

ISDA[®]

International Swaps and Derivatives Association, Inc.

SCHEDULE to the 2002 Master Agreement

dated as of April 2, 2020

between

HSBC BANK USA, NATIONAL ASSOCIATION,
a national banking association organized and existing
under the laws of the United States of America
("**Party A**"),

and

ADVANCED ENERGY INDUSTRIES, INC.,
a corporation
organized and existing under the laws of the State of Delaware
("**Party B**")

Part 1 Termination Provisions

- (a) "**Specified Entity**" means in relation to Party A for the purposes of Sections 5(a)(v), 5(a)(vi), 5(a)(vii) and 5(b)(v):

None.

"**Specified Entity**" means in relation to Party B for the purposes of Sections 5(a)(v), 5(a)(vi), 5(a)(vii) and 5(b)(v):

None.

- (b) "**Specified Transaction**" will have the meaning specified in Section 14. The "**Default under Specified Transaction**" provisions of Section 5(a)(v) of this Agreement will not apply with respect to Party A or Party B or any Credit Support Provider of Party B.

- (c) The "**Cross-Default**" provisions of Section 5(a)(vi) will apply to Party A and will apply to Party B; *provided*, that (i) the phrase " , or becoming capable at such time of being declared," is deleted from Section 5(a)(vi)(1); (ii) the phrase "which has resulted in such Specified Indebtedness becoming due and payable under such agreements or instruments before it would otherwise have been due and payable" is inserted in Section 5(a)(vi)(2) immediately before the semi-colon; and (iii) an Event

of Default shall not occur with respect to a party under Section 5(a)(vi) when the failure to pay or

deliver, or the default, event of default or other similar condition or event, as the case may be, arises solely (A) out of a wire transfer problem or an operational or administrative error or omission (so long as the required funds or property required to make that payment or delivery were otherwise available to that party), or (B) from the general unavailability of the relevant currency due to exchange controls or other similar governmental action, but in either case only if the payment or delivery is made within three Local Business Days after the problem has been corrected, the error or omission has been discovered or the currency becomes generally available.

In connection therewith, “**Specified Indebtedness**” will have the meaning specified in Section 14, except that such term shall not include (i) obligations in respect of deposits received in the ordinary course of a party’s banking business and (ii) Non-recourse Indebtedness. For purposes of this definition, indebtedness is “**Non-recourse Indebtedness**” to the extent that it is non-recourse to the party incurring such indebtedness except recourse to assets acquired with such indebtedness or dividends received by such party on account of such acquired assets.

“**Threshold Amount**” means with respect to (i) Party A, an amount equal to three percent (3%) of Party A’s shareholders’ equity as published in its most recent audited consolidated annual financial statements, or its equivalent in any other currency; and (ii) Party B, USD 50,000,000, or such larger amount used in Section 8.01(e) of the Credit Agreement with respect to a cross-default “Event of Default” (as such term is used in the Credit Agreement) or a similar provision in the Credit Agreement as modified after the date of this Agreement.

With respect to Party B, any “Event of Default” under and as defined in the Credit Agreement which has resulted in Party B’s obligations under the Credit Agreement becoming due and payable before they would otherwise have been payable shall be an Event of Default under this Agreement.

“**Credit Agreement**” means that certain Credit Agreement dated as of September 10, 2019 among Advanced Energy Industries, Inc., as Borrower, certain Subsidiaries of the Borrower party thereto, as the Guarantors, Bank of America, N.A., as the Administrative Agent, Bank of America, N.A., Bank of the West and HSBC Bank USA, N.A., as the Joint Lead Arrangers and Joint Book Runners, Citibank, N.A., as the Co-Manager, and the Lenders from time to time party thereto, and as the same may be amended, supplemented, restated, renewed, extended, replaced or otherwise modified from time to time. Capitalized terms used herein and not otherwise defined herein shall have the meaning ascribed to such terms in the Credit Agreement.

- (d) The “**Credit Event Upon Merger**” provisions of Section 5(b)(v) will apply to Party A and will apply to Party B, as amended by deleting subparagraphs (2) and (3), and inserting the word “or” immediately after the semi-colon at the end of subparagraph (1); *provided* that any event permitted under the terms of the Credit Agreement which would otherwise constitute a Credit Event Upon Merger under this Agreement with respect to Party B or any Credit Support Provider of Party B, shall not constitute a Credit Event Upon Merger under this Agreement.
- (e) The “**Automatic Early Termination**” provision of Section 6(a) will not apply to Party A and will not apply to Party B.
- (f) “**Termination Currency**” means United States Dollars.
- (g) **Additional Termination Event** will apply. It shall be an Additional Termination Event, with respect to which Party B shall be the sole Affected Party, if, after the date of this Agreement, the Credit Agreement is amended, supplemented, restated, renewed, extended, replaced or otherwise modified to grant a security interest to the

Lenders under the Credit Agreement (whether in the Credit Agreement or in a related security agreement securing Loans under the Credit Agreement)

that secures the obligations and liabilities of Party B under the Loans, but fails to also secure the obligations and liabilities of Party B under this Agreement on a *pari passu* basis equal in right and priority of payment with the outstanding principal obligations of Party B under the Loans (and for the avoidance of doubt, if there are multiple tranches of Loans, the most senior tranche). Notwithstanding anything to the contrary in the Credit Agreement or in this Agreement, this Part 1(g) Additional Termination Event shall only be applied when the Lenders become secured under the Credit Agreement following the date of this Agreement.

- (h) ***Failure to Pay.*** Section 5(a)(i) is hereby amended by replacing the word “first” with the word “third” each time it appears.
- (i) ***Optional Termination.*** On any Business Day (the “Optional Termination Date”), Party B may terminate and cash settle any Transaction hereunder in whole or in part; *provided that*, Party B will provide at least three days’ prior written notice to Party A designating the Optional Termination Date. The amount due with respect to any such termination shall be determined pursuant to Section 6 of this Agreement as if (i) the Optional Termination Date is the Early Termination Date; (ii) Party B is the sole Affected Party (for all purposes other than the election to terminate), and (iii) such Transaction is the sole Affected Transaction. If a Transaction is to be terminated in part, the notice thereof provided by Party B shall specify the portion of the Notional Amount of such Transaction to be terminated, and the parties shall execute an amendment to the Confirmation for such Transaction to reflect the revised Notional Amount and the corresponding pro rata reductions on each amortization schedule reduction date for the revised Notional Amount.

Part 2

Tax Representations

- (a) ***Payer Tax Representations.*** For the purpose of Section 3(e) of this Agreement, Party A and Party B will make the following representation:

It is not required by any applicable law, as modified by the practice of any relevant governmental revenue authority, of any Relevant Jurisdiction to make any deduction or withholding for or on account of any Tax from any payment (other than interest under Section 9(h) of this Agreement) to be made by it to the other party under this Agreement. In making this representation, it may rely on (i) the accuracy of any representations made by the other party pursuant to Section 3(f) or 3(g) of this Agreement, (ii) the satisfaction of the agreement contained in Section 4(a)(i) or 4(a)(iii) of this Agreement and the accuracy and effectiveness of any document provided by the other party pursuant to Section 4(a)(i) or 4(a)(iii) of this Agreement and (iii) the satisfaction of the agreement of the other party contained in Section 4(d) of this Agreement, except that it will not be a breach of this representation where reliance is placed on clause (ii) above and the other party does not deliver a form or document under Section 4(a)(iii) by reason of material prejudice to its legal or commercial position.

- (b) ***Payee Tax Representations.*** For the purpose of Section 3(f) of this Agreement, Party A and Party B make the representations specified below, if any:

- (i) The following representations will apply to Party A:
 - (1) Party A is a national banking association organized or formed under the laws of the United States and is a United States person for United States federal income tax purposes.

- (2) Party A makes no other Payee Tax Representations.
- (ii) The following representations will apply to Party B:
- (1) Party B is organized or formed under the laws of a state within the United States, and it is a United States person for United States federal income tax purposes.
- (2) Party B makes no other Payee Tax Representations.

Part 3
Agreement to Deliver Documents

For the purpose of Section 4(a)(i) and (ii) of this Agreement, each party agrees to deliver the following documents:

- (a) Tax forms, documents or certificates to be delivered are:

Party required to deliver document	Document	Date by which to be delivered
Party A	A valid U.S. Internal Revenue Service Form W-9 or any successor thereto.	(i) Upon execution and delivery of this Agreement, and (ii) promptly upon reasonable demand by Party B.
Party B	A valid U.S. Internal Revenue Service Form W-9 or any successor thereto.	(i) Upon execution and delivery of this Agreement, and (ii) promptly upon reasonable demand by Party A.

- (b) Other documents to be delivered are:

Party required to deliver document	Form/ Document/ Certificate	Date by which to be delivered	Covered by Section 3(d) Representation
Party A	Certified copies of all corporate authorizations and any other documents with respect to the execution, delivery and performance of this Agreement.	Upon execution and delivery of this Agreement.	Yes



Party required to deliver document	Form/ Document/ Certificate	Date by which to be delivered	Covered by Section 3(d) Representation
Party A	Certificate of authority and specimen signatures of individuals executing this Agreement. Certified copies of all organizational authorizations and any other documents with respect to the execution, delivery and performance of this Agreement.	Upon execution and delivery of this Agreement and thereafter upon request of the other party.	Yes
Party B		Upon execution and delivery of this Agreement.	Yes
Party B	Certificate of authority and specimen signatures of individuals executing this Agreement.	Upon execution and delivery of this Agreement and thereafter upon request of the other party.	Yes
Party A	Annual Report of Party A containing audited, consolidated financial statements certified by independent certified public accountants and prepared in accordance with generally accepted accounting principles in the country in which such party is organized.	Upon request, as soon as publicly available and in any event within 90 days after the end of each fiscal year of Party A; <i>provided, however,</i> that such financials are “deemed” to be delivered hereunder on the date the same shall be posted on Party A’s website or the website of the Securities and Exchange Commission.	Yes



Party required to deliver document	Form/ Document/ Certificate	Date by which to be delivered	Covered by Section 3(d) Representation
Party A	Consolidated Reports of Condition and Income for A Bank With Domestic and Foreign Offices – FFIEC 031 (<i>“Call Report”</i>) of Party A containing unaudited, consolidated financial statements of such party’s fiscal quarter prepared in accordance with generally accepted accounting principles in the country in which such party is organized.	Upon request, as soon as publicly available and in any event within 45 days after the end of each fiscal quarter of Party A; <i>provided, however,</i> that such financials are “deemed” to be delivered hereunder on the date the same shall be posted on Party A’s website or the Federal Financial Institutions Examination Council (“FFIEC”) website at https://cdr.ffiec.gov/public/ .	Yes
Party B	Annual audited consolidated financial statements of Party B certified by independent certified public accountants and prepared in accordance with generally accepted accounting principles in the country in which Party B is organized (except as described therein).	As soon as available and in any event within 120 days after the end of each fiscal year of Party B; <i>provided, however,</i> that (i) such financials are “deemed” to be delivered hereunder on the date the same shall be posted on the Advanced Energy Industries, Inc. website or the website of the Securities and Exchange Commission, and (ii) for so long as Party A or any Affiliate or Approved Fund of Party A is a party to the Credit Agreement,	Yes

delivery of such
financial statements
to Party A or such
Affiliate or Approved
Fund under the Credit
Agreement shall be
deemed delivery
hereunder.

Party required to deliver document	Form/Document/Certificate	Date by which to be delivered	Covered by Section 3(d) Representation
Party B	Quarterly Financial Statements of Party B containing unaudited consolidated financial statements of Party B's fiscal quarter prepared in accordance with generally accepted accounting principles in the country in which Party B is organized (except as approved by Party B's chief financial or accounting officer and disclosed in reasonable detail therein, and subject to the absence of footnotes).	As soon as available and in any event within 60 days after the end of Party B's first three fiscal quarters; <i>provided, however,</i> that (i) such financials are "deemed" to be delivered hereunder on the date the same shall be posted on the Advanced Energy Industries, Inc. website or the website of the Securities and Exchange Commission, and (ii) for so long as Party A or any Affiliate or Approved Fund of Party A is a party to the Credit Agreement, delivery of such financial statements to Party A or such Affiliate or Approved Fund under the Credit Agreement shall be deemed delivery hereunder.	Yes

Part 4 **Miscellaneous**

- (a) **Address for Notices.** For the purpose of Section 12(a) of this Agreement:
- (i) **Address for notices or communications to Party A.** For purposes of Section 12(a) of this Agreement, all notices or communications to Party A shall, with respect to any particular Transaction, be sent or delivered to the address or e-mail specified by Party A in the relevant Confirmation (or if not so specified, as specified by Party A in writing for that Transaction or type of Transaction, or if not so specified, then to its address or e-mail specified below), and otherwise with respect to this Agreement, as specified below, provided that any notice under Section 5 or 6 of this Agreement shall be sent or delivered to Party A at the address specified below as required by Section 12(a).



HSBC Bank USA, National Association
452 Fifth Avenue, New York, NY 10018
Attention: Legal Department
E-mail: HBUS.ISDA.NOTICES@us.hsbc.com

(ii) **Address for notices or communications to Party B.** For purposes of Section 12(a) of this Agreement, all notices or communications to Party B shall, with respect to any particular Transaction, be sent or delivered to the address or e-mail specified by Party B in the relevant Confirmation (or if not so specified, as specified by Party B in writing for that Transaction or type of Transaction, or if not so specified, then to its address or e-mail specified below), and otherwise with respect to this Agreement, as specified below, provided that any notice under Section 5 or 6 of this Agreement shall be sent or delivered to Party B at its address specified below as required by Section 12(a).

Advanced Energy Industries, Inc.
1595 Wynkoop Street, 8th Floor
Denver, Colorado 80202
Attention: Chris Hanson, Treasurer
Telephone: 408-574-2545
E-mail: chris.hanson@aei.com

with a copy to:

Thomas O. McGimpsey, General Counsel
Advanced Energy Industries, Inc.
1595 Wynkoop Street, 8th Floor
Denver, Colorado 80202
Telephone: 970-407-6326
E-mail: tom.mcgimpsey@aei.com

with a copy (which shall not constitute notice) to:

Foley & Lardner LLP
777 East Wisconsin Avenue
Milwaukee, WI 53202
Attention: Heidi Furlong
Telephone: 414-297-5620
Telecopier: 414.297.4900
E-mail: hfurlong@foley.com

(b) **Process Agent.** For the purpose of Section 13(c):

Party A appoints as its Process Agent: Not Applicable.

Party B appoints as its Process Agent: Not Applicable.

(c) **Offices.** The provisions of Section 10(a) will apply to this Agreement.

- (d) **Multibranch Party.** For the purpose of Section 10(b) of this Agreement:
- Party A is not a Multibranch Party.
- Party B is not a Multibranch Party.
- (e) **Calculation Agent.** Calculation Agent is Party A, provided that if an Event of Default occurs and is continuing with respect to Party A, the Calculation Agent shall be a Reference Market-maker that is selected by Party B independent of either party (and its affiliates) and approved by Party A, which approval shall not be unreasonably withheld, and the costs of employing such Reference Market-maker hereunder shall be borne equally by Party A and Party B. As used herein, “**Reference Market-maker**” means a leading dealer in the relevant market selected by a party in good faith from dealers of the highest credit standing which satisfy all the criteria that such party applies generally at the time in deciding whether to offer or to make an extension of credit. Following any such designation of an alternate Calculation Agent, if no Event of Default in respect of Party A is then continuing, the Calculation Agent shall again be Party A.
- (f) **Credit Support Document.** Details of any Credit Support Document:
- In relation to Party A: Not Applicable.
- In relation to Party B: Not Applicable.
- (g) **Credit Support Provider.**
- Credit Support Provider means in relation to Party A: Not Applicable.
- Credit Support Provider means in relation to Party B: Not Applicable.
- (h) **Governing Law.** This Agreement and any and all controversies arising out of or in relation to this Agreement shall be governed by and construed in accordance with the laws of the State of New York (without reference to its conflict of laws doctrine).
- (i) **Netting of Payments.** Unless the parties otherwise so agree, “Multiple Transaction Payment Netting” will not apply for the purpose of Section 2(c) of this Agreement, except with respect to any Transactions for which the parties mutually agree shall be netted operationally, starting as of the date mutually agreed.
- (j) “**Affiliate**” will have the meaning specified in Section 14 of this Agreement.
- (k) **Absence of Litigation.** For the purpose of Section 3(c):
- “**Specified Entity**” means in relation to Party A, none;
- “**Specified Entity**” means in relation to Party B, none.
- (l) **No Agency.** The provisions of Section 3(g) will apply to this Agreement.
- (m) **Additional Representation** will apply. For the purpose of Section 3 of this Agreement, each of the following will constitute an Additional Representation, which will be made by the party indicated below at the times specified below:

- (i) **Mutual Representations.** Each party makes the following representations to the other party (which representations will be deemed to be repeated by each party on each date on which a Transaction is entered into):
 - (A) **Relationship Between Parties.** Each party will be deemed to represent to the other party on the date on which it enters into a Transaction that (absent a written agreement between the parties that expressly imposes affirmative obligations to the contrary for that Transaction):
 - (1) **Non-Reliance.** It is acting for its own account, and it has made its own independent decisions to enter into that Transaction and as to whether that Transaction is appropriate or proper for it based upon its own judgment and upon advice from such advisors as it has deemed necessary. It is not relying on any communication (written or oral) of the other party as investment advice or as a recommendation to enter into that Transaction, it being understood that information and explanations related to the terms and conditions of a Transaction shall not be considered investment advice or a recommendation to enter into that Transaction. No communication (written or oral) received from the other party will be deemed to be an assurance or guarantee as to the expected results of that Transaction.
 - (2) **Assessment and Understanding.** It is capable of assessing the merits of and understanding (on its own behalf or through independent professional advice), and understands and accepts, the terms, conditions and risks of that Transaction. It is also capable of assuming, and assumes, the risks of that Transaction.
 - (3) **Status of Parties.** The other party is not acting as a fiduciary for or an advisor to it in respect of that Transaction.
 - (B) **Eligible Contract Participant.** Each party will be deemed to represent to the other party on each date on which a Transaction is entered into that it is an “eligible contract participant” as such term is defined in the Commodity Exchange Act, as amended (the “*Commodity Exchange Act*” or “*CEA*”).
 - (C) **ERISA.** Each party represents to the other party at all times hereunder that it is not (i) an employee benefit plan as defined in Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended (“ERISA”), or a plan as defined in Section 4975(e)(1) of the Internal Revenue Code of 1986, as amended (the “Code”), subject to Title I of ERISA or Section 4975 of the Code, or a plan as so defined but which is not subject to Title I of ERISA or Section 4975 of the Code but is subject to another law materially similar to Title I of ERISA or Section 4975 of the Code (each of which, an “ERISA Plan”), (ii) a person or entity acting on behalf of an ERISA Plan, or (iii) a person or entity the assets of which constitute assets of an ERISA Plan
- (ii) **FDIC Requirements; Qualified Financial Contracts.** In the case of Party A:
 - (A) it intends and acknowledges that this Agreement, including all Transactions hereunder, shall constitute a “qualified financial contract” and a “swap agreement,” as those terms are defined in 12 U.S.C. §1821(e)(8)(D) as

in effect on the date of this Agreement (or any successor provision of similar import), (B) without limiting the generality of Section 3(a)(i), it is authorized under applicable non-insolvency law to enter into and perform its

obligations under this Agreement, each Credit Support Document (if any) to which it is party and each Transaction hereunder, (C) it will, at all times during the term of this Agreement, maintain as part of its official books and records a copy of this Agreement (including all Confirmations from time to time and all other supplements hereto and documents incorporated by reference herein), and evidence of its authorization of the foregoing, and (D) this Agreement has been executed and delivered by an officer of the level of Vice President or higher.

- (n) **Exclusion.** Notwithstanding anything to the contrary in any guarantee, credit agreement, loan agreement, security agreement or otherwise, the parties hereby expressly waive the guaranty or other credit support (each a “**Guarantee**”) by any person or entity that purports to guarantee or otherwise support any obligations with respect to any Transaction under this Agreement (each such person a “**Guarantor**”) if, and to the extent, the guaranty or other credit support by such Guarantor with respect to such Transaction is or becomes illegal under the Commodity Exchange Act or any rule, regulation or order of the Commodity Futures Trading Commission (or the application or official interpretation of any thereof) by virtue of such Guarantor’s failure for any reason to constitute an “eligible contract participant” as defined in the Commodity Exchange Act (determined after giving effect to any and all guarantees, letters of credit, keepwell or other support agreements of such Guarantor’s guaranty or other credit support obligations with respect to such Transaction by any person or entity that is capable of bestowing “eligible contract participant” status on the Guarantor within the meaning of Section 1a(18)(v)(II) of the Commodity Exchange Act) at the time the guaranty or other credit support of such Guarantor becomes effective with respect to such Transaction.
- (o) **Recording of Conversations.** Each party to this Agreement (i) acknowledges and agrees to the recording of conversations between trading and marketing and other personnel of the parties or any of their Affiliates in connection with this Agreement, any Transaction or potential Transaction, whether by one or the other or both of the parties or their agents; and (ii) agrees, to the extent permitted by applicable law, that such recordings may be submitted in evidence in any Proceedings.
- (p) **Party A Consent to Disclosure.** Party B is a reporting company under the Securities Exchange Act of 1934, as amended (the “34 Act”), and may be required to disclose this Agreement, including without limitation this Master Agreement and the Confirmations governed by this Master Agreement, the Transactions under this Agreement, and other ancillary agreements on SEC Form 8-K (the “**Form 8-K Documents and Information**”). Party A hereby consents to the disclosure of the Form 8-K Documents and Information and other related material information.

Part 5

Other Provisions

- (a) **2006 ISDA Definitions.** This Agreement and each Transaction are subject to the 2006 ISDA Definitions published by the International Swaps and Derivatives Association, Inc. (the “2006 ISDA Definitions”) and will be governed by the provisions of the 2006 ISDA Definitions. The provisions of the 2006 ISDA Definitions are incorporated by reference in, and shall form part of, this Agreement and each Confirmation. Any reference to a “Swap Transaction” in the 2006 ISDA Definitions is deemed to be a reference to a “Transaction” for purposes of this Agreement or any Confirmation, and any reference to a “Transaction” in this Agreement or any Confirmation is deemed to be a reference to a “Swap Transaction” for purposes of the 2006 ISDA Definitions. The provisions of this Agreement (exclusive of the 2006

ISDA Definitions) shall prevail in the event of any conflict between such provisions and the 2006 ISDA Definitions.

- (b) **2002 Master Agreement Protocol.** Annexes 1 to 18 and Section 6 of the ISDA 2002 Master Agreement Protocol as published by the International Swaps and Derivatives Association, Inc. on July 15, 2003 are incorporated into and apply to this Agreement. References in those definitions and provisions to any ISDA Master Agreement will be deemed to be references to this Master Agreement.
- (c) **Change of Account.** Any account designated by a party pursuant to Section 2(b) shall be in the same legal and tax jurisdiction as the original account.
- (d) **WAIVER OF RIGHT TO TRIAL BY JURY.** EACH PARTY HEREBY IRREVOCABLY WAIVES ANY AND ALL RIGHTS TO TRIAL BY JURY WITH RESPECT TO ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT, ANY CREDIT SUPPORT DOCUMENT OR ANY TRANSACTION CONTEMPLATED HEREBY. NEITHER PARTY SHALL SEEK TO CONSOLIDATE, BY COUNTERCLAIM OR OTHERWISE, ANY SUCH ACTION IN WHICH A JURY TRIAL CANNOT BE OR HAS NOT BEEN WAIVED. THESE PROVISIONS SHALL NOT BE DEEMED TO HAVE BEEN MODIFIED IN ANY RESPECT OR RELINQUISHED BY EITHER PARTY EXCEPT BY WRITTEN INSTRUMENT EXECUTED BY EACH OF THEM.
- (e) **Modifications to the Agreement.** This Agreement shall be modified as follows:
- (i) Section 1(b) shall be amended by inserting the words “fully executed and delivered or otherwise accepted” between the words “any” and “Confirmation” in line 3.
 - (ii) Section 2(d)(i)(4)(B) is amended by deleting “Section 3(f)” in the first line thereof and inserting “Sections 3(f) or 3(g)” in lieu thereof.
 - (iii) Section 3(d) is hereby amended by adding in the third line thereof after the word “respect” and before the period: “or, in the case of financial statements, a fair presentation of the financial condition of the relevant party as of the dates and for the periods set forth therein”.
 - (iv) Section 5(b)(iii) is hereby amended by adding in the fourth line after the word “likelihood” the following: “, in the written opinion of its outside legal counsel,”
- (f) **Amendments, Notices, Counterparts and Confirmations.**
- (i) Section 9(b) shall be amended by (A) deleting in the parenthetical the words “by a facsimile transmission” and replacing them with the words “by an e-mail”; and (B) deleting the word “telexes” and replacing it with the word “e-mails”.
 - (ii) Section 9(e)(i) shall be amended by deleting the words “by facsimile transmission” and replacing them with the words “by e-mail”.
 - (iii) The second and third sentences of Section 9(e)(ii) shall be deleted and replaced by the following:

“A Confirmation will be entered into as soon as practicable and may be executed and delivered in counterparts (including by an e-mail) or be created by an exchange of electronic messages on an electronic messaging system or by an exchange of e-mails, which in each case will be sufficient for all purposes to evidence a binding supplement to this Agreement. The parties will specify therein or through another effective means that any such counterpart, electronic message or e-mail constitutes a Confirmation.”



- (iv) The wording of Section 12(a)(ii) shall be replaced in its entirety by the following: “[reserved;]”.
- (v) The wording of Section 12(a)(iii) shall be replaced in its entirety by the following: “[reserved;]”.
- (vi) Section 12(b) shall be amended by deleting the words “address, telex or facsimile number” and replacing them with the word “address”.
- (g) ***Withholding Tax imposed on payments to non-US counterparties under the United States Foreign Account Tax Compliance Act.*** “Tax” as used in Part 2(a) of this Schedule (Payer Tax Representation) and “Indemnifiable Tax” as defined in Section 14 of this Agreement shall not include any U.S. federal withholding tax imposed or collected pursuant to Sections 1471 through 1474 of the U.S. Internal Revenue Code of 1986, as amended (the “Code”), any current or future regulations or official interpretations thereof, any agreement entered into pursuant to Section 1471(b) of the Code, or any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement entered into in connection with the implementation of such Sections of the Code (a “*FATCA Withholding Tax*”). For the avoidance of doubt, a FATCA Withholding Tax is a Tax the deduction or withholding of which is required by applicable law for the purposes of Section 2(d) of this Agreement.

This Part 5(g) shall replace any “*Express Provisions*” where “*Express Provisions*” means any provisions expressly set out in any confirmation of a Transaction that supplements, forms a part of, and is subject to, this ISDA Master Agreement; that provide for amendments to (i) any Payer Tax Representation contained in this ISDA Master Agreement, (ii) Section 2(d) of this ISDA Master Agreement, or (iii) the definition of “*Indemnifiable Tax*” in this ISDA Master Agreement, in each case, only in relation to FATCA Withholding Tax.

- (h) ***Conditions Precedent.*** Section 2(a)(iii)(1) shall be amended by deleting the words “or Potential Event of Default”. In addition, for the avoidance of doubt, Section 2(a)(iii) of this Agreement applies to each obligation of each party under Section 2(a)(i) of this Agreement, after the application of Section 2(c) of this Agreement or, if applicable, paragraph (d) of Part 6 of this Schedule, where the parties shall be deemed to have agreed to netting therein.
- (i) ***Amendment to Section 2.*** Section 2 of the Agreement shall be amended to add at the end a new Section 2(e), reading in its entirety as follows:

“(e) ***Condition End Date.***

(i) If an Event of Default occurs, the Defaulting Party may, by notice to the Non-defaulting Party identifying the Event of Default and confirming its occurrence, specify that clause (ii) will apply to that Event of Default.

(ii) If this clause (ii) applies to an Event of Default, then the condition precedent specified in Section 2(a)(iii)(1) with respect to that Event of Default will cease to be a condition precedent to each obligation of the Non-defaulting Party on the relevant Condition End Date. Any obligation that would have been payable or deliverable by the Non-defaulting Party but for Section 2(a)(iii)(1) will become payable or deliverable on the first Local Business Day falling after the Condition End Date (together with interest payable on demand in accordance with Section 9(h)(i)(3) (A) or compensation and interest payable on demand in accordance with Section 9(h)(i)(4)(A), as the case may be).



(iii) Subject to clause (iv) below, if, after a party has given a notice under clause (i) above with respect to an Event of Default, another Event of Default occurs with respect to that party (and such other Event of Default does not arise out of the same facts and circumstances as a prior Event of Default), then, with respect to the earlier Event of Default, no Condition End Date will occur and therefore clause (ii) will not apply. This will not affect the right of that party to give a notice under clause (i) in respect of the subsequent Event of Default. This clause (iii) is without prejudice to the right of the Defaulting Party to give a new notice to the Non-defaulting Party under clause (i) with respect to the earlier Event of Default.

(iv) If the Defaulting Party has given a notice under clause (i) above in respect of an Event of Default under Section 5(a)(vii), then clause (iii) will not apply.”

Section 14 of the Agreement is amended to add in the appropriate alphabetical position a new definition of “Condition End Date”, reading in its entirety as follows:

“**“Condition End Date”** means, with respect to an Event of Default, the day falling 90 days after a notice given by the Defaulting Party under Section 2(e)(i) is effective if the Event of Default is still continuing on that day.”

- (j) **ISDA Dodd Frank Protocols.** The parties agree that, notwithstanding anything to the contrary in the ISDA August 2012 DF Protocol Agreement (as published by the International Swaps and Derivatives Association, Inc. on August 13, 2012) entered into by the parties (the “August DF Protocol Agreement”) and the ISDA March 2013 DF Protocol Agreement (as published by the International Swaps and Derivatives Association, Inc. on March 22, 2013) entered into by the parties (the “March DF Protocol Agreement”) (together, the “Protocol Agreements”), this Agreement shall constitute a “Protocol Covered Agreement” for all purposes under the Protocol Agreements.
- (k) **ISDA 2018 U.S. Resolution Stay Protocol.** Each party agrees that it has adhered to the ISDA 2018 U.S. Resolution Stay Protocol (the “**ISDA U.S. Stay Protocol**”) prior to the date hereof. The parties agree that the terms of the ISDA U.S. Stay Protocol are incorporated into and form a part of this Agreement, and this Agreement shall be deemed a Protocol Covered Agreement for purposes thereof. For purposes of incorporating the ISDA U.S. Stay Protocol, Party A shall be deemed to be a Regulated Entity and Party B shall be deemed to be an Adhering Party. In the event of any inconsistencies between this Agreement and the ISDA U.S. Stay Protocol, the ISDA U.S. Stay Protocol will prevail.
- (l) **Confirmation Procedures.** Each confirming document, acknowledgment or other evidence intended by the parties to be effective for the purpose of confirming or evidencing a Transaction, whether created by delivery or exchange of written terms that match, or by making available written terms in a manner that permits the recipient to review and/or accept the terms, or by delivery to an agent or service provider, or via electronic messaging system, electronic communication network, or web-based platform that confirms the matching of such terms, shall constitute a “Confirmation” as referred to in this Agreement, provided that both parties agree in writing or by their course of conduct to use such method with respect to Transactions or certain types of Transactions. The parties expect to execute and deliver Confirmations for Transactions within the timeframes specified in CFTC Rule 23.501, to the extent applicable. Failure of the parties to confirm a Transaction within such timeframes, however, shall not be a basis for voiding or rescinding such Transaction and shall not affect the validity or enforceability of such Transaction.



- (m) **Limitations on Confirmation Override.** Notwithstanding Section 1(b) of this Agreement (as modified in Part 5(e)(i) above), the terms of a Confirmation shall not override any of the provisions identified below, and in the event of any inconsistency the terms of such provision and not the Confirmation shall govern, unless the Confirmation is executed by authorized signatories of Party A and Party B:
- (i) Part 1 of this Schedule (“Termination Provisions”);
 - (ii) Section 5 of this Agreement (“Events of Default and Termination Events”), as supplemented and amended by Part 1 of this Schedule;
 - (iii) Section 6 of this Agreement (“Early Termination; Close-Out Netting”), as supplemented and amended by this Schedule; or
 - (iv) Any Credit Support Document.
- (n) **Limitation of Liability.** NO PARTY SHALL BE REQUIRED TO PAY OR BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, OR PUNITIVE DAMAGES (WHETHER OR NOT ARISING FROM ITS NEGLIGENCE) TO ANY OTHER PARTY EXCEPT TO THE EXTENT THAT THE PAYMENTS REQUIRED TO BE MADE PURSUANT TO THIS AGREEMENT ARE DEEMED TO BE SUCH DAMAGES. IF AND TO THE EXTENT ANY PAYMENT REQUIRED TO BE MADE PURSUANT TO THIS AGREEMENT IS DEEMED TO CONSTITUTE LIQUIDATED DAMAGES, THE PARTIES ACKNOWLEDGE AND AGREE THAT ACTUAL DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE AND THAT SUCH PAYMENT IS INTENDED TO BE A REASONABLE APPROXIMATION OF THE AMOUNT OF SUCH DAMAGES AND NOT A PENALTY.
- (o) **Benchmarks.** The parties acknowledge that in the event they enter into any Transaction referencing a benchmark that is to be demised pursuant to a regulatory initiative (an “*Old Benchmark*”) they will need to amend the terms of that Transaction to account for the demise of the Old Benchmark. They agree to engage in good faith discussions to agree on a replacement benchmark, and mitigate any economic and operational consequences of such amendment. They further agree to consult on these matters in a timely manner ahead of the demise of the Old Benchmark. Reference shall be made to prevailing market standards and practices, including any ISDA published supplements and protocols. Notwithstanding the foregoing, if a Transaction is hedging a Loan under the Credit Agreement, the parties agree to use good faith efforts to select a replacement benchmark for the Transaction that matches the replacement benchmark provided for in the Credit Agreement with respect to such Loan.

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IN WITNESS WHEREOF, the parties have executed this Schedule as of the date specified on the first page of this document.

HSBC BANK USA, NATIONAL ASSOCIATION ADVANCED ENERGY INDUSTRIES, INC.

By: /s/ Leon Kirkland
Name: Leon Kirkland
Title: Authorized Signatory

By: /s/ Paul Oldham
Name: Paul Oldham
Title: EVP and Chief Financial Officer