



Agenda Date: 11/22/13  
Agenda Item: 8C

**STATE OF NEW JERSEY**  
**Board of Public Utilities**  
44 South Clinton Avenue, 9<sup>th</sup> Floor  
Post Office Box 350  
Trenton, New Jersey 08625-0350  
[www.nj.gov/Board/](http://www.nj.gov/Board/)

CLEAN ENERGY

IN THE MATTER OF THE MEMORANDUM OF )  
UNDERSTANDING BETWEEN THE NEW JERSEY )  
DEPARTMENT OF COMMUNITY AFFAIRS, DIVISION )  
OF FIRE SAFETY AND THE NEW JERSEY BOARD OF )  
PUBLIC UTILITIES FOR THE TRANSFER OF FUNDS )  
FOR FIREFIGHTING TRAINING MATERIALS AND )  
SERVICES FROM UNDERWRITERS LABORATORIES )

ORDER

DOCKET NO. QO13100952

**Party of Record:**

**William Kramer, Acting Director, New Jersey Department of Community Affairs**

**BY THE BOARD:**

This Order memorializes action taken by the New Jersey Board of Public Utilities ("Board") at its November 22, 2013 public meeting where the Board considered the Memorandum of Understanding ("MOU") between the Board and the New Jersey Department of Community Affairs ("DCA") and the transfer of funding to the DCA for the Division of Fire Safety ("Division") to distribute its Firefighter Renewable Energy Safety Training materials to state volunteer and career firefighter facilities.

**BACKGROUND AND PROCEDURAL HISTORY**

By Order dated June 21, 2013, Docket No. EO13050376V, ("the June 21, 2013 Order") the Board approved Fiscal Year ("FY") 14 programs and budgets for the New Jersey Clean Energy Program ("NJCEP"). The Order approved the compliance filings of the various program managers which set out program descriptions and detailed budgets. Staff at the Board ("Staff") through the Office of Clean Energy ("OCE") proposed and the Board approved \$35,000 to work with DCA to develop a fire safety training program related to renewable energy and energy storage systems. New Jersey's Clean Energy Program Draft FY14 Program Descriptions and Budgets (June 17, 2013, corrected July 23, 2013), Docket No. EO13050376V. As Staff was still in discussions with DCA, no further program description was available at the time. After working with DCA, a detailed description of the DCA Renewable Energy ("RE") Firefighter training program ("Program") and MOU were developed, and the history of the program's inception are found below.

Since approximately 2001, in implementing the Electric Discount and Energy Competition Act of 1999, N.J.S.A. 48:3-49 et seq. ("EDECA"), the Board has provided incentives for ratepayer adoption of New Jersey Class I renewable energy sources. EDECA defines Class I renewable

energy to include such electricity producing technologies as solar photovoltaics ("PV"), wind turbines, and biopower energy systems. The Board's net metering and interconnection rules further define these type of electricity producing systems as "customer-generator facilities", referred to herein as "facilities" (N.J.A.C. 14:4-2). As the Board's incentive programs and regulations evolved to make renewable electricity facilities more attractive investments for ratepayers, the installation of these facilities has proliferated in a variety of applications and market segments.

By mid-2007, municipal fire departments began questioning Staff and the DCA about methods and techniques for suppressing fires involving solar PV, the more prolific of the various Class I renewable energy facilities. Other stakeholders, such as solar industry participants and system owners, asked that a standard of conditions be developed to ensure firefighter and public safety for all solar PV systems. It was commonly recognized that traditional firefighting techniques, such as roof venting, water extinguishment and fire overhaul would have to be modified to ensure human safety. Roofs that contain solar arrays would be most difficult for firefighters to vent. Delayed roof venting may increase the time factor in fire containment resulting in a greater extent of fire damage. The stakeholders felt that conventional water extinguishment on roofs with solar PV systems may not be an option for firefighters if the integrity of any portion of the solar array is threatened as the risk of accidental electrocution is greatly increased. Fire overhaul would also be a challenge for firefighters, as broken panels or compromised solar conduit would remain energized during daylight hours or would be energized by the illumination of lights during nighttime fire response.

There were further concerns from the firefighter community regarding minimum roof clearance at the ridgeline where solar arrays were installed. Other concerns were with ground mounted solar arrays and clearance from combustible vegetation, accessibility of disconnects by firefighter units, permanent warning signs to notify of dangers, and battery storage in enclosed rooms.

As the State of New Jersey continued to develop and expand its renewable energy markets, Staff saw the need for a sustained effort to develop solutions addressing the issues raised by the firefighters, solar industry and facility owners. OCE staff met with the Division of Fire Safety in April 2009 to discuss the distribution of firefighting training material related to PV systems. At the time, the Division was working with the State of California Fire Fighters Association to develop processes and methods for fighting solar PV fires in New Jersey. Once the Division finalized the firefighting document, it was distributed for use by state firefighting facilities in 2011.

In January 2012, a residential wind energy facility that had been provided incentive through the NJCEP Renewable Energy Incentive Program ("REIP"), caught fire in Villas, NJ. Firefighters called to the scene effectively managed the situation but brought attention to the general lack of preparedness for all involved. In March 2012, the REIP small wind rebate program was discontinued when, in an unrelated incident, another facility experienced catastrophic failure. In May 2012, the Board contracted with the National Renewable Energy Lab ("NREL") to conduct a forensic analysis of the failed wind turbine to discover if it were an isolated incident and if programmatic changes were required to ensure the safety of program participants and first responders. The preliminary results of the NREL identified several program changes related to individual system operations and requirements for each facility's fire safety preparedness that should be incorporated.

Because of the anticipated growth of battery back-up systems in solar PV systems, the OCE contacted the Division of Fire Safety in late 2012 regarding the possibility of funding an updated

firefighting DVD that would include energy storage procedures and then have the Division of Fire Safety distribute the DVDs to the state's fire service.

After consultation with Underwriters Laboratories ("UL"), the DCA proposes to customize the UL training program, reproduce it, and distribute it to the fire service, the cost of which will be covered by the OCE through the MOU agreement between the DCA and the Board. The OCE included a line item in the proposed FY14 NJCEP Administration Budget for the DCA RE Firefighter training program with funding up to \$35,000 in the above-referenced Board Order, which was approved by the Board at its June 21, 2013 Agenda meeting.

#### **RESPONSIBILITIES OF THE DCA**

Under the MOU agreement, the DCA in collaboration with the UL shall develop further procedures in the existing training program and shall convert that program into a format that can be utilized by the fire service for initial and refresher training. The conversion may include, but not be limited to, the development of student materials, instructor guides, CDs and end-of-unit learning evaluations. The DCA shall distribute these materials to all fire departments within the State for use in fire stations and training academies. The DCA shall also collaborate with the UL to design, support, and arrange to record and video the State Fire Marshal's message which will precede the training program contained on the distributed training DVD.

#### **RESPONSIBILITIES OF THE BOARD**

The Board shall provide program funding of up to \$35,000 for the DCA to cover the costs of revising and reproducing the UL Photovoltaic Training for the fire service. The Board, in collaboration with the DCA, shall monitor the distribution of Firefighter Safety and Photovoltaic Systems DVDs and training of state firefighting organizations. In addition, the Board, in collaboration with the DCA, shall evaluate the success of the firefighter safety training program. Furthermore, the Board shall collaborate with the DCA in modifying future RE firefighter safety training involving solar PV and any future battery storage system requirements.

#### **IT IS MUTUALLY UNDERSTOOD AND AGREED BY AND BETWEEN THE PARTIES THAT:**

1. The agreement is for a 12-month period.
2. It is agreed that the training program may be modified as needed for the success of the program.
3. The Board and DCA will discuss future funding for solar training prior to the conclusion of the 12-month agreement period.

#### **FUNDING**

The Board shall provide program funding of up to \$35,000 for the DCA to cover the costs of revising and reproducing the UL Photovoltaic Training for the fire service.

#### **EFFECTIVE DATE AND SIGNATURE**

The MOU shall be effective upon the signature of the duly authorized representatives of the New Jersey Department of Community of Affairs and the New Jersey Board of Public Utilities.

**PROGRAM'S POTENTIAL BENEFITS**

The OCE has reviewed the proposed contract between the UL and the DCA and believes such an arrangement is necessary to ensure the safety of the state's firefighting organizations when responding to RE fire emergencies. The OCE further believes that the MOU agreement between the DCA and the Board is required to provide the funding for the RE firefighter safety training project, which was approved in the June 21, 2013 Order. The approval of the MOU for funding the firefighter safety training program will satisfy and relieve the concerns of the Customer-Generators, firefighters and stakeholder community and continue to support the state's growing RE program. The OCE further recommends that the Board authorize Board Staff to expedite the arrangements to transfer the already approved funds to the DCA for the program.

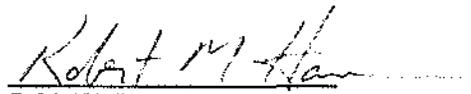
**DISCUSSION AND FINDINGS**

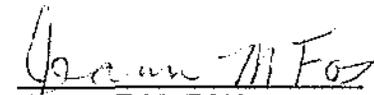
The Board has reviewed the MOU to fund the firefighter safety training project. The Board believes that by approving the funding agreement between the DCA and the Board, and the transfer of funds, the firefighters, customer-generators, stakeholders and NJCEP program would benefit from the arrangement. Board approval of the process should also strengthen the community's confidence in the RE program.

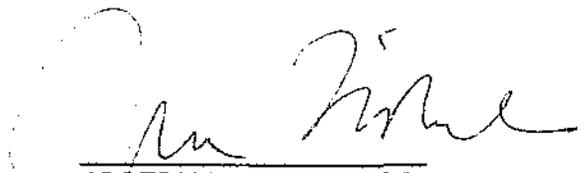
Based on the above, the Board **HEREBY APPROVES** the MOU between the DCA and the Board, and the transfer of funds from the Board to the DCA for the safety training of fire fighter service organizations in the state of New Jersey and **HEREBY AUTHORIZES** the Board President to execute the MOU.

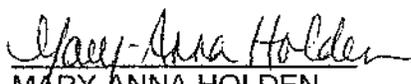
DATED: 11/22/13

BOARD OF PUBLIC UTILITIES  
BY:

  
ROBERT M. HANNA  
PRESIDENT

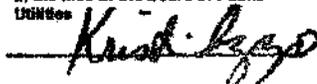
  
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MARY-ANNA HOLDEN  
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COMMISSIONER

ATTEST:  
  
KRISTI IZZO  
SECRETARY

HEREBY CERTIFY that the within document is a true copy of the original in the files of the Board of Public Utilities  


IN THE MATTER OF THE MEMORANDUM OF UNDERSTANDING (MOU) BETWEEN THE  
NEW JERSEY DEPARTMENT OF COMMUNITY AFFAIRS (DCA), DIVISION OF FIRE  
SAFETY AND THE NEW JERSEY BOARD OF PUBLIC UTILITIES (BPU) FOR THE  
TRANSFER OF FUNDS FOR FIREFIGHTING TRAINING MATERIALS AND SERVICES  
FROM UNDERWRITERS LABORATORIES

DOCKET NO. QO13100952

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