

NEW APPLICATION



0000102353

ORIGINAL RECEIVED

BEFORE THE ARIZONA CORPORATION COMMISSION

2009 SEP 18 A 11: 51

COMMISSIONERS

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AZ CORP COMMISSION
DOCKET CONTROL

E-01575A-09-0453

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-

APPLICATION

Expedited Arizona Corporation Request

DOCKETED

SEP 18 2009

DOCKETED BY
NR

On September 8, 2009, the Arizona Corporation Commission ("Commission")
issued Decision No. 71274 ("Decision") in Docket No. E-01575A-08-0328 (the "Rate
Case Docket") that expressly prohibits (until further Order of the Commission) Sulphur
Springs Valley Electric Cooperative, Inc. ("SSVEC" or "Cooperative") from constructing
a 69 kV sub-transmission power line ("69 kV line") to serve the Whetstone, Rain Valley,
Elgin, Canelo, Sonoita, and Patagonia, Arizona areas (collectively the "Affected Areas").
SSVEC had previously planned and scheduled principle construction of the 69 kV line in
the fall of 2009 because the Cooperative's documentation and analysis determined it
necessary to alleviate significant power quality, reliability, and capacity constraints
resulting in power fluctuations and outages in the Affected Areas that are currently served
by the Cooperative's existing V-7 Feeder Line.1

The Decision further ordered SSVEC to: (i) commission an independent feasibility
study regarding alternatives (including use of distributed renewable energy) that could

1 A map depicting the V-7 Feeder Line is attached as Exhibit 1.

Snell & Wilmer
L.L.P.
LAW OFFICES
One Arizona Center, 400 E. Van Buren
Phoenix, Arizona 85004-2202
(602) 382-6000

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1 mitigate the need for construction of the 69 kV line and to report the findings of such
2 study to the Commission by December 31, 2009; (ii) conduct public forums in the
3 Affected Areas to include topics relating to the results of the independent feasibility study
4 and addressing how renewable energy generation (in particular, distributed generation)
5 could be incorporated into the generation plans to serve the area covered by the planned
6 69 kV line and associated upgrades; and (iii) prepare a report to be filed with the
7 Commission by July 30, 2010, that discusses the outcome of the public forums.

8 In light of the Commission's Decision ordering SSVEC to stop construction of the
9 69 kV line, SSVEC, through counsel undersigned, hereby requests the Commission to
10 issue an order authorizing the Cooperative to institute a moratorium on new and/or
11 expanded service connections to its V-7 Feeder Line so the power quality, reliability, and
12 capacity problem resulting in power fluctuations and outages that will continue to exist
13 within the Affected Areas, will not be further exacerbated, nor further degrade, the service
14 to existing members.

15 **I. BACKGROUND AND BASIS FOR THIS APPLICATION**

16 SSVEC is an Arizona member-owned non-profit rural electric distribution
17 cooperative headquartered in Willcox, Arizona. SSVEC is a Class A electric public
18 service corporation that serves most of Cochise County and portions of Santa Cruz, Pima,
19 and Graham Counties (which includes the Affected Areas), pursuant to a Certificate of
20 Convenience and Necessity issued by the Commission.

21 SSVEC has been assiduously working toward a solution to bring quality, reliable
22 power to the Affected Areas through its Sonoita Reliability Project ("Project"). The
23 Project has taken years of planning, analysis, design consideration, cost estimation,
24 community participation, and review and provided SSVEC the information necessary to
25 make sound decisions based upon a balance of community concerns and requirements of
26 the Cooperative with respect to its obligation to provide safe and reliable service within its

1 service territory. As initially identified, the solution to this area's reliability issues is a
2 new substation in Sonoita. Based upon the Community's concerns, SSVEC obtained a
3 new substation property in a commercial land use area of Sonoita, rather than using its
4 existing parcel in a residential subdivision.

5 The 69 kV line necessary to energize the substation has been the most contentious
6 and emotional issue for the Project. The routing of this line has been the primary focus of
7 the community, and SSVEC has conducted numerous community meetings, met with
8 representative groups and individual property owners, welcomed presentations to its
9 Board, and received e-mails and letters with opinions regarding the line location. There
10 was also considerable public comment made in this Rate Case Docket.

11 As a non-partisan entity, SSVEC compiled the route arguments and balanced such
12 with basic aspects of business practices and cost analysis. With these facts in mind,
13 SSVEC determined that the most cost-effective option that impacted the least amount of
14 its members was for the route for the 69 kV line follow the existing known easements
15 within the San Ignacio del Babocomari Land Grant ("SIDB") and the Sonoita Hills
16 subdivision, location of SSVEC's original substation property, Buchanan. The SIDB
17 easement and affiliated easements to SSVEC's original substation property, Buchanan,
18 have been on record for more than a quarter of a century. SSVEC's 1982 purchase of
19 nearly 20 miles of SIDB easement, along with utilizing designated utility corridors, has
20 allowed SSVEC to significantly reduce overall project costs due to acquisition of rights-
21 of-way.

22 Due to some public opposition to the proposed siting of the 69 kV line, the issues
23 relating to the Project were interjected into SSVEC's Rate Case Docket.² In the Rate Case
24 Docket, SSVEC provided the Commission information demonstrating the need and
25 necessity to construct a new substation and affiliated 69 kV line as the electric distribution

26 ² SSVEC hereby incorporates herein the relevant portions of the Rate Case Docket.

1 facilities currently servicing the Affected Areas, have significant deterioration of power
2 quality resulting from an inordinately long feeder line, insufficient line and transformer
3 capacity, nonconforming equipment serialization, and an average reliability occurrence of
4 270 outage hours per year over the last 10 years³. The existing line does not adequately
5 and reliably serve the existing customers, and will continue to decline with the increased
6 load of new customers.

7 The Cooperative presented uncontroverted evidence to the Commission at the rate
8 case hearing that: (i) the proposed construction and siting of the new line through the
9 SSVEC-acquired right-of-way impacted the least number of SSVEC members at the least
10 cost⁴; (ii) the Affected Areas would continue to be plagued by outages if SSVEC did not
11 timely move forward with the Project⁵; and (iii) the Cooperative had concerns for the
12 elderly and businesses in the Affected Areas if the outages and unreliable service
13 continued for a prolonged period of time.⁶

14 Additionally, the Cooperative had previously provided the Commission's Utilities
15 Division ("Staff") information regarding the existing electric distribution facility's in the
16 Affected Areas, voltage instability as shown by SSVEC's Milsoft WindMil Distribution
17 Analysis Software.⁷ The distribution analysis shows a 15% voltage drop on a 120-volt
18 base which exceeds acceptable limits set by manufacturers of electrical apparatus design
19 to withstand +/-10% voltage fluctuations. This analysis clearly demonstrated that
20 voltages do not meet Commission-mandated (A.A.C. R14-2-208 Provision of Service)
21 voltage levels set forth in the 1989 edition of ANSI C84.1.⁸ ANSI C84.1 requires

22
23 ³ See discussion in Decision at page 36, lines 7-24; see also V-7 Outage Chart attached hereto as Exhibit 2
referenced in footnote 122 of the Decision.

24 ⁴ Rate Case Docket Hearing Transcript at page 301, line 3 through page 309, line 17; also see late-filed
Hearing Exhibit A-26.

25 ⁵ Decision at page 36, lines 19-21.

26 ⁶ *Id.* at lines 21-22.

⁷ See Exhibit 3 attached hereto.

⁸ There are no updated editions.

1 voltages to be maintained between 126-117 volts and analysis for this circuit indicates
2 voltages as low as 113V. The information provided to Staff further demonstrated that: i)
3 the existing substation transformer has exceeded its maximum capacity rating of 7MVA
4 multiple times in the past five years, leading to loss of functional life of the equipment;⁹
5 and (ii) the Arizona Department of Economic Security Population Statistics for June 6,
6 2007, indicate a population growth forecast for the Affected Areas within Santa Cruz
7 County of 70-80 persons per year, using an average household size of 2.3 persons; this
8 would indicate a growth of at least 30 homes (or services) per year to the Affected Areas
9 thereby increasing the amount of load on the substation transformer.¹⁰ SSVEC's new
10 service/expansion of service records indicate an actual average of 83 new/expanded
11 services per year over the past five years.¹¹

12 Notwithstanding the evidence presented at the hearing (or information provided to
13 Staff) to the contrary, as well as the concerns raised by Staff at the Open Meeting
14 regarding the impacts on health and safety resulting from the voltage drops that occur on
15 the line,¹² the Commission ordered SSVEC to delay the construction of the 69 kV line.¹³
16 The Decision also references SSVEC's testimony that a delay of the construction of the 69
17 kV line would lead to the imposition of a moratorium on new hookups in the Affected
18 Areas because the existing V-7 Feeder line has poor power quality and is at capacity.¹⁴

19 The Cooperative believes that based upon the requirements of the Decision and as
20 there is not a definite time period for solutions to be effected to resolve these issues from
21 the as yet-to-be-performed independent study results and recommendations, there is a

22 _____
23 ⁹ See Exhibits 4 and 4-A attached hereto.

¹⁰ See Exhibit 5 attached hereto.

¹¹ See Exhibit 6 attached hereto.

¹² Rate Case Docket Open Meeting Transcript at page 155, line 23 through page 157, line 15.

¹³ Decision at page 48, lines 24-26.

¹⁴ Decision at page 37, lines 4-5; Rate Case Docket Hearing Transcript at page 303, line 18 through page 304, line 3; See also Transcript of Rate Case Docket Open Meeting at page 154, line 23 through page 155, line 5 and page 178, lines 21-24.

1 likelihood of a delay of at least several years before rectification may occur to alleviate
2 the Affected Areas' capacity and reliability problems, thereby continuing the degradation
3 of the existing electric system. Allowance of additional load in the form of new service
4 connections or expansion of existing services will only further degrade the quality and
5 reliability of electric service in the Affected Areas by increasing the risk for: (i) voltage
6 brown-outs, causing damage and possible safety hazards; (ii) overload damage to the
7 substation transformer, including total failure; and (iii) an increased number of significant
8 outages due to line and/or equipment failures.

9 Therefore, consistent with the arguments and evidence presented in the Rate Case
10 Docket and to Staff, SSVEC has no choice but to request that the Commission authorize
11 SSVEC to institute a moratorium on new service connections and expanded service within
12 the Affected Areas that are served by the V-7 Feeder Line until such time that the power
13 quality, capacity, and reliability issues can be resolved. Although the requested
14 moratorium will not alleviate the existing power quality, reliability, and capacity problem
15 in the Affected Areas, it will assist in ensuring that the problem is not further exacerbated.

16 As of the date of the filing of this Application, SSVEC has twenty three (23)
17 requests for new service and/or expansion of service, which have been assigned a
18 construction work order or have an application pending.¹⁵ SSVEC will continue to honor
19 these requests. Any request for service made after the date of filings will be put in a
20 queue to be addressed on a first come, first served basis following the lifting of the
21 moratorium.

22 **III. COMMUNICATION AND NOTICES**

23 All communications, notices, and correspondence regarding this Application
24 should be served upon the following:

25
26

¹⁵ See Exhibit 7 attached hereto.

1 Bradley S. Carroll
2 Snell & Wilmer L.L.P.
3 One Arizona Center
4 400 East Van Buren Street
5 Phoenix, AZ 85004-2202
6 602-382-6578 (Direct)
7 602-382-6070 (Fax)
8 bcarroll@swlaw.com (Email)

9 **IV. REQUESTED RELIEF**

10 WHEREFORE, on the basis of the foregoing, SSVEC requests that the
11 Commission issue an order as expeditiously as possible that authorizes the Cooperative to:

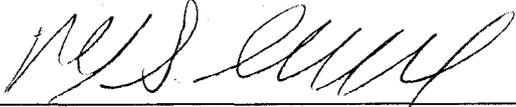
12 1. Immediately institute a moratorium on new and expanded service
13 connections that will be serviced by the existing V-7 Feeder Line within the Affected
14 Areas in the manner set forth in this Application; and

15 2. Maintain such moratorium until such time that SSVEC determines that a
16 long-term, safe, affordable, and reliable solution is defined and fully implemented. This
17 will allow SSVEC to provide the best possible service to existing customers (under the
18 circumstances) without further degrading the already marginal service in the area that
19 would result if additional load were allowed on the V-7 Feeder Line.

20 RESPECTFULLY SUBMITTED this 18th day of September, 2009.

21 SNELL & WILMER L.L.P.

22 By

23 
24 _____
25 Bradley S. Carroll
26 One Arizona Center
400 East Van Buren Street
Phoenix, Arizona 85004-2202
Attorneys for Sulphur Springs Valley
Electric Cooperative, Inc.

1 ORIGINAL and 13 copies filed this
2 18th day of September, 2009, with:

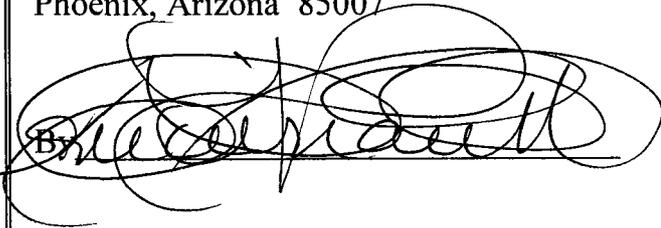
3 Docket Control
4 ARIZONA CORPORATION COMMISSION
5 1200 West Washington
6 Phoenix, Arizona 85007

7 COPIES of the foregoing hand-delivered
8 this 18th day of September, 2009, to:

9 Steve Olea Johnson, Director
10 Utilities Division
11 ARIZONA CORPORATION COMMISSION
12 1200 West Washington Street
13 Phoenix, Arizona 85007

14 Janice Alward, Chief Counsel
15 Legal Division
16 ARIZONA CORPORATION COMMISSION
17 1200 West Washington Street
18 Phoenix, Arizona 85007

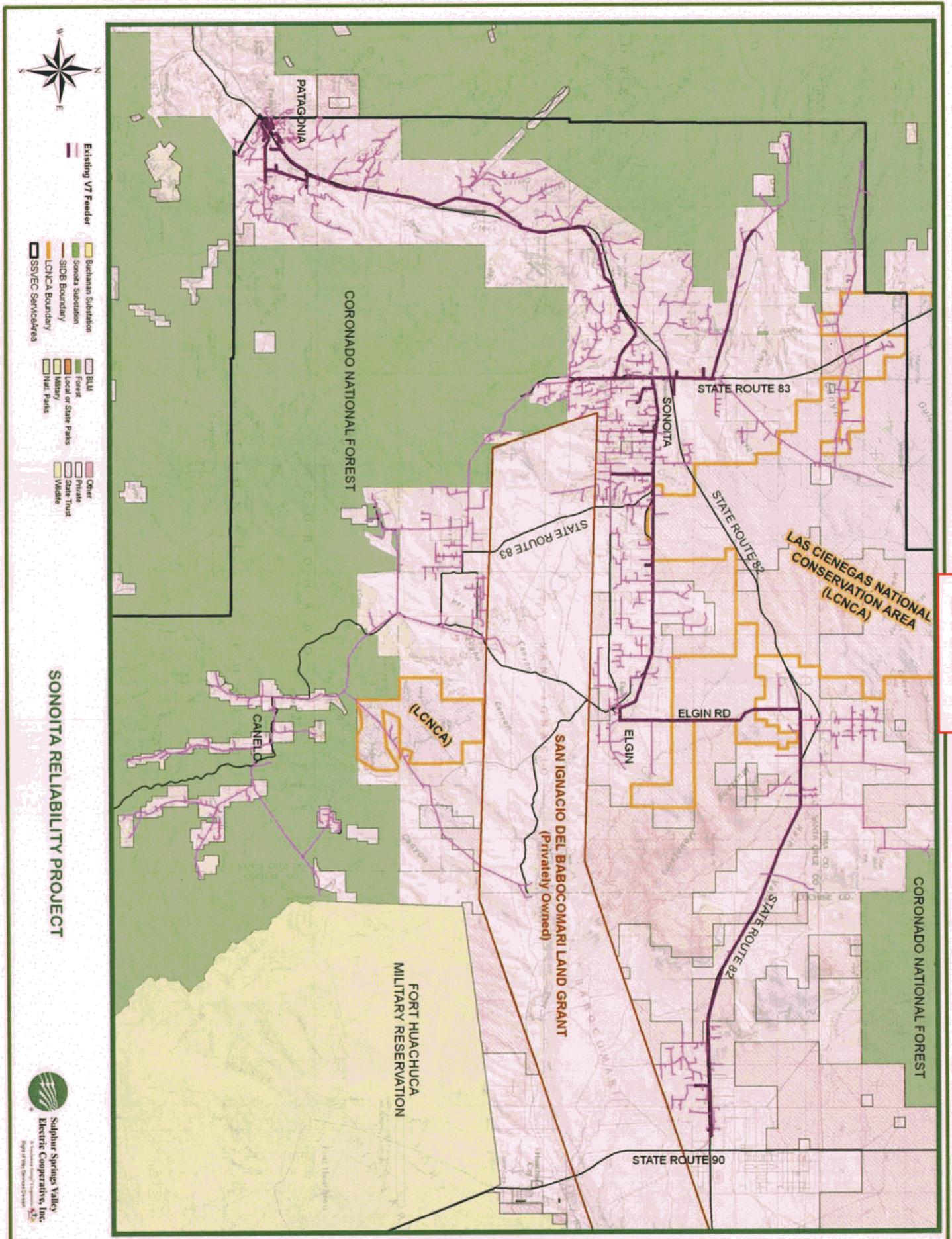
19 Lyn Farmer, Chief Administrative Law Judge
20 Hearing Division
21 ARIZONA CORPORATION COMMISSION
22 1200 West Washington Street
23 Phoenix, Arizona 85007

24 

25 10513949.2

26

EXHIBIT 1



SONOTTA RELIABILITY PROJECT

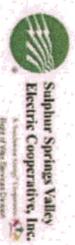
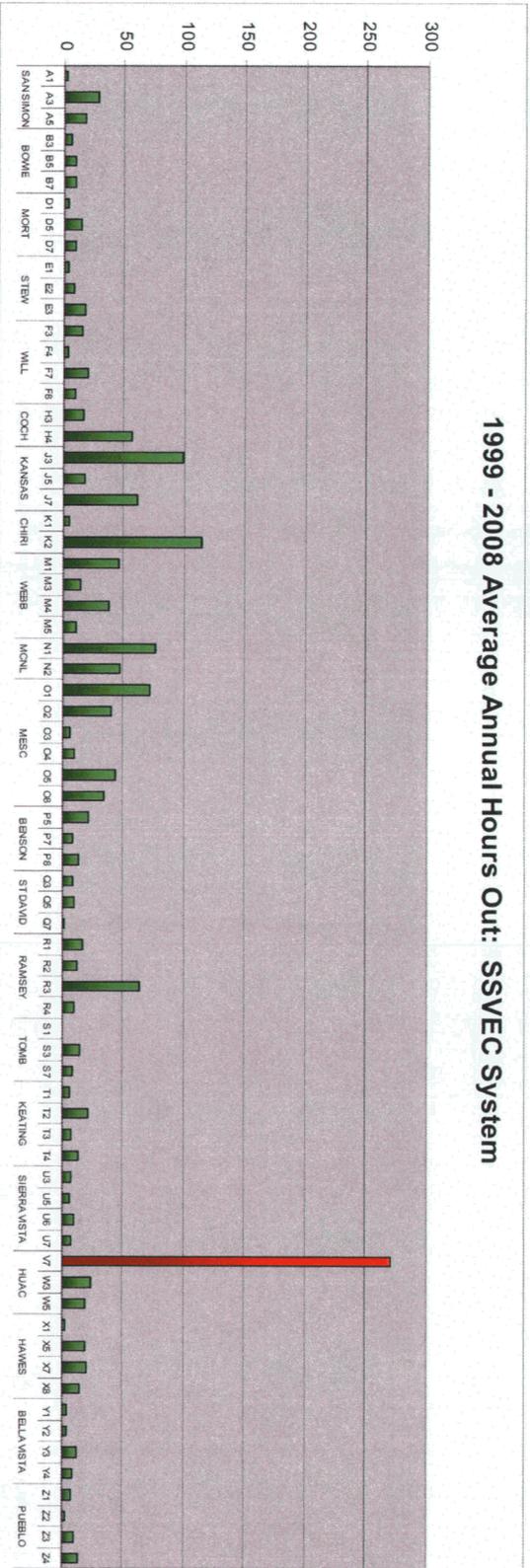


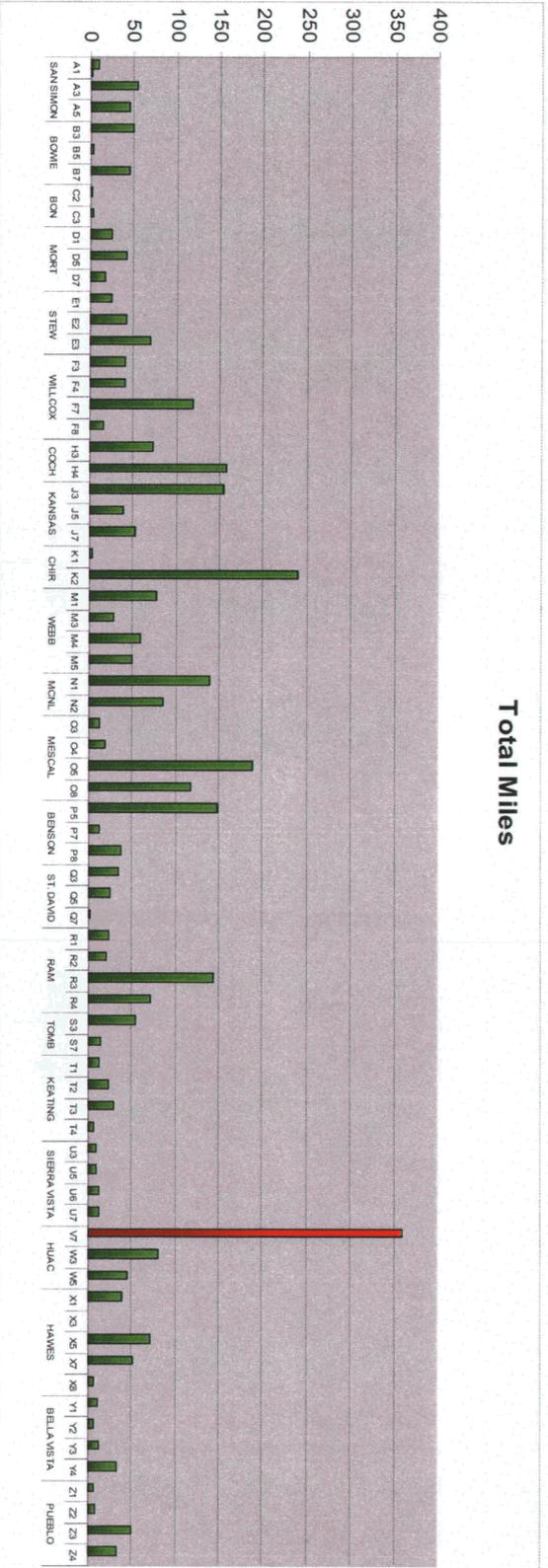
EXHIBIT 2

V-7 Feeder Outages and Length in Miles as Compared to all SSVEC feeders

1999 - 2008 Average Annual Hours Out: SSVEC System



Total Miles



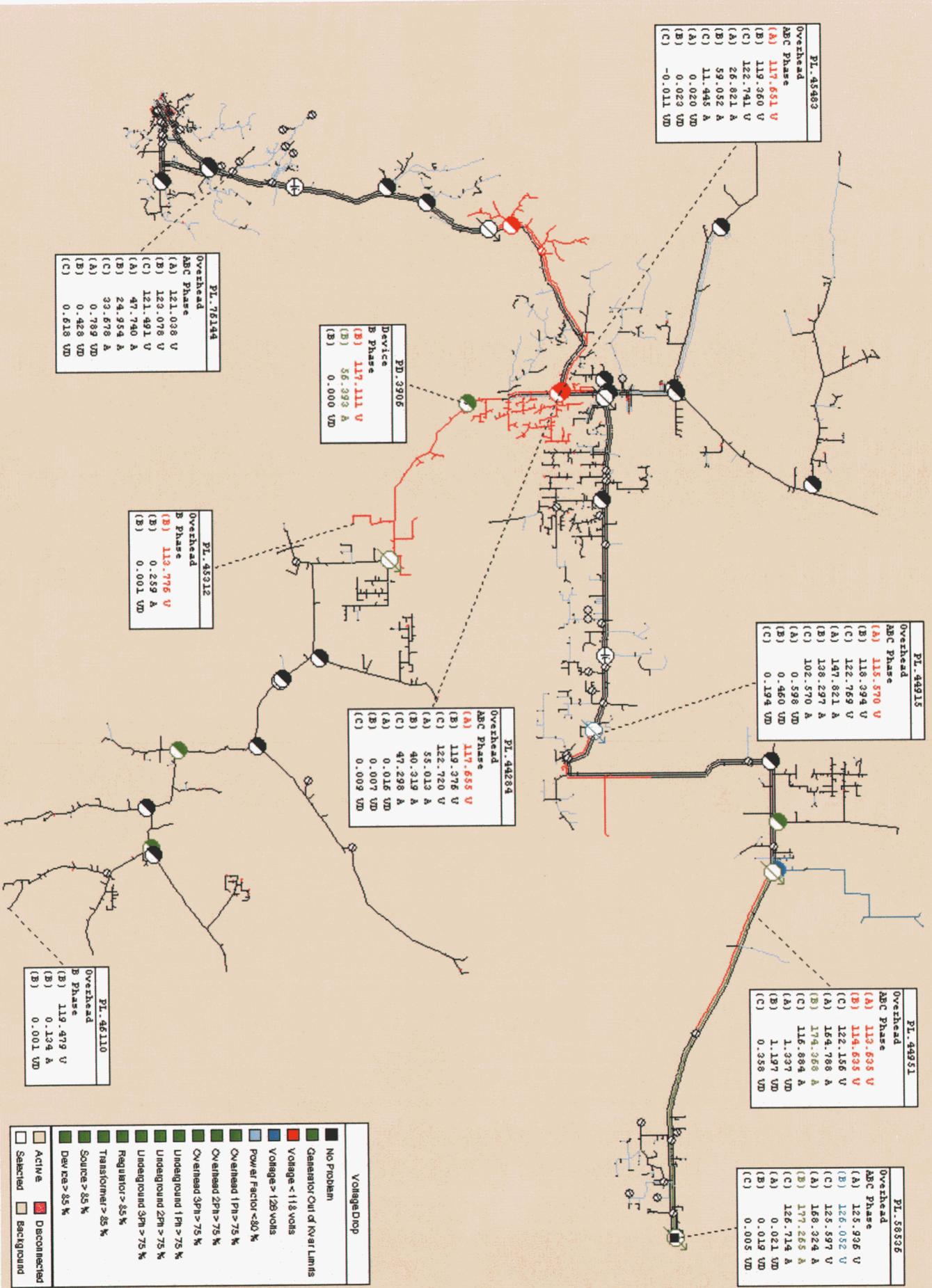
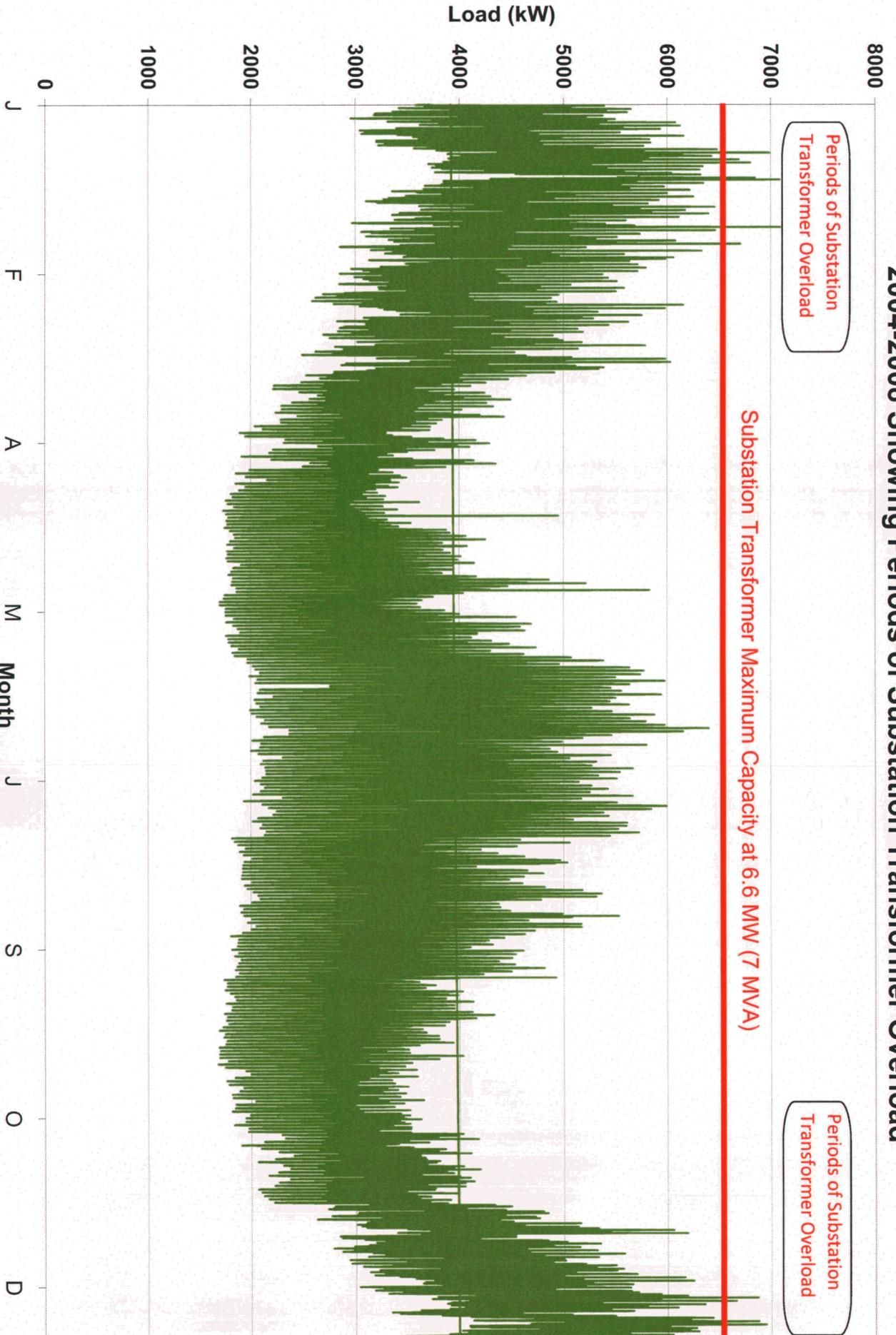


Figure 1: Base Case, Feb 2008 loads, no improvements

V7 Feeder: Milsoft WindMill Distribution Analysis

Maximum V7 Feeder Kilowatts vs. Half-hour Intervals for 5 Year Period 2004-2008 Showing Periods of Substation Transformer Overload



Huachuca West Transformer Nameplate

GENERAL ELECTRIC

TRANSFORMER

NO. 2220019 CLASS 0A/FA THREE PHASE 60 HERTZ

CAUTION! INSTRUCTION BOOK INSIDE BOX. BEFORE INSTALLING OR OPERATING READ INSTRUCTIONS

VOLTAGE RATING 67000-24940Y/14400
 KVA RATING 5000 CONTINUOUS 55 C RISE SELF COOLED
 KVA RATING 6250 CONTINUOUS 55 C RISE FORCED AIR
 KVA RATING 7000 CONTINUOUS 65 C RISE FORCED AIR
 IMPEDANCE VOLTS % 67000-24940Y VOLTS AT 5000 KVA

HV WINDING CONNECTIONS		
VOLTS	AMP 7000 KVA	DIAL POS
70500	57.2	1
68500	58.7	2
67000	60.3	3
65200	62.0	4
63400	63.7	5

LV WINDING CONNECTIONS		
VOLTS	AMP 7000 KVA 162	ITEM
24940		H1 H2 H3 350
		X0 X1 X2 X3 150

ALL WINDINGS COPPER

SUITABLE FOR OPERATION AT 4200 FEET ALTITUDE AND IN AN AMBIENT TEMPERATURE RANGE FROM -23.3°C TO +43.3°C.

LIQUID LEVEL CHANGES .60 INCH PER 10 C CHANGE IN LIQUID TEMPERATURE.
 LIQUID LEVEL BELOW TOP SURFACE OF HIGHEST POINT OF MANHOLE FLANGE AT 25 C IS 11.50 INCHES.
 MAXIMUM OPERATING PRESSURE OF LIQUID PRESERVATION SYSTEM 7.5 LBS POSITIVE TO 0.5 LBS POSITIVE. TANK SUITABLE FOR 14.7 LBS VACUUM FILLING.

CT-1,2,3,5,6,7 ARE 600/5 AMP (ACC CLASS 10C400).
 CT-21,22,23,25,26,27 ARE 1200/5 AMP (ACC CLASS 10C400).
 CT-24 IS 600/5 AMP (ACC CLASS 10C200).
 APPROX WEIGHTS IN LBS
 TOTAL 34200
 UNTANKING 16700
 TANK & FITTINGS 8900
 TYPE 1 OIL 1150 GAL 8600
 NP 263B1979

ROME, GEORGIA
MADE IN U.S.A.

CONTAINS NO DETECTABLE PCB AT TIME OF MANUFACTURE

07 18 2001

EXHIBIT 5

Arizona Subcounty Population Projections July 1, 2006 to July 1, 2055 by County, Census County Division, Place, and Reservation	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Santa Cruz County	45,303	46,545	47,777	48,998	50,210	51,418	52,607	53,800	54,973	56,144	57,291	58,412	59,514	60,595
Patagonia CCD (Sum of Below)	3,180	3,252	3,323	3,394	3,464	3,533	3,602	3,671	3,738	3,806	3,872	3,937	4,000	4,063
% Increase		2.25%	2.19%	2.12%	2.06%	2.01%	1.94%	1.91%	1.84%	1.81%	1.74%	1.67%	1.62%	1.56%
5-10-20 Year % Increase from 2009				0.00%					10.16%					19.72%
Elgin CDP	406	424	441	458	475	492	509	525	542	558	574	590	605	621
% Increase		4.29%	4.08%	3.89%	3.71%	3.57%	3.39%	3.29%	3.13%	3.03%	2.88%	2.74%	2.62%	2.50%
5-10-20 Year % Increase from 2009				0.00%					18.30%					35.53%
Patagonia town	929	937	946	954	962	971	979	987	995	1,003	1,011	1,019	1,026	1,034
% Increase		0.92%	0.90%	0.89%	0.87%	0.86%	0.84%	0.84%	0.82%	0.81%	0.79%	0.76%	0.74%	0.72%
5-10-20 Year % Increase from 2009				0.00%					4.31%					8.36%
Sonoma CDP	1,016	1,050	1,084	1,117	1,151	1,184	1,217	1,249	1,281	1,314	1,345	1,376	1,406	1,436
% Increase		3.36%	3.22%	3.09%	2.98%	2.88%	2.76%	2.69%	2.58%	2.51%	2.40%	2.29%	2.20%	2.11%
5-10-20 Year % Increase from 2009				0.00%					14.68%					28.49%
Remainder of Patagonia CCD	830	841	853	864	876	887	898	909	920	931	942	952	963	973
% Increase		1.40%	1.37%	1.34%	1.31%	1.29%	1.25%	1.24%	1.21%	1.19%	1.15%	1.11%	1.08%	1.05%
5-10-20 Year % Increase from 2009				0.00%					6.47%					12.55%
5-10-20 Year Population Increase from 2009					11	23	34	45	56					108

A census-designated place(CDP) is a type of place (a concentration of population) identified by the United States Census Bureau for statistical purposes. CDPs are delineated for each decennial census as the statistical counterparts of incorporated places such as cities, towns and villages. CDPs are populated areas that lack separate municipal government, but which otherwise physically resemble incorporated places. CDPs are delineated solely to provide data for settled concentrations of population that are identifiable by name but are not legally incorporated under the laws of the state in which they are located. The boundaries of a CDP have no legal status

A Census County Division(CCD) is a subdivision of a county used by the United States Census Bureau for the purpose of presenting statistical data. A CCD is a relatively permanent statistical area delineated cooperatively by the Census Bureau and state and local government authorities. CCDs are defined in states that do not have well-defined and stable minor civil divisions (e.g., townships) that have local governmental purposes

Source: Arizona Department of Economic Security, Research Administration, Population Statistics Unit, 12/01/06.
Seago / DES Population Statistics approved June 6, 2007

EXHIBIT 6

V7 New Services Added 2004 - 2008

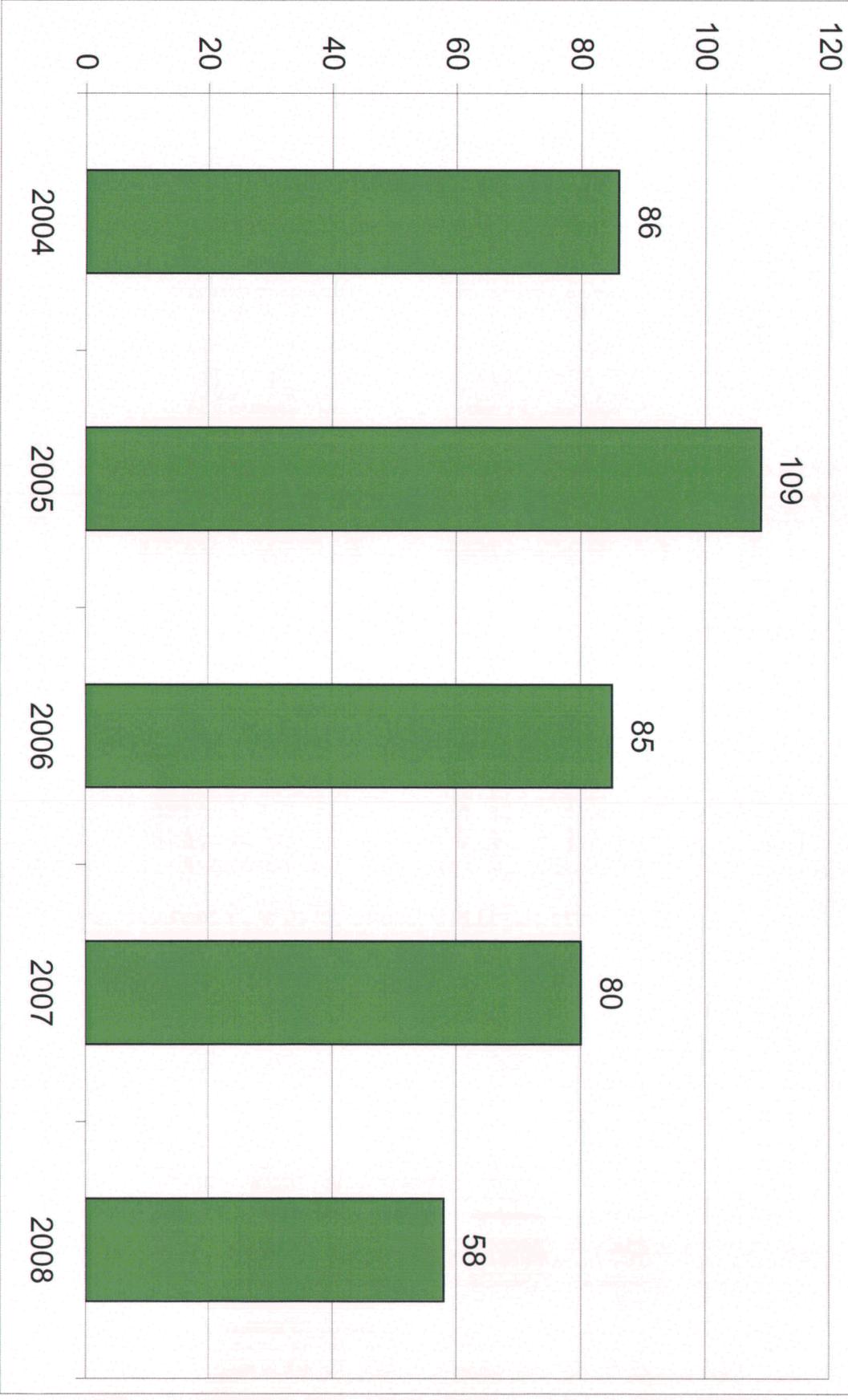


EXHIBIT 7

**V-7 WORK ORDER STATUS
16-Sep-09**

<u>DATE REQUESTED</u>	<u>W/O #</u>	<u>DISCRIPTION</u>	<u>COMMENTS/EXPLANATION OF FILE STATUS</u>
3/3/2009	81043	UG PRIM & SEC 400 AMP HOUSE	PENDING PAYMENT
6/14/2008	80128	400 AMP FOR NEW STORE	HOLDING FOR CUSTOMER INFO
8/14/2008	80402	UG PRIM \$ SEC 200 AMP HOUSE	PENDING PAYMENT
6/4/2009	81370	NEW SERVICE 200 AMP FOR HOUSE	IN ROW PENDING PERMITS
7/22/2009	81540	NEW 200 AMP SERVICE FOR MH	CONSTRUCTION PENDING
8/21/2009	81641	NEW 400 AMP SERVICE FOR SHOP	CUSTOMER WILL CALL WHEN READY
8/21/2009	81640	200 AMP SERVICE FOR WELL	CONSTRUCTION PENDING
8/25/2009	81651	200 AMP SERVICE FOR WELL	PENDING PAYMENT
8/31/2009	81667	200 AMP SERVICE FOR HOUSE	PENDING PAYMENT
PENDING	PENDING	200 AMP TO HOUSE PRI & SEC	APPLICATION
9/8/2009	81863	200 AMP TO HOUSE PRI & SEC	STAKING IN PROGRESS
PENDING	PENDING	200 AMP SEC TO HOUSE	APPLICATION
PENDING	PENDING	UPGRADE TO 200 AMP FOR HOUSE	APPLICATION
7/27/2009	81660	UG SEC TO HOUSE 200 AMP	STAKING IN PROGRESS
PENDING	PENDING	SERVICE FOR HOUSE	APPLICATION
8/24/2009	81649	SERVICE FOR HOUSE 200 AMP	STAKING IN PROGRESS
9/9/2009	81685/81686	SERVICE FOR 2 HOUSES	READY TO STAKE
9/15/2009	81697	200 AMP RAMADA	READY TO STAKE
9/16/2009	81700	SERVICE FOR HOUSE 200 AMP	READY TO STAKE
PENDING	PENDING	SERVICE FOR HOUSE 200 AMP	IN ESCROW
PENDING	PENDING	SERVICE FOR HOUSE 200 AMP	APPLICATION
PENDING	PENDING	SERVICE FOR HOUSE 200 AMP	HOUSE FOR SALE IN TUCSON
PENDING	PENDING	SERVICE FOR HOUSE 200 AMP	DRAWING UP PLANS