April 5, 2019

Ms. Martha Lynn Jarvis  
Chief Clerk  
North Carolina Utilities Commission  
430 North Salisbury Street  
Raleigh, NC 27603

Docket Nos. E-2, Sub 1167 and E-7, Sub 1166

Dear Ms. Jarvis,


Please find attached as Attachment 1 an email that counsel for NCSEA sent to counsel for DEC and DEP on June 19, 2018, which included as an attachment a letter recommending a direct current to alternating current conversion ratio of 0.9. Please also find attached as Attachment 2 an email that counsel for NCSEA sent to counsel for DEC and DEP on March 27, 2019 again attaching the June 19, 2018 letter.

Sincerely,

/s/ Peter H. Ledford
CERTIFICATE OF SERVICE

I hereby certify that all persons on the docket service list have been served true and accurate copies of the foregoing letter by hand delivery, first class mail deposited in the U.S. mail, postage pre-paid, or by email transmission with the party’s consent.

This the 5th day of April, 2019.

/s/ Peter H. Ledford
Peter H. Ledford
General Counsel for NCSEA
N.C. State Bar No.42999
4800 Six Forks Road, Suite 300
Raleigh, NC 27609
919-832-7601 Ext. 107
peter@energync.org
Attachment 1

Date: Tuesday, June 19, 2018 at 4:27:14 PM Eastern Daylight Time

From: Benjamin Smith

To: Fentress, Kendrick C

CC: Sutton, Dawn H, Peter Ledford, Peter Stein, bkaylor@rwkaylorlaw.com, david.tsai@duke-energy.com, 'Smith, Heather Shirley' (Heather.Smith@duke-energy.com), bo.somers@duke-energy.com, Brett Breitschwerdt (bbreitschwerdt@mcguirewoods.com), Daniel Brookshire

Attachments: image001.png, DEC & DEP Solar Rebate Program Plan (E-2 Sub 1167 and E-7 Sub 1166) Letter on Rebate Conversion Factor.pdf

All,

Attached find NCSEA’s Letter to Duke Energy Progress, LLC and Duke Energy Carolinas, LLC (collectively “Duke”) regarding NCSEA’s recommendation for conversion factor for converting DC generating capacity to AC for purposes of rebate eligibility. This letter being sent pursuant to the Order Modifying and Approving Riders Implementing Solar Rebate Program filed by the North Carolina Utilities Commission on April 3, 2018 in Docket Nos. E-2, Sub 1167 and E-7, Sub 1166.

Pursuant to the Order, Duke must state in its first annual report filed in the underlying proceeding that NCSEA has provided the information regarding conversion factor and also whether Duke proposes to use such a conversion factor (and what related revisions must accordingly be made to the Solar Rebate Rider). NCSEA strongly encourages Duke to propose using this conversion factor to the Commission in its first annual report and, to that end, pertinent members of NCSEA or its staff will gladly speak to any Duke employees or representatives with any questions or concerns related thereto.

Please contact Peter Ledford or myself with any such related questions or concerns. Have a nice afternoon.

Thanks,
Ben

Benjamin Smith
Regulatory Counsel
4800 Six Forks Rd., Suite 300 Raleigh, NC 27609
919-818-2095 (cell)
919-832-7601 x 111 (office)

SAVE THE DATE:
NCSEA’s 40th Anniversary Celebration Event
October 18th, 2018
June 19, 2018

Ms. Kendrick Fentress
Associate General Counsel
Duke Energy
NCRH 20 / P.O. Box 1551
Raleigh, NC 27602

Re: Duke Energy Progress, LLC and Duke Energy Carolinas, LLC's Application Requesting Approval of Solar Rebate Program Docket Nos. E-2, Sub 1167 and E-7, Sub 1166

Dear Ms. Fentress,

The Commission’s April 3, 2018 Order Modifying and Approving Riders Implementing Solar Rebate Program in Docket Nos. E-2, Sub 1167 and E-7, Sub 1166 directed Duke Energy Carolinas, LLC and Duke Energy Progress, LLC (collectively, “Duke”) to include in its first annual report on the Solar Rebate Program whether NCSEA provided Duke a conversion factor for direct current to alternating current for purposes of calculating the accurate amount of solar rebate to which the applicant is entitled.

NCSEA recommends a direct current (“DC”) to alternating current (“AC”) conversion ratio of 0.9. This is a recognized industry norm and is supported by the National Renewable Energy Laboratory (“NREL”). NREL has developed the PVWatts Calculator which “[e]stimates the energy production and cost of energy of grid-connected photovoltaic (PV) energy systems throughout the world. It allows homeowners, small building owners, installers and manufacturers to easily develop estimates of the performance of potential PV installations.”

The PVWatts Calculator uses a default value of 1.10 to convert AC to DC. Inversely, this 1.10 value means that the DC to AC conversion factor would be approximately 0.9 (1÷1.1). Since North Carolina Gen. Stat. § 62-155(f) requires that rebates be calculated based on the AC nameplate capacity of the system, NCSEA believes that this conversion factor would simplify the rebate application process and reduce uncertainty about rebate eligibility.

There is also Commission precedent for using the PV Watts Calculator. In Progress Energy Carolinas, Inc.’s SunSense program, the PVWatts Calculator was used for estimating the

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1 See generally, https://pvwatts.nrel.gov/.
generation from participants’ solar facilities. See, Order Approving Rider and Granting Waiver Request, p. 5, Docket No. E-2, Sub 979 (November 15, 2010).

NCSEA respectfully requests that Duke consider its recommendation to utilize a DC to AC conversion ratio of 0.9 in its implementation of the Solar Rebate Program.

Sincerely,

/s/ Benjamin W. Smith
Regulatory Counsel
N.C. State Bar No. 48344
NCSEA
4800 Six Forks Road
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Raleigh, NC 27609
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c: Docket service list for NCUC Docket Nos. E-2, Sub 1167 and E-7, Sub 1166
Attachment 2

Date: Wednesday, March 27, 2019 at 12:43:50 PM Eastern Daylight Time

From: Peter Ledford

To: Holton, Peggy H, Benjamin Smith, David T. Drooz, Peter Stein (SELC), Tim Dodge

CC: Fentress, Kendrick C, Sutton, Dawn H


Kendrick,

Attached is another copy of the letter that NCSEA provided to the parties in this docket on June 19, 2018 regarding the AC/DC conversion ratio.

Thanks,

Peter

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Peter H. Ledford
General Counsel
NC Sustainable Energy Association
4800 Six Forks Road, Suite 300
Raleigh, NC 27609
919-832-7601 ext. 107
peter@energync.org

From: Peggy Holton <Peggy.Holton@duke-energy.com>
Date: Wednesday, March 27, 2019 at 12:30 PM
To: Ben Smith <ben@energync.org>, David Drooz <david.drooz@psncuc.nc.gov>, Peter Ledford <peter@energync.org>, Peter Stein <pstein@selcnc.org>, Tim Dodge <Tim.Dodge@psncuc.nc.gov>
Cc: Kendrick Fentress <Kendrick.Fentress@duke-energy.com>, Dawn Sutton <Dawn.Sutton@duke-energy.com>


Sent on behalf of:

Kendrick C. Fentress
Associate General Counsel