#### COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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)	CASE NO.
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#### KENTUCKY SOLAR INDUSTRIES ASSOCIATION, INC. RESPONSE TO KENTUCKY POWER COMPANY'S DATA REQUESTS

Comes now the Kentucky Solar Industries Association, Inc. (KYSEIA), by and through

counsel, and submits its response to Kentucky Power Company's Data Requests.

Respectfully submitted,

Randal A. Strobo Clay A. Barkley David E. Spenard STROBO BARKLEY PLLC 239 S. Fifth Street, Suite 917 Louisville, Kentucky 40202 Phone: 502-290-9751 Facsimile: 502-378-5395 Email: rstrobo@strobobarkley.com Email: cbarkley@strobobarkley.com Email: dspenard@strobobarkley.com *Counsel for KYSEIA* 

#### NOTICE AND CERTIFICATION FOR FILING

Undersigned counsel provides notice that the electronic version of the paper has been submitted to the Commission by uploading it using the Commission's E-Filing System on this 2<sup>nd</sup> day of November, 2020, and further certifies that the electronic version of the paper is a true and accurate copy of each paper filed in paper medium. Pursuant to the Commission's March 16, 2020, and March 24, 2020, Orders in Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus Covid-19*, the paper, in paper medium, will be filed at the Commission's offices within 30 days of the lifting of the state of emergency.

Randal A. Strobo

#### **CERTIFICATE OF SERVICE**

Undersigned counsel certifies that it has transmitted on this 2<sup>nd</sup> day of November 2020, via electronic mail messages, a notice of the electronic filing of the response and the accompanying Read1st file for the electronic filing to the parties of record at the electronic mail addresses listed below. The Commission has not excused any party from electronic filing procedures for this case.

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Randal A. Strobo

# Witnesses Responsible:

James N. Van Nostrand/Justin Barnes

# Request No. 1

Please provide any and all electric utility cost of service studies, electric utility retail customer load research studies, and rate design calculations performed by KYSEIA witnesses Barnes or Van Nostrand.

# **Response:**

KYSEIA objects to this request because it is overly broad, unduly burdensome to the respondent, and unlikely to lead to the discovery of evidence relevant to this proceeding. Without waiving that objection, KYSEIA responds with the following.

James N. Van Nostrand has no such studies or calculations.

Justin R. Barnes has not performed electric utility cost of service studies or electric utility customer load research studies. With respect to "rate design calculations" KYSEIA attaches Mr. Barnes' workpapers that relate to rate design from proceedings in which he sponsored testimony during the last three years. Due to the volume of information associated with the request, Mr. Barnes' testimony from those proceedings may be accessed at the links below or in the listed attachments where a link is not available. The individual proceedings are listed below with descriptions at they appeared in Exhibit JRB-1.

**New Jersey Board of Public Utilities. Docket No. EO18101111**. September 2020. On behalf of Sunrun, Inc. Public Service Gas and Electric energy storage deployment plan proposal. Offered alternative proposal for a program utilizing non-utility owned energy storage assets under an aggregator model with elements for benefits sharing and ratepayer risk reduction.

Testimony: Attachment EO18101111 Sunrun Barnes Direct Testimony - PUBLIC Filed.pdf

Rate Design Calculations: Attachment EO18101111\_Barnes\_WP\_Table\_1.xlsx

**Virginia State Corporation Commission. Docket No. PUR-2020-00015.** July 2020. On behalf of Appalachian Voices. Appalachian Power Company general rate case. Analysis of the cost basis for the residential customer charge, the Company's winter declining block rate proposal, and a proposed Coal Asset Retirement Rider (Rider CAR) providing for advance collection of anticipated accelerated depreciation of coal generation assets. Provided an alternative residential customer charge

recommendation and an alternative rates proposal for addressing winter bill volatility for electric heating customers.

Testimony:

- PART 1: <u>https://scc.virginia.gov/docketsearch/DOCS/4\_%40t01!.PDF</u>
- PART 2: <u>https://scc.virginia.gov/docketsearch/DOCS/4\_%40%2501!.PDF</u>

Rate Design Calculations: Attachment PUR-2020-00015\_Barnes\_Workpapers.xlsx

**North Carolina Utilities Commission. Docket No. E-7 Sub 1219**. April 2020. On behalf of the North Carolina Sustainable Energy Association. Duke Energy Progress general rate case. Provided analysis of available rate options for electric vehicle charging and recommended the adoption of residential and non-residential EV-specific rate options and appropriate design characteristics for those rate options.

Testimony: <u>https://starw1.ncuc.net/NCUC/ViewFile.aspx?Id=83018b35-3ff3-4b5b-b332-f5da3db25442</u>

Rate Design Calculations: Attachment NC E-2\_Sub\_1219\_Barnes\_Workpapers.xlsx

**North Carolina Utilities Commission. Docket No. E-7 Sub 1214**. January 2020. On behalf of the North Carolina Sustainable Energy Association. Duke Energy Carolinas general rate case. Provided analysis of available rate options for electric vehicle charging and recommended the adoption of residential and non-residential EV-specific rate options and appropriate design characteristics for those rate options.

Testimony: <u>https://starw1.ncuc.net/NCUC/ViewFile.aspx?Id=4c24571c-4c27-4143-bb4f-52f00caff152</u>

Rate Design Calculations: None

**Virginia State Corporation Commission. Docket No. PUR-2019-00060.** November 2019. On behalf of Appalachian Voices. Old Dominion Power Company general rate case application. Analysis of the cost basis for the residential customer charge, proposal to change the residential customer charge from a monthly charge to a daily charge, and design of proposed customer green power program and utility owned commercial behind the meter solar proposal. Proposed modified optional rate structure for mid- to large-size non-residential customers with on-site solar and/or low load factors.

Testimony: <a href="https://scc.virginia.gov/docketsearch/DOCS/4jvy01!.PDF">https://scc.virginia.gov/docketsearch/DOCS/4jvy01!.PDF</a>

Rate Design Calculations: Attachment PUR\_2019\_00060\_Barnes\_Workpapers.xlsx

**Georgia Public Service Commission. Docket No. 42516.** October 2019. On behalf of Georgia Interfaith Power and Light, Southface Energy Institute, and Vote Solar. Georgia Power Company general rate case application. Analysis of the cost basis for the residential customer charge, the validity of the utility's minimum-intercept study, and a proposal to change the residential customer charge from a monthly charge to a daily charge.

Testimony:

- Direct Testimony: <u>https://psc.ga.gov/search/facts-document/?documentId=178641</u>
- Corrections: <a href="https://psc.ga.gov/search/facts-document/?documentId=178889">https://psc.ga.gov/search/facts-document/?documentId=178889</a>

Rate Design Calculations: Attachment GA\_42516\_Barnes\_Calculations\_Updated.xlsx

**Hawaii Public Utilities Commission. Docket No. 2018-0368**. July 2019. On behalf of the Hawaii PV Coalition. Hawaii Electric Light Company (HELCO) general rate case application. Provided analysis of HELCO's proposed changes to its decoupling rider to make the decoupling charge non-bypassable and the alignment of the proposed modifications with state policy goals and the policy rationale for decoupling.

Testimony: https://dms.puc.hawaii.gov/dms/DocumentViewer?pid=A1001001A19G26A85231C00 523

Rate Design Calculations: None

**New York Public Service Commission. Case No. 19-E-0065.** May 2019. On behalf of The Alliance for Solar Choice. Consolidated Edison (ConEd) general rate case application. Provided review and analysis of the competitive impacts and alignment with state policy of ConEd's energy storage, distributed energy resource management system, and earnings adjustment mechanism (EAM) proposals. Proposed model for improving the utilization of customer-sited storage in existing demand response programs and an alternative EAM supportive of utilization of third party-owned battery storage.

Testimony:

http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={9B2ABAF7-C4DB-4B9A-902F-286DD5AC777B}

Rate Design Calculations: None

**South Carolina Public Service Commission. Docket No. 2018-318-E.** March 2019. On behalf of Vote Solar. Duke Energy Progress general rate case application. Analysis of the cost basis for the residential customer charge and validity of the utility's minimum system study, AMI-enabled rate design plans, excess deferred income tax rider rate design, and grid modernization rider proposal, including the reasonableness of the program, class distribution of costs and benefits, and cost allocation.

Testimony:

- Direct: https://dms.psc.sc.gov/Attachments/Matter/395a37e9-cc4e-40e6-93e6-3148f6fe5c22
- Surrebuttal: <u>https://dms.psc.sc.gov/Attachments/Matter/7daf93c1-d744-4ba9-9e39-415bc622b5fd</u>

Rate Design Calculations: Attachment SC\_2018-318\_E\_Barnes\_Rate\_Design\_Calculations.xlsx

**South Carolina Public Service Commission. Docket No. 2018-319-E.** February 2019. On behalf of Vote Solar. Duke Energy Carolinas general rate case application. Analysis of the cost basis for the residential customer charge and validity of the utility's minimum system study, AMI-enabled rate design plans, excess deferred income tax rider rate design, and grid modernization rider proposal, including the reasonableness of the program, class distribution of costs and benefits, and cost allocation.

Testimony:

- Direct: <u>https://dms.psc.sc.gov/Attachments/Matter/fdeb9711-1c5e-4650-a71c-330e2a329a66</u>
- Direct Errata: <u>https://dms.psc.sc.gov/Attachments/Matter/8639428e-53c5-46b4-ad8b-ba758c59f385</u>
- Surrebuttal: <u>https://dms.psc.sc.gov/Attachments/Matter/abd3e6ef-67ef-49e2-9e38-42deae4501a8</u>

Rate Design Calculations: Attachment SC\_2018-319-E\_Barnes\_Rate\_Design\_Calculations.xlsx

**New Orleans City Council. Docket No. UD-18-07**. February 2019. On behalf of the Alliance for Affordable Energy. Entergy New Orleans general rate case application. Analysis of the cost basis for the residential customer charge, rate design for AMI, DSM and Grid Modernization Riders, and DSM program performance incentive proposal. Developed recommendations for the residential customer charge, rider rate design, and a revised DSM performance incentive mechanism.

Testimony:

 Direct: <u>https://www.all4energy.org/uploads/1/0/5/6/105637723/2019\_02\_01\_ud-18-</u> 07\_aae\_direct\_testimony\_of\_j\_barnes.pdf • Surrebuttal:

https://www.all4energy.org/uploads/1/0/5/6/105637723/2019\_04\_26\_ud-18-07\_aae\_surrebuttal\_testimony\_of\_justin\_r.\_barnes.pdf

Rate Design Calculations:

Attachment Barnes\_WP\_Customer\_Charge Attachment Barnes\_WP\_Disconnect Stats Attachment Barnes\_WP\_Fixed\_Charge\_EE\_Impacts Attachment Fixed Charge Comparison\_Table 1&2\_WP

**New Hampshire Public Utilities Commission. Docket No. DE 17-189**. May 2018. On behalf of Sunrun Inc. Review of Liberty Utilities application for approval of customersited battery storage program, analysis of time-of-use rate design, program costbenefit analysis, cost-effectiveness of utility-owned vs. non-utility owned storage assets. Developed a proposal for an alternative program utilizing non-utility owned assets under an aggregator model with elements for benefits sharing and ratepayer risk reduction.

Testimony: <u>https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-189/TESTIMONY/17-189/2018-05-</u>03/SUNRUN\_REVISION\_DTESTIMONY\_BARNES.PDF

Rate Design Calculations: Attachment NH\_DE\_17-189\_Barnes\_workpapers.xlsx

**North Carolina Utilities Commission. Docket No. E-7 Sub 1146**. January 2018. On behalf of the North Carolina Sustainable Energy Association. Duke Energy Carolinas general rate case application. Analysis of the cost basis for the residential customer charge and validity of the utility's minimum system study, allocation of coal ash remediation costs, and grid modernization rider proposal, including the reasonableness of the program, class distribution of costs and benefits, and cost allocation.

Testimony: <u>https://starw1.ncuc.net/NCUC/PSC/PSCDocumentDetailsPageNCUC.aspx?Docume</u> ntId=85db0ad7-731e-4053-ae55-4baf98438644&Class=Filing

Rate Design Calculations: None

**North Carolina Utilities Commission, Docket No. E-2 Sub 1142**. October 2017. On behalf of the North Carolina Sustainable Energy Association. Duke Energy Progress general rate case application. Analysis of the cost basis for the residential customer charge and validity of the utility's minimum system study, allocation of coal ash remediation costs, and advanced metering infrastructure deployment plans and costbenefit analysis.

Testimony:

https://starw1.ncuc.net/NCUC/PSC/PSCDocumentDetailsPageNCUC.aspx?Docume ntId=5a8ab784-b302-4956-98d4-d3abd6d356cf&Class=Filing

Rate Design Calculations: NC E-2\_Sub\_1142\_WP.xlsx

# Witness Responsible:

Justin Barnes

## Request No. 2

Please provide all schedules, tables, and charts included in the testimony and exhibits to the testimony of Justin R. Barnes in electronic format, with formulas intact and visible, and no pasted values.

#### **Response:**

There are no schedules, tables, or charts associated with Mr. Barnes' testimony.

## Witness Responsible:

Justin Barnes

## **Request No. 3**

Please provide all workpapers, source documents, and electronic spreadsheets used in the development of the testimony of Mr. Barnes. The requested information, if so available, should be provided in an electronic format, with formulas intact and visible, and no pasted values.

## **Response:**

Please see the attached files:

Barnes Savings\_Impact\_WP.xlsm Barnes\_Cogen\_WP.xlsm

### Witness Responsible:

Justin Barnes

# Request No. 4

Please refer to the testimony of Mr. Barnes at page 6. Mr. Barnes states that, "the most fundamental question is whether a subsidy exists in the first place."

- (a) Explain whether Mr. Barnes has conducted any calculations or studies related to whether or not Kentucky Power Company's existing net metering customers are paying the full costs for their electric utility service.
- (b) If the answer to (a) is affirmative, please provide a copy of the calculations and/or studies and all workpapers and source documents in electronic spreadsheet form with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, provide the information in the form that most closely matches what has been requested.

# Response:

- (a) Mr. Barnes has not conducted such a study. He did not do so because the Company indicated that it has neither interval production data nor load data for its existing net metering customers, making such an analysis impossible.
- (b) Not applicable.

#### Witness Responsible:

**Justin Barnes** 

#### Request No. 5

Explain whether Mr. Barnes conducted any study, calculation, or analysis related to the reasonableness of the Company's proposed N.M.S. II avoided rate of \$.03659/kWh. If he has, please provide a copy of the bill impact analysis and all workpapers and source documents in electronic spreadsheet form with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, provide the information in the form that most closely matches what has been requested.

## **Response:**

Mr. Barnes' analysis of the Company's proposed methodology for establishing the N.M.S. II avoided cost rate is provided in Section III(D) of his direct testimony contained on p. 27-34. There are not any workpapers associated with this analysis.

#### Witness Responsible:

Justin Barnes

#### **Request No. 6**

Refer to the testimony of Justin R. Barnes, page 17. Mr. Barnes states that his estimate shows that the Company's N.M.S. II tariff would reduce customer bill savings by 30-40% for a system sized to produce an approximate 100% load offset on an annual basis. Please provide the workpapers, source documents, and electronic spreadsheets used in the development of this estimate.

#### Response:

Please see the response to Kentucky Power Company Data Request 1-3, attachment: Barnes Savings\_Impact\_WP.xlsm

#### Witness Responsible:

Justin Barnes

## **Request No. 7**

Please confirm that the customers served under the Company's current N.M.S. tariff are being provided with greater intra-class subsidies as compared to customers who would take service under the Company's proposed N.M.S. II tariff.

#### **Response:**

A customer taking service under the N.M.S. II tariff would receive less total compensation than an identical customer taking service under the N.M.S. I tariff. Whether this constitutes a reduction in an existing intra-class subsidy that benefits net metering customers, or an increase in an existing intra-class subsidy that benefits non-net-metering customers cannot be concluded without a full analysis of long-term costs and benefits and cost-of-service analysis.

#### Witness Responsible:

**Justin Barnes** 

#### Request No. 8

Please confirm that you do not object to the Company closing its current N.M.S. tariff to new customers on December 30, 2020. If your response is anything other than an unqualified confirmation please identify where in your testimony the objection is made and provide basis for the objection, including all evidence supporting the objection.

## **Response:**

KYSEIA makes no such confirmation. As Witness Barnes states at p. 4 lines 1-3 of his direct testimony "I therefore recommend that the current net metering tariff be retained unchanged and that Kentucky Power be directed to produce such a cost study in support of any future proposals to amend its net metering tariff." Closing the tariff on December 30, 2020 would clearly constitute a change in the existing net metering tariff.

### Witness Responsible:

Justin Barnes

# Request No. 9

Refer to the testimony of Justin R. Barnes, pages 22 through 23. Mr. Barnes claims that a "customer could install battery storage and effectively shift the production profile of solar system so as to store electricity that would otherwise be exported during one period and use it during the other netting period."

- (a) Please explain whether Mr. Barnes is aware of any N.M.S. customer in the Company's service territory that has installed a battery storage system.
- (b) Please provide the average cost of installing such a battery storage system.
- (c) Please provide all evidence and calculations supporting your response to subpart (b) of this data request. All calculations should be presented in in electronic format, with formulas intact and visible, and no pasted values.

# Response:

- (a) Mr. Barnes is not aware of whether any N.M.S. customer has installed a battery storage system.
- (b) The cost of a battery storage system depends on type of system employed, the configuration (AC- or DC-coupled), the energy storage capacity, and other factors that may be site specific. In May 2019 comments to the California Public Utilities Commission, Tesla, one of the larger providers, estimated typical costs for a single Powerwall unit (5 kW and 13.5 kWh) of \$0.73/Wh of energy capacity.

Tesla Comments: https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M306/K788/306788347.P DF

2019 small residential storage installations in the California Small Generation Incentive Program ("SGIP") averaged \$0.74/Wh of energy capacity.

While costs may differ by location, the SGIP project database is the most complete database of actual costs available to our knowledge.

(c) See the attached spreadsheet entitled: sgip\_public\_export\_2020-10-29, sourced from: <u>https://www.selfgenca.com/home/resources/#reports</u>

The sheet includes 2020 data as well, but some reported 2020 costs appear to have been entered incorrectly resulting in a clearly inaccurate cost average.

#### Witness Responsible:

Justin Barnes

#### Request No. 10

Refer to the testimony of Justin R. Barnes, pages 31 through 32. Mr. Barnes disagrees with the Company's calculation of the generation capacity and transmission capacity rates but offers no rate design recommendations related to the calculation of generation capacity and transmission capacity rates.

- (a) Confirm that KYSEIA and Mr. Barnes are not making any recommendations with respect to these aspects of rate design.
- (b) If your response is anything other than an unqualified confirmation please [indicate] where in your testimony the recommendation is made and provide basis for the recommendation, including all evidence supporting the objection.

## **Response:**

(a) Not confirmed.

(b) At p. 31 line 20 through p. 32 line 3 Mr. Barnes discusses the reasonableness of the Company's proposed net metering shape discount, stating "The Company claims that such a discount is reasonable because the generation is netted against on-site load during some hours of the day. I disagree. The adjustment is inappropriate because the marginal value of generation at any point in time is not different based on whether the energy constitutes a net hourly export or not." Mr. Barnes disagreement with the appropriateness of this aspect of the Company's calculation constitutes a position that it should not be adopted despite the lack of a specific "recommendation" to this effect.

At p. 12 lines 7-10 Mr. Barnes also states "The value of exports can only be identified with a cost-benefit study that utilizes a long-term time horizon and fully accounts for all future benefits and costs. Such an evaluation would typically be conducted under a total resource cost framework for the life of a typical DG system (e.g., 25 years)." At p. 12 lines 14-20 Mr. Barnes additionally states "A long-term evaluation is necessary because DG systems produce value over the course of the system life. Limiting consideration of value to the short-term fails to consider what is in the best interest of all ratepayers over the time horizon during a which a DG system will produce benefits. A total resource cost framework likewise aligns with the overall long-run interests of ratepayers. In other words, the value will influence customer decision-making on the

construction of long-lived assets. Therefore, this value should reflect the long-term value."

These statements collectively provide Mr. Barnes' position that avoided costs should be evaluated using a long-term outlook, which the Company's methodology for generation and transmission avoided costs does not.

## Witness Responsible:

Benjamin D. Inskeep

# Request No. 11

Please provide all schedules, tables, and charts included in the testimony and exhibits to the testimony of Benjamin D. Inskeep in electronic format, with formulas intact and visible, and no pasted values.

## **Response:**

Please refer to: kpc 11 attachment for requested information.

# Witness Responsible:

Benjamin D. Inskeep

# Request No. 12

Please provide all workpapers, source documents, and electronic spreadsheets used in the development of the testimony of Mr. Inskeep. The requested information, if so available, should be provided in an electronic format, with formulas intact and visible, and no pasted values.

# Response:

Please refer to:

kpc 11 attachment and

kpc 12 attachment for requested information.

Source documents associated with the following footnotes from Mr. Inskeep's testimony are available at the following links:

- Footnote 1: <u>https://pubs.naruc.org/pub/A107102C-92E5-776D-4114-9148841DE66B/</u>
- Footnote 2: <u>https://www.energy.gov/sites/prod/files/2020/06/f75/ICF%20NEM%20Meta</u> <u>%20Analysis\_Formatted%20FINAL\_Revised%208-27-18.pdf</u>
- Footnote 4: <u>https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M157/K701/1577</u> 01730.PDF
- Footnote 5: (1) <u>https://www.washingtonpost.com/national/health-science/utilities-sensing-threat-put-squeeze-on-booming-solar-roof-industry/2015/03/07/2d916f88-c1c9-11e4-ad5c-3b8ce89f1b89\_story.html;</u>
   (2) <u>https://environmentamerica.org/reports/ame/blocking-sun-utilities-and-fossil-fuel-interests-are-undermining-american-solar-power;</u>
   (3) <u>https://www.energyandpolicy.org/edison-electric-institute-campaign-against-distributed-solar/</u>
- Footnote 8: <u>https://dms.puc.hawaii.gov/dms/DocumentViewer?pid=A1001001A15J13B</u> 15422F90464
- Footnote 9: <u>https://www.eia.gov/electricity/data/eia861m/</u>

- Footnote 10 and 11: <u>http://www.apscservices.info/pdf/16/16-027-</u> <u>R 423 1.pdf</u>
- Footnote 13: <u>https://efs.iowa.gov/cs/idcplg?IdcService=GET\_FILE&dDocName=160047</u> <u>0&allowInterrupt=1&noSaveAs=1&RevisionSelectionMethod=LatestRelea</u> <u>sed</u>
- Footnote 14: <u>https://psc.ga.gov/search/facts-</u> <u>document/?documentId=179856</u>
- Footnote 15: <u>https://www.greentechmedia.com/articles/read/nevadas-</u><u>solar-exodus-continues-driven-by-retroactive-net-metering-cuts</u>
- Footnote 16: <u>https://mpuccms.maine.gov/CQM.Public.WebUI/Common/ViewDoc.aspx?DocRefId={9</u> 93E4ACC-029B-4EA4-A38A-885DEC26E0CC}&DocExt=pdf
- Footnote 17: <u>https://pjm.com/-</u> /media/documents/ferc/filings/2020/20200121-el16-49-000-er18-1314-000-el18-178-000.ashx
- Footnote 24: <u>https://www.cesa.org/resource-library/resource/standards-and-requirements-for-solar-equipment-installation-and-licensing-and-certification-a-guide-for-states-and-municipalities/</u>
- Footnote 30: https://www.pge.com/tariffs/assets/pdf/tariffbook/ELEC\_SCHEDS\_NEM.p df
- Footnote 31: <u>https://dms.puc.hawaii.gov/dms/DocumentViewer?pid=A1001001A18G02</u> <u>B00134C00952</u>
- Footnote 35: <u>https://www.pge.com/tariffs/assets/pdf/tariffbook/ELEC\_SCHEDS\_NEM.p</u> <u>df</u>

## Witness Responsible:

Benjamin D. Inskeep

# **Request No. 13**

Refer to the testimony of Benjamin D. Inskeep, page 6. Mr. Inskeep states "there have been numerous studies in recent years that have examined the costs and benefits of net metering or the value of solar DG." Please provide copies of all referenced studies reviewed or relied upon by Mr. Inskeep to support this claim.

# **Response:**

Mr. Inskeep reviewed or relied on the following studies:

- ICF International, "Review of Recent Cost-Benefit Studies Related to Net Metering and Distributed Solar" (May 2018), available at: <u>https://www.energy.gov/sites/prod/files/2020/06/f75/ICF%20NEM%20Meta%20A</u> <u>nalysis Formatted%20FINAL Revised%208-27-18.pdf</u>
- Tom Stanton, "Review of State Net Energy Metering and Successor Rate Designs," National Regulatory Research Institute, available at: <u>https://pubs.naruc.org/pub/A107102C-92E5-776D-4114-9148841DE66B</u>
- Kush Patel, "Act 236: Version 2.0," Energy+Environmental Economics (August 7, 2018), available at: <u>http://energy.sc.gov/files/Act%20236%20Follow%20Up%20-%20Stakeholder%20Meeting%2008.07.18\_Final.pdf</u>
- Gideon Weissman, Emma Searson and Rob Sargent, "The True Value of Solar Measuring the Benefits of Rooftop Solar Power," Frontier Group and Environment America Research and Policy Center (July 2019), <u>https://environmentamerica.org/sites/environment/files/resources/AME%20Rooftop%20Solar%20Jul19%20web.pdf</u>

#### Witness Responsible:

Benjamin D. Inskeep

#### Request No. 14

Refer to the Direct Testimony of Benjamin D. Inskeep, Figure 3 on page 9. Please confirm that Mr. Inskeep did not conduct, participate in, and/or author the "value of solar studies" included in Figure 3. If your response to the foregoing request is anything other than an unqualified confirmation, please explain Mr. Inskeep's participation with regard to the referenced studies.

#### Response:

Mr. Inskeep did not conduct, participate in, and/or author the "value of solar studies" included in Figure 3.

## Witness Responsible:

James N. Van Nostrand

#### Request No. 15

Please provide all schedules, tables, and charts included in the testimony and exhibits to the testimony of James M. Van Nostrand in electronic format, with formulas intact and visible, and no pasted values.

#### **Response:**

The only table in the testimony was prepared in Word format, and the values reflected therein are simply excerpted from the cited source material.

#### Witness Responsible:

James N. Van Nostrand

# Request No. 16

Please provide all workpapers, source documents, and electronic spreadsheets used in the development of the testimony of Mr. Van Nostrand. The requested information, if so available, should be provided in an electronic format, with formulas intact and visible, and no pasted values.

# Response:

Please see:

kpc 16 attachment Rabago and Vaolva, Revisiting Bonbright kpc 16 attachment Oklahoma SB 1456 kpc 16 attachment oklahoma garrett testimony kpc 16 attachment oklahoma 2015000274 Final\_Order kpc 16 attachment oklahoma 2015000273 Rate\_Case\_Final\_Order

FERC Order 2222 https://www.ferc.gov/sites/default/files/2020-09/E-1\_0.pdf

FERC Order 872 https://www.ferc.gov/sites/default/files/2020-07/07-2020-E-1.pdf