STEVENSON-WYDLER (15 USC 3710a) COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT (hereinafter CRADA or Agreement) No. 24CRA14

BETWEEN

Battelle Energy Alliance, LLC (BEA)

under its U.S. Department of Energy Contract

No. DE-AC07-05ID14517 (hereinafter Contractor)

AND

AB Amber Grid

(hereinafter Participant), both being

hereinafter referred to singularly as "Party" and jointly as "Parties"

ARTICLE I: DEFINITIONS

- A. "Background Intellectual Property" means the Intellectual Property identified by the Parties in Annex B, Background Intellectual Property, which was in existence prior to or is first produced outside of this CRADA, except that in the case of inventions in those identified items, the inventions must have been conceived outside of this CRADA and not first actually reduced to practice under this CRADA to qualify as Background Intellectual Property.
- B. "Contracting Officer" means the DOE employee administering the Contractor's DOE contract.
- C. "DOE" means the Department of Energy, an agency of the Federal Government.
- D. <u>"Generated Information" means information, including data, produced in the performance of this CRADA.</u>
- E. "Government" means the Federal Government of the United States of America and agencies thereof.
- F. "Intellectual Property" means patents, trademarks, copyrights, mask works, Protected CRADA Information, and other forms of comparable property rights protected by Federal law and foreign counterparts, except trade secrets.
- G. <u>"Proprietary Information" means information, including data, which is developed at private expense outside of this CRADA, is marked as Proprietary Information, and embodies (i) trade secrets or (ii) commercial or financial information which is privileged or confidential under the Freedom of Information Act (5 U.S.C. 552 (b)(4)).</u>

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- H. <u>"Protected CRADA Information" means Generated Information which is marked as being Protected CRADA Information by a Party to this CRADA and which would have been Proprietary Information had it been obtained from a non-Federal entity.</u>
- I. <u>"Subject Invention"</u> means any invention of the Contractor or Participant conceived or first actually reduced to practice in the performance of work under this CRADA.

ARTICLE II: STATEMENT OF WORK, TERM, FUNDING AND COSTS

- A. The Statement of Work (Technical Specification) is attached as Annex A. The Contractor shall make reasonable efforts to complete the work.
- B. Notices: The names, postal addresses, telephone and email addresses for the Parties are provided in the Statement of Work. Any communications required by this CRADA, if given by postage prepaid first class U.S. Mail or other verifiable means addressed to the Party to receive the communication, shall be deemed made as of the day of receipt of such communication by the addressee, or on the date given if by email. Address changes shall be made by written notice and shall be effective thereafter. All such communications, to be considered effective, shall include the number of this CRADA.
- C. The effective date of this CRADA shall be the latter date of (1) the date on which it is signed by the last of the Parties or (2) the date on which the advance funding referred to in this Article is received by the Contractor. The period of performance of this CRADA will be 12 months from the effective date.
- D. The Participant's estimated contribution is \$230,877.26, of which \$189,872.26 is funds-in to the Laboratory. The Government's estimated contribution, which is provided through the Contractor's contract with DOE, is \$0. (No Government funding shall be used in the execution of this CRADA.) Advance payment in excess of total costs incurred by the Contractor under this CRADA, if any, shall be refunded to the Participant.
- E. Advance Payment and Funding. The Participant shall provide to the Contractor, prior to any work being performed, a budgetary resource sufficient to cover anticipated work that will be performed for the Participant's directly funded share. In order to accomplish the deliverables schedule, set forth in the Statement of Work, the Parties agree to the following payment schedule:

Phase 1 (Task 1, part of Task 2, Task 3 and	\$56,033.00
Task 5	
Phase 2 (remainder of Task 2, Task 3 and	\$50,678.00
Task 5)	
Phase 3 (Task 6)	\$59,133.00
Phase 4 (Task 7)	\$18,498.00
FAC	\$5,530.26
Grand Total:	\$189,872.26

1. Invoices will be submitted electronically to the Participant at the following address:

R.Baltaragiene@ambergrid.lt

2. Payments by the Participant will be directed as follows:

Check Payment: Battel

Battelle Energy Alliance, LLC

ATTN: Accounting P.O. Box 1625, MS 3117 Idaho Falls, ID 83415-3117

Wire Transfer:

U.S. Bank

101 S. Capital Blvd., Suite 816

Boise, ID 83702



- 3. For check payments, include the Agreement number and all invoice numbers being paid on the check. For wire transfers, include the Agreement number and invoice number on the receiver info-line and list all invoice numbers being paid on the sender info-line.
- 4. Applicable Currency. All payments due the Contractor under this Agreement, including cost estimates and obligations of funds, shall be in United States dollars (U.S.\$).

ARTICLE III: PERSONAL PROPERTY

All tangible personal property produced or acquired under this CRADA shall become the property of the Participant or the Government, depending upon whose funds were used to obtain it unless identified in the Statement of Work as being owned by the other Party. Personal property shall be disposed of as directed by the owner at the owner's expense. All jointly funded property shall be owned by the Government. The Participant shall maintain records of receipts, expenditures, and the disposition of all Government property in its custody related to the CRADA. Subject to the foregoing, it is anticipated that no Government funding shall be used to obtain or acquire any tangible personal property under this CRADA.

ARTICLE IV: DISCLAIMER

THE GOVERNMENT, THE PARTICIPANT, AND THE CONTRACTOR MAKE NO EXPRESS OR IMPLIED WARRANTY AS TO THE CONDITIONS OF THE RESEARCH OR ANY INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DEVELOPED UNDER THIS CRADA, OR THE OWNERSHIP, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH OR RESULTING PRODUCT. NEITHER THE GOVERNMENT, THE PARTICIPANT, NOR THE CONTRACTOR SHALL BE LIABLE FOR SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES ATTRIBUTED TO SUCH RESEARCH OR RESULTING PRODUCT, INTELLECTUAL PROPERTY,

GENERATED INFORMATION, OR PRODUCT MADE OR DEVELOPED UNDER THIS CRADA.

ARTICLE V: PRODUCT LIABILITY

The Participant agrees that all of its Intellectual Property generated under this Agreement will be placed in the public domain (with the appropriate disclaimer) or the results will be a product, process, or service unlikely to be commercialized. Therefore, a standard Product Liability provision where the Participant would indemnify the Contractor and the Government is not included in this CRADA.

ARTICLE VI: RIGHTS IN SUBJECT INVENTIONS

Wherein DOE has granted the Participant and the Contractor the right to elect to retain title to their respective Subject Inventions, and wherein the Participant has the option to choose an exclusive license, for reasonable compensation, for a pre-negotiated field of use to the Contractor's Subject Inventions,

- A. Each Party shall have the first option to elect to retain title to any of its Subject Inventions and that election shall be made: (1) for the Participant, within 12 months of disclosure of the Subject Invention to DOE or (2) for the Contractor, within the time period specified in its prime contract for electing to retain title to Subject Inventions. However, such election shall occur not later than 60 days prior to the time when any statutory bar might foreclose filing of a U.S. Patent application. The electing Party has one year to file a patent application after such election unless any statutory bar exists. If a Party elects not to retain title to any of its Subject Inventions or fails to timely file a patent application, the other Party shall have the second option to elect to obtain title to such Subject Invention within the time period specified in paragraph B below.
- B. The Parties agree to assign to DOE, as requested by DOE, the entire right, title and interest in any country to each Subject Invention where the Parties (1) do not elect pursuant to this article to retain/obtain such rights, or (2) elect to retain/obtain title to a Subject Invention but fail to have a patent application filed in that country on the Subject Invention or decide not to continue prosecution or not to pay any maintenance fees covering the Subject Invention. If DOE is granted a patent on Participant's Subject Invention, the Participant may request a non-exclusive license and DOE will determine whether to grant such license pursuant to statutory authority.
- C. The Parties acknowledge that the Government retains a nonexclusive, nontransferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States every Subject Invention under this CRADA throughout the world. The Parties agree to execute a Confirmatory License to affirm the Government's retained license.
- D. The Parties agree to disclose to each other each Subject Invention which may be patentable or otherwise protectable under U.S. patent law. The Parties agree that the Contractor and the Participant will disclose their respective Subject Inventions to DOE and each other within two (2) months after the inventor first discloses the Subject

Invention in writing to the person(s) responsible for patent matters of the disclosing Party.

These disclosures should be in sufficiently complete technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose, and operation of the Subject Invention. The disclosure shall also identify any known actual or potential statutory bars, e.g., printed publications describing the Subject Invention or the public use or "on sale" of the Subject Invention. The Parties further agree to disclose to each other any subsequently known actual or potential statutory bar that occurs for a Subject Invention disclosed but for which a patent application has not been filed. All Subject Invention disclosures shall be marked as confidential under 35 U.S.C. 205.

- E. The Parties agree to include within the beginning of the specification of any U.S. patent applications and any patent issuing thereon (including non-U.S. patents) covering a Subject Invention, the following statement: "This invention was made under a CRADA (identify CRADA number) between (name the Participant) and Battelle Energy Alliance, LLC, operator of Idaho National Laboratory for the United States Department of Energy. The Government has certain rights in this invention."
- F. The Parties acknowledge that DOE has certain march-in rights to any Subject Inventions in accordance with 48 CFR 27.304-1(g) and 15 U.S.C. 3710a(b)(1)(B) and (C).
- G. The Participant agrees to submit, for a period of five (5) years from the date of termination or completion of this CRADA and upon request of DOE, a nonproprietary report no more frequently than annually on efforts to utilize any Intellectual Property arising under the CRADA including information regarding compliance with U.S. Competitiveness provision of this CRADA.

ARTICLE VII: RIGHTS IN DATA

- A. The Parties agree that they shall have no obligations of nondisclosure or limitations on their use of, and the Government shall have unlimited rights in, all Generated Information produced and information provided by the Parties under this CRADA, except for restrictions on data provided for in this Article or data disclosed in a Subject Invention disclosure being considered for Patent protection.
- B. PROPRIETARY INFORMATION: Each Party agrees to not disclose Proprietary Information provided by the other Party to anyone other than the CRADA Participant, Contractor and its subcontractors (if any) performing work under this CRADA without written approval of the providing Party, except to Government employees who are subject to the statutory provisions against disclosure of confidential information set forth in the Trade Secrets Act (18 U.S.C. 1905).

 Government employees shall not be required to sign non-disclosure agreements due to the provisions of the above-cited statute.

If Proprietary Information is orally disclosed to a Party, it shall be identified as such, orally, at the time of disclosure and confirmed in a written summary thereof, appropriately marked by the disclosing Party, within 30 days as being Proprietary Information.

All Proprietary Information shall be protected for a period of 3 years from the effective date of this CRADA, unless such Proprietary Information becomes publicly known without the fault of the recipient, shall come into recipient's possession without breach by the recipient of any of the obligations set forth herein, can be demonstrated by the recipient by written record that it is known prior to receipt from disclosing Party, is disclosed by operation of law, or is independently developed by recipient's employees who did not have access to such Proprietary Information.

Proprietary Information in tangible form shall be returned to the disclosing Party or destroyed with a notification of destruction submitted to the disclosing Party upon termination or expiration of this CRADA, or during the term of this CRADA upon request by the disclosing Party.

C. <u>PROTECTED CRADA INFORMATION</u>: Except where a Participant's Federal funding agreement prohibits such protection, each Party may designate and mark as Protected CRADA Information any Generated Information produced by its employees, which meets the definition in Article I and, with the agreement of the other Party, so designate any Generated Information produced by the other Party's employees which meets the definition in Article I. All such designated Protected CRADA Information shall be appropriately marked.

For a period of 3 years from the date Protected CRADA Information is produced, the Parties agree not to further disclose such information and to use the same degree of care and discretion, but no less than reasonable care and discretion, to avoid disclosure, publication or dissemination of such information to a third party, as the Party employs for similar protection of its own information which it does not desire to disclose, publish, or disseminate except:

- (1) as necessary to perform this CRADA;
- (2) as published in a patent application or an issued patent before the protection period expires;
- (3) as provided in Article X [REPORTS AND PUBLICATIONS];
- (4) <u>as requested by the DOE Contracting Officer to be provided to other DOE</u> facilities for use only at those DOE facilities solely for Government use only with the same protection in place and marked accordingly;
- (5) when a specific maximum time period for delaying the public release of data is authorized in the terms of a Government funding agreement used to fund this CRADA and that maximum period is shorter than the time period set forth in this Article for protecting Protected CRADA Information;

- (6) to existing or potential licensees, affiliates, customers, or suppliers of the Parties in support of commercialization of the technology with the same protection in place. Disclosure of the Participant's Protected CRADA Information under this subparagraph shall only be done with the Participant's consent; or
- (7) as mutually agreed to by the Parties in advance.

The obligations of this paragraph shall end sooner for any Protected CRADA Information which shall become publicly known without fault of either Party, shall come into a Party's possession without breach by that Party of the obligations of paragraph above, or shall be independently developed by a Party's employees who did not have access to the Protected CRADA Information. Federal Government employees who are subject to 18 USC 1905 may have access to Protected CRADA Information and shall not be required to sign non-disclosure agreements due to the provisions of the statute.

D. <u>COPYRIGHT</u>: The Parties may assert Copyright in any of their Generated Information. Assertion of Copyright generally means to enforce or give an indication of an intent or right to enforce such as by marking or securing Federal registration. Copyrights in co-authored works by employees of the Parties shall be held jointly, and use by either Party shall be without accounting.

For all Generated Information, the Government has for itself and others acting on its behalf, a royalty-free, nontransferable, nonexclusive, irrevocable worldwide copyright license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government, in all copyrightable works produced in the performance of this CRADA, subject to the restrictions this Article places on publication of Proprietary Information and Protected CRADA Information.

The Parties agree that no computer software will be created under this CRADA. If the scope of work changes to create computer software, then the CRADA will be amended accordingly.

The Parties agree to place Copyright and other notices, as appropriate for the protection of Copyright, in human-readable form onto all physical media, and in digitally encoded form in the header of machine-readable information recorded on such media such that the notice will appear in human-readable form when the digital data are off loaded or the data are accessed for display or printout.

ARTICLE VIII: U.S. COMPETITIVENESS

The Parties agree that a purpose of this CRADA is to provide substantial benefit to the U.S. economy and Lithuania energy sector cybersecurity as described in Annex A.

A. In exchange for the benefits received under this CRADA, the Participant therefore agrees to the following:

- (1) Products embodying Intellectual Property developed under this CRADA shall be substantially manufactured in the United States, and
- (2) Processes, services, and improvements thereof which are covered by Intellectual Property developed under this CRADA shall be incorporated into the Participant's manufacturing facilities in the United States either prior to or simultaneously with implementation outside the United States. Such processes, services, and improvements, when implemented outside the United States, shall not result in reduction of the use of the same processes, services, or improvements in the United States.
- B. The Contractor agrees to a U.S. Industrial Competitiveness clause in accordance with its prime contract with respect to any licensing and assignments of its Intellectual Property arising from this CRADA, except that any licensing or assignment of its intellectual property rights to the Participant shall be in accordance with the terms of paragraph A of this Article.

ARTICLE IX: EXPORT CONTROL

THE PARTIES UNDERSTAND THAT MATERIALS AND INFORMATION RESULTING FROM THE PERFORMANCE OF THIS CRADA MAY BE SUBJECT TO EXPORT CONTROL LAWS AND THAT EACH PARTY IS RESPONSIBLE FOR ITS OWN COMPLIANCE WITH SUCH LAWS. EXPORT LICENSES OR OTHER AUTHORIZATIONS FROM THE U.S. GOVERNMENT MAY BE REQUIRED FOR THE EXPORT OF GOODS, TECHNICAL DATA OR SERVICES UNDER THIS AGREEMENT. THE PARTIES ACKNOWLEDGE THAT EXPORT CONTROL REQUIREMENTS MAY CHANGE AND THAT THE EXPORT OF GOODS, TECHNICAL DATA OR SERVICES FROM THE U.S. WITHOUT AN EXPORT LICENSE OR OTHER APPROPRIATE GOVERNMENTAL AUTHORIZATION MAY RESULT IN CRIMINAL LIABILITY.

ARTICLE X: REPORTS AND PUBLICATIONS

- A. The Parties agree to produce the following deliverables to DOE Office of Scientific and Technical Information (OSTI):
 - (1) an initial abstract suitable for public release at the time the CRADA is executed;
 - (2) a final report, upon completion or termination of this CRADA, to include a list of Subject Inventions; and
 - (3) other scientific and technical information in any format or medium that is produced as a result of this CRADA that is useful to the Government or the public as specified by and upon request from DOE no later than two years from submission of the final report to OSTI.

The Parties acknowledge that the Contractor has the responsibility to timely provide the above information to OSTI. Furthermore, item (2) above should also be provided to the DOE field office.

- B. The Parties agree to secure pre-publication review from each other wherein the non-publishing Party shall provide within 30 days any written objections to be considered by the publishing Party.
- C. The Parties agree that neither will use the name of the other Party or its employees in any promotional activity, such as advertisements, with reference to any product or service resulting from this CRADA, without prior written approval of the other Party.

ARTICLE XI: FORCE MAJEURE

No failure or omission by the Contractor or the Participant in the performance of any obligation under this CRADA shall be deemed a breach of this CRADA or create any liability if the same shall arise from any cause or causes beyond the control of the Contractor or the Participant, including but not limited to the following, which, for the purpose of this CRADA, shall be regarded as beyond the control of the Party in question: Acts of God, acts or omissions of any government or agency thereof, compliance with requirements, rules, regulations, or orders of any governmental authority or any office, department, agency, or instrumentality thereof, fire, storm, flood, earthquake, accident, acts of the public enemy, war, rebellion, insurrection, riot, sabotage, invasion, quarantine, restriction, transportation embargoes, or failures or delays in transportation.

ARTICLE XII: <u>DISPUTES</u>

The Parties shall attempt to jointly resolve all disputes arising from this CRADA. In the event a dispute arises under this CRADA, the Participant is encouraged to contact Contractor's Technology Partnerships Ombudsman in order to further resolve such dispute before pursuing third-party mediation or other remedies. If the Parties are unable to jointly resolve a dispute within 60 days, they agree to submit the dispute to a third-party mediation process that is mutually agreed upon by the Parties.

After the Parties have consulted with the Technology Partnership Ombudsman in accordance with the paragraph above and if they mutually agree not to enter into mediation or if the mediation is unsuccessful, the Parties can request to have the dispute settled by arbitration conducted in the State of Idaho in accordance with the then current and applicable rules of the American Arbitration Association. Judgment upon the award rendered by the Arbitrator(s) shall be nonbinding on the Parties.

To the extent that there is no applicable U.S. Federal law, this CRADA and performance thereunder shall be governed by the laws of the State of Idaho, without reference to that state's conflict of laws provisions.

ARTICLE XIII: ENTIRE CRADA, MODIFICATIONS, ADMINISTRATION AND TERMINATION

- A. This CRADA with its annexes contains the entire agreement between the Parties with respect to the subject matter hereof, and all prior representations or agreements relating hereto have been merged into this document and are thus superseded in totality by this CRADA.
- B. Any agreement to materially change any terms or conditions of this CRADA or the annexes shall be valid only if the change is made in writing, executed by the Parties hereto, and approved by DOE.
- C. The Contractor enters into this CRADA under the authority of its prime contract with DOE. The Contractor is authorized to and will administer this CRADA in all respects unless otherwise specifically provided for herein. Administration of this CRADA may be transferred from the Contractor to DOE or its designee with notice of such transfer to the Participant, and the Contractor shall have no further responsibilities except for the confidentiality, use and/or nondisclosure obligations of this CRADA.
- D. This CRADA may be terminated by either Party upon 60 days' written notice to the other Party. If Article III provides for advance funding, this CRADA may also be terminated by the Contractor in the event of failure by the Participant to provide the necessary advance funding.

ARTICLE XIV: FOREIGN GOVERNMENT-SPONSORED TALENT RECRUITMENT PROGRAM (FGSTRP) OR OTHER FOREIGN GOVERNMENT-SPONSORED OR AFFILIATED ACTIVITY (OFGSAA)

The Participant and all lower-tiers shall certify if any employee(s) or subcontractor employee(s) who are working under this CRADA either on-site at a DOE NNSA site/facility or in DOE/NNSA/contractor leased space are participating in a FGSTRP or OFGSAA as defined in Attachment 2 of in DOE O 486.1A, which is available at https://www.directives.doe.gov/directives-documents/400-series/0486.1-BOrder-a. Countries that are identified as "Foreign Country of Risk" are People's Republic of China, Russia, North Korea, and Iran and is subject to change upon DOE request.

- A. Participant shall notify Contractor within 5 business days of any personnel changes under this CRADA that result in any change to Participant's certification under this requirement.
- B. Failure to report pursuant to this requirement or falsification of any information required hereby may result in exercising contractual remedies in accordance with the terms of this CRADA.
- C. Contractor reserves the right to remove any employee(s) participating in the FGSTRP or OFGSAA from performing any work under this CRADA from any facilities of the INL or from any other DOE/NNSA site/facility (including a DOE/NNSA contractor leased facility). To the extent the U.S. Department of Energy requires the Participant employee(s) participating in the FGSTRP or OFGSAA to be removed from performing any further work

- under this CRADA, the Participant shall do so, unless such employee(s) agree to discontinue his/her/their participation in the FGSTRP or OFGSAA.
- D. Participant agrees that it shall not submit any request for claim or request for equitable adjustment against Contractor as a result of direction under this subparagraph.

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BATTELLI	E ENERGY ALLIAN	CE, LLC:	AB AMBER GRID:	CRADA No. 24CRA14

Annex B Background Intellectual Property CRADA No. 24CRA14, Mod 0

CONTRACTOR:

Patent ID	Docket No.	Title
N/A	CW-21-55	Cyber-CHAMP Task Analysis Survey Tool
N/A	BA-1187	ICS (Industrial Control Systems) CYBER-CHAMP (CYBER security Health And Maturity Progression
		model)

PARTICIPANT:

None