國際智庫動態報導

2017 年 10 月 27 日 Vol. 010

TERI AND NISE SIGN MOU TO DEVELOP R&D ON SOLAR ENERGY

印度能源與資源研究所與印度國家太陽能機構簽署太陽能研發合作備忘錄

The Energy and Resources Institute
Creating Innovative Solutions for a Sustainable Future

New Delhi, August 31: The Energy and Resources Institute (TERI) entered into a strategic association with the National Institute of Solar Energy (NISE) to achieve common objectives related to research and development of solar energy and related equipment and technology.

TERI Director General, Dr Ajay Mathur, and NISE Director General, Dr AK Tripathi, signed the five-year memorandum of understanding at TERI.

The collaboration is related to grid-connected solar rooftop PV, solar thermal power plants, energy storage systems, electric vehicles, smart grid initiatives, solar cooling etc.

The organisations also intend to carry out policy and regulatory studies and capacity-building

本期摘要(KEY INFORMATION)

◎印度能源與資源研究所(TERI)與印度國家太陽能機構(NISE)簽署一份長達 5 年的合作備忘錄(MOU)，合作領域遍及電網連接屋頂太陽能光伏、太陽能發電廠、儲能係統、電動汽車、智慧電網、太陽能冷卻等。TERI 和 NISE 並研議建立可再生能源技術產品開發中心，該中心著重太陽能技術各方面的商業模式與諮詢的孵化與開發。雙方的夥伴關係，不僅為彼此在太陽能和能源儲存研究方面開創新局，也為印度國家與州級的建設合作帶來新契機。

◎印度電力配電公司（BRPL)）和印度能源與資源研究所(TERI)攜手擴展印度的屋頂太陽能光伏，雙方將努力實現德里電網連接屋頂太陽能光伏的共同目標。印度歷經 2003 年的「電力法」修正，電力部門運作的範式轉變，電業從政府直接控制中脫離出來，轉為公司化並受獨立監管機構的管制。BRPL 與 TERI 的合作夥伴關係，將有助於 TERI 針對可再生能源電網整合的技術挑戰與解決方案進行研究。TERI 相當重視雙方的合作，表示研究成果有益大規模採用屋頂太陽能於配電網的政策制定。隨著太陽能屋頂系統納入配電系統漸漸普及，可能對於配電系統的運行造成不良影響， 因此 TERI 將進行相關課題的研究。BRPL 與 TERI 的共同研究內容包括技術和商業問題，而技術研究的目的是評估配電網中太陽能屋頂系統普及率較高的饋電裝載技術、靜態和動態電壓調節、電力品質及養護等問題。 TERI 首要的研究工作即是根據消費者組合、加載模式和分佈中存在的方式選擇合適的饋線。雙方的共同研究預計將在一年內完成。

programmes dealing with grid integration, recycling and disposal of solar panels and batteries and collaborate with global research institutions to undertake research in India.

Apart from this, TERI and NISE will also look into setting up a product development centre for renewable energy technologies. This centre will also focus on incubation and development of business models and consultancy in various aspects of solar energy technologies.

Speaking on the occasion, Dr Mathur said, "This partnership would open new opportunities for cooperation between the two organisations in solar energy and energy storage research, and in capacity-building programmes at the national and state levels."

Dr Tripathi said, "Technical and R&D strength of NISE and „socio-outreach" capabilities of TERI will be jointly utilised to promote solar energy in the country, thereby achieving goals of the National Solar Mission and the INDC target of the Government of India."

原始連結： http://www.teriin.org/files/TERI-NISE-MoU.pdf

BSES RAJDHANI POWER LIMITED (BRPL) JOINS HANDS WITH TERI FOR A STRATEGIC ASSOCIATION TO INCREASE ROOF TOP SOLAR PV PENETRATION IN INDIA

THE ASSOCIATION WILL ENABLE BOTH THE PARTIES TO WORK JOINTLY FOR ACHIEVEMENT OF COMMON GOALS AND OBJECTIVES OF GRID CONNECTED ROOFTOP SOLAR PV IN DELHI

印度電力配電公司和印度能源與資源研究所攜手擴展屋頂太陽能光伏

The Energy and Resources Institute
Creating Innovative Solutions for a Sustainable Future

New Delhi, July 6, 2017: The Electricity Act, 2003 aimed to bring in a paradigm shift in the functioning of the power sector, distancing the sector from direct government control, corporatizing the sector and bringing it under the control of independent regulators. To minimize the distance and develop a strategic association to work jointly for achievements of common goals and objectives, The Energy and Resources Institute (TERI) has collaborated with BSES Rajdhani Power Limited (BRPL). The partnership will enable TERI to carry out a study for technical challenges and solutions for renewable energy grid integration.

Expressing his views on the joint collaboration, Mr. A K Saxena, Director, E&F Division, TERI, said, "BRPL being one of the proactive Discoms in the country, we value this cooperation and I believe the outcomes of our study would enable informed decision making for large scale adoption of rooftop solar into their distribution grid."

The growing penetration of solar roof top systems into the distribution system may cause undesired effects in the operation of the distribution system. As a part of the collaboration, TERI will look into the cases of a few distribution companies of the country with a view to analyze the emerging technical challenges in the context of increasing roof top solar PV penetration. The growing penetration of solar roof top systems into the distribution system may cause undesired effects in the operation of the distribution system in many ways. Therefore, TERI will be undertaking a study to understand the challenges that may arise with higher penetration of solar rooftop systems in distribution grids.

Showcasing his thoughts on the expected outcome of the study, Mr Amal Sinha, CEO, BRPL, said, “BRPL is prepared to accept the challenges of incorporating large scale rooftop solar and electric vehicles into distribution system rather opposing the same.”

TERI, along with BRPL, will work jointly for the achievement of common goals and objectives related to promotion of grid-connected solar rooftop PV, energy storage system, electric vehicles and smart grid initiatives and other relevant area for achievement at utility level. TERI and BRPL will identify and finalize different areas of carrying out the studies related to rooftop solar PV development for assessment of various issues, including technical and commercial issues, with higher penetration of PV into distribution grid. The technical studies shall be conducted with objective of assessment of technical issues related to loading of feeders, static and dynamic voltage regulation, power quality, protection, etc. that may arise with higher penetration of solar rooftop systems in distribution grids.

As a first step of the study, TERI will select suitable feeders based on the consumer mix, loading pattern and existing in the distribution. The necessary data for this purpose would be required upfront from BRPL. Based on this, feeder selection would be done in consultation with BRPL for detailed studies. The collaboration will ensure ease of implementation of rooftop solar PV system within BRPL area and improving power quality for the consumers. The study is to be expected to be completed in about a year.

原始連結： http://www.teriin.org/files/TERI-BRPL-join-hands.pdf