

**STATE OF INDIANA**

**INDIANA UTILITY REGULATORY COMMISSION**

PETITION OF DUKE ENERGY INDIANA, LLC )  
FOR APPROVAL OF A SOLAR SERVICES PROGRAM )  
TARIFF, RIDER NO. 26, AND APPROVAL OF ) **CAUSE NO. 45145**  
ALTERNATIVE REGULATORY PLAN ("ARP") AND )  
DECLINATION OF JURISDICTION TO THE EXTENT )  
REQUIRED UNDER IND. CODE 8-1-2.5-1, ET. SEQ. )

**WALMART INC.'S**  
**SUBMISSION OF DIRECT TESTIMONY**

Walmart Inc. ("Walmart"), by counsel, hereby submits its Direct Testimony and Exhibits  
of Gregory W. Tillman.

Respectfully submitted,

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Dated: January 9, 2019

**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that a true and correct copy of the foregoing document has been served by electronic mail, hard copies available upon request, this 9<sup>th</sup> day of January, 2019, upon the following counsel:

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**VERIFIED DIRECT TESTIMONY AND EXHIBITS OF**

**GREGORY W. TILLMAN**

**ON BEHALF OF**

**WALMART INC.**

**Filed: January 9, 2019**

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## Exhibits

- Exhibit GWT-1 – Witness Qualifications Statement
- Exhibit GWT-2 – Duke Energy Indiana Response to OUCC Data Request Set No. 1, DR  
OUCC 1.8
- Exhibit GWT-3 – Duke Energy Indiana Response to Walmart Data Request Set No. 1, DR  
Walmart 1.1
- Exhibit GWT-4 – EPA Green Power Partnership, Guide to Making Claims About Your Solar  
Power Use, August 2017

1     ***Introduction***

2     **Q.     PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.**

3     A.     My name is Gregory W. Tillman. My business address is 2001 SE 10th St., Bentonville,  
4           AR 72716-5530. I am employed by Walmart Inc. as Senior Manager, Energy  
5           Regulatory Analysis.

6     **Q.     ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS DOCKET?**

7     A.     I am testifying on behalf of Walmart Inc. ("Walmart").

8     **Q.     PLEASE DESCRIBE YOUR EDUCATION AND EXPERIENCE.**

9     A.     I earned a Bachelor of Science in Electrical Engineering from the University of Tulsa in  
10           1987. Prior to joining Walmart in 2015, I had over 22 years of experience in the  
11           regulated and deregulated energy industry including roles in regulatory, pricing,  
12           billing, and metering information. In 1990, after serving on active duty as a Signal  
13           Officer in the United States Army, I joined Public Service Company of Oklahoma  
14           ("PSO"). From 1990 through 1997, I was employed in various positions at PSO,  
15           including in the Information Services, Business Planning, Rates and Regulatory, and  
16           Ventures departments. During my tenure with the Rates and Regulatory Department,  
17           I served as the Supervisor of Power Billing and Data Collection. In this position, I  
18           managed the billing for large industrial and commercial customers and led the  
19           implementation of PSO's real-time pricing program. I also managed the  
20           implementation of real-time pricing for the three remaining utilities in the Central and

1 South West Corporation – Southwestern Electric Power Company, Central Power and  
2 Light, and West Texas Utilities. In 1997, I joined the Retail Energy Department of the  
3 Williams Energy Company as the Manager of Systems for the retail gas and electric  
4 data and billing. I also managed the customer billing function at Williams Thermogas  
5 as well as the billing and accounting systems support functions at Williams  
6 Communications. From 2000 to 2002, I served as the Vice President of Energy  
7 Solutions for Automated Energy. In 2008, following several assignments as a  
8 consultant and project manager in various industries, I joined Oklahoma Gas & Electric  
9 Company ("OG&E") as a Senior Pricing Analyst. I was promoted to Manager of Pricing  
10 in January 2010 and became the Product Development Pricing Leader in 2013. While  
11 at OG&E, I was instrumental in developing and managing OG&E's pricing strategy and  
12 products, including the design and implementation of OG&E's SmartHours™ rate. I  
13 have been in my current position with Walmart since November 2015. My Witness  
14 Qualification Statement is included herein as Exhibit GWT-1.

15 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN OTHER CASES BEFORE THE**  
16 **INDIANA UTILITY REGULATORY COMMISSION ("IURC" OR "COMMISSION")?**

17 **A.** Yes. I submitted testimony in Cause Nos. 44967 and 45029.

1       **Q.     HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE OTHER STATE**  
2       **REGULATORY COMMISSIONS?**

3       A.     Yes. I have testified in thirty-one (31) other proceedings before the Arizona  
4       Corporation Commission, the Arkansas Public Service Commission, the Connecticut  
5       Public Utilities Regulatory Authority, the Iowa Utilities Board, the Kentucky Public  
6       Service Commission, the Michigan Public Service Commission, The Public Utility  
7       Commission of Nevada, the New Jersey Board of Public Utilities, the Oklahoma  
8       Corporation Commission, the Pennsylvania Public Utility Commission, the Rhode  
9       Island Public Utilities Commission, the South Carolina Public Service Commission, The  
10      Public Utilities Commission of Texas, the Commonwealth of Virginia State Corporation  
11      Commission, the Public Service Commission of West Virginia, and the Wisconsin Public  
12      Service Commission. My testimony addressed the topics of revenue requirement,  
13      rate design, revenue allocation, pricing, customer impacts, tariffs, and terms and  
14      conditions of service. See Exhibit GWT-1.

15      **Q.     WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

16      A.     The purpose of my testimony is to respond to issues related to Duke Energy Indiana,  
17      LLC ("DEI" or "Company") proposed Solar Services Program and the proposed  
18      Standard Contract Rider No. 26 ("Rider 26").

19      **Q.     ARE YOU SPONSORING ANY EXHIBITS WITH YOUR TESTIMONY?**

20      A.     Yes. I am sponsoring the exhibits listed in the Table of Contents.

1       **Q.     PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS IN INDIANA.**

2       A.     As shown on Walmart's website, there are 128 retail units and 10 distribution centers  
3             in Indiana employing 41,789 associates. During fiscal year ending January 2018,  
4             Walmart spent \$1.2 billion with 933 Indiana suppliers supporting an additional 42,530  
5             jobs.<sup>1</sup>

6       **Q.     PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS WITHIN DEI'S SERVICE**  
7             **TERRITORY.**

8             Walmart has 46 retail units, two distribution centers, and related facilities that take  
9             electric service from DEI.

10      **Q.     HAS WALMART ESTABLISHED CORPORATE RENEWABLE ENERGY GOALS?**

11      A.     Yes. Walmart has established aggressive and significant company-wide renewable  
12             energy goals, including: (1) to be supplied 50 percent by renewable energy by 2025,  
13             and, ultimately (2) to be supplied 100 percent by renewable energy<sup>2</sup>. Additionally,  
14             Walmart has set a science-based target to reduce emissions in our operations by 18  
15             percent by 2025 through the deployment of energy efficiency measures and the  
16             consumption of renewable energy.<sup>3</sup> To date, Walmart has contracted for or currently  
17             takes electricity from one or more renewable resources in 25 states and Puerto Rico.

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<sup>1</sup> <https://corporate.walmart.com/our-story/our-locations#/united-states/indiana>

<sup>2</sup> <http://corporate.walmart.com/global-responsibility/environmental-sustainability>

<sup>3</sup> <http://news.walmart.com/2016/11/04/walmart-offers-new-vision-for-the-companys-role-in-society>



1       **Q.     AS A CORPORATE CUSTOMER WHO ACTIVELY ENGAGES IN RENEWABLE ENERGY**  
2           **OPPORTUNITIES, CAN YOU PROVIDE INSIGHT TO WALMART'S GENERAL**  
3           **FRAMEWORK FOR RENEWABLE OPPORTUNITIES?**

4       A.     Yes. Walmart's desire for renewable energy resources must be balanced against its  
5           business needs. As a general rule, Walmart does not enter into premium deal  
6           structures or programs that only result in additional costs to our facilities. Rather,  
7           Walmart seeks renewable energy resources that deliver industry leading cost,  
8           including renewable and project specific attributes such as renewable energy credits  
9           ("REC"), within structures where the value proposition allows the customer to receive  
10          any potential benefits brought about by taking on the risk of being served by that  
11          resource instead of, or in addition to, the otherwise applicable resource portfolio.  
12          Additionally, Walmart typically does not enter into programs with terms in excess of  
13          15 years.

14       **Q.     WHAT CHANNELS DOES WALMART UTILIZE TO SECURE RENEWABLE ENERGY**  
15           **RESOURCES?**

16       A.     To meet our renewable energy goals, Walmart utilizes three primary channels to  
17           secure renewable energy resources:

18           •   **Contracting for off-site resources:** These products are typically structured to  
19           replace other energy, both physically and on the bill. This mechanism allows  
20           Walmart to leverage its scale to drive the best project economics while

1 simultaneously minimizing transaction time and costs. To date, we have primarily  
2 contracted for these resources in deregulated markets through Texas Retail  
3 Energy, LLC, a competitive electric supplier wholly owned by Walmart that serves  
4 as our electric supplier in most deregulated retail markets, to directly serve our  
5 load.

- 6 • **Contracting for on-site resources:** Walmart contracts for on-site, behind the  
7 meter resources through power purchase agreements ("PPA") and leases that  
8 allow performance guarantees ("Solar Lease"). These resources replace grid  
9 energy and are priced with the expectation that the operating costs for the site  
10 are reduced.

- 11 • **Utility partnerships:** Walmart works with its utility partners to develop useable  
12 commercial and industrial programs and economic structures targeted to function  
13 within the confines of the regulatory compact and with minimal impact to non-  
14 participating customers. When this option is pursued, Walmart works to ensure  
15 that programs it assists to develop can be used by the broader group of large  
16 commercial and industrial customers, not merely Walmart. Walmart is unique in  
17 the large commercial space because we have significant in-house rate and  
18 regulatory expertise that we are willing to leverage to create opportunities to  
19 move the entire industry forward. The largest of these partnerships to date  
20 includes the development and participation in Georgia Power's 177 MW

1           Commercial & Industrial Renewable Energy Development Initiative program<sup>1</sup> and  
2           Alabama Power's 72 MW solar farm in Alabama.<sup>2</sup> While Walmart assisted in  
3           developing both opportunities, the opportunities are open to other interested  
4           large customers, not just Walmart.

5           ***Summary of Recommendations***

6           **Q.     PLEASE SUMMARIZE YOUR RECOMMENDATIONS TO THE COMMISSION.**

7           A.     My recommendations to the Commission are as follows:

8           1) The Commission should order the Company to modify the tariff language to clearly  
9           indicate that the renewable attributes of the output of the solar facility are  
10          transferred to the customer. Alternatively, the language should require the  
11          Company to retire the RECs on the customer's behalf. Likewise, the Company  
12          should be ordered to ensure that the Solar Energy Service Agreement ("Service  
13          Agreement") contains language that the environmental attributes, including the  
14          RECs, are transferred to the customer or, alternatively, retired on the customer's  
15          behalf.

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<sup>1</sup> <https://www.greenbiz.com/article/how-google-and-walmart-work-utilities-procure-clean-power>

<sup>2</sup> <http://www.alabamane.wscenter.com/2018/01/02/chambers-county-solar-project-now-serving-alabama-power-customers/>

1           2) Walmart does not oppose the proposed financing structure of the Service  
2            Agreement as modified to include the conveyance of the environmental attributes  
3            of the energy.

4           3) Walmart is not opposed to below-the-line accounting and ratemaking treatment  
5            of the proposed solar services program.

6           4) The Commission should affirm and establish, in its Final Order, Indiana energy  
7            customers' right to choose an alternative supplier for behind-the-meter, solar  
8            services financed through a lease agreement with a performance guarantee  
9            ("Solar Lease").

10       **Q.    DOES THE FACT THAT YOU MAY NOT ADDRESS AN ISSUE OR POSITION ADVOCATED**  
11       **BY THE COMPANY INDICATE WALMART'S SUPPORT?**

12       A.    No. The fact that an issue is not addressed herein or in related filings should not be  
13        construed as an endorsement of any filed position.

14       ***DEI Proposed Solar Service Program***

15       **Q.    WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED SOLAR SERVICES**  
16       **PROGRAM?**

17       A.    My understanding is that DEI filed, on December 21, 2017, a proposal to establish the  
18        program to address an increased interest among its non-residential customers for  
19        additional service options for cleaner energy. The proposed program provides  
20        alternative financing, namely a lease agreement, for on-site solar energy facilities.

1 Under the terms of the lease agreement the Company will install, operate, and  
2 maintain the solar facility and the customer will receive the electrical output of the  
3 facility. See Petitioner's Exhibit 1, Direct Testimony of Andrew S. Ritch (hereafter,  
4 "Petitioner's Ex. 1"), p. 2, lines 12-17.

5 **Q. HAS WALMART REVIEWED THE PROPOSED RIDER 26 AND THE PROPOSED SERVICE**  
6 **AGREEMENT?**

7 A. Yes. See Petitioner's Exhibit 1-A (ASR) and Petitioner's Exhibit 1-B (ASR)  
8 (hereafter, "Petitioner's Ex. 1-A" and "Petitioner's Ex. 1-B," respectively).

9 ***Renewable Energy Certificates***

10 **Q. IS WALMART CONCERNED WITH LANGUAGE USED IN THE PROPOSED RIDER 26 TO**  
11 **DESCRIBE THE SOLAR ENERGY PROGRAM?**

12 A. Yes. Walmart is concerned with the lack of specificity regarding the disposition of the  
13 environmental attributes of the energy produced by the solar facility. The Program  
14 Description section of the tariff specifies that the customer will "receive the kwh [*sic*]  
15 output of the facility." See Petitioner's Ex. 1-A. Additionally, in his testimony, Mr.  
16 Ritch states that the "customer will receive the electrical output of the facility."  
17 Petitioner's Ex. 1, p. 2, lines 16-17. Based on a literal translation of these statements,  
18 Walmart is concerned that the environmental attributes of the solar energy are not  
19 properly conveyed to the customer in the Company's proposal. Likewise, the

1 environmental attributes of the solar facility output are not addressed in the Service  
2 Agreement.

3 **Q. DOES THE OUTPUT OF A SOLAR FACILITY INCLUDE ENVIRONMENTAL ATTRIBUTES AS**  
4 **WELL AS THE KWH OR ELECTRICAL OUTPUT?**

5 A. Yes. Unlike traditional fossil-fueled generation, renewable generation facilities  
6 produce electricity that has environmental attributes in addition to its electrical  
7 attributes. These environmental attributes are separated from the electrical  
8 attributes and are accounted for under a separate accounting framework that was  
9 established to track the generation, sale, and consumption of renewable electricity.  
10 RECs are instruments used to document the production and consumption of energy  
11 produced by renewable resources and represents the environmental attributes of the  
12 energy produced by a renewable generator. To claim that the energy consumed from  
13 the solar facility is renewable energy, the consumer must own the RECs associated  
14 with the electrical output or have the producer retire the REC on the consumer's  
15 behalf.

16 **Q. GENERALLY, COULD A LITERAL TRANSLATION OF THE TARIFF LANGUAGE INDICATE**  
17 **ENVIRONMENTAL ATTRIBUTES, OR RECS, ARE NOT TRANSFERRED TO THE**  
18 **CUSTOMER?**

19 A. Yes. It is unclear to Walmart what is meant by the Company's use of the terms "kWh"  
20 and "electrical output." A literal translation of these terms could indicate that only

1           the electrical attributes can be transferred to the customer and the environmental  
2           attributes of the output are not available to the customer through the proposed tariff.

3           **Q.    HAS DUKE PROVIDED ADDITIONAL INFORMATION REGARDING THE INTENDED**  
4           **DISPOSITION OF THE RECS BEYOND THAT PROVIDED IN ITS APPLICATION?**

5           A.    Yes. In response to Office of Utility Consumer Counselor's ("OUCC") Data Request  
6           OUCC 1.8, the Company states that it will retain the environmental attributes "unless  
7           otherwise conveyed to participating customer through service agreement  
8           negotiations." See Exhibit GWT-2.

9           **Q.    WHAT DOES THE COMPANY INTEND TO DO WITH THE ENVIRONMENTAL**  
10           **ATTRIBUTES THAT ARE NOT CONVEYED TO THE CUSTOMER?**

11          A.    According to DEI response to Walmart's Data Request Walmart 1.1, the Company  
12          intends to determine the best course of action based on market conditions and its  
13          internal business requirements. See Exhibit GWT-3.

14          **Q.    IS WALMART CONCERNED WITH THE COMPANY'S RETENTION OF THE RECS?**

15          A.    Yes. Without the proper transfer of the associated RECs to the customer, the  
16          proposed program is not a renewable program.

17          **Q.    PLEASE ELABORATE.**

18          A.    Without the proper disposition of RECs, Customers would not be able claim that the  
19          energy purchased and consumed through the proposed program is renewable energy.

1           As fully explained on the Green Power Partnership's webpage <sup>1</sup> on making  
2           environmental claims and the associated *Guide to Making Claims About Your Solar*  
3           *Power Use* (included as Exhibit GWT-4), there are specific legal, contractual, financial,  
4           and brand and reputation risks associated with claims about using solar electricity.  
5           REC ownership by Walmart or retirement of RECs on Walmart's behalf is an integral  
6           part of the reporting of Walmart's progress toward its sustainability goals.

7           **Q.   WITHOUT THE TRANSFER OF RECS TO THE CUSTOMER OR THE CONTRACTUAL**  
8           **REQUIREMENT FOR THE COMPANY TO RETIRE THE RECS ON THE CUSTOMER'S**  
9           **BEHALF, IS WALMART LIKELY TO PARTICIPATE IN THE PROPOSED SOLAR SERVICES**  
10           **PROGRAM?**

11           A.   No. Walmart is unlikely to participate in the program without the proper transfer of  
12           RECs to the participating customer. Unless the RECs are either transferred to Walmart  
13           or retired by the Company on Walmart's behalf, Walmart would be purchasing only  
14           the electrical attributes of the output from the facility and would be unable to claim  
15           that the energy purchased under the Solar Services Program is, in fact, renewable  
16           energy. Essentially, the lack of formal REC treatment, which allows the customer to  
17           make a solar energy use claim, reduces the program to nothing more than a non-  
18           renewable energy alternative to the Company's traditional electric service.

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<sup>1</sup> <https://www.epa.gov/greenpower/making-environmental-claims>



1       **Q.     WHAT IS WALMART'S RECOMMENDATION TO THE COMMISSION ON THE**  
2       **DISPOSITION OF RECS AND THE RELATED TARIFF LANGUAGE AND SERVICE**  
3       **AGREEMENT TERMS?**

4       A.     The Commission should order the Company to modify the tariff language to clearly  
5       indicate that the renewable attributes of the output of the solar facility are  
6       transferred to the customer. Alternatively, the language should require the Company  
7       to retire the RECs on the customer's behalf. Likewise, the Company should be ordered  
8       to ensure that any Service Agreement employed by DEI for this program contains  
9       language that the environmental attributes, including RECs, are owned by the  
10      Customer or, alternatively, retired on the customer's behalf.

11      ***Financing Structure***

12      **Q.     WHAT IS YOUR UNDERSTANDING OF THE STRUCTURE OF THE ALTERNATIVE**  
13      **FINANCING OPTION FOR ON-SITE SOLAR FACILITIES?**

14      A.     The Service Agreement contains terms and conditions that represent a standard lease  
15      agreement with a production guarantee. *See generally* Petitioner's Ex. 1-B and  
16      included production guarantee at p. H-1.

17      **Q.     IS THIS TYPE OF AGREEMENT USED BY WALMART AS A FINANCING METHOD FOR**  
18      **BEHIND THE METER INSTALLATIONS IN OTHER JURISDICTIONS?**

19      A.     Yes. As stated earlier in my testimony, Walmart contracts for on-site solar resources  
20      using either PPAs or Solar Leases; however, Walmart considers Solar Lease

1 arrangements only for the full output, including the environmental attributes, of the  
2 solar facility.

3 **Q. DOES WALMART OPPOSE THE FINANCING METHOD STRUCTURE CONTAINED IN THE**  
4 **SERVICE AGREEMENT?**

5 A. No. Walmart does not oppose the proposed financing structure of the Service  
6 Agreement as modified to include the conveyance of the environmental attributes of  
7 the energy.

8 ***Accounting and Ratemaking Treatment***

9 **Q. WHAT ACCOUNTING AND RATEMAKING TREATMENT IS PROPOSED FOR THE SOLAR**  
10 **SERVICES BY DEI?**

11 A. The Company proposes that all costs and revenues associated with the tariff are  
12 treated as below-the-line for accounting and ratemaking purposes. Petitioner's Ex. 1,  
13 p. 5, lines 6-7. According to the Company, this treatment results in all costs being  
14 borne by participating customers with no subsidization from other customers, "so  
15 there is no need for extensive Commission oversight." *Id.* at 6, lines 16-17.

16 **Q. WHAT IS THE MEANING OF BELOW-THE-LINE TREATMENT AS YOU UNDERSTAND ITS**  
17 **USE WITH RESPECT TO REGULATED UTILITIES?**

18 A. Below-the-line treatment, if properly established, fully segregates accounting for the  
19 specified program from Company's business activities associated with the provision  
20 of regulated electric utility service. In other words, the Company is proposing to offer

1           the proposed program to its customers outside of its normal accounting for regulated  
2           electric utility services.

3       **Q.    FROM A CUSTOMER'S PERSPECTIVE, ARE THERE ADVANTAGES OF BELOW-THE-LINE**  
4       **TREATMENT?**

5       A.    Yes. For non-participating customers, the proposed treatment ensures that no costs  
6           associated with the program are included in the customers' electric bills. Likewise, for  
7           participating customers, the program is provided separately and distinctly of the  
8           Company's regulated business and often allows for a more efficient and effective  
9           implementation of products to meet customers' needs at lower cost.

10      **Q.    DOES BELOW-THE-LINE TREATMENT, IF APPROVED BY THE COMMISSION,**  
11      **ELIMINATE THE COMMISSION'S RESPONSIBILITY WITH RESPECT TO THE PROPER**  
12      **SEPARATION OF THE PROGRAM FROM THE COMPANY'S REGULATED ACTIVITY?**

13      A.    No. The Commission's regulatory oversight remains extremely crucial for below-the-  
14           line utility offerings. The Commission must continue to provide oversight to ensure  
15           that approved rates do not include the cost of below-the-line activities. Including  
16           below-the-line expenses in approved rates would violate cost-causation principles  
17           and result in utility customers bearing costs caused by program participants.

1       **Q.     IS WALMART OPPOSED TO THE PROPOSED BELOW-THE-LINE ACCOUNTING AND**  
2       **RATEMAKING TREATMENT OF THE PROPOSED SOLAR SERVICES PROGRAM?**

3       A.     No. Walmart is not opposed to below-the-line accounting and ratemaking treatment  
4       of the proposed solar services program.

5       *Behind-the-Meter Solar is a Competitive Service and the Commission Should Ensure a*  
6       *Level Playing Field for All Providers*

7       **Q.     DOES DEI STATE THAT THE COMMISSION'S APPROVAL OF THE PROGRAM IS IN THE**  
8       **PUBLIC INTEREST BECAUSE THERE ARE COMPETITIVE FORCES THAT RENDER**  
9       **COMMISSION JURISDICTION UNNECESSARY?**

10      A.     Yes. See Petitioner's Ex. 1, p. 6, lines 7-8. Walmart agrees that the proposed product  
11      constitutes a competitive service offering. However, it is important for the  
12      Commission to recognize that the availability of financing options to all suppliers on  
13      an equal basis is a critical part of a competitive solar market. In simple terms, if only  
14      DEI is allowed to offer a Solar Lease option, then the Company will have an unfair and  
15      unwarranted competitive advantage over other suppliers in the market.

16      **Q.     DOES DEI STATE THAT CUSTOMERS HAVE THE RIGHT TO CHOOSE OTHER VENDORS**  
17      **FOR THE INSTALLATION OF SOLAR FACILITIES UNDER A VARIETY OF FINANCING**  
18      **OPTIONS?**

19      A.     Yes. See *id.* at 6, lines 9-11. However, it is not clear that financing options available  
20      to customers from non-DEI suppliers explicitly include a Solar Lease option.

1       **Q.     SHOULD THE COMMISSION ALLOW CUSTOMERS TO CHOOSE FROM OTHER**  
2           **SUPPLIERS, IN ADDITION TO THE COMPANY, WHEN PURSUING BEHIND-THE-METER**  
3           **SOLAR INSTALLATIONS UNDER A SOLAR LEASE?**

4       A.     Yes, as this product offering is a competitive service that can easily be offered by other  
5           providers in the market. If the Commission approves the proposed solar services  
6           program, it is approving an unregulated Solar Lease offering by the Company. By  
7           affirming that all providers can offer a Solar Lease arrangement, the Commission will  
8           ensure that customers will have access to a Solar Leases at the best available price. In  
9           contrast, if the Company is the only available Solar Lease supplier, the pricing would  
10          not be kept in check by the competitive pressures introduced through multiple  
11          suppliers. This would lead to Solar Lease terms that would fail to reflect the best  
12          available pricing.

13       **Q.     SHOULD CUSTOMERS' RIGHT TO CHOOSE A SOLAR VENDOR BE RESTRICTED TO ONLY**  
14           **CUSTOMERS LOCATED WITHIN DEI SERVICE TERRITORY?**

15       A.     No. The Commission should establish customers' right to choose a solar services  
16           provider throughout the state of Indiana, regardless of the electric utility jurisdiction  
17           within which a facility is located.

1       **Q.     IS WALMART AWARE OF ANY STATUTORY RESTRICTIONS THAT WOULD PREVENT**  
2           **COMMISSION AUTHORIZATION OF CUSTOMERS' RIGHT TO CHOOSE AN**  
3           **ALTERNATIVE PROVIDER OF BEHIND-THE-METER SOLAR SERVICES?**

4       A.     While I am not an attorney, Walmart has not identified any statutory restrictions that  
5           would prevent the Commission from establishing the customers' right to choose  
6           alternative suppliers for a behind-the-meter Solar Lease.

7       **Q.     WHAT IS WALMART'S RECOMMENDATION TO THE COMMISSION REGARDING THE**  
8           **RIGHT FOR CUSTOMERS TO CHOOSE ALTERNATIVE VENDORS FOR BEHIND-THE-**  
9           **METER SOLAR SERVICES UNDER A SOLAR LEASE?**

10      A.     The Commission should affirm and establish, in its Final Order, Indiana energy  
11           customers' right to choose an alternative supplier for behind-the-meter, solar services  
12           financed through a lease agreement with a performance guarantee. In so doing, the  
13           Commission will ensure that customers are able to access renewable energy resources  
14           through a Solar Lease, at the best available price.

15      **Q.     DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

16      A.     Yes.

**STATE OF INDIANA**

**INDIANA UTILITY REGULATORY COMMISSION**

**PETITION OF DUKE ENERGY INDIANA, LLC )  
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REQUIRED UNDER IND. CODE 8-1-2.5-1, ET. SEQ. )**

**EXHIBITS OF**

**GREGORY W. TILLMAN**

**ON BEHALF OF**

**WALMART INC.**

**STATE OF INDIANA**

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**EXHIBIT GWT-1 OF**

**GREGORY W. TILLMAN**

**ON BEHALF OF**

**WALMART INC.**



# Gregory W. Tillman

Senior Manager, Energy Regulatory Analysis  
Walmart Inc.

Business Address: 2001 SE 10<sup>th</sup> Street, Bentonville, AR, 72716-5530

Business Phone: (479) 204-7993

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## EXPERIENCE

### November 2015 – Present

Walmart Inc., Bentonville, AR

Senior Manager, Energy Regulatory Analysis

### November 2008 – November 2015

Oklahoma Gas & Electric, Oklahoma City, OK

Product Development Pricing Leader

Manager, Pricing

Senior Pricing Analyst

### May 2006 – November 2008

LSG Solutions, Oklahoma City, OK

Project Manager, International Registration Plan/Interstate Fuel Tax Agreement Systems Development

### August 2002 – May 2006

OnPeak Utility Solutions, Oklahoma City, OK

Owner/Consultant

### May 2000 – August 2002

Automated Energy, Inc., Oklahoma City, OK

Vice President, Utility Solutions

### November 1997 – May 2000

Williams Energy, Tulsa, OK

Sr. Manager Accounting Services

Process Manager, Customer Billing and Accounting

Retail Systems Manager, Billing and Electricity

### May 1990 – November 1997

Public Service Company of Oklahoma, Tulsa, OK

Manager, Software Development and Support

Supervisor, Data Translation and Power Billing

Administrator, Disaster Recovery and Research and Development

Programmer/Analyst

### June 1987 – May 1990

United States Army, Signal Command, Ft. Monmouth, NJ

Project Officer, Joint Tactical Information Distribution System

**EDUCATION**

1991-1994	<b>The University of Tulsa</b>	Graduate Coursework, M.B.A.
1987	<b>The University of Tulsa</b>	B.S., Electrical Engineering

**TESTIMONY BEFORE REGULATORY COMMISSIONS**

**2018**

Michigan Public Service Commission Case No. U-20162. In the matter of the Application of DTE ELECTRIC COMPANY for authority to increase its rates for its rate schedules and rules governing the generation and distribution of electricity and for other relief.

Public Service Commission of West Virginia Case No. 18-0646-E-42T. Appalachian Power Company and Wheeling Power Company, Rule 42T Application to increase electric rates and charges.

Michigan Public Service Commission Case No. U-20134. In the matter of the Application of CONSUMERS ENERGY COMPANY for authority to increase its rates for its rate schedules and rules governing the generation and distribution of electricity and for other relief.

New Jersey Board of Public Utilities Docket Nos. ER18010029 and GR18010030, in the Matter of the Petition of Public Service Electric and Gas Company for Approval of an Increase in Electric and Gas Rates and for Changes in the Tariffs for Electric and Gas Service, B.P.U.N.J. No. 16 Electric and B.P.U.N.J. No. 16 Gas, and for Changes in Depreciation Rates, Pursuant to N.J.S.A. 48:2-18, N.J.S.A. 48.2-21, and N.J.S.A. 48:2-21.1, and for Other Appropriate Relief.

Public Utility Commission of Texas Docket No. 48371, in the Matter of Entergy Texas, Inc.'s Statement of Intent and Application for Authority to Change Rates.

Commonwealth of Virginia State Corporation Commission, Case No. PUR-2018-00048, Application of Appalachian Power Company for the Determination of the Fair Rate of Return on Common Equity Pursuant to Va. Code § 56-585.1:1.C.

Pennsylvania Public Utility Commission, Docket No. R-2018-3000164, Pennsylvania Public Utility Commission v. PECO Energy Company – Electric Division.

Pennsylvania Public Utility Commission, Docket No. R-2018-3000124, Pennsylvania Public Utility Commission v. Duquesne Light Company.

Public Utility Commission of Nevada, Docket No. 18-02010 Application of Nevada Power Company D/B/A Nv Energy Filed Under Advice Letter No. 485 To Revise Tariff No. 1-B To Establish The 2017 Tax Rate Reduction Rider; Docket No. 18-02011 Application of Application Of Sierra Pacific Power Company D/B/A Nv Energy Filed Under Advice Letter No. 605-E To Revise Electric Tariff No. 1 To Establish The 2017 Tax Rate Reduction Rider; and, Docket No. 18-02012 Application Of Sierra Pacific Power Company D/B/A Nv Energy Filed Under Advice Letter No. 326-G To Revise Gas Tariff No. 1 To Establish The 2017 Tax Rate Reduction Rider.

Indiana Utility Regulatory Commission, Cause No. 45029, Petition of Indianapolis Power & Light Company ("IPL") for (1) Authority to Increase Rates and Charges for Electric Utility Service, (2) Approval of Revised Depreciation Rates, Accounting Relief, Including Update of the Major Storm Damage Restoration Reserve Account, Approval of a Vegetation Management Reserve Account, Inclusion in Basic Rates and Charges of the Costs of Certain Previously Approved Projects, Including the Eagle Valley Combined Cycle Gas Turbine,

the National Pollution Discharge Elimination System and Coal Combustion Residuals Compliance Projects, Rate Adjustment Mechanism Proposals, Cost Deferrals, Amortizations, and (3) Approval of New Schedules of Rates, Rules and Regulations for Service.

Oklahoma Corporation Commission Cause No. PUD 201700496: In the Matter of the Application of Oklahoma Gas and Electric Company for an Order of the Commission Authorizing Applicant to Modify its Rates, Charges, and Tariffs for Retail Electric Service in Oklahoma

Public Utility Commission of Texas Docket No. 47527, in the matter of the Application of Southwestern Public Service for Authority to Change Rates.

The Rhode Island Public Utilities Commission Docket No. 4770: In re: The Narragansett Electric Company d/b/a National Grid Electric and Gas Distribution Rate Filing.

Connecticut Public Utilities Regulatory Authority Docket No. 17-10-46: Application of the Connecticut Light and Power Company D/B/A Eversource Energy to Amend its Rate Schedules.

**2017**

Indiana Utility Regulatory Commission Cause No. 44967-NONE: Petition of Indiana Michigan Power Company, an Indiana corporation, for (1) authority to increase its rates and charges for electric utility service through a phase in rate adjustment; (2) approval of: revised depreciation rates; accounting relief; inclusion in basic rates and charges of qualified pollution control property, clean energy projects and cost of bringing I&M's system to its present state of efficiency; rate adjustment mechanism proposals; cost deferrals; major storm damage restoration reserve and distribution vegetation management program reserve; and amortizations; and (3) for approval of new schedules of rates, rules and regulations.

Public Service Commission of Wisconsin Docket No. 4220-UR-123: Application of Northern States Power Company, a Wisconsin Corporation for Authority to Adjust Electric and Natural Gas Rates

Michigan Public Service Commission Case No. U-18255. In the matter of the Application of DTE ELECTRIC COMPANY for authority to increase its rates for its rate schedules and rules governing the generation and distribution of electricity and for other relief.

Michigan Public Service Commission Case No. U-18322. In the matter of the Application of CONSUMERS ENERGY COMPANY for authority to increase its rates for its rate schedules and rules governing the generation and distribution of electricity and for other relief.

Iowa Utilities Board Docket No. RPU-2017-0001: In re: Interstate Power and Light Company.

Public Service Commission of Kentucky Case No. 2017-00179: In the Matter of the Electronic Application of Kentucky Power Company for (1) A General Adjustment of its Rates for Electric Service; (2) An Order Approving its 2017 Environmental Compliance Plan; (3) An Order Approving its Tariffs and Riders; (4) An Order Approving Accounting Practices to Establish Regulatory Assets and Liabilities; and (5) An Order Granting all other Required Approvals and Relief.

Public Service Commission of Kentucky Case No. 2016-00370: In the Matter of the Electronic Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates and for Certificates of Public Convenience and Necessity.

Public Service Commission of Kentucky Case No. 2016-00371: In the Matter of the Electronic Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Rates and for Certificates of Public Convenience and Necessity.

**2016**

Arizona Corporation Commission Docket No. E-01345A-16-0036: In the Matter of the Application of Arizona Public Service Company for a Hearing to Determine the Fair Value of the Utility Property of the Company for Ratemaking Purposes, to Fix a Just and Reasonable Rate of Return Thereon, to Approve Rate Schedules Designed to Develop Such Return.

Public Service Commission of South Carolina Docket No. 2016-227-E: IN RE: Application of Duke Energy Progress, LLC for Authority to Adjust and Increase Its Electric Rates and Charges

Arkansas Public Service Commission Docket No. 16-027-R: In The Matter of Net Metering and The Implementation of Act 827 of 2015.

Public Utility Commission of Texas Docket No. 45524, in the matter of the Application of Southwestern Public Service for Authority to Change Rates

Public Service Commission of Wisconsin Docket No. 4220-UR-122: Application of Northern States Power Company, a Wisconsin Corporation for Authority to Adjust Electric and Natural Gas Rates

Michigan Public Service Commission Case No. U-18014. In the matter of the Application of DTE ELECTRIC COMPANY for authority to increase its rates, amend its rate schedules and rules governing the distribution and supply of electric energy, and for miscellaneous accounting authority.

Arizona Corporation Commission Docket No. E-01933A-15-0322: In the Matter of the Application of Tucson Electric Power Company For the Establishment of Just and Reasonable Rates and Charges Designed to Realize a Reasonable Rate of Return on the Fair Value of the Properties of Tucson Electric Power Company Devoted to its Operations Throughout the State of Arizona, and for Related Approvals.

**2015**

Arizona Corporation Commission Docket No. E-04204A-15-0142: In the Matter of the Application of UNS Electric, Inc. For the Establishment of Just and Reasonable Rates and Charges Designed to Realize a Reasonable Rate of Return on the Fair Value of the Properties of UNS Electric, Inc. Devoted to Its Operations Throughout the State of Arizona, and for Related Approvals.

**2012**

Arkansas Public Service Commission Docket No. 12-067-U: In the Matter of the Application of Oklahoma Gas and Electric Company for an Order Approving a Temporary Surcharge to Recover the Costs of a Renewable Wind Generation Facility

**2011**

Oklahoma Corporation Commission Cause No. PUD 201100087: In the Matter of the Application of Oklahoma Gas and Electric Company for an Order of the Commission Authorizing Applicant to Modify its Rates, Charges, and Tariffs for Retail Electric Service in Oklahoma

**2010**

Arkansas Public Service Commission Docket No. 10-067-U: In the Matter of the Application of Oklahoma Gas and Electric Company for Approval of a General Change in Rates and Tariffs

**STATE OF INDIANA**

**INDIANA UTILITY REGULATORY COMMISSION**

**PETITION OF DUKE ENERGY INDIANA, LLC )  
FOR APPROVAL OF A SOLAR SERVICES PROGRAM )  
TARIFF, RIDER NO. 26, AND APPROVAL OF ) CAUSE NO. 45145  
ALTERNATIVE REGULATORY PLAN ("ARP") AND )  
DECLINATION OF JURISDICTION TO THE EXTENT )  
REQUIRED UNDER IND. CODE 8-1-2.5-1, ET. SEQ. )**

**EXHIBIT GWT-2 OF**

**GREGORY W. TILLMAN**

**ON BEHALF OF**

**WALMART INC.**

OUCC  
IURC Cause No. 45145  
Data Request Set No. 1  
Received: October 31, 2018

OUCC 1.8

**Request:**

Does the customer retain the environmental benefits including Solar Renewable Energy Credits (“SRECs”)?

**Response:**

No. The environmental attributes will be retained by Duke Energy Indiana, unless otherwise conveyed to the participating customer through service agreement negotiations.

**STATE OF INDIANA**

**INDIANA UTILITY REGULATORY COMMISSION**

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**EXHIBIT GWT-3 OF**

**GREGORY W. TILLMAN**

**ON BEHALF OF**

**WALMART INC.**

Walmart, Inc.  
IURC Cause No. 45145  
Data Request Set No. 1  
Received: November 30, 2018

Walmart 1.1

**Request:**

Reference the Company's response to OUCC Data Request 1.8 and 1.9. Please confirm whether DEI intends to provide the environmental attributes (i.e., Renewable Energy Credits ("RECs") or Solar RECs ("SRECs")) to customers participating in the Company's proposed program.

- a. To the extent that DEI does not transfer the RECs/SREs to the customer or retire them on the customer's behalf, what does DEI intend to do with the RECs/SRECs generated by participation in this program?

**Response:**

The Company will provide the customer the option to retain the environmental attributes as part of their participation in the Company's program. Should the customer decline the retain the environmental attributes, the Company will monitor the market conditions and its internal business requirements to determine the best course of action.



**STATE OF INDIANA**

**INDIANA UTILITY REGULATORY COMMISSION**

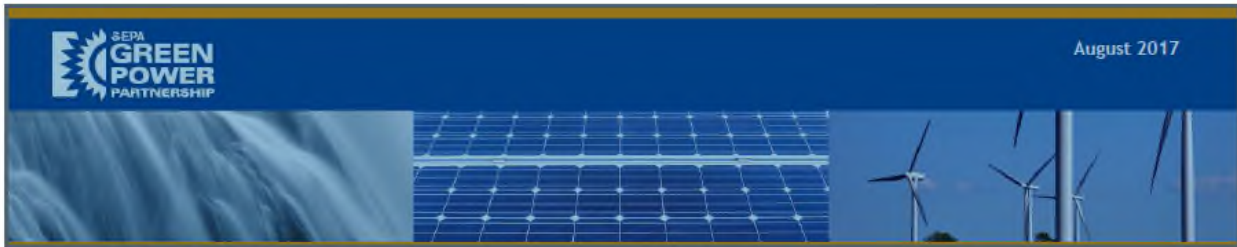
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**FOR APPROVAL OF A SOLAR SERVICES PROGRAM )**  
**TARIFF, RIDER NO. 26, AND APPROVAL OF ) CAUSE NO. 45145**  
**ALTERNATIVE REGULATORY PLAN ("ARP") AND )**  
**DECLINATION OF JURISDICTION TO THE EXTENT )**  
**REQUIRED UNDER IND. CODE 8-1-2.5-1, ET. SEQ. )**

**EXHIBIT GWT-4 OF**

**GREGORY W. TILLMAN**

**ON BEHALF OF**

**WALMART INC.**



## Guide to Making Claims About Your Solar Power Use

### Introduction

This guidance document describes best practices for appropriately explaining and characterizing your solar power activities and the fundamental importance of renewable energy certificates (RECs) for solar power use claims. This guidance is primarily focused on claims associated with on-site projects but is equally relevant for off-site owned projects as well.

### RECs Put the “Renewable” in Renewable Electricity

Much of the confusion about renewable electricity use claims, including solar power use claims, is because our electricity grid does not distinguish where the electricity was generated and delivered.<sup>1</sup> Electrons produced by a solar panel are no different than electrons produced by a coal-fired power plant or any other electricity generating technology. The indistinguishability of these electrons coupled with the inability to direct where electrons flow within the grid resulted in the U.S. electricity market establishing a separate accounting framework that tracks the generation, sale, and ultimate “use” of renewable electricity. Renewable electricity generators, therefore, produce two distinct market commodities: 1) electricity and 2) RECs. These commodities can be used and/or sold separately or together. The REC instrument embodies the environmental attributes of the underlying electricity generated from a renewable resource.

Across the United States, 10 regional electronic REC tracking systems facilitate the creation, management, and retirement of RECs for most renewable energy projects and resources.<sup>2</sup> Even if the renewable energy project is not formally registered with and issued RECs from a regional tracking system, the renewable project still generates the environmental attributes that would normally be conveyed by the REC instruments. These environmental attributes or RECs can be sold or transferred to other parties through contractual agreements.

#### What is a REC?

A renewable energy certificate – REC (pronounced: rêk) is a tradeable, market-based instrument that represents the legal property rights to the “renewable-ness”—or non-power (i.e., environmental) attributes—of renewable electricity generation.

A REC is created for every megawatt-hour (MWh) of electricity generated and delivered to the grid from a renewable energy resource.

Electricity cannot be considered renewable without a REC to substantiate its renewable-ness.

<sup>1</sup> NREL 2015. Renewable Electricity: How do you know you are using it? <http://www.nrel.gov/docs/fy15osti/64558.pdf>

<sup>2</sup> NREL 2013. Renewable Energy Certificate (REC) Tracking Systems: Costs & Verification Issues. <http://www.nrel.gov/docs/fy14osti/60640.pdf>



RECs are legal instruments that contractually convey the attributes of renewable electricity (i.e. environmental attributes) to their owner.<sup>3</sup> As such, the REC owner has exclusive rights to make claims—either explicitly or implicitly—about “using” or “being powered with” the renewable electricity associated with that REC<sup>4</sup>, as well as the associated claims about carbon footprint reductions. Only the owner of a REC should make claims about using renewable electricity, and once made, no other entity can legally make claims about using the renewable electricity associated with that REC. RECs issued through REC tracking systems can be “retired” or removed from circulation once the owner has made a claim against the underlying attributes of the REC.

## Making Solar Power Use Claims

Your institution might have solar panels on-site and use the electrical output to power its facilities, but that does not necessarily mean it can claim to use solar power. The ability to claim “use” of solar electricity from the on-site solar system is contingent on your ownership or exclusive rights to the associated RECs. The requirement to own RECs to substantiate your use of solar energy is true of electricity generation from either a self-owned or third-party owned system, such as through a power purchase agreement (PPA) or solar lease.

To make a solar project financially feasible or improve its return on investment, the project’s RECs are often not conveyed to the electricity consumer, but are sold by the project owner or project developer into the open market. Although selling the associated project RECs brings down the delivered cost of electricity to the consumer the consumer cannot in the absence of owning the RECs claim to be using solar power. In these cases, it is the eventual buyer of the project’s RECs that can make the claim of using renewable electricity from the project. So what is the electricity consumer to do if they must sell the RECs associated with the solar project? Read the EPA white paper on [REC Arbitrage](#) to learn about this widely used instrument swap approach.

The following table provides a sampling of appropriate claims for different scenarios of REC ownership. For a more detailed explanation of claims, please visit the Green Power Partnership’s [Solar Claims webpage](#):

Scenario	Appropriate Marketing Claims
Organization has on-site solar system and owns associated project RECs.	<ul style="list-style-type: none"> <li>• We are using solar power.</li> <li>• Our solar panels are reducing our organization’s carbon footprint.</li> <li>• We are powered by solar energy.</li> <li>• Our electricity comes from solar panels.</li> </ul>
Organization has on-site solar system but does not own associated project RECs.	<ul style="list-style-type: none"> <li>• We generate solar energy but sell it to another party.</li> <li>• Our solar panels are helping to reduce our energy costs and generate revenue through the sale of RECs.</li> <li>• We are not using solar power, but our solar system is helping to green the grid.</li> </ul>

<sup>3</sup> Center for Resource Solutions 2015. The Legal Basis for Renewable Energy Certificates. <https://resource-solutions.org/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf>

<sup>4</sup> Federal Trade Commission 2012. Guides for the Use of Environmental Marketing Claims [https://www.ftc.gov/sites/default/files/documents/federal\\_register\\_notices/guides-use-environmental-marketing-claims-green-guides/greenguidesfrn.pdf](https://www.ftc.gov/sites/default/files/documents/federal_register_notices/guides-use-environmental-marketing-claims-green-guides/greenguidesfrn.pdf)



Scenario	Appropriate Marketing Claims
	<ul style="list-style-type: none"> <li>By selling RECs from our solar system to our utility, we are helping the utility fulfill its state-mandated renewable energy targets.</li> </ul>
<p>Organization has on-site solar system but does not own associated project RECs; however, purchases replacement wind RECs equal to 100 percent of its power needs.</p>	<ul style="list-style-type: none"> <li>We generate solar energy but sell the RECs to another party. However, we purchase 100-percent wind power and have zero Scope 2 emissions.</li> </ul>

## Best Practices in Making Solar Use Claims from On-Site Systems

When making claims about your solar power use, whether through press releases, websites, speeches, videos or other media or public communications, it is important to accurately reflect your specific solar arrangement. By being clear and accurate in your claims, you are helping to ensure that there are no double use claims being made on the same solar electricity.

In order to make accurate and legitimate solar use claims, we suggest the following as best practices:

### *Be specific and clearly define RECs and who owns them in any public communication.*

In your communications and marketing materials, be specific enough to ensure a reasonable consumer or stakeholder understands your solar power arrangement (i.e., who is ultimately using the solar power as substantiated by ownership of the REC).

We suggest that in any press release or public statement, you define what RECs are and who owns them. Partner organizations are encouraged to [contact](#) the Green Power Partnership for assistance when making voluntary green power claims.

For more information on RECs visit the Green Power Partnership's [RECs webpage](#).

### *If you are claiming to use solar electricity, ensure you either own or have exclusive contractual rights to the environmental attributes or RECs to substantiate your claims.*

Before making any claims about “using” solar power, make sure you own the environmental attributes associated with your system or for systems registered in a tracking system that you own the RECs or have had them retired on your behalf in the system.

If you own your solar system, you can claim to be using the solar power as long as you have not 1) sold the RECs to another party, or 2) entered into any contractual agreements that sell or transfer the RECs or the environmental attributes to another party. If the system is registered in a REC tracking system and formally issued RECs, you must retain and retire these RECs in the tracking system.

If your solar system was installed via a PPA or solar lease, you should review the contract and verify that your organization owns the environmental attributes or RECs if it wishes to make claims about using the associated solar power. RECs can be delivered and retired on your behalf



contractually in the lease or purchase agreement. If the system is registered in a REC tracking system, RECs will be issued to the project owner's account and the project owner must either transfer the RECs to your account in the tracking system, or if you do not have an account, retire the RECs in the tracking system on your behalf.

Note, contracts for solar are not always entirely clear with respect to REC ownership, and how transfer and retirement will occur. You should confirm your understanding of what happens to the RECs in any transaction to ensure exclusive ownership of the RECs and exclusive claim to the solar power.

REC ownership is often affected by state laws and incentives. In most states, the project owner is assigned ownership of the environmental attributes or RECs generated by the project. However, some state policies or programs require that RECs be transferred to a utility to help it meet state mandates, such as renewable portfolio standards. You can learn more about your specific state and utilities policies by visiting the online [Database of State Incentives for Renewables and Efficiency](#). For most states, REC ownership policy is covered by either its net-metering or interconnection policies. Again, you may also want to inquire with your utility or solar installer to confirm REC ownership.

*If you do not own the RECs associated with your solar system, do not make claims about using solar electricity.*

Without REC ownership, making claims about using solar power can result in a number of risks to your organization as well as violate state and Federal law and guidance, including the following:

- **Legal risks**—Possible scrutiny by the Federal Trade Commission (FTC) and/or your state's attorney general's office for false or deceptive marketing claims. This is not only true of electricity consumers but also third-party suppliers who develop solar projects through PPA contracts. A PPA developer can't claim to be selling solar energy if the PPA doesn't convey the RECs to the off taker of the electricity.
- **Contractual and financial risks**—Potential for breach of contract by conveying the same environmental attributes to multiple users.
- **Brand and reputation risks**—Possible requirement to issue a clarifying statement regarding the claims about your solar power project, use of solar energy or carbon footprint reductions.

An organization that claims to be using solar power, but does not own the RECs associated with their solar generator's output, may be double counting or claiming the renewable attributes of the electricity. Double counting RECs between multiple parties undermines the renewable electricity market by overestimating the amount of renewable electricity generated/used relative to the number of megawatt-hours produced.

*Avoid implied claims.*

If your company or institution installs on-site solar but does not own the associated RECs, avoid making implied claims that consumers or stakeholders might interpret as you "using" solar. For instance, as the FTC notes in an example of a manufacturer with solar on its facility's rooftop: "Even



if the manufacturer uses the electricity generated by the solar panels, it has, by selling the renewable energy certificates, transferred the right to characterize that electricity as renewable [...]. It also would be deceptive [...] to advertise that it 'hosts' a renewable energy facility because reasonable consumers likely interpret this claim to mean that the manufacturer uses renewable energy." Instead, if you intend to make a public statement about a project you are involved in, make sure that it is clear to reasonable consumers of what is happening.

*Ask for communications assistance from industry experts and key stakeholders.*

Ask industry experts and key stakeholders to review your communications and marketing materials to help ensure that they are accurate and adhere with industry standards and best practices, including the FTC's Guides for the Use of Environmental Marketing Claims. Experts and stakeholders could include individuals from EPA's Green Power Partnership, third party certification programs, regional and national solar power groups, your legal counsel, or your solar developer.

*Ensure individuals throughout your organization understand the importance of accurate claims and have multiple stakeholders review communications materials.*

You might be the point person for your organization's solar efforts and understand how the solar market works and the importance of REC ownership for claims. However, the members of your organization's public relations team are not experts in the solar market and might reasonably assume that because there is a solar project on the organization's rooftop, it is "using" solar power. To ensure your organization's messaging is accurate, we suggest you have multiple reviewers from different stakeholder groups within the organization review the communications materials. EPA is available to help inform or support these other stakeholders. We can review content and provide you with communications materials to help explain your organization's green power use.

*Formally retire the RECs associated with your on-site solar power use.*

When possible, your organization should ensure that the RECs associated with your solar power use are formally retired. Formal REC retirement mechanisms exist for RECs issued by tracking systems. Ask your solar developer or tracking system representative about REC retirement options. If your solar system is owned by a third-party but is not registered in a tracking system, the RECs or environmental attributes can be retired contractually. Lastly, if your organization owns a solar system that is not registered in a tracking system, it is not possible to formally retire RECs or environmental attributes. Most states convey the environmental attributes to the owner, in those cases.

In all instances, organizations should not transfer or sell RECs or environmental attributes after a claim has been made. Making a claim constitutes a retirement of the REC; any sale or claim by a different owner would constitute double-counting of or claim on the same renewable electricity. In taking these steps, you help avoid two different parties claiming the same environmental attributes on the same renewable power.



*Ensure your organization's GHG accounting and carbon footprint reduction claims align with market best practices.*

In accounting for your organization's scope 2 emissions, only electricity backed by RECs can be accounted for as zero-emissions. If your organization owns the RECs associated with its solar system then apply the zero-emissions rate specified by the project REC to your purchased electricity consumption under Scope 2. In the absence of owning the project RECs, apply, in order of preference, either a residual mix or grid average emissions rate to calculate the emissions of your unspecified purchased electricity use under Scope 2. For more information on GHG accounting refer to World Resource Institute's *GHG Protocol Scope 2 Guidance* and the Center for Resource Solutions' *The Greenhouse Gas Benefits of Renewable Energy Purchases and Scope 2 Greenhouse Gas Accounting for U.S. Renewable Energy*.

In summary, all renewable electricity generation involves the creation of RECs. Only the ultimate owner of a REC can claim the environmental attributes of a particular megawatt-hour of renewable energy. If you are making claims about using renewable electricity, make sure you own and retire the RECs. If you do not own the RECs, do not make public claims, explicit or implied, about using renewable electricity.

## Additional Resources

Green Power Partnership's REC video: [www.youtube.com/watch?v=12VYXms6-c](http://www.youtube.com/watch?v=12VYXms6-c)

Green Power Partnership's webpage on making environmental claims: [www.epa.gov/greenpower/making-environmental-claims](http://www.epa.gov/greenpower/making-environmental-claims)

Center for Resource Solutions' (CRS) resources pertaining to RECs and renewable energy claims: [resource-solutions.org/learn/rec-claims-and-ownership/](http://resource-solutions.org/learn/rec-claims-and-ownership/)

CRS's The Legal Basis for Renewable Energy Certificates:  
[resource-solutions.org/site/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf](http://resource-solutions.org/site/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf)

CRS's Scope 2 Greenhouse Gas Accounting for U.S. Renewable Energy  
[resource-solutions.org/document/scope-2-greenhouse-gas-accounting-for-u-s-renewable-energy/](http://resource-solutions.org/document/scope-2-greenhouse-gas-accounting-for-u-s-renewable-energy/)


CRS's The Greenhouse Gas Benefits of Renewable Energy Purchases  
[resource-solutions.org/wp-content/uploads/2016/11/GHG-Benefits-of-RE-Purchases.pdf](http://resource-solutions.org/wp-content/uploads/2016/11/GHG-Benefits-of-RE-Purchases.pdf)

FTC's Guides for the Use of Environmental Marketing Claims:  
[www.ftc.gov/sites/default/files/documents/federal\\_register\\_notices/guides-use-environmental-marketing-claims-green-guides/greenguidesfm.pdf](http://www.ftc.gov/sites/default/files/documents/federal_register_notices/guides-use-environmental-marketing-claims-green-guides/greenguidesfm.pdf)

National Renewable Energy Laboratory's Renewable Electricity: How do you know you are using it?:  
[www.nrel.gov/docs/fy15osti/64558.pdf](http://www.nrel.gov/docs/fy15osti/64558.pdf)

VERIFICATION

I, Gregory W. Tillman, Senior Manager, Energy Regulatory Analysis for Wal-Mart Stores, Inc., affirm under penalties for perjury that the foregoing Direct Testimony and Exhibits are true to the best of my knowledge, information, and belief.

  
\_\_\_\_\_  
Gregory W. Tillman

*12-11-18*  
\_\_\_\_\_  
Date