

MOU Number: MOU-18-496

#### MEMORANDUM OF UNDERSTANDING

#### Between

The National Renewable Energy Laboratory

And

University-Industry Cooperation Foundation of Konkuk University, Seoul, Republic of Korea

For Coordinating offshore wind turbine modeling and validation

#### INTRODUCTION

The National Renewable Energy Laboratory (NREL), a national laboratory managed and operated by the Alliance for Sustainable Energy, LLC for the United States Department of Energy (DOE) under Contract No. DE-AC36-08GO28308.

University-Industry Cooperation Foundation of Konkuk University (hereinafter referred to as KU) is a non-profit private institution of higher education established in 1931 and registered in the Republic of Korea under the Ministry of Education (Company No. 206-82-07325).

As part of its mission for DOE, NREL conducts research and development on offshore wind turbine modeling and validation.

As part of its mission for the development of the design solution for the analysis of fixed offshore structures, KU conducts research and development of the software for the analysis and design of the offshore structure for oil/gas and wind turbine.

NREL or KU is each individually referred to as "Participant" and collectively as "Participants."

The purpose of this MOU is to encourage coordination in areas of mutual interest and benefit the Participants. Based on the principles of equality and reciprocity, this MOU is intended to serve as a general framework for planned coordination between the two Participants and is intended to facilitate discussions for the development of a more specific planned program of research and development (R&D) collaboration. Any specific program of R&D collaboration or sharing of confidential information is to be implemented through an appropriate written contract between the Participants.

# Section 1: Areas of Coordination and Collaboration

The coordination activities planned under this MOU, and the programs of collaboration contemplated in furtherance of, are focused on cooperation to maximize the benefit of each Participant's respective institutional interests, which may include the following selected topics:

- Exchange nonproprietary information related to offshore wind modeling and validation.
- Discuss ideas related to scientific plans and direction of research of offshore modeling and validation.



- Discuss potential for researcher exchanges including the potential for giving lectures, advising students, and exchanging nonproprietary research ideas.
- Actively pursue opportunities for collaboration in joint projects as spin-off from this MOU.

## **Section 2: Forms of Coordination**

Planned coordination under this MOU may include:

- 1. Exchange of published scientific and technical information, publications, and reports;
- 2. Meetings organized to discuss specific topics identified in Section 1, including conferences, seminars, and workshops;
- 3. Exchange of scientists, engineers, and other specialists for participation in workshops, conferences, seminars, working sessions, and model-development activities. Each Participant is expected to abide by the health, safety, and environmental requirements of the host Participant when on an exchange assignment at the host Participant's facility.

## **Section 3: Funding**

- 1. The scope of planned activities under this MOU should be mutually determined in light of time, resources and/or funds available at both institutions for the types of coordination undertaken and by such other financial assistance as may be obtained by either Participant from external sources.
- 2. Unless the Participants otherwise determine in a separate written agreement, each Participant is expected to be responsible for the costs it incurs in participating in the coordination contemplated by this MOU, including all administrative costs, overhead expenses, labor costs, insurance costs, travel expenses and similar costs.

## **Section 4: Researcher Exchanges**

- 1. Each Participant intends to retain responsibility for its own personnel in relation to researcher exchanges to carry out coordination under this MOU.
- 2. Each Participant's personnel is expected to abide by the regulations, policies, and procedures of the host Participant in carrying out activities under this MOU, including protection of business proprietary information, protection of intellectual property, compliance with export control laws and regulations, conditions of coordination and decorum, health, safety, and security requirements, and all other terms under which personnel are authorized to participate in researcher exchanges at the host Participant's facility. Such activities may require entry into separate written agreements.
- 3. Each Participant is expected to be responsible for its own personnel in relation to matters such as visa and travel formalities, appropriate insurance (medical insurance and medical evacuation and repatriation insurance), travel expenses, and suitable living accommodation and expenses.
- 4. To the extent possible, the host Participant is expected to assist in facilitating travel arrangements of the other Participant's personnel in relation to researcher exchanges in accordance with its applicable procedures governing foreign national access to the host Participant's facility.



#### **Section 5: Dissemination of Information**

Each Participant intends to participate in the coordination in a manner that facilitates exchanges of publicly available, non-proprietary business information. Subject to applicable laws and regulations of its country, each Participant may disseminate information, data, and reports of the coordination carried out under this MOU.

## **Section 6: Use of Information**

Any information transmitted by one Participant to the other Participant under this MOU should be accurate to the best knowledge and belief of the transmitting Participant.

## **Section 7: Intellectual Property**

The Participants do not anticipate the transfer of rights in intellectual property or the sharing of confidential information to occur under any planned coordination activity under this MOU.

#### **Section 8: Future Collaborations**

Any specific future research and development collaboration or the transfer or commitment of funds is to be implemented through an appropriate written contract between the Participants. Any such contract should include a work plan, staffing requirements, cost estimates, funding sources, the adequate and effective protection and allocation of intellectual property rights, and other arrangements or conditions; and must be authorized under NREL's Management and Operating Contract.

## **Section 9: Review of Coordination**

The Participants intend to review the coordination undertaken under this MOU as a means to ascertain its effectiveness, document achievements and lessons learned, recognize technical personnel, and identify and plan areas for potential future collaboration that involves the conduct of research and development. This review should take the form of periodic meetings of representatives of each Participant to discuss ongoing coordination and to identify and plan future collaboration that involves the conduct of research and development activities.

## **Section 10: Contacts**

One or more designated representatives from each Participant should oversee, manage and facilitate implementation of this MOU in cooperation with each other on behalf of their respective institutions. All notices, communications and coordination should involve, at a minimum, the following individuals, their successors and/or designees as follows:

(a) For the National Renewable Energy Laboratory:

Senu Sirnivas 15013 Denver West Parkway Golden, CO 80401 Tel: 1 303 384-7250 senu.sirnivas@nrel.gov

# (b) For KU:

Ki-Du Kim Konkuk University, 120 Neungdong-ro, Gwangjin-gu, Seoul 05029

Tel: 82-2-2049-6074

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Youngdal Kim Konkuk University, Office of International Affairs 120 Neungdong-ro, Gwangjin-gu, Seoul 05029

Tel: 82-2-2049-6211

Email: youngdal@konkuk.ac.kr

## **Section 11: General Considerations**

- 1. This MOU is not intended to create any legally binding obligations between the Participants.
- 2. Each Participant should conduct the coordination contemplated by this MOU in accordance with applicable laws and regulations to which it is subject and international agreements to which its government is party.

## Section 12: Commencement, Modification and Discontinuation

- 1. Coordination under this MOU may commence upon signature, and may continue for a period of two (2) years, unless discontinued in accordance with paragraph 3 of this section.
- 2. The Participants may modify this MOU at any time by mutual consent in writing.
- The Participants may discontinue coordination under this MOU at any time by mutual consent in writing.
  Alternatively, a Participant that desires to discontinue its participation in this MOU should endeavor to
  provide the other Participant at least 90 days advance written notice.



Signed in duplicate.

The National Renewable Energy Laboratory

University-Industry Cooperation Foundation of Konkuk University

Name of Signatory

Title

Jung-Hyang Sur

Vice President for Research & University-

**Industry Cooperation** 

Date

Place