Meter Socket Adapter Application and Testing Guidelines

1. Purpose and Scope

These guidelines describe the statewide application information and testing process for a manufacturer seeking approval for a specific Meter Socket Adapter (MSA) model and version under the New York MSA pilot program. They apply across the individual Joint Utilities' respective service territories. Utilities will begin accepting MSA model applications on January 4, 2027.

Pilot scope. The pilot applies to residential, single-meter services using customer-owned or customer-leased MSAs to support solar photovoltaic systems, Level 2 electric vehicle charging, battery storage systems, and backup configurations. Each utility should target testing and approving MSA models from at least two manufacturers. Customers may submit interconnection applications proposing an approved MSA beginning June 1, 2027. The pilot application period closes on June 1, 2029. Utility-owned MSAs remain subject to 16 NYCRR §93 and are not covered by these guidelines.

Regulatory basis. Case 24-E-0526, Order Adopting Pilot Program for Meter Socket Adapters, issued and effective September 21, 2026, directs the JU to jointly develop and file an MSA application guidelines document, an initial testing procedure, and a supplemental testing procedure within 60 days (by November 20, 2026), and to post these on each utility's Distributed Generation (DG) website.

Who may apply. An MSA manufacturer (Applicant) may request approval of a specific MSA model, hardware version, and, where applicable, firmware version. Approval applies only to the configuration evaluated. It does not approve other products, later revisions, or a specific customer installation. Each proposed installation remains subject to the applicable New York Standardized Interconnection Requirements (SIRs), utility review, and the Standard Meter Socket Adapter Agreement.

Relevant Definitions

Term	Meaning
Meter Socket Adapter or MSA	An enclosed device with blades and jaws installed between the utility meter socket and the revenue meter
Multimode MSA	An MSA able to island and electronically isolate from the grid
NRTL	Nationally Recognized Testing Laboratory
Complete MSA application	All information and sample products required by these guidelines and the filed Initial Testing Procedure have been received, and the utility has provided written notice that the application is complete.

Term	Meaning
Initial testing	Evaluation conducted under the filed statewide Initial Testing Procedure and completed within 30 days after the utility determines that the application is complete.
Supplemental testing	Additional evaluation conducted under the filed statewide Supplemental Testing Procedure and completed within 90 days after written notice that supplemental testing is needed.
MSA Approved Equipment list	MSA Approved Equipment list posted on each utility's DG Interconnection website and on the DPS DG webpage

2. Minimum Technical Requirements

Pilot eligibility. An MSA may be used only for a residential, single-meter electric service. Only one MSA may be installed per electric service. MSAs may not be stacked or configured to exceed the applicable service entrance rating. Installation and operation must comply with the National Electrical Code (NEC), the MSA's NRTL listing and installation instructions, applicable utility requirements, and the SIRs. Installation and related work must be performed by a qualified and licensed electrician or electrical contractor, and the contractor/electrician must be recognized as an approved partner/contractor by the MSA Applicant. The MSA must not obstruct emergency access beyond the configuration evaluated and accepted during testing. Before installation, the customer and utility must execute the Standard Meter Socket Adapter Agreement. Utility testing may evaluate whether the MSA affects the accuracy, safety features, communications, remote functions, temperature-detection capability, or other functionality of the utility billing meter and related AMI technologies. Approval of an MSA does not approve any MSA metrology for utility billing purposes.

Minimum technical requirements. The application must show that the specific MSA model and version satisfies each of the six minimum eligibility requirements established by the Commission. If required supporting information is missing, the utility will identify the missing information in its written completeness notice and the application will not be considered complete until all required information is received and confirmed by the utility.

1. **Safety and reliability.** The MSA is installed and operated in a way that maintains the safety and reliability of the electric system and the customers served across New York.
2. **Supply-side qualification.** The MSA is qualified for connection to the supply side of the service disconnect under the applicable provisions of the NEC.
3. **UL 414 listing; suitability for sockets rated up to 200 A.** The MSA is certified, tested, and listed by an NRTL to UL 414 and, according to its approval or listing documentation, is suitable for meter sockets rated up to 200 amperes.
4. **Other applicable standards.** The MSA is certified to any additional standards that the NRTL determines apply.

5. **Access preserved.** The MSA does not impede access to the sealed meter socket compartment or the pull section of the service section of the meter or switchboard.
6. **UL 1741 for multimode units.** An MSA configuration capable of islanding and electronically isolating from the electric grid has the additional certification required by the UL 1741 Certification Requirement Decision.

3. Required Documentation

The Applicant must submit each item listed below. An item marked 'if applicable' is required only when the proposed MSA configuration includes that feature. The reviewing utility may request additional information reasonably needed to determine whether the application is complete or to conduct testing under the filed statewide procedures. The utility will make any additional request in writing and explain why the information is needed. The application will not be considered complete until all required information is received and confirmed by the utility.

#	Document	Mandatory?	Demonstrates
D1	Completed MSA Application – a 1-page document summarizing Applicant name, contact information, and MSA product description	Yes	Identity of the model under review
D2	NRTL certificate and listing report to UL 414	Yes	Criterion 3
D3	Listing documentation showing suitability for meter sockets rated up to 200 A	Yes	Criterion 3
D4	Certificates for any additional standards required by the NRTL	Yes	Criterion 4
D5	UL 1741 CRD for Multimode certification — *if multimode / islanding capable*	As applicable	Criterion 6
D6	NEC supply-side qualification statement, with code sections cited	Yes	Criterion 2
D7	Product data sheet: meter forms supported, voltage, continuous current, short-circuit (withstand) rating, temperature rating	Yes	Ratings and compatibility
D8	Dimensioned mechanical drawings, including jaw spacing and overall depth/projection	Yes	Fit with meter pans
D9	Electrical one-line / internal wiring diagram, including neutral and ground connections	Yes	Connection design
D10	Installation manual and installer instructions	Yes	Safe installation
D11	Compatible meter socket list: ringed vs. ringless, manufacturers, bypass types	Yes	Criterion 5, fit

#	Document	Mandatory?	Demonstrates
D12	Sealing provisions description (how utility seals are applied)	Yes	Criterion 5, tamper security
D13	AMI interaction statement (antenna, communications, remote disconnect, meter extensions)	Yes	No AMI impact
D14	Integrated breaker or switch specifications and trip curves — *if applicable*	As applicable	Protection
D15	Terminal torque values and conductor range – *if applicable*	As applicable	Termination
D16	Peripherals, umbilicals or external controls list — *if applicable*	As applicable	Scope of testing
D17	Prior utility approvals and test reports, with version history — *if applicable*	As applicable	Expedited or proxy review
D18	Shipping confirmation and tracking information for sample unit(s) required by Section 4 and the filed testing procedures	Yes	Delivery of required samples

The Applicant must provide at least three production-representative samples of the exact model and version under review to each reviewing utility, together with the components needed to evaluate the submitted configuration. The filed Initial or Supplemental Testing Procedure may require additional samples when reasonably necessary for a specified test. The utility will identify the number of samples needed and the intended testing in writing. Required samples are part of application completeness only when identified in these guidelines, the filed Initial Testing Procedure, or the utility's written completeness notice.

4. Sample Units

The Applicant must ship **three (3) production-representative sample units** of the exact model and version under review to each reviewing utility when the application is submitted.

- Samples must match the model, version and firmware listed in the application.
- The Applicant must include all accessories, peripherals, umbilicals and installation hardware needed for a complete installation.
- The Applicant should ship the required sample unit or units with the application.
- The Applicant must enter the carrier and tracking numbers in the application (item D18) at the time of shipment.
- Samples are used for fit, functional and possibly destructive testing (for example, heat rise and hi-pot). They will not be returned unless the Applicant requests return and prepays shipping costs before testing begins.

The relevant utility will notify the Applicant within 10 days whether the application is complete, and an application is not complete until all three MSA units are received in good condition. Missing or damaged units will be listed in a utility's deficiency notice which will be provided to the Applicant, and which the Applicant has 10 days to cure. The 30-day initial-testing period begins when the utility determines that the application is complete.

Shipping addresses for each utility are listed in Section 7.

5. Review, Testing and Approval Process

A utility has up to 10 days after receiving an original or updated application to provide written notice regarding completeness. After determining that the application is complete, the utility has 30 days to complete initial testing and provide written findings. If supplemental testing is needed, the utility will provide a detailed written explanation. The 90-day supplemental-testing period begins on the date of that notice. These guidelines do not pause or extend the testing periods unless the Commission authorizes an extension.

Review and testing process

1. The Applicant submits the application and documentation through the utility's interconnection application portal or to an appropriate email address and ships the three samples at the same time.
2. Within 10 days, the utility notifies the Applicant in writing whether the application is complete, indicating that all required documentation is accepted and all three samples received are in good condition.
3. If incomplete, utility provides a notice to the Applicant. The notice gives a detailed list of incomplete items, including any missing or damaged samples. The Applicant must respond within 10 days.
4. After the complete application is received, the utility performs initial testing under the Initial testing procedure within 30 days and notifies the Applicant of its findings in writing.
5. If the MSA fails initial testing, the findings will include a detailed explanation. The Applicant may correct the issue and submit an updated application.
6. If supplemental testing is needed, the utility will provide a detailed written explanation
    a. If no additional equipment specific to the MSA being tested is required from the Applicant for supplemental testing, the 90-day supplemental testing period will begin immediately.
    b. If additional equipment specific to the MSA being tested (such as peripheral equipment) is required from the Applicant for supplemental testing, the utility will communicate this to the Applicant. The 90-day supplemental testing period will begin only after the utility has received this equipment from the Applicant in good condition.
7. Supplemental testing findings will be provided in writing to the Applicant and the DPS Interconnection Ombudsperson. The utility will inform the Applicant in case of failure of the supplemental tests or inability to complete supplemental testing for any reason.
8. On approval at either stage, the utility will notify the Applicant and DPS Staff through the DPS Interconnection Ombudsperson and will add the model to its MSA Approved Equipment list. DPS

Staff will add the MSA to the DPS DG webpage. Beginning June 1, 2027, the approved MSA may be proposed for installation through an interconnection application under the New York SIRs.

9. If equipment specific to the submitted MSA configuration is reasonably needed for supplemental testing, the utility will identify that equipment in its written supplemental-testing notice. The utility and Applicant should coordinate prompt delivery. The 90-day testing period begins on the date of the utility's written notice unless the Commission authorizes an extension. The utility will complete supplemental testing within 90 days after its written notice and provide the results to the Applicant and the DPS Interconnection Ombudsperson. If the MSA is not approved, the written determination will identify the test performed, the applicable criterion, the result, and the basis for the determination. Manufacturers must promptly inform the utilities of all known defects that may affect MSA performance, and whether or not a product recall is initiated.
10. When a revised MSA version needs testing, a utility that approved an earlier product version may use those results to expedite testing. Applicants will be required to identify changes between versions.
11. A utility may approve an MSA by proxy if the same MSA has been previously approved by another member of the JU. To request an MSA review by proxy, an Applicant must submit the utility's approval letter and test results (item D17 above) as part of their application package.

Testing and field results will feed the JU Pilot Evaluation Report, due August 30, 2029. The Joint Utilities anticipate that the Pilot Evaluation Report will cover, among other things, safety performance (hot-socket and thermal incidents), operational impacts, effects on meter pan condition, jaw tension and mechanical wear, and issues found by model.

6. Initial and Supplemental Testing Checklist

The manufacturer must promptly inform each utility that has approved or is evaluating an MSA model of any known defect that may affect MSA performance, whether or not a product recall has been initiated.

In-Depth Documentation Review and Initial Testing

The utility will conduct a review of the required product documentation and listings supplied by the MSA Applicant and mentioned under Section 3 above.

Simultaneously, the utility will perform initial testing. A utility may perform the following tests as part of the initial testing process. The specific test(s) to be conducted will be left to the discretion of each utility. The test(s) that may be conducted include:

1. Visual/Fit/Locking Ring Test. Elements of the fit test may include
    a. Meter forms supported match the application
    b. Jaw separation distances
    c. Jaw tension
    d. Form factor — any restriction within the meter pan
    e. Meter ring compatibility (ringed and ringless)
    f. Meter bypass compatibility; bypass levers accessible and usable
    g. Sealability with utility seals and meter pan provisions
    h. Interaction with the meter pan disconnect switch
2. Selected ANSI C12.1 tests (performed on the attached meter)

a. Test#1 (No Load)
b. Test#2 (Starting Load)
c. Test#3 (Load Performance)
d. Test#4 (Effect of Variation of Power Factor)
e. Test#5 (Effect of Variation of Voltage)
f. Test#6 (Effect of Variation of Frequency)
g. Test#7 (Equality of Circuits)
h. Test#8 (Internal Meter Losses)
i. Test#19 (Effect of Variation of Ambient Temperature)

Initial testing will address, at a minimum, the following compatibility considerations identified in the Order:

- **Physical compatibility** with existing ringless **or** ringed meter pans and enclosures, with existing bypass levers still accessible and usable after installation.
- **No adverse impact** on the safety mechanisms or functionality of existing AMI meters and related technologies.

Supplemental Testing

1. If the utility determines that supplemental testing is needed, it will conduct the applicable tests listed below. The selected tests will relate to the MSA's design, features, submitted configuration, initial-test results, or an identified safety, reliability, metering, AMI, or operational concern. The written notice will explain why supplemental testing is needed and identify the tests, required equipment, and applicable acceptance criteria. AMI features tests
    a. Thermal Conductivity Test
    b. Arc Detection Test
    c. Load Disaggregation Test (not applicable to all AMI meters)
    d. AMI constraints — communications, remote functions, meter extension clearance
2. Functional Test of MSA
3. Power Loss/Restore Test
4. Meter Communication Interference Test
5. PQ Evaluation
6. Entire meter set on a socket (Force Test)
7. Flammability Test
8. Rain Test
9. Current-carrying capacity of bus work matches the stamped/labeled rating and documentation
10. Temperature ratings
11. ANSI C12.1 Test #9 (Heat rise)
12. Hi-pot (dielectric withstand)
13. Breaker trip test: switch continuity in on, off and trip
14. Set-screw terminal robustness and wire torque
15. Neutral and ground connections, if provided
16. Accelerated Life Test
17. Safety - adapter isolation from the meter pan (hot-socket condition)
18. Peripherals – additional umbilicals and peripherals

Detailed test methods, equipment requirements, and acceptance criteria are set forth in the filed statewide Initial Testing Procedure and Supplemental Testing Procedure. If a listed test does not apply to a particular MSA design, the findings will state that the test was not performed and explain why.

7. Key Dates Proposed by DPS Order and Utility Contacts

Milestone	Date
Order issued and effective	September 21, 2026
JU file and post Guidelines, Initial and Supplemental Testing Procedures	November 20, 2026
Amended SIRs (with Standard MSA Agreement) and tariff amendments filed, 31 days' notice	By December 4, 2026
Amended SIRs effective; utilities begin accepting MSA approval applications	January 4, 2027
Interconnection applications including approved MSAs accepted	June 1, 2027
Pilot application period closes	June 1, 2029
JU Pilot Evaluation Report due	August 30, 2029

Sample shipping addresses and contact information

Applicants should submit questions to the relevant utility through the interconnection portal or email address.

Utility	Ship samples to	Application mechanism
Con Edison	Con Edison Electric Meter Shop, Attn: MSA Testing, 31-01 20th Avenue, Bldg. 136 Astoria, NY 11105	Con Edison PowerClerk PowerClerk portal
Orange & Rockland	Orange & Rockland Utilities 500 Route 208 Monroe, NY 10950 ATTN: Meter Shop-MSA Testing	Email to: To be provided
Central Hudson	Central Hudson Gas & Electric Attn: Meter Shop 2001 Route 9W	Email to: dg@cenhud.com

Utility	Ship samples to	Application mechanism
	Lake Katrine, NY 12449	
National Grid	National Grid, 7437 Henry Clay Blvd., Building #1, Liverpool, NY, 13088, ATTN: Electric Meter Lab - MSA Testing	Grid Force DG Portal (Create DG inquiry)
NYSEG	NYSEG 4401 Vestal Rd, Vestal, NY, 13850 ATTN: Electric Meter Lab - MSA Testing	Email to: To be provided
RG&E	RG&E 400 West Ave, Rochester, NY 14611 ATTN: Electric Meter Lab - MSA Testing	Email to: To be provided