BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of EDF Trading North America, LLC to:
Certify Qualification of Tier 1 Solar Photovoltaic Shares Alternative Energy Credits (SAEC) Consistent With Existing Contracts
Implementation of Act 40 of 2017

Docket No. 2017-2631527

AMENDED PETITION OF EDF TRADING NORTH AMERICA, LLC TO CERTIFY QUALIFICATION OF TIER 1 SOLAR PHOTOVOLTAIC SHARES ALTERNATIVE ENERGY CREDITS (SAEC) REQUIREMENTS CONSISTENT WITH EXISTING CONTRACTS

Pursuant to 71 P.S. § 714(2)(iii) (a/k/a Section 2804(2)(ii) of Act 40) and the Commission’s Opinion and Order entered August 2, 2018 at Docket No. M-2017-2631527, EDF Trading North America, LLC (“Petitioner”), respectfully requests that the Commission maintain and affirm its certification of qualified Tier 1 solar photovoltaic shares alternative energy credits (i.e. “SAECs”), which are the subject of specific purchase and sale contracts entered into by Petitioner prior to October 30, 2017 (the “Transaction Contracts”), from November 1, 2017 through the life of each such Transaction Contract. Petitioner entered into these Transaction Contracts as a wholesale supplier for the purchase and/or sale of SAECs – referred to alternately therein as Pennsylvania Solar AECs, Pennsylvania Alternative Energy Credits, and Renewable Energy Credits or RECs – prior to October 30, 2017 and with the intention, ultimately, of having the SAECs used by

2 See Attachments A through C. Petitioner requests that the Commission treat the Transaction Contracts as protected under Pennsylvania’s Right to Know Law, 65 P.S. § 67.708(b). Additionally, Act 40 Clarification Order, Petitioner has redacted particularly sensitive information.
3 For the purposes of this Petition, the terms SAEC, Pennsylvania Solar AEC, Pennsylvania Alternative Energy Credit, and Renewable Energy Credit or REC, or the plural forms thereof, can be read interchangeably.
qualifying third parties to certain of the Transaction Contracts for their compliance with the Alternative Energy Portfolio Standards (AEPS) solar PV share requirements as promulgated by the Pennsylvania General Assembly, at 73 P.S. § 1648.1, et seq (the “Applicable Standard”). At the time that such Transaction Contracts were executed and confirmed, the SAECs satisfied the Applicable Standard. Since these contractual obligations can be shown to be within the chain of production to compliance usage, consistent with the Commission’s Act 40 Clarification Order, Petitioner requests that the Commission certify the SAECs being purchased by Petitioner qualified effective November 1, 2017 pursuant to 2804(2)(ii) of Act 40 and that such qualification is maintained, affirmed and would continue to apply until the SAECs are sold and delivered by Petitioner under the applicable Transaction Contracts.

In further support of this Petition, Petitioner states as follows:

1. Petitioner has entered into the Transaction Contracts as a wholesale supplier with the specific intention of purchasing SAECs satisfying the Applicable Standard and selling those same SAECs to third parties serving load in the State of Pennsylvania who would use such SAECs to satisfy their compliance with the AEPS Act solar PV requirements.

2. The initial effective date for each of these Transaction Contracts (or the underlying purchaser/sale transaction) is prior to October 30, 2017 and each is more fully described as follows:

   a. Agreement for the Purchase and Sale of Alternative Energy Credits Transaction Confirmation Letter between Duke Energy Renewable Services, LLC, as seller, and Petitioner, as buyer (Attachment A).

   b. The REC Transaction Confirmation dated October 11, 2016 by and between Petitioner, as Seller, and GDF SUEZ Energy Marketing NA, Inc., as Buyer, (Attachment B).

   c. The Transaction Confirmation (Physical REC) dated November 21, 2016 by and between Petitioner, as Seller, and Calpine Energy Services, L.P., as Buyer (Attachment C).
3. Pursuant to each of the Transaction Contracts, Petitioner has acquired or sold qualified SAECs created pursuant to the Applicable Standard and generated by a Tier 1 Renewable Source fulfilled by solar photovoltaic facilities. All of the Transaction Contracts note reliance on the Applicable Standard for qualification of the SAECs.

4. Pursuant to each of the Transaction Contracts pursuant to which Petitioner is the “Seller”, the counterparty “Buyer” is an EGS or EDC serving load in Pennsylvania and who may use the SAECs for compliance with their respective AEPS Act solar PV share requirement.

5. Because the Transaction Contracts all pre-date October 30, 2017, are within the chain of production of the SAECs to their use by an EGS or EDC serving load in Pennsylvania to meet their respective AEPS Act solar PV share requirement, and otherwise satisfy the “binding written contract for the sale and purchase of [SAECs]” requirement of Section 2804(2)(ii), the Transaction Contracts meet the Section 2804(2)(ii) exemption.

6. For the reasons set forth above, Petitioner respectfully requests that the Commission (a) confirm that the Transaction Contracts are consistent with the chain of custody concepts expressed in the Act 40 Clarification Order, (b) as a result thereof and the fact that each such Transaction Contract was entered into in writing prior to October 31, 2017, certify the Transaction Contracts meet the Section 2804(2)(ii) exemption (as modified in the Act 40 Clarification Order) and (c) maintain and affirm the certification of the SAECs consistent therewith, continuing in effect such certification from November 1, 2017 until such time as the sale and delivery of the SAECs is made by Petitioner under the applicable Transaction Contracts.

7. In support of its request for the foregoing findings by the Commission, Petitioner agrees to provide any additional information or documentation as the Commission requires in its review of this Petition and for the relief requested in this Petition.
WHEREFORE, the Petitioner respectfully requests that the Commission grant this Petition.

Megan S. Haines, Esquire  
PA ID 203590  
McGuireWoods LLP  
Tower Two-Sixty Two  
260 Forbes Ave., Suite 1800  
Pittsburgh, PA 15222  
(412) 667-6000 (phone)  
(412) 667-6019 (fax)

Attorneys for EDF Trading North America, LLC

Date: April 16, 2019
VERIFICATION

I, Jason Cox, Director, Regulatory Affairs, for EDF Trading North America, LLC, hereby state that the facts above set forth are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: April 15, 2019

Jason Cox
Director, Regulatory Affairs
EDF Trading North America, LLC
Attachment A
# AGREEMENT FOR THE PURCHASE AND SALE OF ALTERNATIVE ENERGY CREDITS

## TRANSACTION CONFIRMATION LETTER

From: Duke Energy Renewable Services, LLC  
139 East 4th Street  
Cincinnati, OH 45202

To: EDF Trading North America, LLC  
4700 W. Sam Houston Parkway N., Suite 250  
Houston, TX 77019

The purpose of this letter (this "Confirmation Letter") is to confirm the terms and conditions of the transaction between Duke Energy Renewable Services, LLC ("Seller") and EDF Trading North America, LLC ("Buyer") as of the Effective Date (the "Transaction"). Seller and Buyer are each referred to as a "Party" and, collectively, as the "Parties." This Confirmation Letter, including the attached General Terms and Conditions, shall constitute the entire agreement ("Agreement") between the Parties related to the subject matter hereof and supersedes and replaces any prior oral or written confirmation, including broker confirmations, regarding this Transaction.

The terms of the Transaction to which this Confirmation Letter relates are as follows:

<table>
<thead>
<tr>
<th>Effective Date:</th>
<th>January 23, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seller:</td>
<td>Duke Energy Renewable Services, LLC</td>
</tr>
<tr>
<td>Buyer:</td>
<td>EDF Trading North America, LLC</td>
</tr>
<tr>
<td>Product:</td>
<td>Pennsylvania Solar Photovoltaic &quot;Tier 1&quot; Renewable Energy Certificates (referred to as &quot;Alternative Energy Credits&quot; under Pennsylvania law) (&quot;RECs&quot;) as defined in Paragraph 1 below</td>
</tr>
</tbody>
</table>
| Reporting Year(s): | Deal #1: 2018  
Deal #2: 2019 |
| Contract Quantity: | Deal #1: 2,500 RECs  
Deal #2: 2,500 RECs |
| Contract Price:  | Deal #1: [redacted]  
Deal #2: [redacted] |
| Total Contract Price: | [redacted] |

Capitalized terms used but not defined herein shall have the meanings given to them in the General Terms and Conditions.

1. **Product.** Seller represents that the Product sold hereunder (A) was generated by one or more facility physically located within the PJM territory, and (B) meets that portion of the "Tier 1 Alternative Energy Source Requirement" requiring a portion of the Tier 1 requirement to be fulfilled with Alternative Energy Credits from solar photovoltaic facilities, as set forth in the Pennsylvania Alternative Energy Portfolio Standards, 73 P.S. § 1648.1 (the "AEPS"), and regulations promulgated with respect thereto, 52 Pa. Code Part 1, Subpt C, Ch 75, in each case as applicable to the Reporting Year(s) transferred hereunder; provided, however, that the Product
does not include: (i) state and federal production tax credits, investment tax credits, and any other
tax credits or tax benefits, (ii) cash payments or outright grants of money (except any cash
payments or grants related to any environmental greenhouse gas or emissions cap and trade
program), (iii) other third party financial incentives which, if achieved, will result in cash
payments by the third party providing such incentives and which are specific to project
development or project operation and (iv) any item that would otherwise be an environmental
benefit or attribute under this definition, but (a) cannot be transferred by Seller in accordance with
applicable law or (b) cannot be transferred by Seller without incurring material expenses.

2. **Product Delivery.** Seller shall initiate a transfer order for the Contract Quantity
generated in Deal #1 to Buyer's PJM GATS account on or before July 15, 2018 (the “Deal #1
Delivery Date”). Seller shall initiate a transfer order for the Contract Quantity of Product
generated in Deal #2 to Buyer’s PJM GATS account on or before July 15, 2019 (the “Deal #2
Delivery Date”). The Deal #1 Delivery Date and the Deal #2 Delivery Date are individually
referred to as the “Delivery Date” and collectively referred to as the “Delivery Dates”. Upon
receiving written, facsimile or electronic confirmation from PJM GATS that a transfer order has
been initiated by Seller, Buyer shall confirm the transfer order in PJM GATS within two (2)
Business Days.

3. **Payment.**

4. **Payment Netting.**

5. **Term.** This Agreement shall commence on the Effective Date and shall terminate on the
date on which both Parties have completed the performance of their obligations hereunder, unless
earlier terminated pursuant to the terms hereof.

Sincerely,

Duke Energy Renewable Services, LLC

By: [Signature]

Name: Shannon Grotefeld

Title: Portfolio Risk Manager
Accepted and Agreed:

EDF Trading North America, LLC

By: ____________________________
Name: Gerald Nemec
Title: General Counsel

EDF Commercial 5
EDF Settlements 3523254
EDF Credit 8
EDF Legal 0
AGREEMENT FOR THE PURCHASE AND SALE OF ALTERNATE ENERGY CREDITS

GENERAL TERMS AND CONDITIONS

1. DEFINITIONS

1.1 Definitions. In addition to any other terms defined in the Confirmation Letter or these General Terms and Conditions, the following terms shall have the meaning ascribed to them as set forth below:

"Adequate Assurances" shall have the meaning given in Section 8.7.

"AEPS" means the Pennsylvania Alternative Energy Portfolio Standards Act, 73 P.S. §1648.1 et seq., and any successor Pennsylvania standard or statute and all rules and regulations of the Pennsylvania Public Utilities Commission which relate to such standard, as they may be amended from time to time.

"Business Day" means a day on which Federal Reserve member banks in New York City are open for business; and a Business Day shall open at 8:00 a.m. and close at 5:00 p.m. Eastern Prevailing Time.

"Change of Law" shall have the meaning ascribed to such term in Section 6.

"Confidential Information" means all non-public oral and written information exchanged between the Parties with respect to the subject matter of this Agreement. The following information does not constitute Confidential Information for purposes of this Agreement: (a) information that is or becomes generally available to the public other than as a result of a disclosure by either Party in violation of this Agreement; (b) information that was already known by either Party on a non-confidential basis prior to this Agreement; (c) information that becomes available to either Party on a non-confidential basis from a source other than the other Party if such source was not subject to any prohibition against disclosing the information to such Party; and (d) information that is developed by receiving Party or its affiliates independently and without access to the Confidential Information of disclosing Party.

"Costs" shall have the meaning specified in Article 7.

"Defaulting Party" shall have the meaning specified in Article 8.

"Delivery Date" shall have the meaning set forth in the Confirmation Letter.
“Early Termination Date” shall have the meaning given in Article 8.2.

“Effective Date” shall have the meaning given in the Confirmation Letter.

“Environmental Attributes” means any renewable energy certificates or credits and any other attribute, aspect, characteristic, claim, credit, benefit, reduction, offset or allowance, however entitled or named, resulting from, attributable to or associated with the generation of energy, other than the electric energy produced, pursuant to any international, federal, state or local legislation or regulation but excluding: (i) any emissions reduction of capped or traded pollutants where allowances are not routinely assigned to renewable energy generators, including sulfur dioxide (SO2), mercury (Hg) and oxides of nitrogen (NOx), and (ii) any production tax credits, investment tax credits or other direct third-party subsidies for generation of electricity associated with the alternative energy system.

“Event of Default” shall have the meaning given in Article 7.

“Force Majeure” means an event or circumstance which materially adversely affects the ability of a Party to perform its obligations under this Agreement, which event or circumstance was not reasonably anticipated as of the Effective Date and which is not within the reasonable control of, or the result of the fault or negligence of, the Party claiming Force Majeure, and which the claiming Party is unable to overcome or avoid or cause to be avoided, by the exercise of reasonable care. Force Majeure may not be based on (i) the loss or failure of Buyer’s markets; (ii) Buyer’s inability economically to use or resell the Product; (iii) Seller’s ability to sell the Product to another at a price greater than the Contract Price; (iv) Buyer’s ability to produce Product; or (v) Buyer’s ability to purchase product similar to the Product at a price less than the Contract Price.

“Interest Rate” means a per annum rate of interest equal to the prime lending rate as published from time to time in the Wall Street Journal under “Money Rates” on such due date (or if not published on such day on the most recent preceding day on which published), but in no event to exceed the maximum lawful rate.

“Losses” means, with respect to any Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from termination of a Terminated Transaction, determined in a commercially reasonable manner.

“Non-Defaulting Party” shall have the meaning given in Article 8.2.

“PJM GATS” means the environmental registry and information system, which is administered by PJM Environmental Information Services, Inc., that tracks the environmental and fuel attributes of generation, and any successor tracking system that both Parties agree in their reasonable commercial judgment facilitates the sale and purchase of Product.

“Reporting Year” means the period beginning June 1 of the period year and continuing until May 31 of the subject year (e.g. Reporting Year 2018 means June 1, 2017 through May 31, 2018).
"Termination Payment" shall have the meaning given in Article 8.3.

"Terminated Transaction" shall have the meaning given in Article 8.2.

2. REPRESENTATIONS AND WARRANTIES

2.1 Representations and Warranties of Both Parties. As of the Effective Date, each Party, hereby represents and warrants to the other Party that:

(a) it is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation;

(b) it has all regulatory authorizations necessary for it to legally perform its obligations under this Agreement;

(c) the execution, delivery and performance of this Agreement is within its powers, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any law, rule, regulation, order or the like applicable to it;

(d) this Agreement and each other document executed and delivered in accordance with this Agreement constitutes its legally valid and binding obligation enforceable against it in accordance with its terms; subject to any equitable defenses, bankruptcy principles, or the like;

(e) no Event of Default with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Agreement;

(g) it is acting for its own account, has made its own independent decision to enter into this Agreement and as to whether this Agreement is appropriate or proper for it based upon its own judgment, is not relying upon the advice or recommendations of the other Party in so doing, and is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions and risks of this Agreement;

(h) it is a "forward contract merchant" within the meaning of the United States Bankruptcy Code; and

(i) it has entered into this Agreement in connection with the conduct of its business and it has the capacity or ability to make or take delivery of all Products referred to in the Agreement to which it is a Party.

2.2 Representations and Warranties of Seller. As of the Delivery Date, Seller hereby represents and warrants to Buyer that:

(a) it has the right to sell the Product;
(b) Seller has not sold the Product or otherwise transferred or reported the Product for any other purpose or use;

(c) the Product is free and clear of all liens or other encumbrances;

(d) the Product was generated during the eligible Reporting Year; and

(e) it has not sold or otherwise transferred or reported for its own account Environmental Attributes associated with the same electrical output from the Product delivered hereunder or Environmental Attributes otherwise associated with the Product delivered hereunder if such sale or reporting would result in the loss of certification of the Product delivered hereunder under the AEPS.

2.3 Limitation on Warranties. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, SELLER EXPRESSLY DISCLAIMS ANY OTHER REPRESENTATIONS OR WARRANTIES, WHETHER WRITTEN OR ORAL, AND WHETHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY REPRESENTATION OR WARRANTY WITH RESPECT TO CONFORMITY TO MODELS OR SAMPLES, MERCHANTABILITY, OR FITNESS FOR ANY PARTICULAR PURPOSE. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, SELLER MAKES NO REPRESENTATION OR WARRANTY HEREUNDER REGARDING ANY ACTION OR FAILURE TO ACT, OR APPROVAL OR FAILURE TO APPROVE, OF ANY AGENCY OR GOVERNMENTAL ENTITY.

3. TAXES AND FEES

Each Party shall be responsible for any taxes or other fees associated with its respective purchase and sale hereunder. As used herein “taxes” means, but is not limited to, any or all ad valorem, property, occupation, severance, first use, conservation, gross receipts, privilege, sales, use, consumption, excise, lease, transaction, and other taxes, governmental charges, licenses, fees, permits and assessments, or increases therein, other than taxes based on net income or net worth. A tax is not a penalty or a fine.

4. ASSIGNMENT

Neither Buyer nor Seller shall assign this Agreement nor delegate any of its duties hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld.

5. FORCE MAJEURE

Except with regard to a Party’s obligation to make payments under this Agreement, in the event that either Party is rendered unable, wholly or in part, by Force Majeure to carry out its obligations hereunder, it is agreed that upon the claiming Party giving written notice and full particulars of such Force Majeure to the other Party as soon as reasonably practicable, that the claiming Party’s performance of its obligations hereunder shall be suspended, during the pendency of the Force Majeure, to the extent such Party is prevented from performing as a result of the Force Majeure. The claiming Party shall use commercially reasonable efforts to fulfill its obligations hereunder and remove any disability caused by such Force Majeure event as soon as practicable.
6. CHANGE IN LAW

If, prior to the transfer of Product sold hereunder, any statutes, rules, regulations, permits or authorizations are enacted, amended, granted or revoked which have the effect of changing the transfer and sale procedure set forth in this Agreement so that the implementation of this Agreement becomes impossible or impracticable, or otherwise revokes or eliminates the AEPS with respect to any Contract Quantity of Product that has not been delivered to Buyer, the Parties hereto agree to negotiate in good faith to amend this Agreement to conform with such new statutes, regulations, or rules in order to maintain the original intent of the Parties under this Agreement. If the Parties are unable to mutually agree on an amendment to reform this Agreement within fifteen (15) Business Days following a request by either Party to commence such negotiations, then either Party may terminate this Agreement by written notice with no further payment or performance obligations except for payment obligations that have accrued prior to such termination.

Notwithstanding the foregoing, (1) Change of Law that changes in any respect the value of the Product will have no effect on the obligation of the Parties to purchase and receive and sell and deliver the Product at the price and on the terms set forth in this Agreement, (2) to the extent that Change of Law renders delivery of the Product illegal under applicable law, this Agreement shall terminate and (3) this Agreement will not be affected, cancelled, or otherwise impaired by Change of Law occurring after delivery of the Product affected thereby.

7. EVENTS OF DEFAULT

For purposes of this Agreement, a Party shall be in default (each of the following, an "Event of Default"): (a) if that Party materially breaches any or all of its obligations as described in this Agreement and such breach is not cured within five (5) Business Days of written notice of such breach from the other Party;

(b) if any representation or warranty made by a Party in Article 2 of this Agreement proves to have been misleading or false in any material respect when made and such Party does not cure the underlying facts so as to make such representation and warranty correct and not misleading within five (5) Business Days of written notice from the other Party; or

(c) if a Party:

(i) makes an assignment or any general arrangement for the benefit of its creditors,

(ii) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause under any bankruptcy or similar law for the protection of creditors, or has such a petition filed against it which has not been dismissed within thirty (30) days, or

(iii) otherwise becomes bankrupt or insolvent (however evidenced).

8. REMEDIES UPON DEFAULT; ADEQUATE ASSURANCES
8.1 No Penalty. The Parties agree that the remedies and measures of damages provided in this Article satisfy the essential purposes hereof and do not constitute a penalty.

8.2 Remedies. If either Party is in default, as set forth in Article 7 (the "Defaulting Party"), the other Party (the "Non-Defaulting Party") may select any or all of the following remedies: (i) to designate a day, no earlier than the day such notice is effective and no later than 20 days after such notice is effective, as an early termination date ("Early Termination Date") to accelerate all amounts owing between the Parties and to liquidate and terminate all, but not less than all transactions (each referred to as a "Terminated Transaction") between the Parties, (ii) withhold any payments due in respect of this Agreement and any other agreements between the Parties to the extent of its damages pursuant to this Article 8, (iii) suspend performance, and (iv) exercise such remedies as provided in this Agreement, including an action for damages (except as limited by Article 8.5). The Non-Defaulting Party will calculate, in a commercially reasonable manner, a Settlement Amount for each such Terminated Transactions as of the Early Termination Date (or, to the extent that in the reasonable opinion of the Non-Defaulting Party certain of such Terminated Transactions are commercially impracticable to liquidate and terminate or may not be liquidated or may not be liquidated and terminated under applicable law on the Early Termination Date, as soon thereafter as is reasonably practicable).

8.3 Net Out of Settlement Amounts. The Non-Defaulting Party shall aggregate all Settlement Amounts into a single amount by: netting out (a) all Settlement Amounts that are due to the Defaulting Party, plus, at the option of the Non-Defaulting Party, any or all other amounts due to the Defaulting Party under this Agreement against (b) all Settlement Amounts that are due to the Non-Defaulting Party, plus any or all other amounts due to the Non-Defaulting Party under this Agreement, so that all such amounts shall be netted out to a single liquidated amount (the "Termination Payment") payable by one Party to the other. The Termination Payment shall be due to or due from the Non-Defaulting Party as applicable. The Termination Payment, if any, is due within two (2) Business Days following written notice sent by the Non-Defaulting Party to the Defaulting Party, which notice will be sent out as soon as reasonably possible following the calculation of the Termination Payment, but in no event later than ten (10) Business Days following the Early Termination Date.

8.4 Calculation Disputes. If the Defaulting Party disputes the Non-Defaulting Party's calculation of the Settlement Amount or Termination Payment, in whole or in part, the Defaulting Party will, within two (2) Business Days of receipt of the Non-Defaulting Party's calculation, provide the Non-Defaulting Party a detailed written explanation of the basis for such dispute.

8.5 Limitation on Damages. Subject to any provisions in this Agreement to the contrary (including the Termination Payment set forth in Article 8.3), the Defaulting Party's liability will be limited to direct, actual damages only, and such direct, actual damages will be the sole and exclusive remedy hereunder. In no event will any other liability be incurred by either Party for any obligations that arise under this Agreement, including, but not limited to, consequential, incidental, punitive, exemplary, or indirect damages in tort, contract, or otherwise.

8.6 Exclusive Remedy. THE REMEDIES SET FORTH IN THIS ARTICLE 8 ARE THE SOLE AND EXCLUSIVE REMEDIES IN THE EVENT OF A DEFAULT OF A PARTY'S OBLIGATIONS TO SELL OR PURCHASE PRODUCT, AND A PARTY'S LIABILITY SHALL BE LIMITED AS SET FORTH IN THIS ARTICLE. ALL OTHER REMEDIES OR DAMAGES FOR FAILURE TO SELL OR PURCHASE PRODUCT ARE HEREBY WAIVED.
Adequate Assurance. Should either Party have reasonable grounds to believe that the 
ability of the other Party to perform its obligations hereunder has become materially impaired, 
then the dissatisfied Party (the "Requesting Party") may require assurance of the other Party's 
ability to perform any obligation hereunder. Such assurance ("Adequate Assurance") may 
include (i) posting of a guaranty from a guarantor and in form and substance reasonably 
acceptable to the Requesting Party, (ii) posting of a letter of credit in favor of the Requesting 
Party by an issuing bank reasonably acceptable to the Requesting Party, (iii) posting of cash 
collateral with the Requesting Party, or (iv) other security reasonably acceptable to the 
Requesting Party.

9. CONFIDENTIALITY

9.1 Confidentiality. Except as provided in this Article, neither Party shall publish, disclose, 
or otherwise divulge Confidential Information to any person, without the other Party's prior 
express written consent. Each Party shall permit knowledge of and access to Confidential 
Information only to those of its affiliates and to persons investing in, providing funding to or 
acquiring it or its affiliates, and to its and the foregoing persons' respective attorneys, 
accountants, representatives, agents and employees who have a need to know such Confidential 
Information related to this Agreement.

9.2 Required Disclosure. If required by any law, statute, ordinance, decision, order or 
regulation passed, adopted, issued or promulgated by a court, governmental agency or authority 
having jurisdiction over a Party, that Party may release Confidential Information, or a portion 
thereof, to the court, governmental agency or authority, as required by the applicable law, statute, 
ordinance, decision, order or regulation, provided that such Party has, if legally permissible, 
promptly notified the other Party of the required disclosure, such that the other Party may attempt 
(if such Party so chooses) to cause that court, governmental agency or authority to treat such 
information in a confidential manner and to prevent such information from being disclosed or 
otherwise becoming part of the public domain.

9.3 Injunctive Relief. Each of the Parties acknowledges and agrees that the other Party 
would be irreparably harmed if any Confidential Information of the Disclosing Party were to be 
disclosed to third persons, or if any use were to be made of such Confidential Information other 
than that permitted under this Agreement, and further agrees that the disclosing Party shall have 
the right to seek injunctive relief upon any violation or threatened violation of the terms of this 
Article 9, in addition to all other rights and remedies available at law or in equity, without having 
to post a bond or other security.

9.4 Tax Treatment Exception. Notwithstanding any provision of this Agreement to the 
contrary, the legal obligations of confidentiality hereunder do not extend to the U.S. federal or 
state tax structure or the U.S. federal or state tax treatment of any transaction hereunder. If any 
U.S. federal or state tax analyses or materials are provided to a Party, such Party is free to 
disclose any such analyses or materials without limitation.

9.5 Survival. The Parties obligations under this Article 9 shall survive for a period of one 
(1) year following the expiration or termination of this Agreement.

10. ENTIRE AGREEMENT
This Agreement, together with any attachments or exhibits specifically referenced herein, constitutes the entire agreement between the Seller and the Buyer with respect to the subject matter hereof, supersedes all prior oral or written representations and contracts, and may be modified only by a written amendment signed by Buyer and Seller.

11. GOVERNING LAW; WAIVER OF TRIAL BY JURY

This Agreement shall be construed, enforced, and performed in accordance with the laws of the State of New York, without recourse to principles governing conflicts of law. AS A MATERIAL INDUCEMENT TO EACH PARTY TO ENTER INTO THIS AGREEMENT, THE PARTIES EACH HEREBY IRREVOCABLY WAIVE ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR RELATING HERETO, ANY PRODUCT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

12. WAIVER

No delay or omission by a Party in the exercise of any right under this Agreement shall be taken, construed or considered as a waiver or relinquishment thereof, and any such right may be exercised from time to time and as often as may be deemed expedient. If any of the terms and conditions hereof is breached and thereafter waived by a Party, such waiver shall be limited to the particular breach so waived and is not deemed to waive any other breach hereunder.

13. NOTICES

All notices, payments and other formal communications which either Party may give to the other under or in connection with this Agreement shall be in writing and shall be sent by any of the following methods: hand delivery; reputable overnight courier; certified mail, return receipt requested; or, with respect to communications other than payments, by facsimile transmission, if the original communication is delivered by reputable overnight courier. The communications shall be sent to the following addresses, and shall be effective when received:

If to SELLER:
Duke Energy Renewables Services, LLC
139 East 4th Street
Cincinnati, OH 45202
Telephone: 513-287-3014
Email: Shannon.Gronfeld@duke-energy.com

If to BUYER:
EDF Trading North America, LLC
4700 W. Sam Houston Parkway N., Suite 250
Attachment B
Confirmation

The purpose of this Confirmation is to confirm the terms and conditions of the KRC Transaction entered into between us on the Transaction Date, specified below. This Confirmation supplements, forms part of, and is subject to the ISDA Master Agreement dated July 1, 2006 entered into between Seller and Buyer hereto as amended and supplemented from time to time.

Transaction Date: October 11, 2016
Transaction ID#: A63457
Seller: EDF Trading North America, LLC
Buyer: GDF SUEZ Energy Marketing NA, Inc.
Product: Pennsylvania Alternative Energy Credits produced from a facility that is qualified as a "Tier 1 Alternative Energy System" consisting of "solar photovoltaic technologies" (each as described under the Applicable Standard).

REC Tracking System: PJM GATS
Applicable Standard: Pennsylvania Alternative Energy Portfolio Standards Act set forth in Title 73 of the Pennsylvania Statutes Annotated, Section 1648.1 et seq., and Title 66 of the Pennsylvania Consolidated Statutes, Section 2814, and the associated rules and regulations of the Pennsylvania Public Utility Commission, including Title 52 of the Pennsylvania Code, Sections 73,1 and 73.61 et seq., as in effect on the Trade Date.

Delivery Date: On or prior to July 15, 2018 with respect to the Product generated in Reporting Year 2018. On or prior to July 15, 2019 with respect to the Product generated in Reporting Year 2019.

Relevant Period(s): Reporting Year 2018: June 1, 2017 - May 31, 2018
Reporting Year 2019: June 1, 2018 - May 31, 2019

Contract Price: $ per unit of the Product generated in Reporting Year 2018
$ per unit of the Product generated in Reporting Year 2019

Quantity: 1,000 units of the Product generated in Reporting Year 2018
1,000 units of the Product generated in Reporting Year 2019

Acknowledged and agreed:

GDF SUEZ Energy Marketing NA, Inc. EDF Trading North America, LLC

By: 
Name: Stefan Serau 
Title: President & CEO

By: 
Name: Gerald Brune 
Title: General Counsel

EDF Credit
EDF Legal
Attachment C
Calpine Energy Services, L.P.
717 Texas Avenue, Suite 1600
Houston, TX 77002
Phone: (713) 693-8693
Fax: (713) 693-8695

TRANSACTION CONFIRMATION
(Physical REC)

"CONFIDENTIALITY NOTICE: The information is intended only for the use of the individual or entity named below. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or taking of any action in reliance on the contents of this information is strictly prohibited. If you have received this transaction in error, please immediately notify us by telephone to arrange for return of the documents."

Date: November 21, 2016
To: EDF Trading North America, LLC
Attention: Confirmation Department
Fax No: (214) 655-1009
From: Calpine Energy Services, L.P.
To: Calpine Deal Number: 00001111
Calpine Agreement Number: GESLP-10.2-222233, dated 10/5/2010

The purpose of this Confirmation is to confirm the terms and conditions of the REC transaction (the "Transaction") agreed upon by you and the undersigned as of the Trade Date specified below.

We confirm the following terms of our Transaction:

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Date</td>
<td>November 16, 2016</td>
</tr>
<tr>
<td>Transaction Reference</td>
<td>1981911</td>
</tr>
<tr>
<td>Seller</td>
<td>EDF Trading North America, LLC</td>
</tr>
<tr>
<td>Buyer</td>
<td>Calpine Energy Services, L.P.</td>
</tr>
<tr>
<td>Applicable Standard(s)</td>
<td>BREC - ENV PA Solar - RY 2019</td>
</tr>
<tr>
<td>Certifiable Renewable Energy Facility</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Vintage</td>
<td>2019</td>
</tr>
<tr>
<td>Start of Generation Period</td>
<td>June 01, 2018</td>
</tr>
<tr>
<td>End of Generation Period</td>
<td>May 01, 2018</td>
</tr>
<tr>
<td>Contract Quantity (MWh)/Delivery Obligation</td>
<td>1,500</td>
</tr>
<tr>
<td>Contract Price ($/MWh)</td>
<td></td>
</tr>
<tr>
<td>Total Contract Price</td>
<td></td>
</tr>
<tr>
<td>Delivery Date</td>
<td>July 15, 2019</td>
</tr>
<tr>
<td>Payment required before Delivery [Yes, No]</td>
<td>No</td>
</tr>
<tr>
<td>Applicable Tracking System</td>
<td>PJM GATS</td>
</tr>
<tr>
<td>Applicable Tracking System Account Name</td>
<td>GES-General</td>
</tr>
</tbody>
</table>

Special Provisions, if any: NA
This Confirmation supplements, forms a part of, and is subject to that certain International Swaps and Derivatives Association Master Agreement, including the Power Annex and REC Annex thereto, as dated above between Buyer and Seller ('the Master Agreement'). The definitions and provisions contained in the 2000 ISDA Definitions and the 2006 ISDA Commodity Definitions are incorporated into this Confirmation. All provisions contained in or incorporated by reference in the Master Agreement will govern this Confirmation except as expressly modified herein. Subject to any contrary provisions in the Agreement, in the event of any inconsistency between the provisions of the Master Agreement and this Confirmation, this Confirmation will prevail for the purpose of this Transaction.

REPRESENTATIONS: Each party represents and warrants to the other party that (i) it is duly authorized to enter into this Transaction and to perform its obligations hereunder, and (ii) the person executing this Confirmation is duly authorized to execute and deliver it.

Please confirm that the foregoing correctly sets forth the terms of our agreement by executing the copy of this Confirmation and returning it to us via the above referenced facsimile number. The terms and conditions contained herein will be deemed accepted unless notification to the contrary is received by Calpine Energy Services, L.P. within two (2) Business Days of receipt of this Confirmation.

Calpine Energy Services, L.P.
By: [Signature]
Name: Andrew Novotny
Title: Vice President

EDF Trading North America, LLC
By: [Signature]
Name: [Name]
Title: General Counsel

EDF Commercial
EDF Settlements 04 394981
EDF Credit
EDF Legal
Fold the first printed page in half and use as the shipping label.

1. Fold the first printed page in half and use as the shipping label.
2. Place the label in a waybill pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.
3. Keep the second page as a receipt for your records. The receipt contains the terms and conditions of shipping and information useful for tracking your package.

Legal Terms and Conditions

Tendering packages by using this system constitutes your agreement to the service conditions for the transportation of your shipments as found in the applicable FedEx Service Guide, available upon request. FedEx will not be responsible for any claim in excess of the applicable declared value, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the applicable FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of 100 USD or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is 500 USD, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see applicable FedEx Service Guide. FedEx will not be liable for loss or damage to prohibited items in any event or for your acts or omissions, including, without limitation, improper or insufficient packaging, securing, marking or addressing, or the acts or omissions of the recipient or anyone else with an interest in the package. See the applicable FedEx Service Guide for complete terms and conditions. To obtain information regarding how to file a claim or to obtain a Service Guide, please call 1-800-GO-FEDEX (1-800-463-3339).