STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on September 18, 2025

COMMISSIONERS PRESENT:

Rory M. Christian, Chair
James S. Alesi
David J. Valesky
John B. Maggiore
Uchenna S. Bright
Denise M. Sheehan
Radina R. Valova

CASE 24-E-0526 – Petition of ConnectDER, Inc. and Tesla, Inc. to Establish a Statewide Process for Meter Socket Adapter Model Approval.

ORDER DIRECTING PROPOSAL

(Issued and Effective September 22, 2025)

BY THE COMMISSION:

INTRODUCTION

On August 24, 2024, ConnectDER and Tesla, Inc. (Tesla) (together, Petitioners) filed a petition (the Petition) requesting that the Public Service Commission (Commission) commence a proceeding and establish a statewide process for meter socket adapter (MSA) models to be approved to facilitate the deployment of customer-owned or customer-leased distributed energy resources (DERs). As discussed below, the Commission directs Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc. (Con Edison), New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation d/b/a National Grid, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation (together, the Joint Utilities) to submit a detailed proposal for the review,

approval, and installation of MSAs in New York for residential DER facilities.

THE PETITION

The Petition identifies a meter socket adapter as a customer-owned device with enclosed construction that is intended for installation between a meter socket and the utility meter. The Petitioners indicate that utilities across the country have owned and installed meter socket adapters for decades for a variety of utility facing applications, such as meter form conversion or surge protection. According to the Petitioners, several original equipment manufacturers (OEMs) have developed MSAs in recent years to support DER deployment, including serving as an enabling technology for residential solar, battery storage, and electric vehicle charging projects. The Petition indicates that MSAs are owned, installed, and operated by a customer in the same way that a customer owns, installs, and operates their meter socket. However, it is noted that MSAs are not part of the utility infrastructure and are not used for billing purposes.

The Petition characterizes MSAs as a critical enabling technology for the State as it advances toward its climate and clean energy goals, lowering costs for project deployment by enabling residential customers to utilize a lower-cost technology that is easier to install, in comparison to main panel upgrades, which are more expensive. Petitioners contend that existing electric service panels represent a major barrier to residential solar installation. The Petitioners note that about half of existing residential service panels cannot accommodate DERs, such as rooftop solar, and that installing a

new service panel can cost $2,500 to $5,000 per premises.[1] The Petitioners explain that MSAs can streamline and standardize work for solar and battery energy storage system installers and electrical inspectors by eliminating the need for complex and site-specific wiring solutions. Simplifying installation, Petitioners contend, creates savings of both materials and labor costs while allowing for faster installations and for more systems to be deployed in a shorter amount of time. In addition, the Petitioners assert that the benefits of MSAs make rooftop solar a more viable option for a larger set of customers, including those with lower incomes.

The Petitioners indicate that there is no standardized process for utilities to test and approve new customer-owned MSAs in New York and that this lack of standardization creates inefficiencies and barriers to adoption by utilities statewide. The Petition explains that the current process for MSA approval is for utility-owned devices and is similar to the approval process for consumption metering devices. The Petitioners distinguish customer-owned devices from utility-owned devices and note that customer-owned MSAs are used in conjunction with a utility meter. Thus, the Petitioners argue, customer-owned MSAs do not require the same types of testing or regulation as revenue metering devices.

Accordingly, the Petitioners request that the Commission commence a proceeding and, following public notice and comment, issue an order establishing a statewide process for MSA models to be approved to facilitate the deployment of customer-owned or customer-leased DER facilities. The Petitioners suggest that the process include certain features

[1] The Petition provides references in support of these statements on page 4.

that would benefit MSA manufacturers, utilities, and customers, including: (1) clear timelines for utilities to test and approve new MSAs within 60 days; (2) defined roles and responsibilities, including minimum safety standards for manufacturers, testing and approval by utilities, and mediation of disputes by Department of Public Service staff (Staff); and (3) clear and consistent minimum safety standards and testing by a Nationally Recognized Testing Laboratory. The Petition includes proposed language for such a process.

PUBLIC NOTICE

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), a Notice of Proposed Rule Making (Notice) was published in the State Register on October 9, 2024 [SAPA No. 24-E-0526SP1] regarding the Petition. The time for submission of comments pursuant to the Notice expired on December 9, 2024. The comments are summarized below.

COMMENTS

Alliance for Clean Energy New York (ACE NY)

ACE NY supports Petitioners' proposal for a statewide MSA approval process that incorporates safety standards and timelines for utilities to follow. ACE NY indicates that this policy structure is utilized successfully in several states and will help realize the benefits of DER deployment in New York. ACE NY believes that such a process would greatly increase the accessibility of MSAs for all New Yorkers, particularly for low- to moderate-income (LMI) households. In turn, ACE NY posits that household DER participation will be easier and less expensive, leading to higher rates of at-home charging and decreased demand on the electric system.

ACE NY suggests that MSA adoption should be encouraged through regulatory action because it will increase DER deployment more than alternative technologies. ACE NY characterizes MSAs as a cheaper alternative than service panel upgrades to provide for household DER deployment. ACE NY notes that DERs must be deployed at high rates to achieve greater grid flexibility and that lowering the cost barrier to household DER deployment, through MSA utilization, will increase DER usage for LMI households. ACE NY also highlights that more widespread adoption of MSAs would help the State achieve its climate goals by incentivizing increased use renewable energy.

Joint Utilities (JU)

The JU emphasize that approval of the use of MSAs hinges on rules relieving the utilities from liability attributable to MSA installation. To allow installation of MSAs, the JU also seek to be held harmless from any impacts resulting from the non-function or malfunction of MSAs, interference with utility meter functioning resulting from the use of MSAs, or any other non-performance of, or adverse impact from, MSAs.

Furthermore, the JU assert that approval of MSAs requires careful review of MSAs by utility meter and engineering staff. The JU recommend establishing a mutually agreeable time limit that would be determined between the manufacturer and each utility. The JU believe that the 60-day timeframe suggested in the Petition is too short and instead propose a timeframe of six months to one year for testing. In addition to this, the JU offered the following suggestions and observations pertaining to testing and approval of MSAs:

- Certification should be by Nationally Recognized Testing Laboratories (NRTL), such as Underwriters Laboratories (UL).

- MSAs should have documentation that they are compliant with UL 414, have a 200A continuous rating, and are "service entrance rated," which includes service equipment that is fully rated for the available fault current and has provisions for bonding the system ground.
- MSAs testing should be in fully energized operating conditions.
- MSAs should be certified to the UL 1741 Certification Requirement Decision (CRD) for Multimode if they are capable of islanding and electrically isolating a customer's premise from the area electric power system/utility network.
- Non-disclosure agreements should be utilized to enable utilities to collaborate in the testing and evaluation of MSAs.
- MSA installation requirements should include provisions that provide unimpeded utility access, as MSAs are devices between the utility's meter and customer's socket and utilities require direct access to the socket for maintenance and troubleshooting.
- Utilities would need to implement alternate work and safety practices when working in the presence of MSAs.
- Review would be needed to determine whether an MSA may interfere with a smart meter's high temperature alarming feature.
- Utility representatives on the New York State Electric Meter Engineering Committee (NYSEMEC) agree that MSAs introduce different risks to the point of common coupling at residential installations, depending on the MSA's functionality, design, and intended application. Such

considerations should be addressed to enable continued safety and service reliability.

New York Solar Energy Industries Association (NYSEIA)

NYSEIA expresses support for the Petition and urges the Commission to direct the electric utilities in New York to establish an approval process for MSAs. NYSEIA states that low-cost, easy-to-install technologies, such as MSAs, are essential to making clean energy more accessible to, and affordable for, all New Yorkers. NYSEIA notes that many homeowners who seek to adopt solar, energy storage, or electric vehicles have electric service panels that cannot accommodate a desired project, often requiring costly and time-consuming custom electrical work to upgrade their home's panel. NYSEIA advises that MSAs can eliminate the need for these costly upgrades, reducing installation costs by hundreds or thousands of dollars, reducing installation time by streamlining electric work and improving the overall homeowner experience. NYSEIA supports enabling DER installers or other qualified contractors to install, maintain, and service MSAs, which it views as vital for effectively serving customers on projects where MSAs add value.

NYSEIA characterizes MSAs as a proven technology, noting that Con Edison has implemented an MSA pilot program and that neighboring states, such as New Jersey, have required all utilities to allow for the use of MSAs. NYSEIA opines that the process proposed by the Petitioners is practical and effective. NYSEIA encourages the Commission to establish clear timelines to facilitate the widespread availability of safe and reliable MSAs in New York. Lastly, NYSEIA emphasizes that improving New York's interconnection process for small DERs and electric vehicles is essential to achieving the State's clean energy goals and that creating a pathway for widespread MSA adoption

will further those goals while lowering costs for New York customers.

Orange and Rockland Utilities, Inc. (O&R)

O&R submitted comments to address what it characterizes as a misstatement in the Petition that indicates it has approved a ConnectDER device for use in its New Jersey and New York service areas. O&R clarifies that it has not approved meter socket adapters to be used in its New York service territory. Furthermore, O&R states that it is not willing to extend approval to such devices absent legislative immunity from liability. O&R suggests that New York utilities should be afforded the same immunity from liability that is currently available in New Jersey before they are required to install meter socket adapters.[2]

ConnectDER and Tesla

On November 4, 2024, the Petitioners submitted clarifying comments, which they identify as responsive to questions raised during an Interconnection Technical Working (ITWG) meeting on September 26, 2024. As part of that discussion, a question arose as to whether the Standardized Interconnection Requirements (SIRs)[3] need to be updated to enable implementation of MSAs. The Petitioners believe that the MSA approval process should be implemented without updates to the SIRs. The Petitioners explain that updating the SIRs to include an MSA approval process would be misaligned with the purpose of

[2] O&R references New Jersey L. 2023, Ch. 156, enacted September 12, 2023.

[3] The current New York State SIRs and Application Process for New Distributed Generators and/or Energy Storage Systems 5 MW or Less Connected in Parallel with Utility Distribution Systems are available on the Distributed Generation webpage of the Department of Public Service: https://dps.ny.gov/distributed-generation-information.

the SIRs and inconsistent with how MSAs have been implemented through pilot programs, without any updates to the SIRs. The Petitioners note that the SIRs require equipment to meet certain safety standards and certifications but do not specifically address types or models to be used. The Petitioners reference lists of approved equipment maintained by the Department of Public Service (DPS) while noting that the lists are not included as explicit requirements of the SIRs.[4]

The Petitioners believe that MSAs can be utilized within the existing processes under the SIRs for generating facilities below 50 kilowatts (kW) or energy storage system applications. The Petitioners discuss Con Edison's MSA pilot program in which approved MSA models were added to the approved meter equipment list maintained by DPS and the MSAs were understood to be part of the distributed generation system.

The Petitioners also respond to a question that was asked in the ITWG meeting regarding why MSAs should not be subject to meter review procedures outlined in 16 NYCRR §93. The Petitioners explain their recommendation that MSAs follow a procedure that is closer to how meter sockets are evaluated than how meters are tested. The Petitioners distinguish MSAs, which are owned by customers, from metering equipment, which is owned by utilities. The Petitioners also highlight that MSAs do not track "units of electric service furnished to consumers," which is one of the key features included in the definition of a meter under 16 NCYRR §93.1. Instead, the Petitioners refer to the definition of meter socket adapters by the National Electrical Manufacturers Association, as "an enclosed construction with blades and jaws intended for installation between a meter socket

[4] The Petitioners reference lists of certified equipment available at https://dps.ny.gov/distributed-generation-information.

and the utility meter."[5] Since MSAs do not perform or replace the function of tracking electrical consumption for the purpose of utility billing, the Petitioners argue that MSAs are not subject to the provisions of 16 NYCRR §93. The Petitioners also note that the standards for meter sockets include safety standards, while the standards referenced in 16 NYCRR §93 do not validate safety and are instead focused on metering accuracy and dimensions. While the Petitioners believe that evaluating MSAs against NRTL standards for meter sockets is sensible and does not require testing by DPS, the Petitioners suggest that it would be possible for DPS to validate the testing.

In addition, on December 20, 2024, the Petitioners submitted comments in reply to the filings by the JU and O&R. The Petitioners acknowledge that additional time may be required for utilities to initially implement MSA review processes and that a six-month period would be reasonable to develop procedures, complete testing on existing MSA models, and update standards. For future products, the Petitioners suggest that the 60- to 90-day testing period that has become standard practice across multiple states should serve as a goal.[6] The Petitioners note that a recent test cycle by Con Edison for a ConnectDER solar product fell within that timeframe.

The Petitioners express caution that the potential for customized test plans for some of the complex MSAs being introduced, which the JU note may involve collaboration between a utility, MSA vendor, NRTL, and others, would duplicate NRTL

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[5] See https://www.nema.org/docs/default-source/technical-document-library/nema-us-80016-2022-aspublished.pdf?sfvrsn=a4caa6df_3.

[6] The Petitioners reference 60-day testing timelines in New Jersey and Colorado along with 90-day timelines in Maryland and Connecticut. See Petitioners' December 20, 2024 Comments, p. 2.

efforts and be an inefficient use of JU resources. The Petitioners suggest alternative procedures and test equipment to address some of the concerns raised by the JU. The Petitioners also discuss that bonding the system ground should only be required when applicable.

The Petitioners indicate that they contacted O&R about its comments regarding approval of MSAs in its New York service territory. The Petitioners attached a letter from O&R that they relied upon and documentation from O&R's website that support their original claim that a ConnectDER MSA was approved. However, Petitioners indicate that since the Petition was filed, O&R has provided updated guidance stipulating that MSAs are only approved for use in a secondary meter socket. In addition, the Petitioners indicate that O&R has agreed that addressing reliability through a regulatory process would be sufficient. The Petitioners agree with the JU that a waiver of liability should be provided to utilities for the non-function or malfunction of MSAs and that the JU should be allowed to collaborate in assessing MSAs.

LEGAL AUTHORITY

Public Service Law (PSL) §§5, 65, and 66 provide the Commission with broad authority over the manufacture, conveyance, sale, or distribution of electricity, supervision of electric corporations, and the responsibility to ensure that all service, instrumentalities, and facilities furnished shall be safe and adequate and all charges made by such corporations for any service rendered shall be just and reasonable. Multiple other provisions of the PSL authorize the Commission to adopt

rules and regulations addressing the treatment of distributed energy resources by electric corporations.[7]

DISCUSSION AND CONCLUSION

The Petitioners propose that MSAs should be considered for approval and installation in New York because MSAs can both simplify and reduce the expense of deploying residential DER systems and interconnections. NYSEIA and ACE NY express support for the Petition and its proposal for a statewide approval process for MSAs. The JU, however, have identified several issues that should be resolved prior to widespread installation of MSAs across the State. While each party has put forth compelling arguments, we do not find the record to be sufficiently developed to move forward with a practical MSA approval process at this time. Specifically, we determine that additional details are needed to establish minimum technical and safety standards, testing requirements, and timeframes for the approval process. In addition, the filings do not address the details of how MSA devices would be installed and whether any inspections are necessary.

The Petitioners argue that the SIRs need not be modified to accommodate installation of MSAs as part of the interconnection process. The Petitioners assert that the existing application process and timelines established in the SIRs can be applied to MSA installations. The JU did not articulate a position on this issue. However, we view MSAs as another type of technology and equipment that should be addressed in the SIRs, as are inverters and other equipment, to establish technical requirements and testing certification

[7] PSL §§5(2), 66(1), 66(2), 66(3), 66-c, 66-j, and 74.

requirements, at a minimum.[8] Incorporating MSA equipment testing and installation into the SIRs would provide clarity to utilities, equipment manufacturers, and customers while establishing minimum standards to ensure safe and adequate service.

Consequently, we approve the request in the Petition to commence a proceeding for a statewide process for MSAs to be approved for utilization. However, we deny the request to establish such a process at this time because additional details are required, as discussed above. We direct the JU to file a detailed proposal within 90 days of the issuance of this Order for the review, approval, and installation of MSA devices, including modifications of the SIRs, as discussed above. We expect the JU to incorporate into their proposal any lessons learned from their experience with MSAs in New York and how MSAs have been deployed in other states.

The Commission orders:

1. The Petition filed in this proceeding by ConnectDER and Tesla, Inc. on August 24, 2024, is approved, in part, and is otherwise denied, as discussed in the body of this Order.

2. Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation d/b/a National Grid, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation shall file, within 90 days following the issuance of this Order, a detailed proposal for the review, approval, and installation of meter socket adapters, as discussed in the body of this Order.

[8] See SIRs, Section I.B. and Section II.

3. In the Secretary's sole discretion, the deadline set forth in this Order may be extended. Any request for an extension must be in writing, must include a justification for the extension, and must be filed at least three days prior to the affected deadline.

4. This proceeding is continued.

By the Commission,

(SIGNED) MICHELLE L. PHILLIPS
Secretary