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BEFORE THE ARIZONA CORPORATION COMMISSION

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ARIZONA CORP. COMM
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IN THE MATTER OF THE APPLICATION OF SULPHUR SPRINGS VALLEY ELECTRIC COOPERATIVE, INC. FOR A FAIR HEARING TO DETERMINE THE FAIR VALUE OF ITS PROPERTY FOR RATEMAKING PURPOSES, TO FIX A JUST AND REASONABLE RETURN THEREON, TO APPROVE RATES DESIGNED TO DEVELOP SUCH RETURN AND FOR RELATED APPROVALS.	DOCKET NO. E-01575A-08-0328
IN THE MATTER OF THE APPLICATION OF SULPHUR SPRINGS VALLEY ELECTRIC COOPERATIVE, INC. FOR AN ORDER INSTITUTING A MORATORIUM ON NEW CONNECTIONS TO THE V-7 FEEDER LINE SERVING THE WHETSTONE, RAIN VALLEY, ELGIN, CANELO, SONOITA AND PATAGONIA, ARIZONA AREAS.	DOCKET NO. E-01575A-09-0453

PRE-FILED DIRECT TESTIMONY OF JAMES F. ROWLEY III
(A.R.S. §40-252 Proceeding)

March 16, 2010

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Introduction

Q. Please state your name and address

A. James F. Rowley III

My physical address is 52 Omega Lane, Elgin, Arizona with the mailing address of HC 1 Box 259, Elgin, Arizona 85611

Q. Please state the purpose of your testimony before the Arizona Corporation Commission.

A. I am an intervenor in the two cases before the Arizona Corporation Commission, Docket numbers E-01575A-08-0328 and E-01575A-09-0453. I am very concerned about SSVEC's proposed plan to build a new 69kV line to service the Elgin, Sonoita, and Patagonia areas. The proposed location of this line will damage fragile grassland ecosystem of the largest Mexican Land Grant Ranch in the United States as well as damage economic and tourism values of this community, when there are other alternatives that will met the area's needs for the future.

Q. Have you previously testified before the Arizona Corporation Commission?

A. Yes. As an intervenor I have appeared at various hearings for SSVEC's 2010 REST Plan.

Q. What is your professional experience as it relates to being an Intervenor in this case?

A. I worked at SRP for 22 years in various management positions, Project Manager at Williams Gateway Airport for 5 years, and have an Arizona Contractor's License in General Engineering and Electrical Contracting.

Q. What items are covered by the General Engineering license?

A. Listed below is the Arizona Registrar of Contractors definitions of items covered under a General Engineering License:

A-	**GENERAL ENGINEERING** Construction in connection with fixed works, including streets, roads, power and utilities plants, dams, hydroelectric plants, sewage and waste disposal plants, bridges, tunnels, and overpasses. Also included are the scopes of work allowed by all of the other engineering classifications, A-3 through A-21.
A-03	**BLASTING** The use of explosives and explosive devices for excavation, demolition, geological exploration, mining, or any construction related blasting. Included is any drilling, boring, or earth moving required for the placement of explosive charges, the erection of temporary shelters, barricades and associated protective devices, equipment, and enclosures.
A-04	**DRILLING** Drilling includes horizontal and vertical drilling or boring, constructing, deepening, repairing, or abandoning wells; exploring for water, gas, and oil; and constructing dry wells, and monitor wells. Also included is the erection of rigs, derricks and related substructures, and installation, service and repair of pumps and pumping equipment.
A-05	**EXCAVATING, GRADING AND OIL SURFACING** Movement and alteration of earthen material by digging, horizontal boring, trenching, grading, or compacting the material for a cut, fill, grade, or trench. Included is the placement of shoring, the oiling of base materials, and incidental blasting and drilling. Excludes excavating for water, gas, and oil

	wells.
A-07	**PIERS AND FOUNDATIONS** Installation of piers and foundations using concrete, rebar, and other materials common to the industry. Includes pile driving, excavation, forming and other techniques and equipment common to the industry.
A-09	**SWIMMING POOLS** Construction, service, and repair of swimming pools and spas, including water and gas service lines from point of service to pool equipment, wiring from pool equipment to 1st readily accessible disconnect, pool piping, fittings, backflow prevention devices, waste lines, and other integral parts of a swimming pool or spa. Also included is the installation of swimming pool accessories, covers, safety devices, and fencing for protective purposes, if in the original contract.
A-11	**STEEL AND ALUMINUM ERECTION** Field fabrication, erection, repair, and alteration of architectural and structural steel and aluminum materials common to the industry, including field layout, cutting, assembly, and erection by welding, bolting, wire tying or riveting.
A-12	**SEWERS, DRAINS AND PIPE LAYING** Installation and repair of any project involving sewer access holes, the laying of pipe for storm drains, water and gas lines, irrigation, and sewers. Includes connecting sewer collector lines to building drains and the installation of septic tanks, leaching lines, dry wells, and all necessary connections, and related excavation and backfilling
A-14	**ASPHALT PAVING** Installation of asphalt paving, and all related fine grading on streets, highways, driveways, parking lots, tennis courts, running tracks, play areas, and gas station driveways and areas, using materials and accessories common to the industry. Includes the necessary excavation and grading only for height adjustment of existing sewer access holes, storm drains, water valves, sewer cleanouts, and drain gates.
A-15	**SEAL COATING** Application of seal coating to asphalt paving surfaces. Includes repair of surface cracks and application of painted marking symbols.
A-16	**WATERWORKS** All work necessary for the production and distribution of water including drilling well, setting casing and pump, related electrical work, related concrete work, excavation, piping for storage and distribution, storage tanks, related fencing, purification and chlorination equipment.
A-17	**ELECTRICAL AND TRANSMISSION LINES** Installation, alteration, and repair of transmission lines on public right-of-ways, including erection of poles, guying systems, tower line erection, street lighting of all voltages, and all underground systems including ducts for signal, communication, and similar installations. Installing transformers, circuit breakers, capacitors, primary metering devices and other related

	equipment of all electrical construction is included. All electrical systems of less than 600 volts on or inside a building are excluded.
A-19	**SWIMMING POOLS, INCLUDING SOLAR** Construction, service, and repair of swimming pools and spas, with or without solar water heating devices, including water and gas service lines from point of service to pool equipment, wiring from pool equipment to first readily accessible disconnect, pool piping, fittings, backflow prevention devices, waste lines and other integral parts of a swimming pool, spa and attached solar water heating device. Also included are swimming pool accessories, covers, safety devices, and fencing for protective purposes, if in the original contract.
A-21	**LANDSCAPING AND IRRIGATION SYSTEMS** Treat, condition, prepare, and install topsoil. Plant all decorative vegetation. Excavate, trench, bore, backfill and grade as necessary for installation of landscaping and irrigation systems. Landscaping includes installation of non-load bearing slabs, walkways and areas using concrete, brick, stone, or gravel; wooden decks; decorative garden walls, fences and screens up to 6 feet in height; retaining walls up to 3 feet in height; and all other materials and equipment common to the industry. Excluded are cast-in-place or tilt concrete; load bearing walls for structures; and perimeter fencing along property lines or boundaries. Install, repair, and maintain irrigation systems to distribute water for the purpose of irrigation, dust and soil erosion control using equipment, materials, and fittings common to the industry. This includes electrical control panels and apparatus which are an integral part of the irrigation system. Connections to potable water lines, installation of backflow prevention devices, installation of hose bibs and installation of service lines from source of supply are permitted only when they are an integral part of the irrigation system. Installation of electric wiring and related fixtures of 110 volts or less for landscaping projects is included. All electrical work is limited to exterior use and only that work necessary to complete a landscaping project. If necessary, a new circuit may be added to the existing service panel or sub-panel. Excluded is the installation of a new service panel or sub-panel.

Q. Are your contractors licenses still active?

A. My General Engineering License is suspended because I did not renew the bonding. The type of work in the area did not lend itself to the General Engineering license. I have a current Electrical Contractor's License # 254282, licensed in residential and commercial electrical.

Q. If your General Engineering License was still active could you build a 69kV line as a Contractor I could build this type of electrical line with plans from an engineering firm?

A. Yes, I am familiar will substation and line construction.

Q. During your employment at SRP were you exposed to power transmission and distribution systems?

A. Yes, I was on the SRP Joint Accident Prevention Rules Committee for five years and Co-Chairman for three years. While I was Co-Chair of the committee I was responsible for over site of two editions of the Joint Accident Prevention Rule book.

Q. Do you have a good understanding of Transmission and Distribution electrical systems?

A. Yes. I am not an engineer. However, I have a very good understanding of electrical systems and communication systems.

Q. Do you agree with the assumptions and conclusions of the Navigant Feasibility Study prepared for SSVEC?

A. No, The study doesn't fully address the storage of energy from either distributed generation or large scale generation to meet peak load.

Q. Have you reviewed the load data for the V-7 feeder supplied to Sue Downing by SSVEC?

A. Yes, the data supplied was for 15 minute intervals for years 2005 through 2009.

Q. What conclusions did you arrive at during your review?

It appears the average of the B phase was lower than the A and C phases until 2007. During the fall of 2007 it appears the load was changed on the V-7 feeder to cause the B phase load to continually grow larger until the end of 2009.

Q. What other anomalies did you find?

A. The B phase seems to be the only phase of the three phases that experienced any overload other than events when two of the phases overloaded for a brief period likely caused from two of the phases shorting during lightning or wind events.

Q. Do you believe SSVEC could better balance the three phases of the V-7 feeder?

A. Yes, some variation in load is to be expected. However, in this case the B phase is obviously not balanced with the A and C phases.

Q. Do you agree with Mr. Shlatz's Direct Testimony on page 9, paragraph (2) when he mentions the ten (10) percent overload on the substation transformer:

A. No. While Mr. Shlatz is very qualified to make this type of statement he does not mention that the substation transformer is able to handle much higher load capacity when the air temperature is cold as it was in December 2009. The transformer rated capacity is at a much higher temperature. Also, the high loads seen in December 2009 were caused from the lines shorting either from phase to phase or phase to ground, not from customer load.

Q. Do you agree with conclusion Navigant Consulting made in their statement regarding the exposure to residential and roadway views on Page 72 of the study as it relates to the T 1 option vs. the T 2 Option?

A. No, Raising the pole height and adding wires on the existing V-7 feeder does not make a larger visual impact than placing a new 69 kV line in areas where no power lines exist today.

Q. Do you agree with Ms. White's answer to Direct Testimony on Page 5 as it relates to the number of customers out?

A. No. While some customers were out almost 5 hours other customers on the V-7 feeder in the Rain Valley area were not affected by the outage. Also, other customers power was restored much sooner than the 5 hours Ms. White mentions. Apparently SSVEC was notified of at least one location of wires in contact with a tree directly after problem occurred. It appears SSVEC was in no hurry to restore power to the "Problem Customers" in the Sonoita-Elgin area.

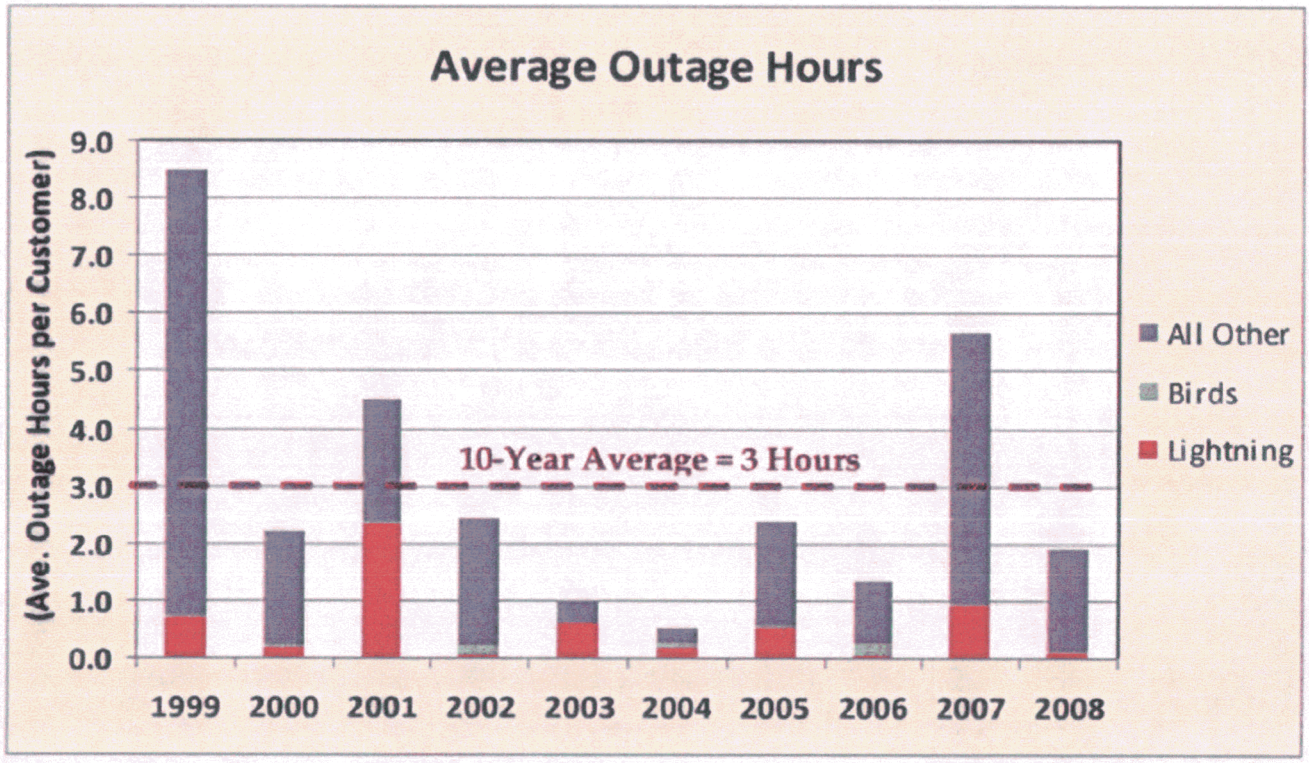
Q. Do you agree with Ms. White's answer to Direct Testimony on page 6 in her answer to the "Average Total Hours Out".

A. No. This is just another case of SSVEC trying to over state the problem. While the number is correct when you extrapolate the data in this method, it does not correctly state the reality quoted in the Navigant study which says customers have only been out of power an average of 3 hours and if the 1999 data was removed it would be less than 2.4.

"For over 10 years SSVEC has collected outage statistics, including the number of sustained outages by cause, duration, and number of customers affected, among other data.« (NCI used the SSVEC data without modification to derive each of the reliability charts that follow.) One of the more common statistics utilities collect is the total time that customers are out of service, measured in minutes or hours. Figure 2 presents annual customer outage hours, which over 10

years has averaged three hours per customer. While high, the duration is not unusual for very long feeders; the value drops to 2.4 hours if 1999 is excluded (in 1999 several wind-related events interrupted all customers served by the feeder).” [F.S. page 10 & 11]

Figure 2: Annual Average Outage Hours per Customer [F.S. page 11]



Q. Do you find it curious that in Mr. Orozoco's Direct Testimony on page 6 he mentions that in 2007 SSVEC conducted an in-depth analysis of the existing V-7 feeder and this coincides with the same time the B phase started the trend of being way over balanced?

A. Yes. In the Spring of 2007 the average load for the B phase was slightly below the A and C phases, then in the Summer it was perfectly balanced. Later in 2007

the B phase started the trend of being way out of balance. This lead to the B phase load going over the rated capacity.

Q. Do you take exception to Mr. Orozco's Direct Testimony on page 12 relating to use of the CREB bonds?

A. Yes, Mr. Orozco makes it appear the 750 kW grid-connected solar electric system could not be installed if the 69 kV line was not built. This is not true, the PV can still be built with the power feeding directly onto the existing 25 kV line.

Q. Do you take exception to Mr. Orozoco's Direct Testimony on page 14 as it relates to the grant money for the Smart Grid system.

A. Yes. The improvements can still be made to the Huachuca West substation and the two-way directional meters for the DSM could still be installed. Again, SSVEC is trying to make it sound like the affected communities will receive no benefit from these programs if the 69 kV line is not built. This is a blatant distortion of facts to distort the true reason the 69 kV line is being built. This is a purposeful distortion of facts to unduly sway SSVEC Cooperator Members and the Arizona Corporation Commission to assume if the 69kV line does not go in, the ARRA Funds cannot be applied to this area.

Q. What would you recommend to solve the load issues on the V-7 feeder?

A. The solution is multifaceted.

1. The load on the V-7 feeder should be better balanced. This can be done by removing load from the B phase adding it to the A and C phases.

2. Temporarily install a skid or trailer mounted 500 kW to 1 mW generator in Patagonia on the property currently owned by SSVEC. This property has access to Natural gas and the 25 kV line. Noise attenuation can reduce the sound from the plant to less than 60 db.

3. Continue plans to build the PV installation in Sonoita and deliver the power directly to the 25 kV line.

4. Continue plans with the Demand Side Management and make the upgrades to the Huachuca West substation.

5. Develop an RFP for a storage facility in Sonoita with use of NaS battery technology. The storage facility would be recharged by either the PV or generation provided by the existing V-7 feeder. The storage plant would be available to meet peak on the V-7 feeder until well after 2029. After the storage plant is operational the Peaker Plant could be removed. If monitoring/operation of either the Peaker Plant or the PV system cannot be accomplished with current SSVEC systems, a T1 line from Qwest Communications should be used. Qwest has fiber optics within a 1/4 mile from either of these locations and would provide reliable communications.

6. Continue developing strategies to help customers reduce their load.

Respectfully Submitted this 16th Day of March, 2010

By _____

James F. Rowley lll
HC 1 Box 259, Elgin, Az 85611
520.455.0404
jfrowleylll@msn.com

Service List

Original and 13 copies of the foregoing are filed this date:
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007-2927 (Attn: **Docket Control**, 13 copies)

Jane L. Rodda, Administrative Law Judge (1 copy)
Arizona Corporation Commission, Room 218
400 West Congress
Tucson, Arizona 85701-1347

Susan J. Downing
HC 1 Box 197
Elgin, Arizona 85611

Susan Scott
PO Box 178
Sonoita, Arizona 85637

Bradley S. Carroll, Attorney for SSVEC
One Arizona Center
400 East Van Buren
Phoenix, Arizona 85004-2201

CC.

Santa Cruz County Board of Supervisors
County Complex
2150 N. Congress Drive
Nogales, Arizona 85621

Mayor and Town Council
Town of Patagonia
310 McKeown Avenue
Patagonia, Arizona 85624