare to the alternatives that SSVEC considered in question 1?
6. What is the name of the individual/company that performed the biological/archeological survey of the proposed power line route?
7. How will SSVEC construct the proposed route without impacting:
  - a. Archeological sites and cultural resources lying within 100 yards of the proposed route,
  - b. All species of interest that have habitats in this area?
8. What are the next phases of this project? Specifically:
  - a. Where are the new rights-of-ways for the four new underground distribution reliability loops from the new proposed Sonoita substation?
  - b. When are these distribution loops planned to be constructed?
  - c. Where are the proposed plans for the new Sonoita substation including architectural renderings for its neighbors' review and when will it be built?
  - d. When will the upgrading to the existing 23kV line between Sonoita and Patagonia be constructed?
  - e. What are the costs breakouts associated with each additional phase(s) of the overall project?
  - f. When will our community be provided this important information about the additional project phases beyond the proposed 69kV line?
9. What are the proposed distribution reliability improvements in terms of reduced outage hours, number of outages, and frequency of outages per year for the (1) Elgin, (2) Sonoita, and (3) Patagonia co-op residential and business areas including:
  - a. The existing situation, the proposed 69kV line (CPP\*, Alternative 2), and Alternatives 1, 3, and 4 with Backups A and/or B; and upgrade with double-circuit the 23kV line from Mustang Corner,
  - b. Under each of the conditions of 9.a above, with 7 to 10 MW of local renewable distributed generation, and

- c. With and without the addition of a Sonoita substation, four distribution loops, and the proposed upgrades to the existing Patagonia 23kV line?
10. What are the expected SSVEC total cost and resultant ratepayer monthly cost for each of the following:
- a. Alternative 1 (CPP, Green Route with upgrade existing 23kV to 69 kV from the Huachuca substation),
  - b. Alternative 2 (CPP, Yellow Route with SSVEC proposed 69kV line from the Huachuca City substation),
  - c. Alternative 3 (CPP, tap SWTC 115kV line, with 8 miles of 69kV line to the Sonoita substation),
  - d. Alternative 4 (CPP, tap TEP 46kV line, with 3 miles of 46kV line to the Sonoita substation),
  - e. Backup Alternative A (CPP, tap TEP 46kV line with 3 miles of 46kV line to the Sonoita substation),
  - f. Backup Alternative B (provide isolation switches between UNSE and SSVEC to provide backup power for Patagonia and the San Rafael Valley during an outage by either utility),
  - g. Double-circuit the existing 23kV line from Mustang Corner to the Sonoita substation,
  - h. The Sonoita substation (69kV to 23kV),
  - i. The four Sonoita distribution underground reliability loops, and
  - j. The Patagonia 23kV line upgrades?
11. Has SSVEC requested any Stimulus Credits (grants, loans, rebates, earmarks, etc.) to cover or reduce expenses for any of the above expenses, including renewable energy installations?

\*Sonoita, Elgin, Patagonia Reliability Alternatives. A Constructive Point Paper. Dec. 2008

Submitted on: 25 February 2009

By: Jeanne Horsmann, PO Box 334, Sonoita, AZ 85637

Cc: SSVEC Board of Directors

Deborah White, Right of Way Project Manager

ACC Commissioners

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We are trying to stress to the Board how serious we are about alternative energy and local power generation. We are researching alternatives to the best of our abilities and are bringing in outside engineers/consultants to help us. It would be a show of good faith for SSVEC to halt construction to give us time to work out an equitable solution that benefits both the community and SSVEC.

Please enter these documents into the Rate Hearing Docket No. E-01575A-08-0328.

Thank you,  
Jeanne Horsmann

SSVEC

E-01575A-08-0328

**From:** navajorug@gmail.com [mailto:navajorug@gmail.com] **On Behalf Of** Steve & Gail  
**Sent:** Tuesday, February 24, 2009 10:58 PM  
**To:** Mayes-WebEmail; Newman-Web; Pierce-Web; Kennedy-Web; Stump-Web  
**Cc:** John Maynard; Alan Stephens  
**Subject:** Letters and Renewable Energy articles presented to SSVEC Board Members 2-25-2009

Dear Commissioner Mayes and ACC Commissioners;

I have attached a copy of a letter that I will be submitting to the SSVEC Board Members at their Board Meeting tomorrow morning.

Feb. 25, 2009

We hope that the Board Members will take our interest as seriously as we do. We want to pursue other renewable energy generation possibilities for our area. Another option we are talking about is getting a large number of local residents to sign up for the net metering program, just one interim solution to help with any grid load problems.

We are committed and serious about being a renewable energy model for the State of Arizona. We hope that SSVEC will commit to work with the community to research the best possible solution for our area. We are hopeful they will work with us and in this process discontinue work on the 69kV line, which would split their energy and resources, not allowing them to focus on finding the best solution. - not serving the community or the cooperators for the best resolution of this matter, (for all concerned)

Thank you very much,  
gail getzwiller

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Gail Getzwiller  
PO Box 815  
Sonoita, AZ 85637  
520-455-5020

"Imagination is Everything. It is the preview of life's coming attractions." Albert Einstein (1878-1955)

**Save the Scenic Sonoita/Elgin Grasslands**  
**PO Box 103, Sonoita, AZ 85637**

February 25, 2009 : Presentation to the SSVEC Board of Directors

We sincerely want to be a model SSVEC community for the State of Arizona and power our community with Renewable Energy generation.

I was pleased to receive the letter from Jack Blair, extending the staff of SSVEC to work with the community for the best renewable energy solution for our area.

The prospect of renewable energy for our area is very exciting to our community from many points of view, (i.e.; higher reliability, lower future electric bills, local job generation, freedom from dependence on coal fired generation and foreign oil, clean renewable energy generation)

As we understand electricity goes from source to nearest load (customers) thus any generated electricity less that of the instant local load will never use any external lines.

Second, if the local generated electricity exceeds all of Sonoita, Elgin, Patagonia, etc. loads; then the "existing lines" will carry that excess to the SSVEC grid for use by others. Third, by double-circuiting existing 7 MW line, then 14 MW can be imported/exported. This is a 28 MW swing or window for export, thus if 5 MW is being generated and distributed locally (local demand or load), then 12MW (7+5) or 19 MW (14+5) could be the max load at the time for the total Renewable Energy Plant. Fourth, if a 7 MW Renewable Energy distributed generation plant was located west of Mustang Corners, then, using the existing "peak" demand, zero current would flow on the existing line, with another 7MW of spare capacity present. According to the First Law of Siting Transmission Lines, using what you have should be the first option.

The existing 23 kV line is reaching its 7 MW capacity. If just 2 MW of RE were locally added, then 9 MW are available in our community, almost 30% (2/7) additional power and using the existing line. If 5MW of RE were added, then 12 MW would be available, over 70% (5/7) more power available. NOTE: SSVEC does not have to spend "capital" for these RE options, as there are many new RE funding options becoming available for commercial sources to use.

We will be meeting with Rotary, Crossroads Forum Board Members, and Sonoita/Elgin Board Members Thursday morning to discuss how to best organize community input to SSVEC. Also at this meeting we will discuss attendance of community members to the "Sustainability & Energy Expo" in Tucson - March 6 & 7. We are committed to working out the best electrical reliability and generation solutions for our community, please join us!

We request that SSVEC discontinue working on the Sonoita Reliability Project 69kV line, while in-depth analysis of all alternatives, backup alternatives, and renewable energy options are conducted. Working with our community to provide locally generated energy from renewable resources is a win for SSVEC and the communities it serves. We look forward to working together with SSVEC on these energy conservation, national security, and patriotic endeavors.

Sincerely,  
Gail Getzwiller

**Save the Scenic Sonoita/Elgin Grasslands (520-455-5020)**

cc: ACC

John Maynard, Santa Cruz County Supervisor

# Energy Policy Update

Kent Ennis, Interim Director



Energy and Environmental News - February 17, 2009

The Sustainability and Energy Expo 09 will be held in Mesa at the Tucson Convention Center, Exhibit Hall A.

Attendees will find up-to-the-moment solar and energy technologies in southern Arizona, hear from national and regional experts, and learn more about sustainable living. Sixty exhibits will offer information about going green.

The Sustainability and Energy EXP09 will also showcase alternative fueled vehicles, new solar power technologies, sustainable construction, water conservation, the local food movement and more.

The Expo is hosted by Pima Association of Governments. More information is available at [www.pagnet.org](http://www.pagnet.org) under special events.

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**USA Today – Feb. 24, 2009:** Utilities and independent power suppliers plan to shave capital budgets 10% in 2009 and 2010, according to Edison Electric Institute, the industry trade group. The 2009 cuts could total 20% by year's end, says Larry Makovich of Cambridge Energy Research Associates.

Before the recession, utilities were poised for a big construction wave to meet rising demand. Beset by lower revenue, particularly from large industrial customers, utilities now have less cash and limited access to capital and face high interest rates.

**•Transmission lines. Arizona Public Service is pruning capital spending by \$520 million, or 17%, the next three years. The utility is putting off new high-voltage lines as population growth slows to 1% from 5%.**

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## Integrated Distributed Solar

**2.18.09 Patrick O'Leary, Founder, Futura Solar, LLC**

Every building standing today is a solar collector. The primary collecting surface is the roof and if the building sits in the bright sunlight it will literally catch some rays. But even in this time of increased awareness about renewable solar energy to help reduce greenhouse gases and shift away from fossil fuels, most of that energy goes to waste.

With energy costs varying wildly and much of the world's petroleum held hostage overseas, the move to put underutilized rooftops to work has begun in earnest. Renewable solar designs are proliferating at a rapid pace. The use of rooftop panels to heat hot water is becoming more commonplace. Governments are discovering ways to encourage the use of distributed solar technology as a way to encourage diversification and drive down unit manufacturing costs. This has resulted in a rapidly improving economic model for distributed solar, with cost recovery now projected to occur between 2008 and 2010, fully 5 years ahead of projections.

The most cost effective way to gather this rooftop energy is to do it right the first time - when a building is built. Yet many buildings are undergoing modifications such as repair, retrofit or re-roof. So there are perfect opportunities to bring efficient, multiple benefit cost-effective solutions to problems of expensive heating and cooling or electric energy by rethinking rooftop energy capture and utilization.

What is the most effective approach for optimizing rooftop energy collection and minimizing a building's energy cost? It

is by integrating different cost effective solar design elements. Nowadays, for example, collector surfaces can generate photovoltaic (PV) electricity and heat water for use in the same rooftop collector array. These exterior applications can be combined with designs that optimize availability of interior natural light, or that circulate rooftop heated air & water to drive space conditioning systems or support commercial or industrial operations such as laundries, crop drying processes, or even treatment of municipal sewage.

A century ago, sawtooth roof designs for low profile, 'big box' type buildings were popular. Before the time of cheap fossil fuels, these designs provided plentiful interior lighting to support cloth dying, rope making or other labor intensive industries. These designs make sense again today, where interior lighting can be as much as half of a building's energy demand. Using modern space framing technology, it is possible to build a sawtooth design incorporating rooftop PV electricity and solar thermal capability with energy efficient daylighting, solar driven space conditioning or process air. This means that as many as five energy intensive building needs can be addressed with a single ultra-efficient rooftop design. Applying this kind of structurally integrated solar roofing system can reduce overall building energy demand by half. In terms of building asset management this represents an optimum solution to the problem of unpredictable utility costs.

By integrating renewable energy (RE) with energy efficient (EE) systems, building owner-managers can expect to rapidly reconfigure their operating & maintenance budgets. They can also expect building users, whether employees or shoppers, to respond well to the natural lighting conditions offered by a sawtooth design. This means additional business economies tied to happy employees (reducing costs) and comfortable shoppers (increasing sales).

But there are still other reasons to invest in a sawtooth solar roof. Those reasons have to do with state & federal policy preferences for sustainability and energy efficiency. The California Global Warming Solutions Act mandates reduction in greenhouse gas emissions by 20 percent before 2020. The California Public Utilities Commission has established an identical goal, as well as a Zero Net Energy (ZNE) growth goal by 2050. These goals were reaffirmed by the Governor's Executive Order S-14-08, calling on retail sellers of electricity such as PG&E or SCE to satisfy 33 percent of their load demand with renewable energy by 2020. The multiple benefits of integrated solar roofing systems will help Californians meet or exceed these goals.

In fact, all three initiatives look to the state's major energy companies to become key RE/EE solution providers. In the renewable energy arena, SCE has led the way by campaigning to install PV on up to a million square feet of commercial and industrial rooftop space. Other utilities (SMUD, LADWP, SEMPRA) are implementing programs aimed at energy efficiency, while PG&E seems to be looking at both RE/EE solutions.

Whether the emphasis is renewable energy or energy efficiency, the economics of integrated, distributed rooftop solar energy make sense. Drawing on yesterday's wisdom as well as modern engineering & manufacturing know how, low profile commercial & industrial buildings can become part of today's movement towards cost effective, socially responsible enterprise.

For information on purchasing reprints of this article, contact Tim Tobeck [ttobeck@energycentral.com](mailto:ttobeck@energycentral.com).

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Submitted by Gail Getzwiller to SSVEC Board of Directors February 24, 2009 : 520-455-5020

**Save the Scenic Sonoita/Elgin Grasslands. PO Box 103, Sonoita, AZ 85637**

**From:** navajorug@gmail.com [mailto:navajorug@gmail.com] **On Behalf Of** Steve & Gail  
**Sent:** Thursday, February 26, 2009 6:07 PM  
**To:** Mayes-WebEmail; Newman-Web; Pierce-Web; Stump-Web; Kennedy-Web; Alan Stephens  
**Subject:** SSVEC board & local leaders meetings February 25 and 26

Dear Chairman Mayes and Commission Members,

Several of us from Sonoita and Elgin area made a presentation to the SSVEC Board Members at their Board meeting in Willcox Wednesday morning. Steve and Gail Getzwiller, Sue Downing, Steve Mann, Rob Horsmann.

The Board let us all present and at the end of the presentation the President of the Board told us that the Board relies on the expertise of their engineers and would listen to them, for how they will proceed with addressing our issues.

I met with Ron Orosco for about a half an hour during the board meeting, (one of the engineers at SSVEC). He said he would bring together some major players (that he would even bring in someone from APS as part of our discussion group) And that I should do the same. He would arrange a meeting with this group to come up with alternative renewable energy solutions for our area to present to the SSVEC Board at the March 25th meeting in Patagonia. He seemed to think getting these meetings and work done was very important and timely.

I spoke with Ron Orosco today and he has a different proposal for us now. He said he will meet with us and let us know what SSVEC would require from us - to work with them. Requirements for a distributive generation plant etc. A cooperative relationship to find a solution together, does not seem to be his focus today. One of the presentations by Steve Mann at the Board Meeting was to have 100 individuals install solar on their houses to help the load. That seems to be totally dismissed by him now.

We met with our Rotary, Crossroads Forum Board Members, and Chamber Board President this morning to give them an update and discuss the next steps in moving forward with future meetings and community involvement.

The consensus was that a meeting be set up asap with these group representatives and Patagonia, along with engineers and experts in the renewable field to help our communities come up with viable renewable energy solutions. The goal being to come up with a plan (or plans) with budgets, acreage, investment, grants, etc. that would be necessary to move our project forward to fruition and acceptance by SSVEC Board Members.

There is a swell of community interest and involvement that is giving greater life to this endeavor. Also, the very high electric bills in our area are having a dramatic affect on our business and home owners. Some business see that adding solar generation to their business is the only way to survive. One local business had a monthly utility increase of 300%, from \$1,000 to \$3,000 a month. Not sustainable in a small town like Sonoita.

Individuals are also feeling the crunch. Individuals are now paying from \$250 to \$350 a month and more for electricity, and SSVEC wants a rate hike?

So the renewable energy solution for our community is, for some of us, survival. In these economic times we must save as much of our personal and business resources. Local business cannot stay in business for the sole purpose of serving the community, they must make a profit.

We are planning another meeting with the communities of Sonoita and Patagonia, and our County Supervisor on March 3rd. We are planning on meeting the challenge of developing a plan for distributive power in our area,.  
Our rural way of life and local economy are being threatened by higher electric utility rates.

thank you,

Gail Getzwiller  
PO Box 815  
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