ELSEVIER SUBSCRIPTION AGREEMENT

This agreement ("Agreement") is entered into as of 29 December 2017 by and between **Alliance for Sustainable Energy, LLC, on behalf of the US Department of Energy ("DOE") Integrated Contractor Purchasing Team (hereinafter "DOE ICPT") 15013 Denver West Parkway, Golden, CO 80401, USA,** on behalf of the independent operator(s) of DOE facilities identified on Schedule 2 (the "DOE Sites"), and **Elsevier B.V.,** Radarweg 29, 1043 NX Amsterdam, The Netherlands ("Elsevier").

The parties hereto agree as follows:

SECTION 1. DEFINITIONS.

"Authorized Users" is defined at Section 2.2 below.

"Subscribing Site" will mean a DOE Site that has issued a Delivery Order that has been executed by Elsevier and the DOE Site.

"Delivery Order" will mean an order issued by a DOE Site, which references this Agreement and outlines the fees for the DOE Site's subscription, to obtain access and use of the Subscribed Products.

"Subscribed Products" will mean the products and services identified in Schedule 1.

SECTION 2. SUBSCRIPTION.

2.1 *Subscribed Products.*
Elsevier hereby grants to the Subscribing Sites the non-exclusive, non-transferable right to access and use the products and services identified in Schedule 1 ("Subscribed Products") and provide the Subscribed Products to its Authorized Users (as defined herein) subject to the terms and conditions of this Agreement.

2.2 *Authorized Users/Sites.*
Authorized Users are the individuals employed or otherwise engaged by the Subscribing Site to perform research and development in furtherance of the Subscribing Site's business, including: employees; contractors, subcontractors, and employees thereof; consultants; students; and visiting professionals affiliated with the Subscribing Site's 's locations listed on Schedule 2 (the "Locations") and individuals using computer terminals within the library facilities at the Locations permitted by the Subscribing Site to access the Subscribed Products for purposes of personal research, education or other non-corporate use ("Walk-in Users").

2.3 *Authorized Uses.*
Each Authorized User may:

- access, search, browse and view the Subscribed Products;
- print, download, make electronic copies of and store a reasonable portion of individual items from the Subscribed Products for the exclusive use of such Authorized User;
- incorporate links to the Subscribed Products on the Subscribing Site's intranet and internet websites;
- provide print or electronic copies of individual items from the Subscribed Products to other Authorized Users and to third-party colleagues for their scholarly or research use;

- provide print or electronic copies of individual items from the Subscribed Products to governmental, regulatory, or judicial bodies worldwide, as part of submitting reports or applications to such bodies respecting the Subscribing Site's products or services in the course of the relevant Subscribing Site's business; and

- access, search, browse, view, print, make electronic copies and store for the exclusive use of such Authorized User or, if the Authorized User is a librarian/information specialist, for the exclusive use of another Authorized User certain journal articles and book chapters from the ScienceDirect® online service that are not subscribed to as part of the Subscribed Products, with each twenty-four (24) hour access period for a selected article or chapter, a "Transaction".

2.4 *Restrictions on Use of Subscribed Products.*
Except as expressly stated in this Agreement or otherwise permitted in writing by Elsevier, the Subscribing Site and its Authorized Users may not:

- abridge, modify, translate or create any derivative work based on the Subscribed Products, except to the extent necessary to make them perceptible on a computer screen to Authorized Users;

- remove, obscure or modify in any way any copyright notices, other notices or disclaimers as they appear in the Subscribed Products;

- use any robots, spiders, crawlers or other automated downloading programs, algorithms or devices to continuously and automatically search, scrape, extract, deep link, index or disrupt the working of the Subscribed Products;

- substantially or systematically reproduce, retain, store locally, redistribute or disseminate online the Subscribed Products; or

- post individual items from the Subscribed Products on social networking sites.

Authorized Users who are contractors or subcontractors of the Subscribing Site, or employees of contractors or subcontractors of the Subscribing Site may use the Subscribed Products only for the purposes of the research work for which they were contracted by the Subscribing Site.

The Subscribing Site may:

- deliver journal articles from Subscribed Titles (as defined herein) and, if any, book chapters from the ScienceDirect Subscribed Products to fulfill requests as part of the practice commonly known as "interlibrary loan" from non-commercial libraries located within the United States, provided that the Subscribing Site's staff reviews the requests and fulfills the requests in compliance with Section 108 of the U.S. Copyright Law (17 U.S.C. § 108) and the Guidelines for the Proviso of Subsection 108(g)(2) (Final Report of the National Commission on New Technological Uses of Copyrighted Works, 1978)

2.5 *Intellectual Property Ownership.*
The Subscribing Site acknowledges that all right, title and interest in and to the Subscribed Products remain with Elsevier and its suppliers, except as expressly set forth in this Agreement, and that the unauthorized redistribution or dissemination online of the Subscribed Products could materially and irreparably harm Elsevier and its suppliers.

Notwithstanding anything to the contrary contained in this Agreement, more extensive usage terms might

be permitted for open access content in the Subscribed Products as identified in the individual journal article as stated in the applicable user (e.g. CC) license.

SECTION 3. ELSEVIER PERFORMANCE OBLIGATIONS.

3.1 *Access to Subscribed Products.*
Elsevier will make the Subscribed Products accessible to the Subscribing Site and its Authorized Users from the internet address set forth on Schedule 1 or as may be otherwise set forth herein.

3.2 *Quality of Service.*
Elsevier will use reasonable efforts to provide the Subscribed Products with a quality of service consistent with industry standards, specifically, to provide continuous service with an average of 98% up-time per year, with the 2% down-time including scheduled maintenance and repairs performed at a time to minimize inconvenience to the Subscribing Site and its Authorized Users, and to restore service as soon as possible in the event of an interruption or suspension of service.

3.3 *Withdrawal of Content.*
Elsevier reserves the right to withdraw from the Subscribed Products content that it no longer retains the right to provide or that it has reasonable grounds to believe is unlawful, harmful, false or infringing.

3.4 *Usage Data Reports.*
Elsevier will make usage data reports on the usage activity of each Subscribing Site accessible online on a monthly basis to the librarians/administrators employed by each Subscribing Site and the DOE for internal use or disclosure as required by law, regulation or DOE Order only. Such reports may be accessed by vendors or other third parties retained by the Subscribing Site only upon notification to Elsevier by the Subscribing Site and only for the purpose of usage analysis of the Subscribing Site. Elsevier shall not provide the Subscribing Site's usage data (except in aggregated, collective or anonymized form) to any third party without the Subscribing Site's written authorization, unless the third party owns rights in the Subscribed Products or as required by law. In all cases, disclosure of such data shall fully protect the anonymity of individual users and the confidentiality of their searches, and will comply with all applicable privacy laws. Elsevier shall not disclose or sell to other parties usage data or information about the Subscribing Site or its Authorized Users (except in aggregated, collective or anonymized form) without the Subscribing Site's express written permission, unless required by law.

SECTION 4. SUBSCRIBING SITE PERFORMANCE OBLIGATIONS.

4.1 *Authentication.*
Access to the Subscribed Products will be authenticated by the use of Internet Protocol ("IP") address(es) and/or usernames and passwords and/or a delegated authentication mechanism requiring at least two different credentials, as identified on Schedule 2. Distribution of usernames, passwords, credentials or otherwise providing remote access to the Subscribed Products by Authorized Users who are Walk-in Users is not permitted.

4.2 *Protection from Unauthorized Access and Use.*
The Subscribing Site will use reasonable efforts to:

- limit access to and use of the Subscribed Products to Authorized Users and notify all Authorized Users of the usage restrictions set forth in this Agreement and that they must comply with such restrictions;

- issue any passwords or credentials used to access the Subscribed Products only to Authorized Users, not divulge any passwords or credentials to any third party, and notify all Authorized Users not to divulge any passwords or credentials to any third party;

- provide true, complete and accurate IP addresses, as identified on Schedule 2, (if any) for the exclusive use by the Subscribing Site (including, if requested by Elsevier, written confirmation by the relevant third party internet service provider) and proactively inform Elsevier of any changes to the Subscribing Site IP addresses, including the addresses no longer being used exclusively by the Subscribing Site; and

- promptly upon becoming aware of any unauthorized use of the Subscribed Products, inform Elsevier and take appropriate steps to end such activity and to prevent any recurrence.

In the event of any unauthorized use of the Subscribed Products, Elsevier may suspend the access and/or require that the relevant Subscribing Site suspend the access from where the unauthorized use occurred upon notice to the relevant Subscribing Site. The Subscribing Site will not be liable for unauthorized use of the Subscribed Products by any Authorized Users provided that the unauthorized use did not result from the Subscribing Site's own gross negligence or willful misconduct and that the Subscribing Site did not permit such unauthorized use to continue after having actual notice thereof.

4.3 *Compliance with Sanction Laws.*
Elsevier reserves the right to deny access to the Subscribed Products to any person or entity who is prohibited from receiving such access based on any applicable sanctions or embargoes laws.

SECTION 5. DOE SITE ORDERS AND PRICING

Each DOE Site may issue a Delivery Order for the Subscribed Products during the term of this Agreement at the applicable price indicated in Schedule 1 or such lower price as agreed to by both parties, solely provided that each and every DOE Site identified in Schedule 1 issues a Delivery Order for the Subscribed Products at the applicable price indicated in Schedule 1, or such lower price as agreed to by both parties; notwithstanding anything to the contrary stated herein, in the Basic Ordering Agreement to which this Agreement is attached and incorporated by reference or elsewhere, the prices identified in Schedule 1 are only fixed to the extent that each and every DOE Site identified in Schedule 1 places an order for the Subscribed Products identified in Schedule 1 annually. A Delivery Order will be effective only when signed by both Elsevier and the DOE Site. Upon execution of a Delivery Order, the DOE Site becomes a Subscribing Site and will be bound by the terms of this Agreement. For clarity, each Subscribing Site will be independently and solely liable for any breach of this Agreement by said Subscribing Site.

SECITON 6. FEES AND PAYMENT TERMS.

Upon the issuance of a Delivery Order to Elsevier, each Subscribing Site shall be independently responsible for and will separately pay to Elsevier the respective fees set forth in Schedule 1 (the "Fees") within sixty (60) days of date of invoice. The Fees will be exclusive of any sales, use, value added, withholding or similar tax and each Subscribing Site will be liable for any such taxes in addition to the Fees unless the Subscribing Site is entitled to exemption from taxation and provides to Elsevier appropriate documentation of its tax-exempt status upon Elsevier's request.

SECTION 7. TERM.

7.1 *Term.*
The term of this Agreement will commence on 01 January 2018 and continue until 31 December 2018. The term of each Delivery Order will commence on execution of the Delivery Order and continue for twelve (12) months thereafter or as otherwise expressly set forth in the applicable Delivery Order. The terms and conditions of this Agreement will continue to govern any outstanding Delivery Order despite termination of this Agreement.

7.2 *Renewal.*

This Agreement may be renewed upon mutual agreement of Elsevier and the DOE ICPT for two (2) successive one-year terms, subject to appropriate adjustments to Schedule 1.

SECTION 8. ELSEVIER WARRANTIES AND INDEMNITIES.

8.1 *Warranties.*
Elsevier warrants that use of the Subscribed Products in accordance with the terms and conditions herein will not infringe the intellectual property rights of any third party.

8.2 *Indemnities.*
Elsevier will indemnify, defend and hold harmless the Subscribing Site and its Authorized Users from and against any loss, damage, costs, liability and expenses (including reasonable attorneys' fees) arising from or out of any third-party action or claim that use of the Subscribed Products in accordance with the terms and conditions herein infringes the intellectual property rights of such third party. If any such action or claim is made, the Subscribing Site will promptly notify and reasonably cooperate with Elsevier. This indemnity obligation will survive the termination of this Agreement.

8.3 *Disclaimer.*
EXCEPT FOR THE EXPRESS WARRANTIES AND INDEMNITIES STATED HEREIN AND TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE SUBSCRIBED PRODUCTS ARE PROVIDED "AS IS" AND ELSEVIER AND ITS SUPPLIERS EXPRESSLY DISCLAIM ALL WARRANTIES AND REPRESENTATIONS OF ANY KIND WITH REGARD TO THE SUBSCRIBED PRODUCTS AND ANY OTHER DATA, DOCUMENTATION OR MATERIALS PROVIDED IN CONNECTION WITH THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO ANY ERRORS, INACCURACIES, OMISSIONS, OR DEFECTS CONTAINED THEREIN, AND ANY IMPLIED OR EXPRESS WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

8.4 *Limitation of Liability.*
Except for the express warranties and indemnities stated herein and to the extent permitted by applicable law, in no event will Elsevier or its suppliers be liable for any indirect, incidental, special, consequential or punitive damages including, but not limited to, loss of data, business interruption or loss of profits, arising out of or in connection with this Agreement, or will the liability of Elsevier and its suppliers to the Subscribing Site exceed a sum equal to two (2) times the Fees paid by the Subscribing Site hereunder during the twelve (12) month period immediately preceding the date on which the claim arose, even if Elsevier or any supplier has been advised of the possibility of such liability or damages.

SECTION 9. GENERAL.

9.1 *Force Majeure.*
Neither party's delay or failure to perform any provision of this Agreement as a result of circumstances beyond its control (including, but not limited to, war, strikes, fires, floods, power failures, telecommunications or Internet failures or damage to or destruction of any network facilities or servers) will be deemed a breach of this Agreement.

9.2 *Severability.*
The invalidity or unenforceability of any provision of this Agreement will not affect any other provisions of this Agreement.

9.3 *Entire Agreement.*
This Agreement and the Basic Ordering Agreement to which this Agreement is attached and incorporated by reference, contains the entire understanding and agreement of the parties and merges and supersedes any and all prior and contemporaneous agreements, communications, proposals and purchase orders, written or oral, between the parties with respect to the subject matter contained herein.

9.4 *Modification.*
No modification, amendment or waiver of any provision of this Agreement will be valid unless in writing and signed by the parties.

9.5 *Assignment.*
Alliance for Sustainable Energy, LLC and/or Subscribing Site will not assign, transfer or license any of its rights or obligations under this Agreement unless it obtains the prior written consent of Elsevier, which consent will not unreasonably be withheld, except that this Agreement may be transferred or assigned to a successor contractor of the Alliance for Sustainable Energy, LLC or a Subscribing Site should the Prime Contract between the Subscribing Site and DOE or Alliance for Sustainable Energy, LLC and DOE terminate during the term of this Agreement provided that the successor contractor agrees to be bound by the terms and conditions hereof.

9.6 *Privacy.*
Elsevier will not, without the prior written consent of the relevant Subscribing Site, share, sell, transfer or otherwise transmit personal information of any Authorized Users to any third party, including but not limited to log-ins recorded in system logs, IP addresses of Sites or Authorized Users accessing the Subscribed Products, saved searches, usernames or passwords, or use it for any purpose other than as described in this Agreement. The following are excepted (i) applicable service providers contracted by Elsevier to perform functions in support of this Agreement; (ii) where reasonably necessary to address security, fraud or other legal issues; and (iii) if the Subscribed Products are acquired by another company. If Elsevier is compelled by law or court order to disclose personally identifiable information of Authorized Users or patterns of use, Elsevier shall, if practicable, provide the relevant Subscribing Site with adequate prior written notice as soon as practicable, so that the relevant Subscribing Site or Authorized Users may seek protective orders or other remedies. Elsevier will notify the relevant Subscribing Site as soon as practicable if Elsevier's systems are, or are suspected to be, breached and confidentiality of personally identifiable information may be compromised.

9.7 *Notices.*
All notices given pursuant to this Agreement will be in writing and delivered to the party to whom such notice is directed at the address specified below or the electronic mail address as such party will have designated by notice hereunder.

If to Elsevier: Elsevier B.V. c/o Regional Sales Office, Elsevier Inc., 230 Park Avenue, Suite 800, New York, NY 10169, USA.

If to a Subscribing Site: The Subscribing Site's Primary Contact as identified on Schedule 2.

9.8 *Confidentiality.*
The Subscribing Site, and its employees, officers, directors and agents will maintain as confidential and not disclose to any non-affiliated third party, other than the DOE for audit and inspection purposes, without Elsevier's prior written consent or except as required by law, including the Freedom of Information Act (FOIA), 5 U.S.C. § 552, the financial terms of this Agreement. Elsevier may only disclose such information (i) to applicable service providers to the extent necessary to perform their functions in support of this Agreement and (ii) where reasonably necessary to address security, safety, fraud or other legal issues.

9.9 *Execution.*
This Agreement and any amendment thereto may be executed in counterparts, and signatures exchanged by facsimile or other electronic means are effective to the same extent as original signatures.

IN WITNESS WHEREOF, the parties have executed this Agreement by their respective, duly authorized representatives as of the date first above written.

Alliance for Sustainable Energy, LLC, on behalf of the US Department of Energy Integrated Contractor Purchasing Team
(DOE ICPT)

Name: Robert Pittelkow
Title: IP Counsel

ELSEVIER B.V.
(Elsevier)

Name: Gino Ussi
Title: Executive Vice President Research Solution Sales

No. 1-14387189176, 1-14387240196, 1-14387302819, 1-14387287787, 1-14387300457, 1-14091023523, 1-14387309066, 1-14387307428, 1-14387404480, 1-14387407602, 1-14387423927