



0000161259

ORIGINAL

FOR THE ARIZONA CORPORATION COMMISSION

RECEIVED
AZ CORP. COM.
DOCKET CONTROL

2015 JUL 24 PM 3 02

- 1
- 2 **COMMISSIONERS**
- 3 SUSAN BITTER SMITH, CHAIRMAN
- 4 BOB STUMP
- 5 BOB BURNS
- 6 DOUG LITTLE
- 7 TOM FORESE

8
9
10
11
12
13
14
15
16
17
18

IN THE MATTER OF THE NOTICE OF
PROPOSED RULEMAKING
REGARDING INTERCONNECTION OF
DISTRIBUTED GENERATION
FACILITIES

DOCKET NO. RE-00000A-07-0609

19
20
21
22
23

On June 26, 2015, Arizona Corporation Commission (“ACC” or “The Commission”) Staff filed draft proposed rules for the Interconnection of Distributed Generation Facilities (“Rules”). Staff requested interested parties file comments on these draft Rules by July 24, 2015.

The following comments on draft Rules are provided by the Grand Canyon State Electric Cooperative Association, Inc. on behalf of the Arizona Electric Power Cooperative, Inc. (“AEPSCO”), Southwest Transmission Cooperative, Inc. (“SWTC”), Duncan Valley Electric Cooperative, Inc. (“Duncan”), Graham County Electric Cooperative, Inc. (“Graham”), Mohave Electric Cooperative, Inc. (“Mohave”), Navopache Electric Cooperative, Inc. (“Navopache”), Trico Electric Cooperative, Inc. (“Trico”) and Sulphur Springs Valley Electric Cooperative, Inc. (“Sulphur”) (collectively, “the Cooperatives”).

THE RULES ARE DUPLICATIVE AND UNNECESSARY

The first question that the Commission should address is what “problem(s)” do the DG Interconnection rules actually address? Not a single formal complaint has been initiated against a distribution cooperative alleging an interconnection policy is discriminatory or otherwise unreasonable. The proposed rules, however, would create duplicative and unnecessary regulation. Moreover, they preclude the parties from developing appropriate criteria around specific projects.

Arizona Corporation Commission

DOCKETED

JUL 24 2015

DOCKETED BY

BATU

1 The most cost effective and reasonable action is to abandon the rulemaking effort all together and
2 continue to operate as we have done over the last 10 years. Alternatively rulemaking should not
3 commence until additional workshops have been conducted and the rules reduced to their bare
4 essentials that reflect current practice and the most recent technical and engineering requirements.

5 These Rules have been introduced despite an effort by the Commission to review its
6 existing rules and policies with an announced goal of eliminating those that are unnecessary and
7 streamlining those that are unduly burdensome. Many of the topics covered by the proposed rules
8 are best left to the Utility's Interconnection Manual and/or the Interconnection Agreement entered
9 into between the parties. Unless and until there is an issue there is no need for the Commission to
10 become involved. At the point there are problems with interconnection, the Commission should
11 deal with the particular issue involved, without burdening all electric utilities generally with
12 cumbersome rules.

13 In 2005, when the Commission first began to look at creating some interconnection
14 standards,¹ DG was relatively new and novel for most distribution cooperatives. Only a handful of
15 DG interconnections were being requested, at least in the areas served by cooperatives. The
16 electric industry was still developing standards and practices for DG interconnection. In such an
17 environment, appropriately formulated rules might have served to "both streamline the
18 interconnection process and ensure that the interconnection does not impair the safety and
19 reliability of the grid." (Decision No. 69674, p. 5 OF 14). A lot has occurred in the DG field over
20 the last decade. The cooperatives now have thousands of DG interconnections and as such we are
21 not aware of how the proposed rules will serve to assist the interconnect process in today's
22 environment.

23 ¹ The workshop process into DG issues was initiated by Decision No. 67744, dated April 7, 2005,
to investigate unsubstantiated concerns and proposals raised by some renewable advocates during
rate case settlement discussions involving Arizona Public Service Company.

1 The Interconnection Document has provided guidance for DG interconnections (of 10 MW
2 and less) for eight (8) years. For the most part, the draft Rules remain unchanged from those
3 developed at workshops conducted during the 2005 – 2007 period. In the interim, individual
4 utilities in Arizona have been constantly updating their DG interconnection rules to keep up with
5 the changing environment and the latest technical requirements.

6 Since July 8, 2011, the Rural Utilities Service (“RUS”) has mandated that its borrowers
7 have a Board approved written policy relating to the Interconnection of Distributed Resources
8 (“IDR”). See, 7 CFR §1730.60 et seq. The written policy must satisfy the basic criteria set forth
9 in 7 CFR §1730.63. The Commission’s proposed rules make no provision for resolving any
10 conflicts between the Commission’s interconnection requirements and those imposed by RUS or
11 any other jurisdictional body (e.g., WECC, NERC or FERC). For example, RUS criteria require
12 borrowers to reconsider their written DG Interconnection policy at least every five years.

13 Certainly, formal DG interconnection rules, once adopted, will not be reconsidered and updated on
14 a five year cycle. It has already been 8 years since the Interconnection Document was approved
15 by this Commission. It makes no sense to create unique Arizona standards and procedures that
16 may conflict, today or in the future, with the requirements of entities having a wider scope of
17 jurisdiction.

18 DG Interconnection requirements are dynamic and constantly changing, as evidenced by
19 APS’s interconnection rules which are 81pages and getting more complex. Rules setting forth
20 specific criteria and processes inhibit the flexibility needed to address innovation, new technology
21 and the unique characteristics of individual utilities and projects. For example, the certification
22 criteria contained in R14-2-2613 will need to be continuously updated. The rulemaking process is
23 not susceptible to frequent and prompt changes.

 Additionally, the National Rural Electric Cooperative Association (“NRECA”) has
developed guidance documents for cooperatives to use in developing their interconnection policies

1 and in providing guidance to their consumers. These guidance documents are geared to satisfying
2 the RUS. What purpose is served by imposing another level of potentially conflicting regulation,
3 especially when there is no evidence of an existing problem that must be addressed?

4 Electric distribution cooperatives are required to follow the requirements of RUS, a federal
5 agency. Written policies are in place meeting those requirements. It makes no sense to duplicate
6 the effort at the state level or to impose state based regulations that may conflict with the policies
7 implemented to satisfy a federal agency. At most, Arizona electric distribution cooperatives
8 should be required to maintain a current copy of their written IDR policy with the Commission's
9 Utilities Division.

10 The most cost effective and reasonable action is to either abandon the rulemaking effort all
11 together or to exempt electrical cooperatives from any DG interconnection rules not consistent
12 with RUS requirements.

13 **ADDITIONAL WORKSHOPS ARE NEEDED**

14 The draft rules are premised upon input received during workshops conducted more than
15 eight (8) years ago. We appreciate that Staff provided its draft rules for informal comment prior to
16 initiating formal rulemaking. At a minimum, additional workshops must be conducted. If not
17 eliminated completely, the rules should be reconstituted to provide more general minimalistic
18 requirements aimed at ensuring the DG interconnection criteria are nondiscriminatory, reasonable
19 and will remain flexible enough to address the unique needs of particular utilities, as well as new
20 innovations and technologies.

21 To the extent the Commission proceeds with adopting DG Interconnection rules that
22 encompass distribution cooperatives, those rules should focus on setting forth Commission policy
23 objectives (e.g., categories of topics to be contained in a DG interconnection manual) and allow
each utility to develop a DG interconnection manual consistent with those objectives. Such an

1 approach would minimize the likelihood of inconsistencies with other regulatory entities including
2 RUS.

3 The proposed deadlines and criteria for processing applications will be difficult for the
4 cooperatives to meet under all circumstances. For example, there is no consideration for delays
5 associated with (i) the size of the utility and its engineering staff; (ii) rights-of-way acquisition
6 (especially from third parties); (iii) inspections, etc.; (iv) receipt of a large volume of DG
7 interconnection requests; and (v) distance to DG site; (vi) outages, storms, weather, etc. How is a
8 small distribution cooperative to balance its normal customer requests for connections and
9 termination, line extensions, etc., with requests for DG interconnections?

10 These general concerns, as well as the more specific examples discussed below, need to be
11 explored among the interested parties in further workshops.

12 **RESPONSE TO STAFF QUESTIONS**

13 **Question #1 regarding R14-2-2616(D) and R14-2-2621 related to Distribution** 14 **Networks and Interconnection to Secondary Spot Network System and revising these** 15 **sections based on the Institute of Electrical and Electronic Engineers (“IEEE”) 1547.6** 16 **Active Standard**

17 Cooperatives and small electric utilities do not typically have any requests or need for
18 network or spot network services. However, the question highlights the problem with trying
19 to develop rules where technical requirements are evolving and changing over time.

20 **Question #2 regarding R14-2-2617(A) related to revising the screening test section for** 21 **projects meeting the threshold requirement to be put on supplemental review rather** 22 **than Study Track**

23 The proposed limits correctly reflect additional requirements on the distribution system
requiring further evaluation and study. Undoubtedly system needs will vary depending on
the scope of the project and the individual utilities system. The question should be

1 addressed in further workshops, but highlights the problem of using static rules to define
2 the appropriate track, based upon fixed criteria where there are numerous variables that can
3 impact the processing of any interconnection application.

4 **Question #3 regarding the utility to require a disconnect switch**

5 The disconnect switch is an operational safety requirement for utilities. To remove the
6 utilities ability to require this switch will significantly limit the utilities ability to meet
7 occupational safety requirements. Moreover, eliminating the Cooperatives ability to
8 require a disconnect switch would be inconsistent with RUS rules (7 CFR 1730.63(b)(3)),
9 which provide: "IDR policies must provide for appropriate electric power system
10 disconnect facilities, as determined by the borrower, which shall include a lockable
11 disconnect and visible open, that are readily accessible to and operable by authorized
12 personnel at all times."

13 **OTHER COMMENTS**

14 The Cooperatives have a number of questions and concerns regarding the form and content
15 of the specific Rules. If the Commission determines to proceed with a formal rulemaking process
16 in this docket, the Cooperatives believe those issues are best discussed in workshops and
17 additional technical meetings with other interested stakeholders. In particular, the Cooperatives
18 are concerned with a "one size fits all" approach to the timing and processing of specific DG
19 projects. The Cooperatives have implemented thousands of DG interconnections working directly
20 with individual project participants under existing interconnection processes. It is not appropriate
21 to impose the same study and timing criteria on small distribution cooperatives that lack the staff
22 and resources of the larger utilities. Rather, the Rules should address the principles of access to
23 interconnection and non-discrimination.

1 The following are some examples of the concerns Cooperatives have with the proposed Rules as
2 currently drafted:

- 3 • R14-2-2602-B, page 5

4 **B. The total capacity of an individual Generating Facility may exceed 10 MW;
5 however, no more than 10 MW of a Generating Facility's capacity can be
6 interconnected at a single Point of Interconnection.**

7 This language is unclear. If they are above 10MW, they are FERC regulated regardless of
8 connection.

- 9 • R14-2-2602-C, page 5

10 **C. The electric rates and schedules, terms and conditions of service, or other contract
11 provisions governing the electric power sold by a Utility to an Arizona retail
12 consumer are subject to the jurisdiction of the Commission. The Commission also
13 has jurisdiction when the Utility purchases excess power from a QF under 18 CFR
14 292.303 and 18 CFR 292.306 (2004).**

15 This language appears incomplete (e.g., what happens if utility purchases excess power
16 from entities that are not QFs under federal law; or purchases at wholesale; or does or does not
17 have an Open Access Transmission Tariff?). This statement of law is unnecessary, incomplete,
18 and confusing.

- 19 • R14-2-2602-A-2, page 6

20 **2. The Utility has specific Interconnection, contractual, and inspection requirements
21 that must be complied with and information that needs to be submitted for all
22 interconnected Generating Facilities. These may include protective relaying,
23 metering, special rate schedules, applicable safety devices, and information
24 requirements, as specified in the Interconnection Manual.**

25 This broad principal is appropriate, but the Rules include restrictions, conditions and
26 limitations set forth in later provisions, such as precluding an insurance requirement for DG
27 customers (even though RUS rules indicate a cooperative borrower has the right to require liability
28 insurance as a condition of service).

- 29 • R14-2-2604, page 7

30 **A. The customer has the right to interconnect a Generating Facility with the
31 Distribution System.**

1 The foregoing statement is too broad and may be misused by customers that fail to meet the
2 conditions allowing them to interconnect a Generating Facility with the Distribution System. A
3 more accurate and appropriate statement would be: A customer may only interconnect a
4 Generating Facility with the Distribution System in accordance with the Rules and the Utility's
5 Interconnection Manual.

- 6 • R14-2-2607-A, page 10

7 **A. The Customer is not required to provide general liability insurance coverage as a**
8 **condition for Interconnection. Due to the risk of incurring damages, it is**
9 **recommended that every Interconnection Customer protect itself with insurance**
10 **or other suitable financial instrument sufficient to meet its construction, operating**
11 **and liability responsibilities.**

12 The rule recognizes the Customer is creating a risk of damage and should maintain
13 adequate liability insurance, yet precludes the utility from requiring adequate protection as a
14 condition of allowing interconnection. Moreover, this language is inconsistent with RUS rules
15 that require the customer to "maintain appropriate liability insurance as outlined in the borrower's
16 interconnection policy." RUS recognizes that the system on which it has a mortgage is placed at
17 risk by interconnection and expects the borrower to require the customer to maintain liability
18 insurance to minimize the risk to RUS. As Generating Facilities have become more common,
19 safety and fire codes now address these systems. The interconnecting customer should provide
20 insurance to protect against the risk it is creating. The Utility and its customers should not be
21 compelled to assume that risk without the protection of adequate liability coverage in place.

- 22 • R14-2-2609-A, page 11

23 **A. Each Utility shall designate a person or persons to serve as the Utility's contact for**
all matters related to Distributed Generation Interconnection; identify to the
Commission its Distributed Generation contact person; and provide convenient
access through its web site to the names, telephone numbers, mailing addresses
and electronic mail addresses for its Distributed Generation contact person or
persons.

By this rule, the Commission seeks to manage a specific aspect of the Utility's business and
is requiring the Utility to allocate specific personnel to interconnection issues and customers. This

1 is unduly burdensome for small Cooperatives which may not have the staff or resources. It is also
2 unclear why this language is necessary. Whenever a customer has an issue, they contact the
3 business office and are placed in contact with appropriate personnel to address the problem. There
4 is no justification for treating interconnection issues any differently. This language should be
5 eliminated.

- 6 • R14-2-2613, page 12

7 Several codes have been updated. Such #5 NFPA 70 NEC is now 2014 not 2002, and IEEE
8 519 has been updated. These code references need to be updated accordingly. Also a mechanism
9 needs to be in place to allow these references to be periodically refreshed without a formal rule
10 amendment. Perhaps a more appropriate alternative is to require the Utilities Division to
11 coordinate with the Utilities and maintain a listing of those standards each Utility will use to
12 certify Generating Facilities.

- 12 • **(Level 1 SuperFast Track)**

13 The concept of having different tracks, depending on the nature of the Generating Facility
14 and interconnection issues, is appropriate. However, establishing set deadlines for all applications
15 in a particular track fails to appropriately account for the many variables that can impact the
16 processing of even what would normally be a routine application. The rules should identify
17 Commission policy objectives and allow each Utility to establish appropriate methods to achieve
18 those objectives.

- 18 • R14-2-2618-A, page 17

19 A. . . . **The inverters must be US 1741 listed, and certified to meet the shutdown**
20 **protective functions (under/over voltage, under/over frequency and anti-islanding)**
21 **specified in IEEE 929, screen(F). The Generating Facility must also meet all**
22 **applicable codes and standards, as well as comply with the Utility Interconnection**
23 **and contractual requirements.**

22 This reference should be: “and meet the applicable certifications under R14-2-2613 . . .”

- 23 • R14-2-2618-C-1, page 18

1 **1. . . . No initial application fee or processing fee will be charged.**

2 Why should other customers bear the costs for processing initial DG interconnection
3 applications?

- 4 • R14-2-2618-C-7-a, page 21

5 **7. The Utility may charge a fee for each re-inspection, if a tariff containing such a fee is approved by the Commission.**

6 This is one of many instances where the rules require the Utility to bear the cost until it is
7 able to secure a tariff authorizing the specific charge. The rules should allow the Utility to submit
8 proposed tariffs within ninety days of the effective date of the new rules. To the extent similar
9 services are already provided in other contexts, those fees should be expandable to include DG
10 interconnection related activities.

- 11 • R14-2-2619 (**Level 2 Fast Track**)

12 In general, much of this level is written the same as Level 1 [$<10\text{kW}$]. But for many
13 rural/lightly loaded areas, installing DG can be problematic. R14-2-2617 screens may be
inadequate for cooperatives.

- 14 • R14-2-2619-C-1, page 21

15 **1. Prior to Submitting Application. The Customer may contact the Utility at the**
16 **conceptual stages of the design to discuss the proposed design, installation, and**
17 **operation. Upon the Customer's request, the Utility shall meet with the Customer**
18 **prior to submission of an Application.**

19 This rule, should affirmatively encourage the Customer to contact and involve the Utility as
20 early as possible. Utility's regularly meet with customers on matters prior to submission of formal
21 applications. It is unnecessary and inappropriate to mandate the Utility meet with DG
22 interconnection customers, when no such requirement exists for other customers.

- 23 • R14-2-2619-C-4-b, page22 (**Utility Reviews Application**)

b. . . . In such case, the Utility shall offer to perform additional review (typically
about three hours of study) to determine whether minor modifications to the
Distribution System . . .

 Insertion of a "typical" length of the study is unwarranted and may be misleading.

- 1 • R14-2-2619-C-6-v, page 24(**Inspection and Testing**)
- 2 v. **The Utility has unrestricted 24-hour access to the Disconnect Switch (if required),**
- 3 **and the switch meets all applicable requirements . . .**

4 Large DG will have something significantly more than a “disconnect switch.” It may be
5 more like a recloser with relaying. Access should be authorized to the “installed disconnect
6 facilities” rather than limiting the language to the “Disconnect Switch”.

- 6 • R14-2-2619-E, page 25
- 7 E. **Fees for Level 2 Fast Track Additional Review. A Utility may not charge a fee for**
- 8 **an additional review, unless a tariff containing the hourly rate for additional**
- 9 **review is approved by the Commission. . . .**

10 Hourly rates are variable depending on the Staff used and change frequently. It is
11 unreasonable to establish a fixed hourly rate in a tariff. Cooperatives have estimated review and
12 design costs in connection with line extensions for decades without the need of securing
13 Commission approval of the specific hourly rates. It is unnecessary and unreasonable to require
14 such a tariff for this particular type of customer. (Same comment for R14-2-2620-E, page 32).

- 13 • R14-2-2620 (**Level 3 Study Track**)
- 14 • R14-2-2620-A, page 26
- 15 A. . . . **No review of the Generating Facility’s protection equipment is required for**
- 16 **generators that are certified, although the Utility may study the interface between**
- 17 **the Generating Facility and the Distribution System. . . .**

18 The Utility must have ability to review and approve protection equipment. This provides
19 coordination of utility devices and generation devices. Certification does not mean the equipment
20 has not been damaged or improperly installed. There is unclear what this type of distinction is
21 made.

- 20 • R14-2-2620-C-1, page 26 (See comment to R14-2619-C-1).
- 21 • R14-2-2620-C-5, page 27 (**Scoping Study**)
- 22 5. . . . **This meeting shall be held within 12 calendar days after an Application is**
- 23 **deemed complete unless other mutual agreements are made.**

1 Fixing firm dates for meetings in rules is problematic. What if there are several
2 Applications (or other matters, such as weather related damage, emergencies, etc.) impacting the
3 availability of Utility staff. The rule, should be more general with language such as “The meeting
4 shall be held as mutually agreed between the Utility and Customer.”

- 5 • R14-2-2620-C-7-a, page 27 (**Feasibility Study**)
 - 6 a. . . . **The Feasibility Study shall be completed within 21 calendar days, unless other mutually agreeable terms are made.**

7 As previously stated a fixed calendar day deadline in the rule is problematic. Cooperatives
8 and small utilities with limited staff may need to work with consultants their power supplier or
9 others to complete the Feasibility Study which can require a longer timeframe.

- 10 • R14-2-2620-C-8-a, page 28 (**System Impact Study**)
 - 11 a. **The System Impact Study will be completed within 30 calendar days, unless other mutually agreeable terms are made.**

12 Given the possible amount of field work required, limited personnel and the possible need
13 for outside assistance, electric distribution cooperatives will have difficulty meeting this
14 timeframe.

- 15 • R14-2-2620-C-9, page 29 (**Facilities Study**)
 - 16 9. . . . **The Utility shall provide the Customer, within seven calendar days after completing the previous study or meeting, a Facilities Study agreement including an outline. . . .**

17 For the reasons previously noted, this time frame is unreasonable as applied to the
18 Cooperatives.

- 19 • R14-2-2620-C-9-a, page 29
 - 20 a. **The Facilities Study shall be completed within 30 calendar days, unless other mutually agreeable terms are made.**

21 For the reasons previously noted, this time frame is unreasonable as applied to electric
22 distribution cooperatives. Additionally, it should be clear that any time frame does not start until
23 the Customer executes the agreement and pays the cost estimate.

- 1
- R14-2-2620-C-10-c, page 30 (**Interconnection Agreement**)
- 2
- c. **. The Utility shall employ best reasonable efforts to complete such system upgrades in the shortest time practical.**

3 This type of provision is more appropriate throughout the rules than fixed time frames.

- 4
- R14-2-2622-A, page 33 (**Utility Reporting Requirements**)
- 5
- A. **Interconnection Manual. Each Utility shall file an Interconnection Manual for approval with the Commission no later than 90 calendar days after adoption of this Article. An updated Interconnection Manual shall be provided to the Commission upon any substantive revision by the Utility and shall become effective within 60 days unless otherwise acted upon by the Commission.**
- 6
- 7

8 While the Cooperatives believe that there is no need for direct Commission involvement in
9 DG interconnections at this time, this provision, possibly with a portion of proposed R14-2-
10 2622(B) and (C), is the full extent of any rule that would be required by the Commission. A
11 Cooperative's Interconnection Manual approved pursuant to RUS rules should become effective
12 within 60 days after filing, unless otherwise acted upon by the Commission.

12 **CONCLUSION**

13 The Cooperatives believe that the proposed rules are unnecessary, at least as applied to
14 electric distribution cooperatives that RUS already mandates adoption of DG interconnection
15 policies by all of its borrowers. Distribution cooperatives, therefore, should be exempt from any
16 Arizona specific DG interconnection rules that are not consistent with RUS requirements. As
17 reflected above, there are many areas where the draft rules, if adopted and applied to distribution
18 cooperatives, can be eliminated, simplified and clarified. Further workshops are warranted before
19 the Commission initiates formal rulemaking.

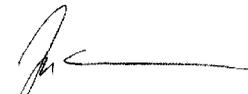
20 Please send all further correspondence in this matter electronically to the following email
21 address: **jwallace@gcseca.coop**

22

23

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

RESPECTFULLY SUBMITTED this 24th day of July, 2015.

By: 

John Wallace, CEO
GRAND CANYON ELECTRIC COOPERATIVE
ASSOCIATON, INC.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

PROOF OF AND CERTIFICATE OF MAILING

I hereby certify that on this 24th day of July, 2015, I caused the foregoing document, with attachments, to be served on the Arizona Corporation Commission by delivering the original and thirteen (13) copies of the above to:

Docket Control
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007

Copies of the foregoing mailed/delivered this 24th day of July, 2015 to:

Jeff Schlegel
SWEEP
1167 West Samalayuca Drive
Tucson, AZ 84704

Eric C. Guidry
Western Resource Advocates
2260 Baseline, Suite 200
Boulder, CO 80302

Jerry Payne
Cooperative International Forestry
333 Broadway S.E.
Albuquerque, NM 87102

C. Webb Crockett
Patrick Black
Fennemore Craig
2394 E. Camelback Road
Suite 600
Phoenix, AZ 85016

Robert Annan
Annan Group
6605 East Evening Glow
Scottsdale, AZ 85262

Justin Brown
Southwest Gas Corporation
5421 Spring Mountain Road
Las Vegas, NV 89150

David Berry
Western Resource Advocates
Post Office Box 1064
Scottsdale, AZ 85252

John Wallace
Grand Canyon State Electric
Cooperative Association, Inc.
2210 South Priest Drive
Tempe, AZ 85282

Brian Hageman
Caren Peckerman
Richard Brill
Deluge, Inc.
4116 East Superior Avenue
Suite D3
Phoenix, AZ 85040

Jana Brandt
Kelly Barr
Salt River Project
Post Office Box 52025
Mail Station PAB221
Phoenix, AZ 85072

Daniel Pozefsky
RUCO
1110 West Washington Street
Suite 220
Phoenix, AZ 85007

1 Michael Patten
Snell & Wilmer LLP One Arizona Center
2 400 E. Van Buren Street
Suite 1900
3 Phoenix, AZ 85004

4 Tucson Electric Power Company
Post Office Box 711
Tucson, AZ 85702

5 Gary Mirich
6 Energy Strategies
One North Central Avenue
7 Suite 1120
Phoenix, AZ 85004

8 Amy LeGere
9 4850 Reata Road
Flagstaff, AZ 86004

10 Cohn Murchie
11 Solar Energy Industries Association
805 15 N.W., #510
12 Washington, DC 20005

13 Adam Browning
The Vote Solar Initiative
14 182-2 Street
Suite 400
15 San Francisco, CA 94105

16 Tyler Carlson
Mohave Electric Cooperative
17 Post Office Box 1045
Bullhead City, AZ 86430

18 Valerie Rauluk
19 Greater Tucson Coalition For Solar Energy
Post Office Box 1045
20 Bullhead City, AZ 85733

21 Greg Patterson
Water Utility Association of Arizona
22 916 West Adams
Suite 3
23 Phoenix, AZ 85007

James Hamilton
Hamilton Consulting
822 North 5th Avenue
Phoenix, AZ 85003

Cynthia Zwick
2700 North Third Street
Suite 3040
Phoenix, AZ 85004

Arizona Public Service Company
Leland Snook
400 North 5th Street, MS 8695
Phoenix, AZ 85004

Christopher Thomas
Fred E. Breedlove III
Squire Sanders (US) LLP
One East Washington, 27th Flr.
Phoenix, AZ 85004

Anthony Wanger
615 North 48th Street
Phoenix, AZ 85008

Alan Kierman
615 North 48th Street
Phoenix, AZ 85008

Dillon Holmes
Clean Power Arizona
9635 North 7th Street. #47520
Phoenix, AZ 85068

Pinnacle West Capitol Corp.
Thomas Mumaw
Thomas Loquvam
Post Office Box 53999, MS 8695
Phoenix, AZ 85072

Sidney Smith
HoHoKam Irrigation & Drainage District
142 South Arizona Boulevard
Coolidge, AZ 85128

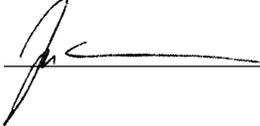
1	Court Rich 7144 East Stetson Drive, Suite 300 Scottsdale, AZ 85251	Anne Smart Alliance for Solar Choice 45 Fremont Street 32nd Floor San Francisco, CA 94105 Tim Lindl
2		
3	Stephanie Wojcik Town of Wickenburg 155 North Tegner, Suite A Wickenburg, AZ 85390	Kevin Fox Keyes & Fox LLP 436 14th Street Suite 1305 Oakland, CA 94612
4		
5	Christopher Hitchcock Law Offices of Christopher Hitchcock, P.L.C. One Copper Queen Plaza Post Office Box AT Bisbee, AZ 85603	Greg Bass Noble Americas Energy Solutions 401 West A Street, Suite 500 San Diego, CA 92101-3017
6		
7		
8	Sulphur Springs Valley Electric Cooperative, Inc. Jack Blair 311 East Wilcox Sierra Vista, AZ 85635	Nicholas J. Enoch IBEW 349 North Fourth Avenue Phoenix, AZ 85003
9		
10		
11	Lawrence Robertson, Jr. Post Office Box 1448 Tubac, AZ 85646	Hugh Hallman & Affiliates, PC 2011 North Campo Alegro Road Suite 100 Tempe, AZ 85281
12		
13	Bradley Carroll Tucson Electric Power Company 88 E. Broadway Boulevard. MS HQE910 Post Office Box 711 Tucson, AZ 85701	Erica Schroeder 436 14th Street Suite 1305 Oakland, CA 94612
14		
15	Navopache Electric Cooperative, Inc. Heather McInelly 1878 West White Mountain Blvd Lakeside, AZ 85929	Todd Glass Wilson Sonsini Goodrich & Rosati, PC 701 Fifth Avenue Suite 5100 Seattle, WA 98104
16		
17		
18	Mohave Electric Cooperative, Inc. Peggy Gillman Post Office Box 1045 Bullhead City, AZ 86430	Kristin Mayes 3030 North Third Street Suite 204 Phoenix, AZ 85012
19		
20		
21	Patty Ihle 304 East Cedar Mill Rd. Star Valley, AZ 85541	
22		
23		

1	Albert Gervenack 14751 West Buttonwood Drive Sun City West, AZ 85373	Robert Hall 4809 Pier Mountain Place Marana, AZ 85658
2	W.R. Hansen Property Owners and Residents Association 13815 West Camino del Sol Sun City West, AZ 85375	Vincent Nitido Trico Electric Cooperative, Inc. 8600 West Tangerine Road Marana, AZ 85658
3	Lewis Levenson 1308 East Cedar Lane Payson, AZ 85541	Kevin Koch Post Office Box 42103 Tucson, AZ 85716
4	Garry Hays 1702 East Highland Avenue Suite 204 Phoenix, AZ 85016	Navopache Electric Cooperative, Inc. Paul O'Dair 1878 West White Mountain Boulevard Lakeside, AZ 85929
5	Jeffrey Crockett Crockett Law group PLLC 1702 East Highland Avenue Suite 204 Phoenix, AZ 85016	Rich Gilliam 1120 Pearl Street Suite 200 Boulder, CO 80302
6	Mark Holohan Arizona Solar Energy Industries Association 2122 West Lone Cactus Drive Suite 2 Phoenix, AZ 85027	Ken Wilson Western Resource Advocates 2260 Baseline Road, Suite 200 Boulder, CO 80302
7	Lisa Malagon Gregory Bemosky Arizona Public Service Company Post Office Box 53999 MS 9708 Phoenix, AZ 85072	Chiyere Osuala Jill Tauber Earth Justice - Washington DC Office 1625 Massachusetts Avenue Suite 702 Washington, DC 20036
8	Robyn Interpreter Susan B. Montgomery Montgomery & Interpreter, PLC 4835 East Cactus Road, Suite 210 Scottsdale, AZ 85254	Jerry Payne COOPERATIVE INTERNATIONAL FORESTRY 333 Broadway SE Albuquerque, NM 87102
9	Creden Huber Sulphur Springs Valley Electric Cooperative, Inc. 311 East Wilcox Drive Sierra Vista, AZ 85635	Dan Austin COMVERGE, INC. 6509 West Frye Road, Suite 4 Chandler, AZ 85226
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		

1	Troy Anatra COMVERGE, INC. 120 Eagle Rock Avenue, Suite 190 East Hanover, NJ 07936	Laure E. Sanchez NATURAL RESOURCES DEFENSE COUNCIL 111 Sutter Street, 20th Floor San Francisco, CA 94104
2		
3	Greg Pins WELHOME 528 Cameron Street Atlanta, GA 30312	Amanda Ormond THE ORMOND GROUP, LLC 7650 South McClintock Drive, Suite 103-282 Tempe, AZ 85283
4		
5		
6	Kevin Lauckner Director, Business Development HONEYWELL SMART GRID SOLUTIONS 1280 Kemper Meadow Drive Cincinnati, OH 45240	Giancarlo Estrada 3030 North 3rd Street, Suite 770 Phoenix, AZ 85012-3074
7		
8		
9	ARIZONA ELECTRIC POWER COOPERATIVE, INC. PO Box 670 Benson, AZ 85602	Timothy M. Hogan ARIZONA CENTER FOR LAW IN THE PUBLIC INTEREST 202 West McDowell Road, Suite 153 Phoenix, AZ 85004 Attorneys for SWEEP
10		
11	DUNCAN VALLEY ELECTRIC COOPERATIVE, INC. PO Box 440 Duncan, AZ 85543	Sandy Bahr SIERRA CLUB-GRAND CANYON CHAPTER 202 East McDowell Road, Suite 277 Phoenix, AZ 85004
12		
13		
14	THE MORENCI WATER AND ELECTRIC COMPANY PO Box 68 Morenci, AZ 85540	Kevin C. Higgins ENERGY STRATEGIES, LLC 215 South State Street, Suite 200 Salt Lake City, UT 84111
15		
16	ALLIANT GAS, LLC 200 West Longhorn Road Payson, AZ 85541	Joshua Rosen SOUTHWEST SOLAR TECHNOLOGIES, INC. 4148 North Arcadia Drive Phoenix, AZ 85004
17		
18	Michael A. Curtis William P. Sullivan CURTIS, GOODWIN, SULLIVAN, UDALL & SCHWAB, PLC 501 East Thomas Road Phoenix, AZ 85012-3205	Jay Moyes MOYES SELLERS & SIMS, LTD Viad Corporate Center 1850 North Central Avenue, Suite 1100 Phoenix, AZ 85004
19		
20		
21	Jennifer A. Cranston GALLAGHER & KENNEDY, PA 2575 East Camelback Road Phoenix, AZ 85016	
22		
23		

1	Karen Haller Justin Brown	Marcus Middleton COPPER MARKET, INC. P.O. Box 245 Badgad, AZ 86321
2	SOUTHWEST GAS CORP. P.O. Box 98510	
3	5241 Spring Mountain Road Las Vegas, NV 89193-8510	Scott Canty THE HOPI TRIBE P.O. Box 123 Kykotsmovi, AZ 86039
4	Mona Tierney-Lloyd	
5	ENERNOC, INC. P.O. Box 378	
6	Cayucos, CA 93430	Donna M. Bronski SCOTTSDALE CITY ATTORNEY'S OFFICE 3939 North Drinkwater Boulevard Scottsdale, AZ 85251
7	Ladel Laub DIXIE-ESCALANTE RURAL ELECTRIC ASSOCIATION, INC.	
8	71 East Highway 56 Loa, UT 84747	Jerry Coffey Erick Bonner Rebecca Turner
9		GILA RIVER POWER, LP 202 North Franklin Street Tampa, FL 33602
10	Carl Albrecht GARKANE ENERGY COOPERATIVE, INC. P.O. Box 465 Loa, UT 84747	
11		
12	Michael Fletcher COLUMBUS ELECTRIC COOPERATIVE, INC. P.O. Box 631 Deming, NM 88031	Paul R. Michaud MICHAUD LAW FIRM, PLC 46 Eastham Bridge Road East Hampton, CT 06424
13		
14		Rob Mongrain ARCADIS U.S., INC. 4646 East Van Buren Street, Suite 300 Phoenix, AZ 85008
15	Richard Adkerson AJO IMPROVEMENT CO. P.O. Drawer 9 Ajo, AZ 85321	
16		Steven M. Olea Director, Utilities Division Arizona Corporation Commission 1200 West Washington Street Phoenix, AZ 85007
17	Jeffrey Waner K.R. SALINE & ASSOCIATES, PLC 160 North Pasadena, Suite 101 Mesa, AZ 85201	
18		Janice M. Alward Chief, Legal Division Arizona Corporation Commission 1200 West Washington Street Phoenix, AZ 85007
19		
20	GRAHAM COUNTY UTILITIES, INC. P.O. Drawer B Pima, AZ 85543	
21		
22		
23		

1 Dwight Nodes
Acting Chief, Hearing Division
2 Arizona Corporation Commission
1200 West Washington Street
3 Phoenix, AZ 85007

4  _____

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23