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BEFORE THE ARIZONA CORPORATION

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COMMISSIONERS

BOB STUMP - Chairman  
GARY PIERCE  
BRENDA BURNS  
BOB BURNS  
SUSAN BITTER SMITH

2013 AUG 26 A 8:31

AZ CORP COMMISSION  
DOCKET CONTROL

IN THE MATTER OF THE APPLICATION OF  
ARIZONA PUBLIC SERVICE COMPANY  
FOR APPROVAL OF NET METERING COST  
SHIFT SOLUTION.

DOCKET NO. E-01345A-13-0248

**STAFF'S NOTICE OF FILING DATA  
REQUESTS AND RESPONSES**

On August 21, 2013 Commissioner Susan Bitter-Smith requested that the parties file all data requests and responses in this docket. Arizona Corporation Commission Staff ("Staff") hereby files the data requests it has issued and the responses it has generated to date.

RESPECTFULLY SUBMITTED this 26<sup>th</sup> day of August 2013.

Maureen A. Scott, Senior Staff Counsel  
Charles H. Hains, Attorney  
Matthew Laudone, Attorney  
Legal Division  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007  
(602) 542-3402

Original and thirteen (13) copies  
of the foregoing filed this  
26<sup>th</sup> day of August 2013 with:

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

Arizona Corporation Commission

**DOCKETED**

AUG 26 2013

DOCKETED BY *ne*

1 Copy of the foregoing mailed this  
26<sup>th</sup> day of August 2013 to:

2 Thomas A. Loquvam  
3 Deborah R. Scott  
4 Pinnacle West Capital Corporation  
400 North 5<sup>th</sup> Street, MS 8695  
Phoenix, Arizona 85004  
5 Attorney for Arizona Public Service Company  
thomas.loquvam@pinnaclewest.com;  
6 deb.scott@pinnaclewest.com

7 Lewis M. Levenson  
1308 East Cedar Lane  
8 Payson, Arizona 85541  
equality@centurylink.net

9 Anne Smart, Executive Director  
10 Alliance for Solar Choice  
45 Fremont Street, 32<sup>nd</sup> Floor  
11 San Francisco, California 94105  
anne@allianceforsolarchoice.com

12 Garry D. Hays  
13 Law Offices of Garry D. Hays, P.C.  
1702 East Highland Avenue, Suite 204  
14 Phoenix, Arizona 85016  
Attorney for Arizona Solar Deployment  
15 Alliance  
ghays@lawgdh.com

16 Greg Patterson  
17 916 West Adams, Suite 3  
Phoenix, Arizona 85007  
18 Attorney for Arizona Competitive Power  
Alliance  
19 greg@azcpa.org

20 Patty Ihle  
304 East Cedar Mill Road  
21 Star Valley, Arizona 85541  
apattywack@yahoo.com

22 Michael W. Patten  
23 Jason Gellman  
Roshka DeWulf & Patten, PLC  
24 One Arizona Center  
400 East Van Buren, Suite 800  
25 Phoenix, Arizona 85004  
Attorneys for Tucson Electric Power  
26 Company and UNS Electric, Inc.  
mpatten@rdp-law.com  
27 jgellman@rdp-law.com

Bradley S. Carroll  
Kimberly A. Ruht  
Tucson Electric Power Company  
88 East Broadway Boulevard, MS HQE910  
Post Office Box 711  
Tucson, Arizona 85702  
bcarroll@tep.com  
kruht@tep.com

Daniel W. Pozefsky, Chief Counsel  
Residential Utility Consumer Office  
1110 West Washington, Suite 220  
Phoenix, Arizona 85007  
dpozefsky@azruco.gov

John Wallace  
Grand Canyon State Electric Cooperative  
Association, Inc.  
2210 South Priest Drive  
Tempe, Arizona 85282  
jwallace@gcseca.coop

Court S. Rich  
Rose Law Group PC  
6613 North Scottsdale Road, Suite 200  
Scottsdale, Arizona 85250  
jwallace@gcseca.coop

Todd G. Glass  
Keene M. O'Connor  
Wilson Sonsini Goodrich & Rosati, PC  
701 Fifth Avenue, Suite 500  
Seattle, Washington 98104  
tglass@wsgr.com

Hugh L. Hallman  
Hallman & Affiliates, PC  
2011 North Campo Alegre Road  
Suite 100  
Tempe, Arizona 85281  
Attorney for The Alliance for Solar Choice  
hallmanlaw@pobox.com



COMMISSIONERS  
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GARY PIERCE  
BRENDA BURNS  
BOB BURNS  
SUSAN BITTER SMITH



JODI JERICH  
Executive Director

ARIZONA CORPORATION COMMISSION

August 14, 2013

*Via E-mail and United States Mail*  
[lhuber@azruco.gov](mailto:lhuber@azruco.gov)

Daniel W. Pozefsky  
Lon Huber  
Residential Utility Consumer Office  
1110 West Washington, Suite 220  
Phoenix, Arizona 85007

Re: Staff's Responses to Residential Utility Consumer Office's First Set of Data Requests - Docket No. E-01345A-13-0248

Dear Messrs. Pozefsky and Huber:

Enclosed are Staff's responses to Residential Utility Consumer Office's First Set of Data Requests to the Arizona Corporation Commission Staff in the above-referenced matter.

Please do not hesitate to contact me if you have any questions regarding the attached.

Sincerely,

A handwritten signature in black ink, appearing to read "Maureen Scott".

Maureen A. Scott, Senior Staff Counsel  
Charles H. Hains, Attorney  
Matthew Laudone, Attorney  
Legal Division  
(602) 542-3402

MAS:CHH:ML:klc

Attachment

**ARIZONA CORPORATION COMMISSION STAFF'S RESPONSES TO  
RESIDENTIAL UTILITY CONSUMER OFFICE'S  
FIRST SET OF DATA REQUESTS  
DOCKET NO. E-01345A-13-0248  
August 14, 2013**

- 1.01
- a. Please provide a complete copy of all data requests issued by the Commission Staff to all parties in this matter. Provide these data requests in both electronic and hard copy form.
  - b. Please provide a copy of all the parties' responses to all data requests issued by Staff. Please provide these data responses in both electronic and hard copy form.
  - c. This data request is continuing, and your answers or any documents supplied in response to this data request should be supplemented with any additional information or documents that come to your attention after you have provided you initial responses.

**RESPONSE:**

- a. Please see attached.
- b. Please see attached.

**RESPONDENT:** Constance Fitzsimmons, Paralegal, Legal Division, Arizona Corporation Commission, 1200 West Washington, Phoenix, Arizona 85007.

**COMMISSIONERS**  
BOB STUMP - Chairman  
GARY PIERCE  
BRENDA BURNS  
BOB BURNS  
SUSAN BITTER SMITH



JODI JERICH  
Executive Director

**ARIZONA CORPORATION COMMISSION**

July 31, 2013

Thomas A. Loquvam  
Pinnacle West Capital Corporation  
400 North 5<sup>th</sup> Street, MS 8695  
Phoenix, Arizona 85004

*Via E-mail and United States Mail*  
Thomas.Loquvam@pinnaclewest.com

Re: Staff's First Set of Data Requests to Arizona Public Service Company  
Docket No. E-01345A-13-0248

Dear Mr. Loquvam:

Please treat this as Staff's First Set of Data Requests to Arizona Public Service Company in the above-referenced matter.

For purposes of this data request set, the words "APS," "Company," "you," and "your" refer to Arizona Public Service Company and any representative, including every person and/or entity acting with, under the control of, or on behalf of Arizona Public Service Company. For each answer, please identify by name, title, and address each person providing information that forms the basis for the response provided.

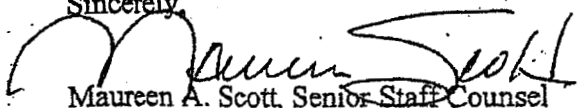
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Please respond within ten calendar days of your receipt of the copy of this letter. However, if you require additional time, please let us know.

*Please provide one hard copy as well as searchable PDF, DOC or EXCEL files (via email or electronic media) of the requested data directly to each of the following addressees via overnight delivery services to:*

- (1) Richard Lloyd, Utilities Division, Arizona Corporation Commission, 1200 West Washington Street, Phoenix, Arizona 85007, [RLloyd@azcc.gov](mailto:RLloyd@azcc.gov).
- (2) Connie Fitzsimmons, Paralegal, Legal Division, Arizona Corporation Commission, 1200 West Washington Street, Phoenix, Arizona 85007, [cfitzsimmons@azcc.gov](mailto:cfitzsimmons@azcc.gov).

Sincerely,

  
Maureen A. Scott, Senior Staff Counsel  
Charles H. Hains, Attorney  
Matthew Laudone, Attorney  
Legal Division  
(602) 542-3402

MAS: RL:klc:mam  
Enclosure

ARIZONA CORPORATION COMMISSION  
STAFF'S FIRST SET OF DATA REQUESTS TO  
ARIZONA PUBLIC SERVICE COMPANY

Docket No. E-01345A-13-0248

July 31, 2013

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**Subject: All information responses should ONLY be provided in searchable PDF, DOC or EXCEL files via email or electronic media.**

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**BENEFITS OF SOLAR**

- RL 1-1: Has DG and or EE pushed out the date of your next generation unit? Please explain.
- RL 1-2: If DG does defer and avoid generation, how should DG customers be reimbursed?
- RL 1-3: Please provide a map (in ARCGIS shape file format) that depicts all current customer sited distributed generation sites within APS's service territory together with a postal zip code boundary overlay. Differentiate between DG technology type (i.e. solar pv, wind, geothermal, biogas, etc.) and whether the site is a residential or commercial installation
- RL 1-4: Please provide your estimate of the ancillary benefits of renewable DG noted in the Crossborder study, including price mitigation, grid security, and economic development. Provide a discussion of how these benefits are quantified and your assessment of the value of these benefits.

**CROSSBORDER ASSUMPTIONS:**

- RL 1-5: Please provide a response to Crossborder Energy's criticism of SAIC's production cost modeling technique and the results obtained.
- RL 1-6: Crossborder estimates the costs of commercial DG on APS' system to be between 9.2 to 11.5 cents and the costs of residential DG on APS' system to be between 19.9 to 20.5 cents. Crossborder then estimates a weighted average cost (13.7 cents) for all solar DG on APS' system, assuming the current mix of DG (44% residential versus 56% commercial) will persist in the future. Is it reasonable to assume the current DG mix will persist in the future given current trends? [e.g. 2012 and 2013 residential versus commercial installed capacity]
- RL 1-7: Since APS has limited its proposed net metering solution to residential DG, should we compare the 21.5 to 24.7 cents of benefits to the blended DG cost rate of 13.7 cents per kWh, or to the 19.9 to 20.5 cent cost estimate for residential solar DG?
- RL 1-8: Is it accurate to say that Crossborder estimates that APS realizes net benefits of 10 to 14.5 cents per kWh for commercial DG but only 1 to 3.8 cents per kWh for residential DG? If so, would the adoption of either of APS' proposed net metering solutions for residential customers have the effect of bringing the net benefits of future residential DG more in line with the net benefits of commercial DG utilizing Crossborder's analysis?

**ARIZONA CORPORATION COMMISSION  
STAFF'S FIRST SET OF DATA REQUESTS TO  
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**SAIC ASSUMPTIONS:**

- RL 1-9:** How does DG change APS' ability to make off-system sales? How are these proceeds returned to APS' ratepayers/shareholders?
- RL 1-10:** How does incremental DG affect the capacity needed for APS to satisfy its planning reserve margin requirement?
- RL 1-11:** Why does APS choose to discount future savings to ratepayers at the utility investors' discount rate, rather than a societal discount rate?
- RL 1-12:** What load and resource forecast is used in the SAIC study? Please provide loads and resources anticipated for each future year (e.g. 2014 through 2025).
- RL 1-13:** In the SAIC study, are fuel transport costs counted as fixed or variable costs? In rates, is this included in the energy portion of the bill?
- RL 1-14:** What is the confidence interval associated with APS's prediction of future load forecasts?
- RL 1-15:** What is the confidence interval associated with APS's prediction of future natural gas prices?
- RL 1-16:** Is the load shape utilized in the SAIC study consistent with APS's prediction of near-term changes to that load shape (as created by increased DG penetration)?
- RL 1-17:** How will assumptions about APS' planned resource mix affect the marginal cost of power?
- RL 1-18:** Why did the SAIC study choose to use the average system line losses instead of a marginal value as utilized in the Crossborder energy study? Is the Crossborder study approach appropriate and accurate?
- RL 1-19:** Why did the SAIC study choose to utilize a 13-year "snap-shot" study period versus a 20-year timeframe?
- RL 1-20:** Please provide a response to the Crossborder Energy's criticism of SAIC using "blocks" of solar resources to determine capacity value.

**ARIZONA CORPORATION COMMISSION  
STAFF'S FIRST SET OF DATA REQUESTS TO  
ARIZONA PUBLIC SERVICE COMPANY  
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- RL 1-21:** Please provide your estimate of the ancillary benefits of renewable DG noted in the Crossborder study, including price mitigation, grid security, and economic development. Provide a discussion of how these benefits are quantified and your assessment of the value of these benefits.
- RL 1-22:** What dollar value do you ascribe to the environmental benefits (i.e. reduced CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and PM<sub>10</sub> emissions, and less water consumption) of solar DG?
- RL 1-23:** Please provide a rationale for how the capacity losses value of 11.7% (SAIC presentation April, 2013, Slide 59) was determined?
- RL 1-24:** How is the customer's capital investment valued in the SAIC model?
- RL 1-25:** How are O&M costs of customer-sited DG valued in the SAIC model?
- RL 1-26:** Please provide a response to Crossborder Energy's criticism of SAIC's production cost modeling technique and the results obtained.
- RL 1-27:** Please provide a response to the production cost modeling methodology utilized in the Crossborder study

**COSTS OF SOLAR DG**

- RL 1-28:** What is annual revenue APS receives from its residential solar customers?
- RL 1-29:** What would annual revenue have been from those customers had they not had solar?
- RL 1-30:** Provide support and explanation for APS' estimated residential DG costs.
- RL 1-31:** Describe the usage profile of a typical residential DG customer.

**SOLAR PPA QUESTIONS**

- RL 1-32:** APS asserts that it could build equivalent sized solar DG resources at a lower cost than a similar-sized aggregation of customer-owned and sited DG. Please provide documentation (actual RFP proposals or service offers) to support this assertion.



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- RL 1-33:** APS asserts that it can install solar PV (via utility ownership or PPA) on the subtransmission grid and produce all the same benefits estimated for solar DG in the Crossborder study at a lower cost than it would pay for the same capacity of solar DG. Please provide documentation (actual RFP proposals or service offers) to support this assertion.
- RL 1-34:** Please explain why such systems will produce the same benefits as customer-sited solar DG.
- RL 1-35:** Would central planning and the targeted deployment of subtransmission level PV, in a manner described by APS, likely produce greater value on a capacity basis than customer-sited solar DG? Wouldn't this allow for APS to deploy solar PV where it has the greatest opportunity to defer distribution and transmission capital investments compared to the current regime of solar DG, where customers, not APS decide when and where to deploy solar PV?

**PROPOSED SOLUTION QUESTIONS**

- RL 1-36:** The Net Metering Rules require the installation of bidirectional meters at all net metered facilities. Do these bidirectional meters measure customer demand? If not, what additional metering equipment would be necessary for utilization of rates with demand-based charges? What is the average cost of this additional equipment?
- RL 1-37:** What is the average monthly demand charge for APS' ECT-tou customers?
- RL 1-38:** What would the estimated average monthly demand charge be for new solar customers on the ECT-tou rate?
- RL 1-39:** What challenges would arise if the Commission allowed grandfathering to run with the property?
- RL 1-40:** Would APS be opposed to addressing this issue temporarily now and more permanently in its next rate case?
- RL 1-41:** Did APS perform any cost-benefit analyses of the proposed net metering solutions? If so, please submit the results of these analyses.
- RL 1-42:** Please provide your rationale behind the statement that the total costs shifted to non-solar customers could increase by an estimated \$6-10 million annually. (Page 9). How is the high end of this range derived?

ARIZONA CORPORATION COMMISSION  
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- RL 1-43: Please provide your rationale behind the statement that the ACC's failure to act now on the instant application may preclude the Commission from grandfathering the use of net metering by customers that currently have solar installed on their homes. (Page 10).
- RL 1-44: Please provide the rationale with supporting details for the assertion on Page 18 of Mr. Miessner's testimony that "These flaws are so fundamental in nature that APS believes the Cross Border (sic) study does not merit serious consideration."
- RL 1-45: With regard to the LFCR discussed on Page 33 of Mr. Miessner's testimony, please provide details and a calculation of the power plant infrastructure costs and the fixed-budget public policy programs costs that will not be collected under the LFCR adjustor.
- RL 1-46: Are the solutions proffered in the instant application intended to be permanent solutions to the net metering cost shift issue, or a bridge solution until the next general rate case? If not, please describe your intended permanent solution(s).

Miscellaneous

- RL 1-47: Please provide an electronic copy of the instant application, including all tables, charts and spreadsheets. Files shall be in native format with all formulae intact and visible.
- RL 1-48: Please provide copy of all DRs from other parties and responses to those DRs.
- RL 1-49: APS asserts that the reason for proposing the Net Metering Cost Shift Solution under docket No. E-01345A-13-0248 is not related to lost revenues, but rather is a matter of customer fairness. Based on this assertion, if the Commission were to take no action on APS's proposed net metering solution, would APS be satisfied with allowing the financial implications of the proposal to be determined during the next general rate case, assuming that APS's financial requirements are satisfied in that rate case, exclusive of APS's fairness concerns?

**COMMISSIONERS**  
BOB STUMP - Chairman  
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JODI JERICH  
Executive Director

**ARIZONA CORPORATION COMMISSION**

July 31, 2013

Thomas A. Loquvam  
Pinnacle West Capital Corporation  
400 North 5<sup>th</sup> Street, MS 8695  
Phoenix, Arizona 85004

*Via E-mail and United States Mail*  
Thomas.Loquvam@pinnaclewest.com

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Sincerely,

A handwritten signature in black ink, appearing to read "Maureen Scott".

Maureen A. Scott, Senior Staff Counsel  
Charles H. Hains, Attorney  
Matthew Laudone, Attorney  
Legal Division  
(602) 542-3402

MAS: RL:klc:mam  
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- RL 1-39:** What challenges would arise if the Commission allowed grandfathering to run with the property?
- RL 1-40:** Would APS be opposed to addressing this issue temporarily now and more permanently in its next rate case?
- RL 1-41:** Did APS perform any cost-benefit analyses of the proposed net metering solutions? If so, please submit the results of these analyses.
- RL 1-42:** Please provide your rationale behind the statement that the total costs shifted to non-solar customers could increase by an estimated \$6-10 million annually. (Page 9). How is the high end of this range derived?

**ARIZONA CORPORATION COMMISSION  
STAFF'S FIRST SET OF DATA REQUESTS TO  
ARIZONA PUBLIC SERVICE COMPANY  
Docket No. E-01345A-13-0248  
July 31, 2013**

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**Subject: All information responses should ONLY be provided in searchable PDF, DOC or EXCEL files via email or electronic media.**

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- RL 1-43:** Please provide your rationale behind the statement that the ACC's failure to act now on the instant application may preclude the Commission from grandfathering the use of net metering by customers that currently have solar installed on their homes. (Page 10).
- RL 1-44:** Please provide the rationale with supporting details for the assertion on Page 18 of Mr. Miessner's testimony that "These flaws are so fundamental in nature that APS believes the Cross Border (sic) study does not merit serious consideration."
- RL 1-45:** With regard to the LFCR discussed on Page 33 of Mr. Miessner's testimony, please provide details and a calculation of the power plant infrastructure costs and the fixed-budget public policy programs costs that will not be collected under the LFCR adjustor.
- RL 1-46:** Are the solutions proffered in the instant application intended to be permanent solutions to the net metering cost shift issue, or a bridge solution until the next general rate case? If not, please describe your intended permanent solution(s).

**Miscellaneous**

- RL 1-47:** Please provide an electronic copy of the instant application, including all tables, charts and spreadsheets. Files shall be in native format with all formulae intact and visible.
- RL 1-48:** Please provide copy of all DRs from other parties and responses to those DRs.
- RL 1-49:** APS asserts that the reason for proposing the Net Metering Cost Shift Solution under docket No. E-01345A-13-0248 is not related to lost revenues, but rather is a matter of customer fairness. Based on this assertion, if the Commission were to take no action on APS's proposed net metering solution, would APS be satisfied with allowing the financial implications of the proposal to be determined during the next general rate case, assuming that APS's financial requirements are satisfied in that rate case, exclusive of APS's fairness concerns?





## RESIDENTIAL UTILITY CONSUMER OFFICE

[www.azrucoco.gov](http://www.azrucoco.gov)

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1110 WEST WASHINGTON • SUITE 220 • PHOENIX, ARIZONA 85007 • PHONE: (602) 364-4835 • FAX: (602) 364-4846

Janice K. Brewer  
Governor

Patrick J. Quinn  
Director

August 13, 2013

Maureen Scott  
Legal Division  
Arizona Corporation Commission  
1200 W. Washington Street  
Phoenix, AZ 85007

**VIA ELECTRONIC MAIL  
VIA U.S. MAIL**

Re: RUCO's First Set of Data Requests to ACC Staff  
Arizona Public Service Company Net Metering Cost Shift Solution  
Docket No. E-01345A-13-0248

Dear Ms. Scott:

Attached is the Residential Utility Consumer Office's ("RUCO") First Set of Data Requests to the Arizona Corporation Commission ("Staff"). RUCO should expect to receive the Staff's response on or before Friday, August 23, 2013.

Please indicate the person or persons responsible for compilation of the information provided in response to these Data Requests, and the witness to whom questions regarding that information should be directed. Please see the attached list of definitions and explanations for further instructions.

These requests are continuing in nature. Accordingly, the Staff is requested to supplement prior responses if it receives or generates additional information, reports, or other data within the scope of these data requests between the time of the original response and the hearing.



RUCO's First Set of Data Requests  
August 13, 2013  
Page 2

If any request is considered overly burdensome or would require the production of a voluminous amount of material, contact me at RUCO as soon as possible to discuss clarification or possible limits to the Staff's response.

Please provide one copy of the requested data directly to:

Lon Huber  
Residential Utility Consumer Office  
1110 W. Washington, Suite 220  
Phoenix, AZ 85007  
[lhuber@azruco.gov](mailto:lhuber@azruco.gov)

If you have any questions, please do not hesitate to contact me.

Thank you for your time and cooperation.

Very truly yours,

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke, positioned above the printed name.

Daniel W. Pozefsky  
Chief Counsel

## DEFINITIONS AND EXPLANATIONS

### 1. Document.

As used herein, the term "document" shall mean any written, recorded, graphic, or other medium, however that medium was produced, reproduced, or stored.

To the extent that a response to any of these requests is answered by way of a computer printout, please explain each variable contained on the printout.

To the extent that a specific document, workpaper or information does not exist as requested, but similar documents, information or workpapers exist, please provide the latter.

### 2. Identify, Identity, or Identification.

As used herein, the term "identify," "identity," or "identification," when used in reference to a document, requests that the respondent state the type of document, as well as its present location and custodian.

If any such document was, but is no longer, in your possession or subject to your control, describe its disposition and current status. If destroyed or discarded pursuant to a retention policy, provide a copy of the retention policy.

### 3. Explain.

As used herein, the term "explain" requests a narrative discussion, in sentence form, that provides a responsive, comprehensive and complete answer to the stated request.

### 4. Orderly Response.

Wherever it is reasonably practicable, please produce documents in a manner that will facilitate their identification with the particular request or requests to which they are responsive.

**5. Partial Production.**

Whenever a document is not produced in full, state with particularity the reason or reasons it is not produced in full, and describe with as much particularity as possible, those portions of the document which are not produced.

**6. Documents Withheld.**

If any documents are withheld because the request therefor is objected to on the grounds of privilege, work-product, confidentiality, or any other basis, specify with particularity:

- a. The reason for withholding, i.e., the nature of and legal basis for the asserted privilege;
- b. The parties to the document (e.g., addressors and addressees), and all persons to whom the document was distributed, shown, or explained;
- c. The date of the document;
- d. The subject matter of the document;
- e. The length of the document;
- f. The location of the document; and
- g. The custodian of the document.

Arizona Public Service Company  
Net Metering Cost Shift Solution

Docket No. E-01345A-13-0248

RUCO's First Set Of Data Requests to ACC Staff

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- 1.01
- a. Please provide a complete copy of all data requests issued by the Commission Staff to all parties in this matter. Provide these data requests in both electronic and hard copy form.
  - b. Please provide a copy of all the parties' responses to all data requests issued by Staff. Please provide these data responses in both electronic and hard copy form.
  - c. This data request is continuing, and your answers or any documents supplied in response to this data request should be supplemented with any additional information or documents that come to your attention after you have provided your initial responses.

ROSE  
LAW GROUP  
pc

COURT :  
6613 N. Scottsdale Road,  
Scottsdale, Ariz  
Phone 480.505.3937 Fax 480  
CRich@RoseLawGroup.com  
www.RoseLawGroup.com

August 15, 2013

**SENT BY ELECTRONIC MAIL**

Original sent by regular U.S. mail

Richard Lloyd  
Arizona Corporation Commission  
1200 W. Washington Street  
Phoenix, Arizona 85007  
rlloyd@azcc.gov

Connie Fitzsimmons  
Arizona Corporation Commission  
1200 W. Washington Street  
Phoenix, Arizona 85007  
cfitzsimmons@azcc.gov

**RE: SEIA's First Set of Data Requests to Arizona Corporation Commission Staff  
Docket No. E-01345A-13-0248**

Dear Mr. Lloyd and Ms. Fitzsimmons:

Please find enclosed the First Set of Data Requests from the Solar Energy Industries Association ("SEIA") to Staff in the above-referenced matter. These requests are submitted pursuant to SEIA's intervention in APS's Application for Net Metering Cost Shift Solution before the Arizona Corporation Commission (the "Commission").

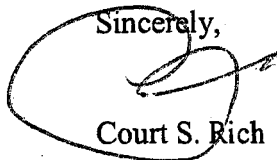
For purposes of this data request set, the words "Company," "you," and "your" refer to Staff, and any representative, including every person and/or entity acting with, under the control of, or on behalf of the Commission. For each answer, please identify, by name, title, and address each person providing the information that forms the basis for the response provided.

These data requests are continuing, and your answers or any documents supplied in response to these data requests should be supplemented with any additional information or documents that come to your attention after you have provided your initial responses. Please respond within **ten (10)** business days. Should you require additional time, please contact me immediately.

Please send electronic and regular delivery service of your responses, including all attachments, to: Court S. Rich, Rose Law Group pc, 6613 N. Scottsdale Road, Suite 200, Scottsdale, Arizona 85250, e-mail: crich@roselawgroup.com.

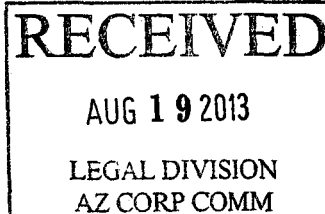
Should you have any questions or comments, please feel free to contact me directly at 480-505-3937.

Sincerely,



Court S. Rich

Enclosure

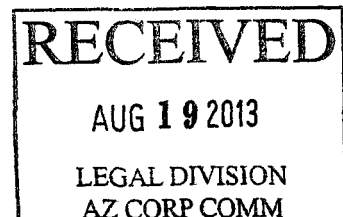


**SEIA'S FIRST SET OF DATA REQUESTS  
TO STAFF  
Docket No. E-01345A-13-0248**

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SEIA 1.1 Provide copies of any and all Data Requests served upon Commission Staff from any other Party, including the Applicant, in the above referenced docket and provide the complete responses provided to any such Data Requests.

SEIA 1.2 Provide copies of any and all Data Requests served by Commission Staff upon any other Party, including the Applicant, in the above referenced docket and provide the complete responses provided to any such Data Requests.



COMMISSIONERS  
BOB STUMP - Chairman  
GARY PIERCE  
BRENDA BURNS  
BOB BURNS  
SUSAN BITTER SMITH



JODI JERICH  
Executive Director

ARIZONA CORPORATION COMMISSION

August 1, 2013

Mr. Court S. Rich  
ROSE LAW GROUP PC  
6613 North Scottsdale Road, Suite 200  
Scottsdale, Arizona 85250

*Via E-mail and United States Mail*  
[crich@roselawgroup.com](mailto:crich@roselawgroup.com)

Re: Staff's First Set of Data Requests to Solar Energy Industries Association  
Docket No. E-01345A-13-0248

Dear Mr. Rich:

Please treat this as Staff's First Set of Data Requests to Solar Energy Industries Association in the above-referenced matter.

For purposes of this data request set, the words "SEIA," "Company," "you," and "your" refer to Solar Energy Industries Association and any representative, including every person and/or entity acting with, under the control of, or on behalf of Solar Energy Industries Association. For each answer, please identify by name, title, and address each person providing information that forms the basis for the response provided.

These data requests are continuing, and your answers or any documents supplied in response to these data requests should be supplemented with any additional information or documents that come to your attention after you have provided your initial responses.

Please respond within ten calendar days of your receipt of the copy of this letter. However, if you require additional time, please let us know.

***Please provide one hard copy as well as searchable PDF, DOC or EXCEL files (via email or electronic media) of the requested data directly to each of the following addressees via overnight delivery services to:***

- (1) Richard Lloyd, Utilities Division, Arizona Corporation Commission, 1200 West Washington Street, Phoenix, Arizona 85007, [rlloyd@azcc.gov](mailto:rlloyd@azcc.gov).
- (2) Connie Fitzsimmons, Paralegal, Legal Division, Arizona Corporation Commission, 1200 West Washington Street, Phoenix, Arizona 85007, [cfitzsimmons@azcc.gov](mailto:cfitzsimmons@azcc.gov).

Sincerely,

Maureen A. Scott, Senior Staff Counsel  
Charles H. Hains, Attorney  
Matthew Laudone, Attorney  
Legal Division  
(602) 542-3402

MAS:CCH:ML:klc  
Enclosure



**ARIZONA CORPORATION COMMISSION  
STAFF'S FIRST SET OF DATA REQUESTS TO  
SOLAR ENERGY INDUSTRIES ASSOCIATION  
Docket No. E-01345A-13-0248  
August 1, 2013**

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**Subject: All information responses should ONLY be provided in searchable PDF, DOC or EXCEL files via email or electronic media.**

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**BENEFITS OF SOLAR**

**RL 1-1:** Please respond to Arizona Public Service Company's ("APS") assertion that Crossborder's estimate of 21.5 to 23.7 cents per kWh (\$2014) of benefits from Solar DG on the APS system is twice the amount of APS' current cost of service? Is it realistic to believe that solar DG will save APS twice the amount of its current cost of service?

**CROSBORDER ASSUMPTIONS:**

**RL 1-2:** Please provide your rationale for using a 50% capacity value for DG, and for not showing any decline in capacity value as penetration levels increase.

**RL 1-3:** How did you arrive at a REC value of 4.5 cents? How are market costs impacted as market prices increase?

**RL 1-4:** When is the appropriate time to begin counting capacity savings from distributed generation?

**RL 1-5:** What if solar does not defer as much generation as previously thought? How will ratepayers be impacted?

**RL 1-6:** Why use a Combustion Turbine as the marginal unit for energy?

**RL 1-7:** Is Crossborder obtaining a much higher levelized rate for generation than what is included in APS's IRP plan? If so, why?

**RL 1-8:** Please provide details of your rationale for the statement "...the costs for APS ratepayers will be lower if it is customers, instead of APS, who install renewable [DG] generation."

**RL 1-9:** How is the customer's capital investment valued in the Crossborder model?

**RL 1-10:** How are O&M costs of customer-sited DG valued in the Crossborder model?

**RL 1-11:** Is targeted deployment of wholesale DG of more value than rooftop solar?

**RL 1-12:** How do you address APS's criticism regarding the threshold reasonableness check?

**ARIZONA CORPORATION COMMISSION  
STAFF'S FIRST SET OF DATA REQUESTS TO  
SOLAR ENERGY INDUSTRIES ASSOCIATION  
Docket No. E-01345A-13-0248  
August 1, 2013**

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**Subject: All information responses should ONLY be provided in searchable PDF, DOC or EXCEL files via email or electronic media.**

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**RL 1-13:** The Crossborder study utilizes the Ratepayer Impact Measure ("RIM") test to calculate cost / benefit valuations. Please perform an analysis utilizing the five (5) traditional utility cost-benefit tests (i.e., Total Resource Cost, Ratepayer Impact Method, Societal Cost, Utility Cost, and Participant Cost) and present the results in a table comparing the five methods. Clearly explain your assumptions for each test.

**RL 1-14:** If electric system costs are collected through a utility's energy charge, how should the utility collect those fixed costs when it sells less energy because of a Commission mandate?

**SAIC ASSUMPTIONS:**

**COSTS OF SOLAR DG**

**RL 1-15:** Crossborder estimates the costs of commercial DG on APS' system to be between 9.2 to 11.5 cents and the costs of residential DG on APS' system to be between 19.9 to 20.5 cents. Crossborder then estimates a weighted average cost (13.7 cents) for all solar DG on APS' system, assuming the current mix of DG (44% residential versus 56% commercial) will persist in the future.

**RL 1-16:** Is it reasonable to assume the current DG mix will persist in the future given current trends? [e.g. 2012 and 2013 residential versus commercial installed capacity]

**RL 1-17:** Since APS has limited its proposed net metering solution to residential DG, what is the applicable benefit to cost comparison, 21.5 to 24.7 cents to 13.7 cents per kWh, or 21.5 to 24.7 cents to 19.9 to 20.5 cents per kWh?

**RL 1-18:** Is it accurate to say that Crossborder estimates that APS realizes net benefits of 10 to 14.5 cents per kWh for commercial DG but only 1 to 3.8 cents per kWh for residential DG? If so, should APS make adjustments such that residential DG produces comparable net benefits to commercial DG?

**RL 1-19:** Does Crossborder dispute the cost estimates APS has produced for residential solar DG?

**ARIZONA CORPORATION COMMISSION  
STAFF'S FIRST SET OF DATA REQUESTS TO  
SOLAR ENERGY INDUSTRIES ASSOCIATION  
Docket No. E-01345A-13-0248  
August 1, 2013**

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**Subject: All information responses should ONLY be provided in searchable PDF, DOC or EXCEL files via email or electronic media.**

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**SOLAR PPA QUESTIONS**

- RL 1-20:** APS asserts that it can install solar PV (via utility ownership or PPA) on the subtransmission grid and produce all the same benefits estimated for Solar DG in the Crossborder study at less the cost that it would pay for the same capacity of solar DG. Does AriSEIA agree with APS' assertion that APS can install solar PV at the subtransmission level either through utility ownership or through a PPA in a manner that will produce the same benefits estimated for Solar DG in the Crossborder study?
- RL 1-21:** Does AriSEIA agree with APS' assertion that APS can acquire such a system at lower total cost than APS would otherwise pay for a comparable amount of Solar DG?
- RL 1-22:** Would central planning and the targeted deployment of subtransmission level PV, in a manner described by APS, likely produce greater value on a capacity basis than solar DG? Wouldn't this allow for APS to deploy solar PV where it has the greatest opportunity to defer distribution and transmission capital investments compared to the the current regime of Solar DG, where customers, not APS decide where to deploy Solar PV?
- RL 1-23:** Should APS pursue the benefits estimated for solar PV in the least expensive way?