

**Memorandum of Understanding**  
**between**  
**The Regents of the University of California, as Management and Operating**  
**Contractor for**  
**Lawrence Berkeley National Laboratory**  
**and**  
**HYDRO QUEBEC for**  
**Center of Excellence in Transportation Electrification and Energy Storage**  
**Concerning Collaboration in the Fields of Prototyping and Manufacturing**  
**Scale-up of Energy**  
**Storage Systems, Materials, and Components**

This Memorandum of Understanding (MOU) is between The Regents of the University of California (The Regents), in its capacity as the manager and operator of the Lawrence Berkeley National Laboratory (LBNL) and HYDRO-QUEBEC (HQ), operating the Center of Excellence in Transportation Electrification and Energy Storage (CETEES)

LBNL is a U.S. Department of Energy (DOE) National Laboratory managed and operated by The Regents pursuant to DOE Contract No. DE-AC02-05CH11231. HQ is a corporation constituted under the laws of Quebec, Canada and operates CETEES. For over 40 years Hydro-Quebec has also actively been involved in battery research and development (R&D) and is now a leader in the industry. In March, 2018, Hydro-Québec opened its CETEES.

The Regents and HQ are collectively herein referred to as the “Participants” or individually as a “Participant.”

**1. Objective**

The objective of this MOU is to explore collaboration between the Participants in the fields of electrochemical generators, cells, batteries, packs, storage systems and related components and materials. To further the acceleration of the 2050 energy use goals of California and the United States, and Quebec and Canada, the Participants intend to assess the feasibility of creating a California-based joint center focused on research and development and pilot scale manufacturing for product realization through which collaborative activities could be conducted.

## **2. Proposed Areas of Collaboration**

The Participants intend to collaborate in one or more of the following areas:

- A. Assess feasibility of creation of a joint next-generation battery technology and pilot-scale manufacturing center in California
- B. Exploration of potential funding sponsors for a next-generation battery technology development and pilot-scale manufacturing center.
- C. Development of ideas for a potential research portfolio and related works of authorship for next-generation battery technology.
- D. Explore potential for joint pursuit of funding solicitations from the Province of Quebec, the State of California, or other related funding opportunities that could support a next generation battery technology development and pilot scale manufacturing center, with any such solicitations to be undertaken only pursuant to an appropriate written agreement therefore.
- E. Exploration of organizational efficiencies and structures for the purpose of maximizing success of a next generation battery technology and pilot scale manufacturing center.

The scope of above activities and cooperation may be changed or extended to other areas by mutual written consent of the Participants.

## **3. Proposed Forms of Collaboration**

The Participants intend to collaborate through mutual visits, the exchange of publicly available information, exchanges of researchers and experts, training and planning for potential future joint research, with any future collaborative research to be undertaken only pursuant to an appropriate written agreement therefor.

## **4. Proposed Mechanisms of Collaboration**

- a. To coordinate collaborative activities under this MOU, each Participant intends to designate one or more principal coordinators to be in charge of the collaboration, through whom all requests and plans of that Participant should be made.
- b. The principal coordinators may hold meetings when necessary to discuss matters related to collaboration under this MOU.
- c. The principal coordinator for The Regents is Robert Kostecki, Senior Scientist and Division Director of Energy Storage and Distributed Resources (ESDR), or, in the alternative, Ravi Prasher, Associate Lab Director, Energy Technologies Area. The principal coordinator for HQ is intended to be Chisu Kim, Director Research and Expertise at CETEES.
- d. If a Participant wishes to change its designated principal coordinator, the Participant should provide written notice to the other Participant.

## **5. Commencement, Modification and Discontinuation**

- a. Cooperative activities under this MOU may commence upon signature by the Participants and continue for a three-year period, unless discontinued in accordance with Paragraph b of this Section, or extended in accordance with Paragraph c. of this Section.
- b. The Participants may discontinue this MOU at any time by mutual written consent. Alternatively, a Participant that wishes to discontinue its participation in this MOU should endeavor to provide at least thirty (30) days prior written notice to the other Participant(s).
- c. This MOU may be modified or cooperative activities hereunder extended for additional periods by mutual written consent of the Participants.

## **6. Exchange of Information**

The Participants do not anticipate the exchange of business-confidential information or the creation of intellectual property. If the Participants determine that a particular activity may lead to the exchange of business-confidential information or the creation of intellectual property, they should consult with each other and enter into an appropriate written agreement therefor.

## **7. General Provisions**

- a. This MOU does not create any legally binding obligations between the Participants.
- b. Each Participant should conduct the activities contemplated by this MOU in accordance with all applicable laws, regulations and other requirements to which it is subject, including by way of illustration and not by way of limitation, export control laws; environmental, health and safety laws and regulations; and international agreements to which its Government is party.
- c. The conduct of cooperative activities contemplated by this MOU is subject to the availability of funding, personnel, and other resources.
- d. Each Participant is to be responsible for the costs it incurs in participating in cooperative activities under this MOU.

Signed in duplicate:

FOR THE REGENTS OF THE  
UNIVERSITY OF CALIFORNIA:

By: Michael Witherell

Name: Michael Witherell

Title: Director, Lawrence Berkeley  
National Laboratory

Date: 10 / 30 / 2020

Place: LBNL

FOR HYDRO-QUEBEC

By: \_\_\_\_\_

Name: Jean Matte

Title: Senior Director Hydro-  
Québec Research Institute  
(IREQ)

Date: 11/09/2020

Place: Hydro-Québec

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