储能技术合作

谅解备忘录

MEMORANDUM OF UNDERSTANDING ON COOPERATION ON ENERGY STORAGE

中国华电集团清洁能源有限公司

美国加州能源委员会

CHINA HUADIAN GREEN ENERGY CO., LTD OF THE PEOPLE'S REPUBLIC OF CHINA CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

日期: 2017年6月9日

Date:June 9th 2017

本备忘录(MOU)的订立双方分别为:中华人民共和国的中国华电集团 清洁能源有限公司(以下简称为"华电")与美利坚合众国加利福尼亚州 能源委员会(以下简称为"加州能源委员会"),双方以下简称为"参与 方")。

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This Memorandum of Understanding (MOU), is entered into between the China Huadian Green Energy Co.,Ltd of the People's Republic of China ("CG") and the California Energy Resources Conservation and Development Commission (the "Energy Commission"), hereinafter referred to as "the Participants".

兹认可,中国正致力于增加可再生能源并且逐步向低碳能源过渡,从而在 日益增加的能源需求背景下,确保可靠、价格优惠且更加清洁的能源来 源;

ACKNOWLEDGING China's commitment to increasing renewables and transitioning to low-carbon energy resources in order to secure reliable, affordable, and cleaner sources of energy in the face of increasing energy demand;

兹认可,加利福尼亚州制定的能源与气候政策为可再生能源的增加、低碳 能源和新型清洁能源技术的开发铺平了道路,并且通过需求侧管理和提升 能源效率实现了节能;

ACKNOWLEDGING that California's energy and climate policies have paved the way for increased renewables, the development of low-carbon energy resources, and innovative clean technologies while achieving energy conservation through demand side management and energy efficiency practices;

兹确认,加利福尼亚州正逐步达成并超过其可再生能源目标,并且致力于 达成储能目标;

RECOGNIZING that California is on track to meet and exceed its renewable energy goals and is also working toward energy storage goals;

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兹确认,加利福尼亚州和中国都具备利用大量可再生能源的良好机遇,这 些可再生能源可开发用于优化能源的使用,并且为两国带来环境与经济利 益,此外

RECOGNIZING that both California and China have vast opportunities to harness large amounts of renewable energy that could be tapped to optimize energy usage and bring environmental and economic benefits of both our regions, and further,

兹提及,对旨在实现可再生能源利用与利益最大化的各项创新技术(其中 包括储能技术)的研究与开发进行持续投资所产生的潜在经济、环境、公 共卫生与创造就业机会等益处;

NOTING the potential economic, environmental, public health and job creation benefits derived from continued investment in the research and development of innovative technologies, including energy storage technologies aimed at maximizing the applications and benefits of renewable energy;

力图在参与方之间达成互利互惠的伙伴关系与合作;并且

STRIVING to develop a mutually beneficial relationship of partnership and cooperation between the Participants; and

依照双方各自国家的监管法律;

CONSISTENT with the governing laws of their respective countries;

参与方商定致力于以下事项:

The Participants agree to pursue the following:

第一条 目标 Paragraph 1 OBJECTIVE

本备忘录旨在鼓励参与方日后在平等互利的基础上,就储能开展协同合作。本备忘录不规定参与方的任何法律责任。

The objective of this MOU is to encourage future collaboration on energy storage between the Participants on the basis of equality and mutual benefit. This MOU does not imply any legal obligations for the Participants.

第二条 合作领域 Paragraph 2 AREAS OF COOPERATION

参与方将在不违反各自国家各项法律、条例、法规和政策的前提下致力 于:

The Participants will, subject to the laws, rules, regulations, and policies governing the subject matter in their respective countries, endeavor to:

1) 推进在共同领域的合作,其中包括:

Promote cooperation in mutual interest areas, including:

- a)储能; Energy Storage;
- b) 能源效率; Energy efficiency
- c)需求侧管理; Demand-side management
- d) 可再生能源开发; Renewable energy development
- e)综合资源规划; Integrated resource planning
- f) 以及 and:
- 2)分享关于电力供应转变从而将越来越多的可再生能源纳入电网,以及 关于储能如何在助力可再生能源的成功整合方面发挥作用的信息和经 验。

Share information and experience on shifting the power supply to integrate increasing amounts of renewable energy into the grid and how energy storage can play a role in helping to successfully integrate these renewables.

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 协调科学研究以及分享清洁能源技术开发和部署信息,包括设立区域 创新中心(iHubs)以及例如电话会议、研讨会和网络研讨会等信息交 流会议。

Coordinate on scientific research and share information on clean energy technology development and deployment, including establishing regional innovation hubs (iHubs) and information exchange meetings such as conference calls, workshop and webinars.

 4) 在中国和美国加利福尼亚州研究机构和学术界中促成储能研究与开发 项目。

Foster joint research and development projects for energy storage amongst research institutions and the academic sectors in China and California.

5) 以结合最佳实践并且增强能源供应的多样性、可靠性和可接受性的方 式,促进中国和加利福尼亚州的可持续发展。

Promote sustainable development in China and California in a manner that incorporates best practices and enhances diversity, reliability, and affordability of energy supplies.

6) 依照参与方书面约定,采用与本备忘录范围有关的其他方式开展合 作。

Cooperate by other means related to the scope of this MOU, as may be decided upon by the Participants in writing.

第三条 实施 Paragraph 3 IMPLEMENTATION

为实施本备忘录,参与方可选择每年召开会议,并针对本文第二条列明的 合作领域编制年度工作计划。

To implement this MOU, the Participants may choose to meet annually and develop annual work plans focused on the areas of cooperation identified in Paragraph 2.

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华电和加州能源委员会牵头组织上述年度工作计划的编制和实施。 The development and implementation of such annual work plans will be led by the CG and by the California Energy Commission.

参与方指定华电的龚伟以及加州能源委员会的首席副理事担任项目负责 人,负责组织实施本备忘录。

The Participants designate Gong Wei and the Chief Deputy Director of the California Energy Commission to serve as project leads to implement this MOU.

参与方可通过下列方式进行合作:

The Participants can use the following forms of cooperation:

1. 储能设施的规划、设计和施工;

Planning, design, and construction of energy storage facilities;

2. 交流相关信息、经验以及从储能项目开发和实施过程中吸取的经验教训,通过分享相关文件以及其他资源进行交流。

Exchange of relevant information, experience, and lessons learned from energy storage development and implementation, including through sharing relevant documents and other resources;

 参与方相关人员的交流和互访,可通过召集会议和网络研讨会的形式 进行交流;

Exchange and visits between the Participants' relevant personnel, including exchange using conference call and webinar technology;

4. 科研、联合研究和技术开发项目交流;

Exchange of scientific research or joint research and technology development;

5. 共同组织专题研讨会、展览以及培训;

Co-organization of seminars, workshops, exhibitions, and trainings;

 推动储能联合研发项目、通过加州(包括但不限于)的创新中心 (iHub)网络、贸易代表团以及 PPP(公私合作)项目增进中国和加州 两地企业家之间的业务合作关系;

Facilitation of energy storage joint research and development, enhancement of business relationships, and collaboration between China-based and California-based entrepreneurs through (but not limited to) California's innovation hub (iHub) network, trade delegations, and public-private partnerships;

 7. 推动加州和中国境内主要城市之间的合作交流,分享当地政府的相关 设施和资源;

Facilitation of cooperation and exchanges between major California cities and cities located in China to share local government tools and resources;

8. 参与方协商一致的其他协作方式。

Other forms of collaboration as agreed upon by the Participants.

参与方将通过采取下列措施实现本备忘录拟定的各项目标:

The Participants will carry out the objectives of this MOU by the following:

 9. 华电和美国加州能源委员会作为执行机构,负责协调本备忘录项下拟 定的相关合作项目的具体实施;

CG and the California Energy Resources Conservation and Development Commission as the Executive Agencies responsible for coordinating the implementation of relevant cooperation activities under this MOU; 10. 参与方将成立工作组,负责储能技术的研究和论证;

The Participants will create a new Working Group dedicated to exploring and demonstrating energy storage technologies.

 在推动实施备忘录实施的过程中,参与方可与加利福尼亚大学、能 源部国家实验室、加州储能联盟、以及加利福尼亚州立大学等以及其 他公立私立学术及研发机构进行多边交流;

The Participants may cooperate in multilateral exchanges with other partners engaged in activities advancing the goals of this MOU, including universities and other public and private academic and research and development institutions, such as the University of California, Department of Energy National Laboratories, the California Energy Storage Alliance, California State Universities;

12. 本备忘录下实施的各项活动必须符合参与方各所在国或地区的法 律、法规,且受各方资金、人员以及其他资源的约束。

All activities carried out based on the MOU must be in accordance with the Participants' respective laws, rules, and regulations and shall be subject to the availability of funds, personnel, and other resources available to each Participant.

第四条 财务安排 Paragraph 4 FINANCIAL ARRANGEMENTS

本备忘录不涉及资金往来,并且不构成任何一个参与方提供资金的义务。 除各方在未来签署的书面协议中另有规定外,本备忘录项下活动而产生的 各项费用由发生费用的一方自行承担。

This MOU does not involve the exchange of funds, nor does it represent any obligation of funds by any of the Participants. All costs that arise from the activities under this MOU will be assumed by the Participant who incurs them, unless otherwise stipulated pursuant to a future written agreement.

第五条 其他机构的参与 Paragraph 5 PARTICIPATION OF OTHER INSTITUTIONS

在一致同意的基础上,各参与方可与各大学、其他公立私立学术和研发机 构或从事有助于实现本备忘录各项目标之业务的任何其他机构等第三方达 成合作。

The Participants, by common consent, may seek the collaboration of a third party, including universities and other public and private academic and research and development institutions, or any other organizations whose activities may contribute to achieving the goals of this MOU.

第六条 透明度和公共信息 Paragraph 6 TRANSPARENCY AND PUBLIC INFORMATION

与本备忘录及其实施相关的各项文件和往来通讯将受制于双方共同认可的 公共记录法的披露规定。

Documents and communications related to this MOU and its implementation will be subject to disclosure under public record laws that will be mutually accepted by both Participants.

第七条 其他权利和权益 Paragraph 7 OTHER RIGHTS AND INTERESTS

参与方有意按照各自所在国家和地区的法律法规,采取一切适宜的措施对 各自的知识产权和权益加以保护。

The Participants intend to adopt all appropriate measures, in accordance with their respective laws and regulations, to protect intellectual property rights and interests.

本备忘录的任何条文均不限制各方享有的与其他机构订立类似协议的权利。本备忘录项下的合作项目不影响参与各方在其他国际协议项下获取的 各项权利和承担的各项义务。

Nothing in this MOU limits the right of each of the Participants to establish similar agreements with other institutions. Cooperation under this MOU does not affect the rights and obligations acquired by the Participants in other international agreements.

第八条 备忘录的法律效力 Paragraph 8 EFFECT OF MOU

本备忘录仅作为各方意愿的纪录,不具有任何法律约束力或者强制执行的权利或义务。

This MOU serves only as a record of the Participants' intentions and does not constitute or create any legally binding or enforceable rights or obligations.

第九条 通知 Paragraph 9 NOTICES

下列联系人将负责接收本备忘录项下需发出的各项通知,负责本备忘录相 关事宜的整体管理和协调:

The following contacts will be responsible for receiving notices and correspondence necessary under this MOU, as well as the overall management and coordination of this MOU:

加州能源保护发展委员会:

For the California Energy Resources Conservation and Development Commission:

Drew Bohan 先生 Mr. Drew Bohan

地址: 1516 9th Street, Sacramento, CA 95814, USA. Address: 1516 9th Street, Sacramento, CA 95814, USA.

电邮: <u>Drew.Bohan@energy.ca.gov</u>以及 <u>Alana.Sanchez@energy.ca.gov</u> E-mail: <u>Drew.Bohan@energy.ca.gov</u> and <u>Alana.Sanchez@energy.ca.gov</u>

中国华电集团清洁能源有限公司: For the China Huadian Green Energy Co.,Ltd:

龚伟先生 Mr. Gong Wei

地址:中华人民共和国北京丰台区汽车博物馆东路六号华电产业园 B 座 12 层 邮编 100070 Address: F12, Tower B, Huadian Office Park, No.6 of East Beijing Auto-museum Road, Fengtai District, Beijing 100160, P.R. China

电邮: gongw@cg.com.cn E-mail: Gongw@cg.com.cn

第十条 最终条款

Paragraph 10 FINAL PROVISIONS

本备忘录并非一项合同或合约。 This MOU is neither a contract nor a treaty.

本备忘录将在双方签署之日起生效,并在该日期之后五(5)年内维持有效,经双方一致同意可续期,每次续期五年,直至一方发出书面通知终止为止。

This MOU will be effective upon the date of its signature by both participants, will remain in force for five (5) years thereafter, and may be renewed for equal periods by mutual consent of the Participants, until terminated through written notice.

本备忘录可在双方达成书面一致同意的前提下修订或变更。

This MOU may be amended or modified by mutual written consent of the Participants.

任一方可通过向对方发出三十天事先书面通知终止本备忘录。 Either Participant may terminate this MOU by providing the other with 30 days written notice. 本备忘录以原件一式两份中英双语的形式于 2017 年 6 月 9 日签署于中国 北京,中英版本具有相同法律效力。

Signed in Beijing, China on June 9th 2017, in two originals in Chinese and English languages, both texts being equally authentic.

Robert B. Weisenmiller

主席

Chairman

谢春旺 Xie Chunwang

董事长

Chairman of the Board

美利坚合众国

加利福尼亚州能源委员会

California Energy Commission United States of America 中华人民共和国

中国华电集团清洁能源有限公司

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