A Customer Guide to Natural Gas Service Installation

October 2026

Revision 24

conEdison

Consolidated Edison Company of New York, Inc. (Con Edison) Gas Service Requirements

Customers

Architects and Engineers

Plumbing Contractors

City and County Building Inspectors

October 2026 Revision 24

(Supersedes All Previous Editions and Revisions)

All Updates are highlighted in Yellow

The Customer Guide to Natural Gas Service Installation is a Guide to Con Edison requirements and specifications for establishing gas service to **new or remodeled applicant installations**. In addition to the utility requirements, **local or state officials may stipulate additional provisions for the installation of equipment and materials** that are in their authorized areas of responsibility and jurisdiction. Should you have any questions regarding this guide, please contact your local Con Edison Energy Services Representative. Applicant gas service and meter installation arrangements are subject to Con Edison's review and approval. Applicants should submit a Work Request as soon in the planning process as possible.

DISCLAIMER: This is a guidance document for the convenience of the public. It does not substitute for any applicable laws, rules, codes or regulations, and information in it regarding procedures is subject to change without notice. It is the Licensed Plumbing Contractor's responsibility to be aware of the code requirements for the area of the installation. Con Edison does not assume the obligation of enforcing State, City and Local Municipal code requirements.

A Customer Guide to Natural Gas Service Installation

Accidents involving dig-ins to underground facilities occur every year. They can damage equipment, and more importantly, sometimes lead to serious injuries, even death. We want to reduce the number of accidents, so we joined a One-Call-System designed to make it safer for you to dig and work near underground facilities. The customer shall immediately notify Con Edison of any suspected leakage or escape of gas by calling the company's toll-free hotline **1-800-75CONED or 1-800-752-6633**.

It's the Law! Call before you dig!

Much of the Con Edison equipment that transmits and delivers energy is under the ground, including more than 4,300 miles of natural gas pipelines. We work diligently to keep our systems safe and our excellent safety record demonstrates that commitment. New York State law requires anyone planning to dig or excavate to call a one-call center two to 10 days in advance. The one-call center will contact Con Edison on your behalf to obtain the necessary clearances, including the locations of all in-ground electrical and natural gas lines near your job site.



Underground Utilities Call Centers

NYC and Westchester: 811
NY Code 753 Requires 2-10 Working Days' Notice.
Gas Emergencies Call
1-800-75-CONED (800-752-6633) OR 911
Hearing Impaired
Toll-free, teletype line
(1-877-423-4372)
Billing and Service

We Think You Should Know

At Con Edison, when we say: "We're here to help," we mean it! Our responsibility is to provide our gas customers with safe, reliable and cost-effective service. Con Edison's prices for natural gas service are among the lowest in the State of New York. Before you start planning your project, please feel free to visit https://www.coned.com/en/small-medium-size-businesses/building-project-center to create a work request using Con Edison's Project Center application.

The Con Edison System

For more than 200 years, Con Edison has served the world's most dynamic and demanding marketplace – metropolitan New York while maintaining a safe and reliable natural gas supply to more than 1.1 million gas customers. We have employees on duty 24 hours a day, 365 days a year to ensure the safety and reliability of our gas system. We work closely with multiple pipeline suppliers to ensure a consistent and reliable flow of gas into our distribution system.

This guide is intended to protect the mutual interest of our gas customer and Con Edison. Close attention and adherence to our Gas Specifications will ensure the timely and efficient installation of a gas service that meets your requirements.

This guide will be revised and/or amended as required in keeping with developments and progress in the natural gas industry. The latest revision of this guide may be obtained at: https://www.coned.com/en/small-medium-size-businesses/building-project-center/contractor-resources

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Quick Start

1. Frequently Asked Questions

1.1 Question - How can this guide help me?

Answer - This guide, entitled "A Customer Guide to Natural Gas Service Installation", is issued as a means of exchanging pertinent information between Consolidated Edison Co. of NY, Inc. (here after referred to as "Con Edison"), its customers (including customer representatives), and municipal inspectors.

1.2 Question - When should I apply for natural gas services?

Answer - An application for any new, additional, or an alteration to an existing service should be made as far in advance as possible to ensure adequate time for engineering and construction details to be arranged.

1.3 Question - Is gas service readily available?

Answer - Prior to ordering equipment or starting pipe work, it is important that the customer contact Con Edison to make sure of the availability and proximity to existing gas facilities. The type and/or size of gas service requested by a customer may not be available at a specific location. Gas service may only be available through special negotiation and at the expense to the customer.

1.4 Question - What is the Climate Leadership and Protection Act (CLCPA)?

Answer - Passed in 2019, the CLCPA is a transformative law which requires 100 percent zero-emission electricity by 2040, the electrification of heating in buildings and the downsizing of the natural gas systems in New York State. As part of Con Edison's Clean Energy Commitment, the state is requiring that any property owner or account holder requesting a gas service or who has a gas service request must review and accept the Acknowledgement of the Climate Leadership and Protection Act and Con Edison's Clean Energy Commitment. The gas case can be created but will not be progressed until the property owner or account holder has completed this online document. If this document is not received within ten business days, the case will be autocancelled. Please discuss this with your customers before creating a case, to ensure they understand that they will need to log in to Project Center and review and sign this document.

1.5 Question - How do I initiate having a gas service installed?

Answer - Visit Con Edison's Project Center portal at https://www.coned.com/en/small-medium-size-businesses/building-project-center to submit a service request form.

1.6 Question - When should I contact 811?

Answer - By law, excavators and contractors working in New York State must contact 811 (New York 811 in the five boroughs of NYC and Dig Safely NY in Westchester County) at least 48 hours but no more than 10 working days (excluding weekends and legal holidays) prior to beginning any mechanized digging or excavation work to ensure underground lines are marked. Excavators and contractors can also submit locate requests online.

For safety reasons, homeowners are strongly encouraged to call as well when planning any type of digging on their property. For excavation work completed on personal property, it is the contractor's responsibility—NOT the homeowner's—to contact 811.



1.7 Question - Where will my gas meter be located?

Answer - 1-3 Family residential gas meters shall be placed outdoors. 4 family dwellings and larger, commercial and mixed use have the option to sign the Outdoor Meter refusal Wavier.
Note: gas regulators are not subject to a refusal waiver.

1.8 Question - Do I have to physically protect the gas meter?

Answer - Yes, gas meters, regulators, and associated gas piping that may be subjected to vehicle damage must be adequately protected. Pipe posts or bollards shall be installed by the customer. Certain installations may require more substantial protection at the discretion of Con Edison.

1.9 Question - Why is odorant added to natural gas?

Answer - Natural gas is flammable, colorless and odorless. To make its use safe, an odorant must be added so that it is easily detectable if a leak occurs. All gas transported in Con Edison's distribution system is to be adequately odorized so as to render it readily detectible by the public and company employees with a normal sense of smell. Please refer to additional information on Odor Fade in Section 2- N. below.

1.10 Question - What is the BTU rating of natural gas in the Con Edison distribution system?

Answer - The natural gas heating value fluctuates as it passes through the distribution system. The heating value of gas can range from 0.95 MMBtu/MCF to 1.090 MMBtu/MCF.

Btu Rating = (0.950-1.050) MMBtu/MCF 1 MCF
* (Btu Rating) = 1 MMBtu
1 MMBtu / (Btu Rating) = 1 MCF 1
Therm = (MCF) * 10

However, if the Btu rating is assumed to be 1.0 MMBtu/MCF, the following ratios apply:

1 CF = one cubic foot of gas = 1,000 Btu
1 CFH = one cubic foot of gas per hour = 1,000 Btu/hour 1 CCF =
100 CF = 100,000 Btu = 1 Therm
1 MCF = 10 CCF = 1000 CF = 1,000,000 Btu = 10 Therms
1 MMBtu = 1,000 Mbtu + 1 MCF = 1 DekaTherm = 10 Therms
1kW (kiloWatt – 1,000 Watts) = 3,413 BTU

2 Customer Request for Gas Service – "Our Service to You"

Customer requests for all new or additional gas service, as well as certain non-service work, will be made through our Project Center web-site https://www.coned.com/en/small-medium-size-businesses/building-project-center. See Work Request Process.

Step – 1
Opening a Work Request (WR)

When you are ready to begin the process for a new gas service or for a gas service information ruling, please have a licensed professional installer as the preferred contact agent for the work request.

1. Initiate project center https://www.coned.com/en/small-medium-size-businesses/building-project-center and e-file the work request.
2. Input the request for gas supplied to your end-use of equipment, examples are, gas range, water heater, boiler or furnace and a back-up emergency generator. Gas consumption will be totaled; a customer representative will be assigned to the work request.
3. Energy Services/Gas Conversion Rep will follow up with an Acknowledgement Letter confirming your request for the referenced location and an assigned ID No. to track the progress of the request.
4. Energy Services/Gas Conversions Rep will arrange scheduled meetings with customer/customer's agent to discuss the preliminary gas service layout while working with the customer to ensure the most economic means are addressed and that the project is satisfactory installed with no delays to service completion date.
5. The company will determine the point of entry (POE) to the building. A preferred POE will be a special cost to the customer. The property line/building line and other easement issues will be discussed in **Step- 3.**
6. Tracking the job progress as a registered user (customers/contractor) can e-file all work requests, quickly review status of current cases and receive email alerts when current milestones are reached or inquire of the status of the project.

Step – 2
Gas Service Ruling

Con Edison Representative will initiate a case management number to the project and a case triage assessment will include:

1. Review customer / contractor work requests.
2. All load requests will be reviewed by Gas Engineering. Please provide accurate Gas Loads when filing a case.
3. Ruling returns from Gas Engineering and the existing gas service is not adequate, Energy Services will issue the necessary work orders to the construction department to excavate and install gas services according to approved gas engineering layouts.
4. Issue to the customer and contractor an approved service layout with all current company specifications, meter drawings, outlining company and customer responsibility.
5. Gas Engineering Service Layouts are valid for 60 days from the date of issuance. A new load study and service layout will need to be prepared as Con Edison cannot reserve pipeline capacity.
6. Gas Cost Estimates are valid for six (6) months from the date of issuance.

Step – 3
Inspections & Gas service Layout

Depending on the case request type, actions by Con Edison Representative may include:

1. Site verification that the wall sleeve has been installed in the building point of entry.
2. Discuss with the customer / contractor to obtain the necessary operator qualifications, city certificates and documents related to the installation, pressure testing of gas service pipe, distribution piping and/or metering, to avoid a delay in a service completion date.
3. To monitor the progress of work by customer / contractors through field visits, Customer Inquiry correspondence and Customer Project Management System.
4. Track status updates encourage customers to use Project Center to follow up on their case by contacting the assigned representative. To avoid delays by the company in order to meet customer service dates.
5. Site visits to verify status of customer's project and or discuss case details/specifications with customer's contractor.
6. The Gas Service Layout, the drawing which includes a sketch and description of company construction work to be performed.
7. The inspections occur during non-holiday workdays between 8AM and 6PM or any other reasonable time requested by the customer/contractor.

Step – 4
Construction of Gas Service Installation

Con Edison Representative reviewing the customer's project progress will determine when to release the requests to the appropriate groups for the construction of the facilities. It will include:

1. Gas Operations or Construction Management – oversee employees and/or contractors working for Con Edison on the installation of Company owned facilities.
2. Gas Operations – installation of Company owned facilities. Generally, mains, services and gas regulator set-up.
3. Energy Services or Gas Conversion to establish the application of the customer service gas rate account and to collect payment agreement for deposits, easements and the cost of the gas service work.
4. Energy Services or Gas Conversion – Customer's licensed contractor has completed the applicable piping installation while fulfilling the requirements of all federal, state, city, municipal and company requirements for natural gas service installation.
5. Customer to contact Energy Services or Gas Conversion representative to schedule final inspection.

Step – 5
Final Inspection and Gas Meter Turn – On

Customer on completion of his/her work request will contact the assigned Con Edison Representative for the final inspection and the release of the gas meter:

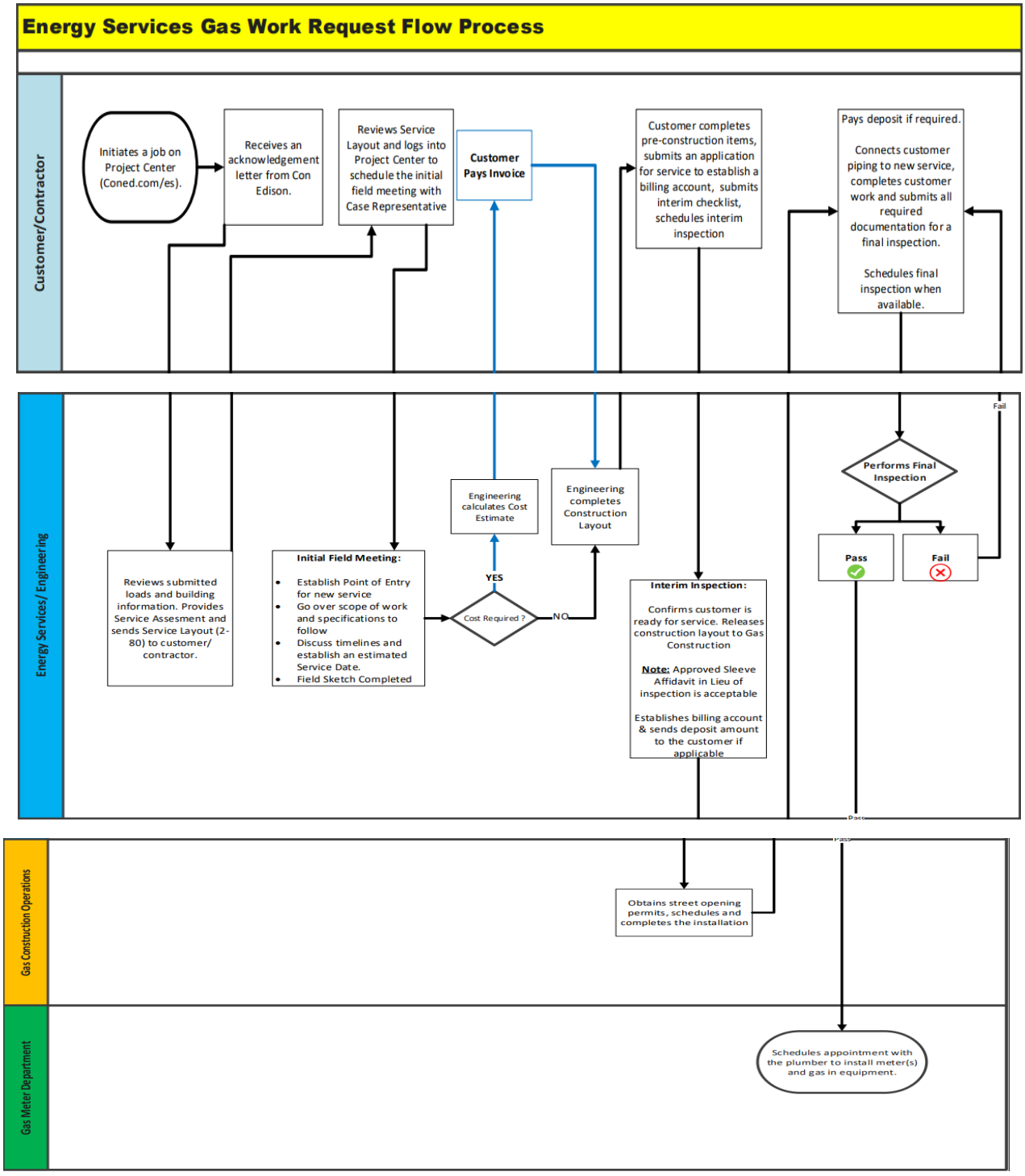
1. A work order will be issued for a gas meter by Energy Services or Gas Conversion upon sign-off of a complete final inspection checklist.
2. The gas meter is the property of Con Edison and the size and type selected are based on the gas service ruling for residential and commercial dwellings.
3. Con Edison Gas Distribution Services will deliver, set meters, and turn on the gas service.
4. The inspection occurs during a non-holiday workday between 8AM and 6PM or any other reasonable time requested by the customer/contractor.

Step – 6
Account Verification and Close Out

Energy Services / Gas Conversion Representative will:

1. Review the case work request; verify the accuracy of the customer's account and billing as well as the documentation of any revenue associated with the project.
2. Once all the case task/steps have been verified the case is closed out.

3 Energy Services Gas Work Request Flow Process



Section 1 – General Information

1.1 Purpose:

The information in this handbook provides a basic and uniform set of guidelines covering the installation of gas service for Con Edison's customers. The codes we have referenced and the information provided in this booklet in no sense relieves the customer of the responsibility to install gas piping and appliances in accordance with the latest revisions of the applicable governing codes and Company specifications that are listed in Section 7. It is the Licensed Plumbing Contractor or Customer's Representative responsibility to be aware of the code requirements for the area of the installation. Any change or modification to our Gas Service Layout(s) or equipment type including location and point of entry (POE) requires advanced approval from Con Edison. Our Gas Specifications have been prepared to assure compliance with all the various codes and safety requirements. Changing anything without prior approval from Con Edison, will result in the job not being accepted, requiring a contractor to make corrections causing potential delays. Corrections to piping configurations will incur an additional expense to the customer and/or licensed contractor. Deviating from a gas specification creates the potential for a code or safety violation.

The customer should always feel free to consult a company representative regarding safe practices and practical applications of gas installation and equipment connection. Representatives are available to discuss design details while in the planning stage.



Con Edison does not assume the obligation of enforcing State, City and Local Municipal code requirements.

1.2 Scope:

The information and specifications found in this handbook relate to the piping and equipment necessary for connecting the customer's appliances to the company's gas distribution piping as well as other subjects of mutual interest to developers, customers, architects, engineers, and licensed plumbing contractors. This handbook is intended to be a guideline and is not a complete set of rules governing natural gas installations.

1.3 Application For Service:

Con Edison requires a company application for new or additional gas service requests. To ensure a timely service connection your application should be submitted well in advance of the date service is required. All customers are required to consult with the company regarding service availability before the completion of plans, purchase any equipment and before any construction commences on a facility that you plan to connect to the company's gas distribution system. An application for new and additional natural gas service may be made through Con Edison's customer Project Center portal via the internet. The portal can be accessed through Con Edison's Energy Services Resource Web site using at https://www.coned.com/en/small-medium-size-businesses/building-project-center. Submitting an application for service using the Project Center application ensures an immediate response along with confirmation the application was received. As per the PSC Code, natural gas is delivered at a minimum

of four inches (4”) of water column (WC) at the outlet of the gas meter (for indoor meter installations) or the outside building wall (for outdoor meter installations). The installation of appliances and/or equipment requiring more than 4-inches WC must NOT be installed until evaluated and approved in advance by Gas Engineering. Request for approval should be submitted through the Energy Service Representative. The customer or his/her contractor must furnish Con Edison with information on the proposed gas service installation or any increase in the required gas load.

1. During the application process, the customer contractor is required to provide Con Edison with proof of gas Operator Qualifications as per https://www.ecfr.gov/current/title-49/subtitle-B/chapter-I/subchapter-D/part-192#sp49.3.192.n, for work on gas service pipe. A copy of the contractor’s operator qualification card (from ITS On Board) showing the QR code, a transcript (from the On Board Learning Management System), and the OQ Certification will be acceptable forms of OQ proof.

2. Con Edison Gas Cost Estimates are valid six (6) months from the date of issuance.

1.4 Rates & Terms of Service:

The rates and terms of service under which Con Edison provides gas service is set forth in schedules (also referred to as "tariffs") filed with the New York State Public Service Commission ("NYPSC"), which regulates the state's electric, gas and steam utilities and reviews and approves their rates and terms of service. The Company's schedules on file with the NYPSC – including current, pending, and canceled or superseded tariff leaves - can be found on the NYPSC's website located at https://dps.ny.gov/.

The rates and terms of service shown on the Con Edison website are provided for your convenience and do not replace or provide an authorized substitute for the official schedules (including the rates and terms of service) and the Statements of rate adjustments on file with the NYPSC. The Company does not guarantee that the Summaries available on this website reflect the rates and adjustments contained on the Statements filed with the NYPSC and in effect or that the tariff leaves, Statements, and Summaries shown on this website reflect the most recent filings made with the NYPSC.

NOTE: The leaves (pages) in tariffs found on the Company’s website may have headers and footers that differ from the official leaves on file with the NYPSC. The NYPSC marks its official leaves with receipt and actual effective date “stamps” and with information on cancelled or superseded leaves that may not be shown on the Company’s leaves found at https://lite.coned.com/_external/cerates/gas.asp

1.5 Customer's Responsibility for Safety Inspection:

 Customers are responsible for the safe installation, operation, inspection, maintenance, repair, and replacement of any customer-owned gas equipment or facilities at their own expense. Customers are also responsible for requesting a safety inspection when they believe a safety concern may exist.

 Upon becoming aware of a potential safety issue, or in response to a customer's request for a safety inspection, Con Edison will visit the premises without charge.

During such visits, the company's primary responsibility is to assess the safety condition and make any hazardous situation safe.

1.6 Customer Entitlement for New Gas Service:

1.6.1 Customer entitlement for gas service is explained in its entirety in Gas Rates and Tariffs General Rules III 3. (A) (B) "Installation of Mains and Services" Leaf 28 to 38.2. Special Service Performed by the Company for Customers at a Charge is explained in Gas Rates and Tariffs General Rules IV (1) (2) (3) Cost and Special Services. A brief summary of cost responsibility for heating and non-heating customers is listed below:

1. Firm Residential Applicant – Non-Heating

1, 2 and 3 family detached, semi-attached or attached homes containing less than four (4) dwelling units.

The material and installation costs relating to up to 100 feet of any combination of main and service line measured from the centerline of the public right-of-way (or the main if it is closer to the customer and development will be limited to one side of the right-of-way for at least 10 years), service connections and appurtenant facilities, but not less than 100 feet of main (if necessary) plus the length of service line necessary to reach the edge of the public right-of- way.

2. Firm Residential Applicant – Heating

The material and installation costs relating to:

- Up to 100 feet of main and appurtenant facilities; and
- Up to 100 feet of service line measured from the centerline of the public right-of-way (or the main if it is closer to the customer and development will be limited to one side of the right-of- way for at least 10 years), service connections and appurtenant facilities; but not less than the length of service line necessary to reach the edge of the public right-of-way.

3. Firm Non-Residential Applicant

If an applicant which will be a firm, non-dual-fuel customer requests service other than residential service, the material and installation costs relating to:

- Up to 100 feet of main and appurtenant facilities; and
- Service line, service connections and appurtenant facilities located in the public right-of- way;

4. Charges for Additional Facilities

Refer Rates and Tariffs General Rules III 3. (C) "Installation of Mains and Services" Leaf 32 to

38.2 for instances where Customer Cost and/or Surcharge is applicable, i.e., main reinforcement, extension, firm dual-fuel capability.

5. Special Service Performed by the Company for Customers at a Charge

Refer to Section 1 for a list of tasks that Con Edison will charge accommodation cost of the project gas service installation, the definition of cost and the following elements of cost where applicable.

1.6.2 If required by the company, each applicant or customer is responsible to execute and deliver to Con Edison free from cost, satisfactory permanent easements or rights-of-way to enable and permit Con Edison to provide gas service.

1.7 Customer Responsibility for Maintenance and Replacement of Existing Gas Services:

1.7.1 Service Piping is all piping, tubing and fittings that transport the gas from the main to:

- For inside meter(s) – the outlet of the meter
- For outside meter(s) – outside the building wall

See Exhibit 12 for various service piping scenarios.

The Customer is responsible for the costs to maintain (in accordance with Company specifications) all service piping on their property, beginning with the point of service termination as defined in the Company gas rates and tariff: https://lite.coned.com/_external/cerates/documents/gas_tariff/pdf/schedule-for-gas-service.pdf

1.7.2 The Company may elect to repair, insert, or replace a portion of or the entire service, beyond the point of service termination without charge, where it is cost effective.

1.7.3 If a service or any part of a service is temporarily disconnected or relocated at the request of the customer due to an act or omission of the customer, the customer shall bear the cost of such work.

1.7.4 Any change requested by the Customer in the point of service termination or location of the service pipe, provided such change is approved by Con Edison, will be made at the sole expense of the Customer. The entire estimated cost must be paid in full prior to service installation.

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[1] ***For outside meter sets, Con Edison defines "the building" to be the building (or other final use appliance) for which gas is being served, even if the piping first passes through a different building before reaching the outside wall of the building being served. Therefore, the gas service should take the most direct route to the final destination building and/or outdoor appliance. See Exhibit 12 for various scenarios.***

1.8 Identification of Con Edison Employees and Company Contractors:

In an effort to protect customers from unauthorized persons representing themselves as Con Edison

company employees, each of our employees and contractors has an identification card that will be shown upon request.

1.9 Access to a Customer's Premise:

The Customer shall not permit access by anyone, except authorized employees of the Company, to the meters, equipment or any other property of the Company, and shall not interfere or permit interference with the same; and the Customer shall be responsible for their safe keeping on the Customer's premises. The Company's duly authorized representatives shall have the right of access to the premises of the Customer and to all of the Company's property thereon at all reasonable times for the purposes of reading and testing meters, inspecting equipment used in connection with its service, installing, inspecting, maintaining and replacing, where necessary, its load testing equipment, and removing its property.

1.10 Customer Cooperation:

It is the desire of Con Edison to provide and maintain dependable, safe and satisfactory natural gas service in a courteous and efficient manner. Cooperation from our customers and/or their agents is always necessary to ensure we can evaluate and process each gas service request in a timely manner.

1.11 Information Inquiries:

Con Edison will assist the customer and/or his/her contractor with any questions or concerns regarding the physical application of our specification requirements. Company Service Representatives are available to receive inquiries and process requests for information regarding the application of these gas specifications.

1.12 Gas Service Layouts:

Individual detailed Gas Service Layouts will be provided to the Customer's Contractor on all applications for natural gas service.

Please note, when a gas service layout received from Con Edison states that service is adequate, it is referring to your underground piping from the street to your building. A field meet will determine if additional work is required by your plumber or the company to bring meter and distribution piping up to current codes and standards.

1.13 Customer Pipe Size and Adequacy:

Proper sizing of customer pipe and ensuring adequacy for current and future use is the sole responsibility of the customer. The Customer's Engineer or Licensed Plumbing Contractor should assist the customer in determining that the natural gas piping installation will have adequate capacity.

1.14 Un-Metered Connection (Flat):

Un-Metered (Flat) connections are prohibited and can result in termination of service.

1.15 Gas Work Permits and Certifications (aka Gas Authorization or Blue Cards):

All Gas service piping and associated components are to be installed in accordance with Gas Specification Standards of Con Edison, Operator Qualification requirements and are regulated by Federal DOT and New York Public Service Commission Standards in accordance with Part 255 and are not governed by the NYCDOB or the local AHJ. Con Edison or its approved contractors performing gas service work (new, replacement, or maintenance) do not require gas authorization for work up to the Point of Delivery. All gas piping installation after the Point of Delivery requires certification that the gas piping system has been pressure tested, built to the local AHJ's requirements, and there is Gas Authorization and/or permit documentation that the building's gas service is authorized for natural gas fuel supply. It is the owner /contractor's responsibility to make the appropriate arrangements and notify Con Edison when such action has been accepted prior to requesting a gas turn-on appointment. Utility Jurisdiction ends at Point of Delivery which is the meter outlet for inside meter installations and the outside foundation wall for outside meter sets. Please reference Appendix 12 and Section 1.T and other sections in this book for additional information on Utility Jurisdiction and requirements.

When electric or gas services are to be supplied to governmental facilities, federal, city, and state-owned buildings, transit authority facilities, which do not come under the jurisdiction of the Department of Buildings in New York City, or the AHJ in Westchester, the Company requires such agencies to submit a written statement, signed and stamped by a Professional Engineer, that the installation was installed to applicable codes and standards and that the agency authorizes connection and turn-on of the required service.

All NYCHA and SCA projects require Gas Authorization from NYCDOB prior to gas turn on.

In order to avoid a delay to the gas service completion date, please obtain and conform to the following:

1. Installation must comply with all the required applicable Con Edison Specifications and Operator Qualification requirements.

2. Required AHJ/City permits must be obtained for any gas piping work after the Point of Delivery.

For below grade Gas Services installed by Licensed Master Plumbers behind the property line, in addition to the Con Edison Operator Qualification requirements, Hold Point Inspection and Second Inspection of Fuses may require municipal certification that the gas piping system has been pressure tested and permit documentation that the building's gas service is authorized for fuel supply only for the area that the local AHJ has jurisdiction. It is the owner /contractor's responsibility to make the appropriate arrangements and notify Con Edison when such action has been acceptable for a gas turn-on appointment. In order to avoid a delay to the gas service completion date, please obtain and conform to the following:

3. Below grade installation must comply with the current applicable Con Edison Specifications and shall meet all Operator Qualification requirements, Hold Point Inspections and Second Inspection of Fuses for PE plastic installation as outlined in this Yellow Book.

Required city and local certification permits must be obtained for non-Con Edison related service work.

- **Distribution Piping -** Identified as customer piping from the outlet of the meter (if the meter is inside) or the foundation wall (if the meter is outside) and under AHJ jurisdiction Gas Service Authorization: In NYC- DOB NOW Inspections - REQ-GA – Approved or Blue Card/Gas Certificate in Westchester County. For outside meter installations overlapping utility and AHJ jurisdiction apply.

- **Meter Piping -** Identified as the piping between the Head of Service Valve and the meter outlet.

- **Point of Delivery -** Identified as the point in the gas service line where utility responsibility ends, governed by Federal DOT and NYSPC and the customer-owned piping begins governed by the NYCDOB or the local Authority Having Jurisdiction. The Point of delivery may be located physically at different points in the piping depending on the meter header configuration and the meter location if this is situated indoors or outdoors.

1.15.1 In New York City

- **Gas Distribution (house) Piping (after the meter) – Requires NYC DOB Gas Authorization** Distribution piping work requires a valid EWN – for emergency minor repair work or REQ-GA/Gas Authorization for other type of work for a gas turn on.

- **Gas Meter Piping (before the meter) – Under PSC Jurisdiction and requires OQ.** Meter piping work requires a Gas meter piping pressure test verification, a Gas Integrity test & Turn on Form (Exhibit A), OQ Certification, copies of OQ Cards, and a final gas checklist for a gas turn on if gas was shutoff at the Head of Service Valve. All listed documents are required for service restoration. On Intermediate, Medium & High-Pressure services, an Operator Qualified performed pressure test is required. Please see G-8204 for guidance.

  Note: if gas was shut off at the HOS and no work was performed between the HOS and the meter, a pressure test is not required for that segment of piping.

  - **<u>Required Forms:</u>**
    - A Gas Integrity test & Turn on Form (Exhibit A) is required for all work/testing after the meter. (This form is not required for OTG work/cases)

    - **Including Gas Authorization (i.e., Gas Certificate/Blue Card), when required by the local building code requirements.**

    - A Gas meter piping pressure test verification and OQ certification Exhibit B and B.1 is required for work/testing before the meter.

    - If the gas is shut off at the meter control valve and work is done after the meter, there is no pressure test required between the meter control valve and the inlet side of the meter. Only a Gas integrity test & turn on form and Final checklist are required.

    - No pressure test shall be applied up against a valve (meter control valve or Head of service

valve) that has live gas on the other side.

- Note: New oil-to-gas conversion work with the Gas Customer Connections Group does not require a Gas Integrity Test & Turn on Form. This form will only be required by the Customer Connections group if there is a gas shutdown involved.

Additional items listed below require Gas Authorization from the authority having jurisdiction.

i. The installation of any new, alteration of existing, or complete replacement of gas piping.
ii. New Gas Fired Equipment installation

iii. Meter Bar replacement when required as identified in this book.

In cases where emergency work is already being performed under an EWN and a meter bar is leaking or does not exist, the LMP shall replace or install a meter bar. This corrective work can also be performed under an EWN, as long as the LMP notes the meter bar installation or replacement on their LAA filing.
iv. Restoration of service discontinued (cut-off) due to a fire or other conditions (ie, flooding, safety, etc.)

- Where the gas service to a building or the gas meter has been shut off for over six (6) months.

All required forms can be found on the Con Edison Energy Services Resource website located https://www.coned.com/en/small-medium-size-businesses/building-project-center/contractor-resources/applications-and-affidavits.

1.15.2 In Westchester County

- **Distribution Piping – Requires AHJ Authorization**
  Gas Service Authorization or Blue Card will be required. The Gas Integrity Test & Turn-On Form can be found on the Con Edison Energy Services Resource website. Please refer to https://www.coned.com/en/small-medium-size-businesses/building-project-center/contractor-resources/applications-and-affidavits or in the Exhibits at the end of this book.
- **Meter Piping – Under PSC Jurisdiction and requires OQ**
  Requires a Gas Meter Piping Pressure Test and Verification Form as well as OQ Certification. The Gas Meter Piping Pressure Test Verification form can be found on the Con Edison Energy Services Resource website located at https://www.coned.com/en/small-medium-size-businesses/building-project-center/contractor-resources/applications-and-affidavits or refer to Exhibit – B at the end of this book. On Intermediate, Medium & High Pressure services, an Operator Qualified witnessed pressure test is required. Please see G-8204 for guidance.

- **IF gas was shut off at the HOS and no work was performed between the HOS and the meter, a Pressure Test is not required.**

- **Note:** New oil-to-gas conversion work with the Gas Customer Connections Group does not require a Gas Integrity Test & Turn On Form. This form will only be required by the Customer Connections group if there is a gas shutdown involved.

I. A Gas Meter Piping Pressure Test Verification Form is required for the gas meter piping for all installations excluding residential homes where gas meters are installed outdoors by Con Ed forces.

II. Restoration of service discontinued (cut-off) due to a fire or other conditions or where all the gas service to a building has ceased for over six (6) months.

1.16 Special Services Provided at Cost:

Upon the Customer's request, the Company will perform the following special services for a Customer and will charge the Customer upon the basis of cost to the Company as defined "Definition of Cost":

1. Change the point of service termination or location of the service pipe.

2. Relocate Company Street facilities to accommodate Customers.

3. Remove and relocate Company facilities when a street is to become private property.

4. Make gas main extensions in private roads or streets of real estate developments under a refunding agreement based on use of service, provided that the Customer furnishes evidence of intent, satisfactory to the Company, that the Customer will cede or otherwise transfer said roads or streets for public street purposes to the municipal or other governmental authority having jurisdiction, subject to "Installation of Mains and Services" in the current Gas Tariff.

5. Install service lines, service connections, and appurtenant facilities in addition to those required under customer entitlements.

6. Change an existing customer's service configuration from multiple-meter to a single-meter configuration, including all costs associated with removing and upgrading meter(s). This also applies to removing a single meter and upgrading to a multiple-meter configuration.

7. Provide a meter or auxiliary metering equipment not normally furnished by the Company and not required for billing the customer's service, including meter upgrades and furnishing of equipment that permits remote reading of the meter.

8. Bottled gas when used to maintain gas integrity when a gas service is being upgraded per customer request.

1.17 Definition of Cost:

The cost to be charged for the furnishing of the special services listed in "Special Services at Cost" consists of the following elements of cost where applicable:

1. Labor of the Company organization unit involved at average payroll rate plus related expenses and indirect costs. Overtime and Sunday rates will be charged where applicable;

2. Material at the average actual storeroom price plus 8.5% for handling cost (Sales Taxes to be added where applicable)

3. Use of transportation vehicles at rates covering operation, maintenance, carrying charges and taxes.

4. Contract work and sundry vendors' bills at invoice cost, including any taxes contained therein;

5. Use of large tools and equipment at rates covering operation, maintenance and carrying charges;

6. Corporate overhead for the above five defined costs, (1 through 5) at (a) 9% for engineering and drafting, unless the labor cost for those services is separately stated or was already charged on a prior invoice, (b) 11% for construction management, if applicable, and (c) 2% for administration;

7. Salvage credit at storeroom price of materials reduced by salvaging cost, or at junk value.

1.18 Flat Rate Policy (Maintain integrity of gas piping during building swing-over):

Upon the Customer's request, the Company will supply temporary gas, to maintain integrity to the building's gas piping to enable the customer's contractor to perform a swing over from the old service to the new service (not-applicable to residential homes). This work will be charged to the customer at a flat-rate price as an accommodation cost and is due at the time the Final Inspection is scheduled. The customer is advised to discuss all alternatives with their engineer or contractor, and with the Licensed Master Plumber performing the gas piping work.

1.19 Shut-Down of Building Gas Service Requiring Utility Notification:

The following are situations where Con Edison **MUST BE** notified to avoid an interruption of gas service to a customer in a building:

1. Any time that a curb valve needs to be operated

2. Any time that a service head valve needs to be operated

3. Any time a gas meter valve needs to be operated

If any of the above situations are needed, Con Edison will schedule shutdown upon notification.
A customer contractor should never perform this work!

After shut-down is performed by Con Edison, never re-open a meter valve, once closed. Please contact the company for service restoration and provide a gas integrity test & turn on form submittal to energize the gas service.

1.20 Operator Qualification (OQ) Requirements:

1.20.1 Different OQ requirements exist, depending on the type of work and location of work being performed. The following scenarios are provided:

- Work on below grade service line piping
- Work on indoor service line piping and meters
- Work on above grade service line piping and meters

See applicable sketches in Exhibit 12,

1.20.2 OQ Instructions:
The following instructions are for customers (or their representatives) to follow, if required to gain Operator Qualifications when working on jurisdictional piping (aka- service pipe)[1].

When working on below grade gas service pipe on customer property, the person performing the work is required to be Operator Qualified per Subpart N in 49 CFR Part 192 and NYCRR Part 255. In order to gain Operator Qualifications, the contractor must comply with the Con Edison OQ Plan which incorporates principal elements contained in the Northeast Gas Association (NGA) OQ Program.

To gain Operator Qualifications to work on Con Edison's gas system, you must:

1. Identify the required covered tasks needed for your project (see Appendix A and/or B for below grade installations).

2. Ensure technicians seeking qualification have had the necessary technical training, including instructor-led training to perform the work.

3. For inside service piping work (i.e.: covered tasks 86 and/or 87, 87A or 87B):

3.1 if working in NYC, contact the Plumbing Foundation City of New York, Inc. This organization will facilitate the process to obtain the required training and qualification requirements are met. Visit the Plumbing Foundation's website at: https://www.plumbingfoundation.nyc/resources/gas-operator-qualification/

3.2 if working in Westchester County: you can contact the Independent Master Plumbers of Westchester, by emailing DOTOQ@IMPW.NET

4. For below grade gas service installation qualifications:

4.1 If you have (or plan to get) tasks 86/87, 87A or 87B: Con Edison will assist with additional task assignments. Contact OPQUAL@coned.com with a list of required tasks and applicable employee names. See Appendix A and B below for a list of possible tasks.

4.2 If you do not have (or do not plan to get) tasks 86/87, 87A or 87B: contact the Northeast Gas Association (NGA), to sign-up for an online account/profile.

- **i.** Email: oq@northeastgas.org to start the process of setting up an OQ database.
- **ii.** The NGA OQ Team will email you step by step instructions to complete the process of setting up your database and getting trained to navigate the ITS Onboard system.
- **iii.** If additional training is needed regarding the use of the ITS Onboard system, you may contact the NGA Help Desk at ngaqualificationservicedesk@northeastgas.org for further support AFTER you complete your onboarding webinar training.
- ***iv.*** *NOTE: in addition to OQ, conformance with a D&A program will be required. Please see Section 1.U below, for further details.*

4.3 Online refresher training courses associated with the required covered tasks are available

4.3. 1 If additional technical training is needed, -you may contact the NGA at OQ@northeastgas.org for further additional technical training options.

4.3. 2 Scheduling OQ testing (outside of 86/87, 87A or 87B): Depending on the required tasks, this may include written and/or practical (i.e.- hands on) evaluations

- **i.** The NGA can assist in scheduling practical evaluations (if required). To schedule a practical evaluation email oq@northeastgas.org with the applicable tasks needed.
- **ii.** Written evaluations can be taken at any Prometric testing facility*. The following link can be used to schedule testing. www.prometric.com/NGA

** You must inform the organization holding your ITS account (i.e. The Plumbing Foundation, or IMPW) when you schedule Prometric Testing for billing purposes.*

5. Once all required covered tasks have been gained, a copy of the individual's operator qualification transcript (or OQ card) should be provided to Con Edison's project representatives, prior to the start of work.

6. Please note- project specific requirement, including but not limited to Con Edison's A Customer Guide to Natural Gas Service Installation (aka- the Yellow Book), must be reviewed, understood and followed for all aspects of service pipe installation, repair or replacement.

For any questions related to Con Edison Operator Qualification requirements, please email OPQUAL@coned.com

Appendix A: Plastic Pipe Installation Covered Task List

The following list of covered tasks encompasses all possible tasks needed for a new, below-grade plastic pipe installation, repair, or replacement. Under "Required Evaluations" "-WE-" indicates a written exam, while "-PE-" indicates a practical evaluation.

Please note: not all tasks may be required for every single job. If you do not plan to perform one of the following tasks, then you do not need to be operator qualified in that task.

Task #:	Task Name:	Notes:
31A - CAOC	Installation of Pipe: Storage, Handling and Inspection of Pipe: General Knowledge (Critical AOC)	1. NGA-WE-31A-Installation of Pipe: Storage, Handling, and Inspection of Pipe: General Knowledge (Critical AOC)
31B - CAOC	Installation of Pipe: Install Pipe in a Ditch	1. NGA-WE-31A-Installation of Pipe: Storage, Handling, and Inspection of Pipe: General Knowledge (Critical AOC) 2. NGA-PE-31B-Installation of Pipe: Installing Pipe in a Ditch
31E - CAOC	Installation of Pipe: Installing Pipe by Dead Insertion	1. NGA-WE-31A-Installation of Pipe: Storage, Handling, and Inspection of Pipe: General Knowledge 2. NGA-PE-31E-Installation of Pipe: Installing Pipe by Dead Insertion
31G - CAOC	Installation of Pipe: Installing Service Line Point of Entry Seal for Below Grade Foundation / Wall Penetration	1. NGA-PE-31G-Installation of Pipe: Installing Service Line Point of Entry Seal for Below Grade Foundation/Wall Penetration
34A	Performing pressure test on a pipeline	1. NGA-WE-34A-Performing a Pressure Test with Air 2. NGA-PE-34A-Performing a Pressure Test with Air
40A	Install/Replace tracer wire and marker balls	1. *NGA-PE-40A-Installing/Replacing Tracer Wire and Marker Balls*
41/42C	Operating Distribution Valves	1. *NGA-PE-41/42C-Operating Distribution Valves*
50/51/52C.1 Electrofusion Saddle	Joining and Inspecting Plastic Pipe Saddle Electrofusion	1. *NGA-WE-50/51/52A-Joining Plastic Pipe: General Knowledge* 2. *NGA-WE-50/51/52C-Electrofusion* 3. *NGA-PE-50/51/52C.1-Saddle Electrofusion*
50/52C.2 Electrofusion Coupling	Joining and Inspecting Plastic Pipe Coupling Electrofusion	1. *NGA-WE-50/51/52A-Joining Plastic Pipe: General Knowledge* 2. *NGA-WE-50/51/52C-Electrofusion* 3. *NGA-PE-50/52C.2-Coupling Electrofusion*
50/52D.1 Hydraulic Butt Fusion (Power Driven)	Joining and Inspecting Plastic Pipe Hydraulic Butt Fusion (Power Driven)	1. *NGA-WE-50/51/52A-Joining Plastic Pipe: General Knowledge* 2. *NGA-WE-50/52E-Butt Fusion Fundamentals* 3. *NGA-WE-50/52D-Hydraulic Butt Fusion* 4. *NGA-PE-50/52D.1-Hydraulic Fusion (Power-Driven)*

50/52D.2 Hydraulic Butt Fusion (Manual Pump)	Joining and Inspecting Plastic Pipe Hydraulic Butt Fusion (Manual Pump)	1. *NGA-WE-50/51/52A-Joining Plastic Pipe: General Knowledge* 2. *NGA-WE-50/52E-Butt Fusion Fundamentals* 3. *NGA-WE-50/52D-Hydraulic Butt Fusion* 4. *NGA-PE-50/52D.2-Hydraulic Fusion (Manual Pump)*
50/51I Mechanical Bolt On	Joining and Inspecting Plastic Pipe Mechanical Bolt On	1. *NGA-WE-50/51/52A-Joining Plastic Pipe: General Knowledge* 2. *NGA-PE-50I-Joining Plastic Pipe-Bolted Fitting*
50/51J.3 Mechanical Compression – Metfit (Manual)	Joining and Inspecting Plastic Pipe Mechanical Compression – Metfit (Manual)	1. *NGA-WE-50/51/52A-Joining Plastic Pipe: General Knowledge* 2. *NGA-PE-50J.3-Joining Plastic Pipe-Compression (Metfit - Manual)*
50/51J.4 Mechanical Compression – Metfit (Hydraulic)	Joining and Inspecting Plastic Pipe Mechanical Compression – Metfit (Hydraulic)	1. *NGA-WE-50/51/52A-Joining Plastic Pipe: General Knowledge* 2. *NGA-PE-50J.4-Joining Plastic Pipe-Compression (Metfit - Hydraulic)*
50/51H Mechanical Nut Follower	Joining and Inspecting Plastic Pipe Mechanical Nut Follower	1. *NGA-WE-50/51/52A-Joining Plastic Pipe: General Knowledge* 2. *NGA-PE-50H-Joining Plastic Pipe-Nut Follower*
50/52E.1 Manual Butt Fusion	Joining and Inspecting Plastic Pipe Manual Butt Fusion	1. *NGA-WE-50/51/52A-Joining Plastic Pipe: General Knowledge* 2. *NGA-WE-50/52E-Butt Fusion Fundamentals* 3. *NGA-PE-50/52E.1-Manual Butt Fusion (Coil-to-Coil)*
50K.1 Service Head Adapter (Separate Stiffener)	Joining and Inspecting Plastic Pipe Service Head Adapter (Separate Stiffener)	1. *NGA-WE-50/51/52A-Joining Plastic Pipe: General Knowledge* 2. *NGA-PE-50K.1-Joining Plastic Pipe-Compression (Service Head Adapter - Separate Stiffener)*
50K.2 Service Head Adapter (Integral Stiffener)	Joining and Inspecting Plastic Pipe Service Head Adapter (Integral Stiffener	1. *NGA-WE-50/51/52A-Joining Plastic Pipe: General Knowledge* 2. *NGA-PE-50K.2-Joining Plastic Pipe-Compression (Service Head Adapter - Integral Stiffener)*
70 – CAOC	Properties of Natural Gas and Abnormal Operating Conditions	1. NGA-WE-70A-Basic Abnormal Operating Conditions (Critical AOC) 2. NGA-WE-70B-Properties of Natural Gas
71 - CAOC	Excavation & Backfill	1. *NGA-WE-71-Operator Excavating and Backfilling in the Vicinity of a Pipeline (Critical AOC)*

Appendix B: Steel Pipe Installation Covered Task List

The following list of covered tasks encompasses all possible tasks needed for a new, below-grade non-welded steel pipe installation, repair or replacement. Under "Required Evaluations" "-WE-"indicates a written exam, while "-PE-" indicates a practical evaluation.

Please note: not all tasks may be required for every single job. If you do not plan to perform one of the following tasks, then you do not need to be operator qualified in that task.

Task #:	Task Name:	Notes:
11E/12E/17E Pipe Coating - Mastic	Pipe Coatings (Mastic)	1. NGA-WE-11/12/17A-Pipe Coatings (General Knowledge) 2. NGA-PE-11/12/17E-Pipe Coatings (Mastic)
11F/12F/17F Pipe Coating – Cold Applied Tape	Pipe Coatings (Cold Applied Tape)	1. NGA-WE-11/12/17A-Pipe Coatings (General Knowledge) 2. NGA-PE-11/12/17F-Pipe Coatings (Cold Applied Tape)
11H/12H/17H Pipe Coating Single Coat Paint	Pipe Coatings (Paint)	1. NGA-PE-11/12/17H-Pipe Coatings (Single Coating System Paint)
14A	Installing/Replacing an Anode on a Pipeline by Exothermic Welding	1. NGA-WE-14-Installing/Replacing an Anode 2. NGA-PE-14/16A-Installing/Replacing an Anode or Test Station on a Pipeline by Exothermic Welding
14B	Installing/Replacing an Anode on a Pipeline by Mechanical Connection	1. NGA-WE-14-Installing/Replacing an Anode 2. NGA-PE-14/16B-Installing/Replacing an Anode or Test Station on a Pipeline by Mechanical Connection
15A	Installing, Replacing and Testing Electrical Isolation Couplings	1. NGA-WE-15-Testing Electrical Isolation Fittings 2. NGA-PE-15-Testing Electrical Isolation Fittings
16A	Installing / Replacing a Corrosion Test Station on a Pipeline by Exothermic Welding	1. NGA-WE-16-Installing/Replacing a Corrosion Test Station on a Pipeline 2. NGA-PE-14/16A-Installing/Replacing an Anode or Test Station on a Pipeline by Exothermic Welding
16B	Installing / Replacing a Corrosion Test Station on a Pipeline by Mechanical Connection	1. NGA-WE-16-Installing/Replacing a Corrosion Test Station on a Pipeline 2. NGA-PE-14/16B-Installing/Replacing an Anode or Test Station on a Pipeline by Mechanical Connection

31A - CAOC	Installation of Pipe: Storage, Handling and Inspection of Pipe: General Knowledge (Critical AOC)	1. NGA-WE-31A-Installation of Pipe: Storage, Handling, and Inspection of Pipe: General Knowledge (Critical AOC)
31B - CAOC	Installation of Pipe: Install Pipe in a Ditch	1. NGA-WE-31A-Installation of Pipe: Storage, Handling, and Inspection of Pipe: General Knowledge (Critical AOC) 2. NGA-PE-31B-Installation of Pipe: Installing Pipe in a Ditch
31E - CAOC	Installation of Pipe: Installing Pipe by Dead Insertion	1. NGA-WE-31A-Installation of Pipe: Storage, Handling, and Inspection of Pipe: General Knowledge 2. NGA-PE-31E-Installation of Pipe: Installing Pipe by Dead Insertion
31G - CAOC	Installation of Pipe: Installing Service Line Point of Entry Seal for Below Grade Foundation / Wall Penetration	1. NGA-PE-31G-Installation of Pipe: Installing Service Line Point of Entry Seal for Below Grade Foundation/Wall Penetration
34A	Performing pressure test on a pipeline	1. NGA-WE-34A-Performing a Pressure Test with Air 2. NGA-PE-34A-Performing a Pressure Test with Air
40A	Install/Replace tracer wire and marker balls	1. NGA-PE-40A-Installing/Replacing Tracer Wire and Marker Balls
41/42C	Operating Distribution Valves	1. NGA-PE-41/42C-Operating Distribution Valves
49A	Mechanical Joining of Pipe other than Plastic (Threaded Fittings)	1. NGA-WE-49-Mechanical Joining of Pipe Other than Plastic 2. NGA-PE-49A-Mechanical Joining of Pipe Other than Plastic (Threaded Fittings)
49B	Mechanical Joining of Pipe other than Plastic – Flanged	1. NGA-WE-49-Mechanical Joining of Pipe Other than Plastic 2. NGA-PE-49B-Mechanical Joining of Pipe Other than Plastic (Flanged)
49H.1	Mechanical Joining of Pipe other than Plastic - Nut Follower (Insulated and Non-Insulated)	1. NGA-WE-49-Mechanical Joining of Pipe Other than Plastic 2. NGA-PE-49H.1-Mechanical Joining of Pipe Other Than Plastic-Nut Follower (Insulated and Non-Insulated)
49I.1	Mechanical Joining of Pipe other than Plastic - Bolted (Insulated and Non-Insulated)	1. NGA-WE-49-Mechanical Joining of Pipe Other than Plastic 2. NGA-PE-49I.1-Mechanical Joining of Pipe Other Than Plastic-Bolted (Insulated and Non-Insulated)
49J.1	Mechanical Joining of Pipe Other than Plastic – Compression (Saddle)	3. NGA-WE-49-Mechanical Joining of Pipe Other than Plastic 4. NGA-PE-49J.1-Mechanical Joining of Pipe Other Than Plastic-Compression (Saddle)
70 – CAOC	Properties of Natural Gas and Abnormal Operating Conditions	3. NGA-WE-70A-Basic Abnormal Operating Conditions (Critical AOC) 4. NGA-WE-70B-Properties of Natural Gas

71 - CAOC	Excavation & Backfill	3. NGA-WE-71-Operator Excavating and Backfilling in the Vicinity of a Pipeline (Critical AOC)

***NOTE: If new steel pipe being installed is to be joined together via welding, additional requirements apply. Welder certifications are required, plus covered task 44/54, Welding on a Pipeline.*

https://www.plumbingfoundation.nyc/wp-content/uploads/2019/08/FAQs-on-CT87-revised.pdf

OQ PROCESS

Operator Qualification is required to direct bury gas prior to the foundation wall. The following process should be followed if gas pipe will be buried before the foundation wall:

POE:

- Plumber to notify ESR that they will be burying pipe before the foundation wall.

INTERIM:

- Submit OQ cards for all personnel working on the buried pipe, prior to work commencing.
- Plumber to ensure those performing the work are operator qualified in accordance with the covered tasks lists found in Appendix A or B above, for the below grade work planning to be performed.
- Submit OQ Affidavit for all personnel working on the buried pipe.
- OTG/ESD to verify OQ. (see yellow book pg. 23-24). Reach out to OpQual@coned.com if assistance is needed. Mechanic must have all tasks pertaining to the job (i.e. pipe storage and handling, pressure testing, electrofusion/butt fusion, welding, etc.)
- If installing plastic, customer contractor should notify OTG/ESD 3 days prior to the start of work so that a second level inspection can be arranged. OTG/ESD to request second level inspection by requesting the following information from the contractor:
    - Scope of work
    - Location
    - Work Request#
    - OQ Contractor Name & Number
    - Date & Time the inspection is required.
    - OTG/ESD contact information.
- If installing steel, notify OTG/ESD to coordinate two inspections with the corrosion department prior to backfill. The first inspection covers pipe coating/tape, anode and isolation fittings installation. The second inspection covers the pipe to soil testing. Request corrosion inspection by emailing corrosion supervisor for the area.
- Contractor to submit As-Constructed sketch of buried pipe using Exhibit 13.

- Contractor to schedule backfill with OTG/ESD. The ESR will submit the Hold Point electronic form and photos via CAGE app.
    - Note: If contractor performing the backfill is qualified in task 70/71, the ESR does not need to be qualified to submit the hold point form. If the contractor does not have tasks 70/71, a qualified ESR must be sent to witness the backfill and document the hold point.

- When issuing job to Construction, a copy of the hold point form, photos, and contractor sketch should be sent to the Work Organizer for the area, so that it can be included with the work package.

1.21 Drug and Alcohol (D&A) Requirements:

Per state and federal pipeline safety regulations, anyone who performs operation and/or maintenance functions on a pipeline are subject to the D&A code requirements, and therefore, must participate in a D&A Program. Performing work on a service line pipe is considered a covered function, per the regulations.

In addition to the above OQ requirements, when performing repair or replacement work of existing services (on jurisdictional piping), individuals performing the work must be participants of a Con Edison approved PHMSA (Pipeline and Hazardous Materials Safety Administration) D&A program.

By working with your local plumbing association (i.e.- the Plumbing Foundation of New York or the Independent Master Plumbers of Westchester), you can gain OQ status, as well as be added as a participant to an acceptable Drug & Alcohol Program. See above OQ instructions for points of contact in your area.

In the event the customer's contractor is not participating in the above referenced plumbing association programs, then they must submit a regulatory compliance D&A Plan to Con Edison for acceptance, prior to any work being performed. Con Edison must accept the D&A Plan, before any work on jurisdictional piping can begin. This acceptance process is lengthy and should be factored into any project plans.

Section 2 – Gas Services

2.1 General Information:

2.1.1. Gas service piping will be installed by Con Edison, its authorized contractor, or a Customer Operator Qualified contractor (when applicable).

2.1.2 No person, unless an employee of the Company, shall repair, alter, open, or make connections to the service piping or do any work on any parts of Con Edison's gas supply system, including operation of a curb valve, head of service/riser valve, or meter valve.

2.1.3 Con Edison reserves the right to determine the location and type of service pipes to be installed.

2.1.4 Gas service will be supplied to each building or premise through a single service pipe. Any request for additional service pipes will be communicated to the assigned Energy Service Representative. Additional service must be pre-approved and are subject to Excess Distribution Facility (EDF) charges to be paid by the customer. Excess facilities will be provided at the discretion of Gas Engineering.

2.1.5 A Customer's request to supply a natural gas-fired generator installed to provide required emergency power in accordance with the NYC Building Code requires a separate outside gas shut-off valve that is separate from the existing gas service to the building. This additional gas service is subject to Excess Distribution Facility (EDF) charges to be paid by the Customer.

2.1.6 All gas meter sets shall be in accordance with Section 4 of the Yellow Book. Location exceptions require an approved outdoor meter refusal form per Section 4.

2.2 Customer Pipe Size:

Acceptable methods of calculating pressure loss are outlined in NYC, NYS or National Fuel Gas Code as appropriate:

1. Any meter piping more than 3 feet between the Con Edison head of service valve and Con Edison regulator/meter installation shall not have a pressure loss (drop) of more than 0.1" WC. This piping is in excess of the piping shown in Con Edison drawings and referred to in this installation guide.

2. Where room space clearance is limited, Refer to Gas Specification G-703. If there is any meter piping in excess of 3 feet between the Con Edison head of service valve and Con Edison regulator/meter installation or if there is multiple regulators and/or meters, you must comply with Con Edison specification G-703

3. Customer piping systems shall follow National Fuel Gas Code (NFPA 54), New York State Fuel Gas Code (FGNYS) and NYC Fuel Gas Code (NYCFGC) where applicable and be of such size and so installed as to provide a supply of gas sufficient to meet the maximum demand without undue loss of pressure between the Con Edison meter outlet and the customer's equipment. The design pressure loss (drop) shall not be more than 0.3" WC. Sizing of Customer gas piping/fitting/valves and shall meet requirements of National Fuel Gas Code, Chapter 6 and Annex B, and NYC Fuel Gas Code Section 402 of the NYC Fuel Gas Code for Schedule 40 metallic pipe with a pressure drop of 0.3" WC

4. Elevated pressures may not be available throughout the Con Edison service territory. Requests for elevated pressure must be approved in advance by Con Edison. In instances where customer equipment requires elevated pressure, Con Edison will provide additional requirements. If a location requires elevated pressure because of gas utilization equipment requirements, the customer or the Licensed Master Plumber shall provide the required information in writing for further evaluation. Customers may not request elevated pressure for the sole purpose of downsizing the houseline size. In NYC reference section 402.6 of the Fuel Gas Code for Gas distribution pressures and exceptions. Only cases referenced in the code will be eligible for elevated pressures to be available at the Point of Delivery (meter outlet), and after all requirements of the

governing Fuel Gas Code have been satisfied. This is applicable in both the NYC and Westchester territories.

5. The Company has the right to refuse service and make the customer change out the piping at customer / plumber's expense when the piping size is found to be inadequately sized.

2.3 Gas Service Installation Requirements:

To provide prompt, safe and adequate gas service to our customers, Con Edison requires that the following conditions be met by the Customer or the Customer's agents:

1. New and replacement gas service piping shall be installed per Gas Specification G-8100. A second level inspection and hold point inspection with Con Edison shall be requested prior to backfill of the pipe. Detailed As-Constructed drawings (Exhibit N) shall be submitted by the Customer or the Customer's agent prior to any gas service piping being connected to the gas distribution system

2. Head of Service (HOS) Valve

2.1 New Service Installation - The gas service line valve (Head of Service Valve) shall be in an accessible location and within 2 feet from the point where the gas service enters the building.

2.2 Where the service head valve is located 6-feet or more above floor level, an access platform (with a permanent ladder, if applicable) shall be installed. The construction of the platform must follow OSHA standards. See Below:

2.3 General Requirements (OSHA 1910.22):

- **Surface Conditions**: The platform must be kept in a clean, orderly, and sanitary condition*1*.
- **Load Capacity**: The platform must support the maximum intended load*1*.
- **Access and Egress**: Safe means of access and egress must be provided*1*.
- **Inspection and Maintenance**: Regular inspections and maintenance are required to ensure the platform remains in a safe condition*1*.

2.4 Guardrails and Fall Protection (OSHA 1910.28):

- Platforms 4 feet or higher must have guardrails on all open sides*2*.
- Guardrails must be 42 inches high and capable of withstanding a force of at least 200 pounds*2*.

2.5 Toe boards (OSHA 1910.29):

- Toeboards must be at least 3.5 inches high to prevent objects from falling off the platform*2*.

2.6 Specific Requirements for Platforms (OSHA 1910.66):

- Platforms must be designed to support the intended load and provide safe access to the gas valve*3*.
- Permanent installations must comply with specific design criteria, including load-sustaining capabilities and stability factors*3*.

These standards ensure that the platform is safe for workers accessing the gas valve.

Upgrading an Existing Gas Service - A gas service head valve must be installed (where none exists) or replaced (where the existing valve is not a Con Edison approved type) when the following conditions exist:

- The gas service is SHUT-OFF upstream of the service head valve to perform work.
- The gas service head valve itself is being worked on.

2.7 Installations in Specialized Areas - In certain situations, the installation of a service may result in unique configurations that Con Edison is not familiar with inspecting (for example, service line piping installed under a pier, under a bridge, high up in the air, in areas of little access by company personnel, etc.). Con Edison is ultimately responsible for the operations and maintenance activities associated with all service line pipe; however, the financial burden of such responsibilities would fall to the customer. When the service installation results in a configuration in which Con Edison personnel are unable to inspect consistent with routine procedures or do not have the adequate training to inspect, then the customer will be required to perform these inspections in accordance with all federal, state and company requirements and submit those inspection results to Con Edison. Inspections include, but may not be limited to, leakage surveys and corrosion inspections.

In the event a service line pipe configuration meets the above-mentioned criteria, additional information and detailed requirements will be provided to the customer.

2.8 Effective 10/03/2025 - Installation of the Thermally Activated Valve aka Fire Bag has been Temporarily Suspended – ~~**Thermally Activated Valve aka Fire bag** – Effective November 18, 2021 most Medium and High Pressure, Indoor or Outdoor Services will require the installation of a TA/Fire bag.~~

~~Referenced Specifications where this fitting is required are listed below.~~

~~- EO-14158 – Installation of Gas Service Regulators – Indoors (1" to 2)~~
~~- EO-14166 – Installation of Twin Gas Service Regulators – Indoors (1" to 2")~~
~~- EO-16511 – Installation of Meter Piping for Class 3000R-TC to Class 23000R-TC Rotary Meter Outdoors~~
~~- EO-16585 – Installation of Meter Piping for Class 250TC Diaphragm Meters~~
~~- EO-16726 – Installation of 2 to 6 Unit Prefabricated Meter Sets for Class 250TC Meters – Outdoors or Indoors~~
~~- EO-506175 – Installation of Meter Piping for Class 500TC to 1000TC Diaphragm Meters – Outdoors~~
~~- EO-514203 – Outdoor Installation of Twin Gas Regulators – 1" to 2" Body~~

2.9 Installation of Maxon Valves when required for school installations or other applications must be the same pipe size diameter or larger, as the gas meter and must be installed after the Gas Meter.

3. Gas Service Point of Entry (Sleeve/Sweep)

3.1 The customer is responsible for the costs for any modification of the building or foundation wall including installation of a wall sleeve that may be required. See Gas Specification G-8096, "Sealing the Annular Space Between a Gas Pipe and a Wall, Casing Pipe, or Sleeve."

3.2 Gas services are to be properly sleeved and vented per Gas Drawing EO-4890, "Service Pipe Tubing and Service Sleeve through Vault, Open Areaway, Open Area under Stairs, Under Enclosed Area and Vaulted Basement". If the Customer elects to build and/or add an extension over an existing gas service, the Customer will bear the full cost to sleeve and vent the existing gas service or the full cost to off-set same.

3.3 A Multi-Dwelling Residential/Commercial/Industrial customer is responsible for the costs to maintain and replace a sleeved elbow unit (if one exists.)

4. Protection of Above Ground Service Pipe and Fittings

Adequate protection devices shall be installed in areas where the service head valve, service regulator (if required), meter(s), and associated valves are subject to vehicular or other damage. See Gas Drawing 502163, "Bumper Installation."

5. Gas Trench

5.1 The areas in which gas services are to be located shall be easily accessible and allow for safe working conditions. Dirt piles, debris, construction materials etc. are to be removed from the proposed gas service route and service trench. Trenches containing water must be pumped out by the customer before installation of the gas service pipe.

5.2 If the Customer's contractor is excavating the gas service trench, the trench must:

5.2.1 Be excavated to ensure the gas pipe is installed perpendicular to the street and should not run at angles.

5.2.2 Provide minimum required clearance from other subsurface facilities (see Gas Specification G-8100, "General Specification for the Installation of Gas Distribution Services")

5.2.3 Be the required minimum depth and width (see Gas Drawing 309495, "Trench Excavation for Gas Mains and Services up to 350 psig")

5.2.4 Distribution mains and services must be properly supported on undisturbed or well-compacted soil. All material used for backfill and pipe support must be free of materials that could damage the pipe or its coating. In a "rock area" a 4"-6" bedding of sand, 3/8" clean fill, or recycled screening backfill shall be used. (See Gas Drawing 309495)

5.3 If the trench is located within 3 feet of a live gas line and the Customer's contractor is not qualified in task 70/71, they must call Con Edison to schedule an appointment for an operator qualified individual to witness excavation activities.

6. Backfill

6.1 A second level fusion inspection and hold point inspection with Con Edison is required prior to backfill of the pipe.

6.2 In addition to tracer wire, Electronic markers (EMs) shall be installed on steel, PE plastic, and copper gas service pipe as per Gas Drawing 502664, "Installation of Electronic Markers on Gas Mains and Services" and noted on the as constructed drawing.

6.3 Backfill material around gas pipe shall be sand, 3/8" clean fill, or recycled screening backfill.

6.4 If the Customer's contractor is not qualified in task 70/71, they must call Con Edison to schedule an appointment for an operator qualified individual to witness and document backfill activities.

6.5 If the Customer's contractor is qualified in task 70/71, they must still call Con Edison to schedule an inspector to document backfill activities.

7. Polyethylene (PE) Plastic Gas Service Pipe, Tubing, and Fittings

All joiners of PE plastic pipe/tubing and fittings by butt fusion, electrofusion, or mechanical joints MUST:

7.1 Be Operator Qualified (OQ) and current with 12 month requalification (see Gas Specification G-8121, "Qualification of Installers Joining Polyethylene (PE) Plastic Pipe/Tubing and Fittings for Gas Mains and Services")

7.2 Join PE plastic pipe/tubing and fittings in accordance with the joining procedures outlined in Gas Specifications G-8123, "Heat Fusion Joining of Polyethylene Plastic Pipe/Tubing and Fittings for Gas Mains and Services," IP-27, "Installation of Electrofusion Fittings on Plastic Pipe/ Tubing and Molded Fittings Using a Universal Electrofusion Processor" and Gas Specification IP-20, "Installation of Mechanical Fittings for Plastic Pipe and Tubing."

7.3 Visually inspect all PE plastic joints.

7.4 Mark all PE plastic joints with their contractor OQ # at the 12 o'clock position with a Company approved marker (e.g. silver Sharpie) adjacent to the joint; **AND**

7.5 Document all PE plastic joints, joiners, and associated tracking information on as-constructed drawings **AND** on the "Gas Operations PE Plastic Joint Tracking" form (or equivalent)

7.6 Second inspectors are required to be independent of the fuser (aka- a non-crew-based inspection). Con Edison offers second inspectors to perform PE plastic joint inspections to meet this requirement. In order to schedule a second PE Joint Inspection, please make arrangements through your Con Edison representative. Second Inspectors will also document all PE joining information on Con Edison's applicable mobile application.

7.7 To perform all other work associated with a PE plastic service (e.g., installation of pipe in trench, pressure test, install tracer wire, backfill, etc.), the individual must either be Operator Qualified or under the direct observation of one who is Operator Qualified. "Direct observation" means that the Operator Qualified individual always remains in direct visual and verbal contact with the individual performing the task. See above Section 1. T for full OQ instructions.

7.8 See Gas Specification G-8104, "Polyethylene Pipe, Tubing, and Fittings for Gas Mains and Services" for Company approved PE plastic pipe, tubing, and fittings and Gas Specification. G- 100,298, "Valves for Gas Transmission and Distribution Systems" for Company approved PE plastic valves.

7.9 All PE plastic pipe, tubing, and fittings, must be inspected prior to installation to verify:

- No cuts, gouges, deep scratches, or other defects.
- PE plastic material is high density polyethylene (HDPE), PE3408/4710, manufactured per ASTM D2513, PE plastic pipe & fittings are not to be older than 10 years old.

- For PE plastic pipe/tubing (yellow striped), check the print line.

- For PE plastic fittings, check the sticker on the fitting.

See Gas Specification G-8122, "Inspection, Handling, Storage, and Transportation of Polyethylene (PE) Plastic Pipe, Tubing, and Fittings for Gas Mains and Services."

7.10 A minimum #14 AWG yellow insulated copper tracer wire shall be taped to all direct buried PE plastic service pipe at 20 to 30 foot intervals. Bring the tracer wire to the top of the curb box or riser. Tracer wire may not be wrapped around the plastic pipe and contact with the plastic pipe must be minimized (i.e. just to the contacts for "taping intervals"). (See Gas Specification G- 8100).

7.11 PE plastic pipe/tubing shall not be installed in the following areas:

- Above ground.
- Where the temperature of the PE plastic pipe/tubing will be below -20°F or exceeds 100°F.
- Within 35 feet of any steam facility (Company or private) or in any subsurface structure, inside of which, a steam facility is located.
- In a subsurface vault or any below grade enclosure (not containing therein any steam facilities) unless it is completely encased in a gas tight metal pipe having adequate corrosion protection.
- Where the soil is saturated with solvents, fuels (e.g. gasoline), or oils.
- More than 24" beyond the inner face of the building wall (this includes a building's vaulted area) and the 24" (or less) of plastic pipe/tubing must be fully encased within a steel sleeve or existing service pipe. The plastic service pipe or tubing shall terminate at a transition fitting or service head adapter/basement tee.
- All PE plastic joints, joiners, and second inspectors shall be marked and documented as per DOJT GAS6006, "Documentation and Inspection of Polyethylene (PE) Plastic Joints on Gas Mains and Services.
- Qualification of new and existing joiners and second inspectors of Polyethylene (PE) plastic pipe shall be performed and documented by Con Edison or Northeast Gas Association (NGA) trained evaluators.

8. Steel Service Pipe

8.1 To perform all work associated with installing steel service pipe (e.g., installation of pipe in trench, coating pipe, pressure test, backfill, etc.), the individual must either be Operator Qualified or under the direct observation of one who is Operator Qualified. “Direct observation” means that the Operator Qualified individual always remains in direct visual and verbal contact with the individual performing the task. See above Section 1.T for full OQ instructions.

Note: Welders performing welds on buried pipe must meet the Operator Qualification requirements in gas Specification G-1064 and follow the welding procedure in Gas Specification G-1065.

8.2 See Gas Specification G-8107, "Steel Pipe for Gas Mains and Services" for approved steel pipe and G-100,298, “Valves for Gas Transmission and Distribution Systems for Company approved metallic valves.

Note: All above ground outdoor service piping shall be steel.

8.3 Corrosion Control of Steel Pipe

- All buried or sleeved steel service pipe shall be factory coated as per Gas Specification G- 8062, "Extruded Polyolefin Coating on Steel Pipe" or field coated as per Gas Specification G-8209, "Field Coating of Steel Gas Pipe and Fittings Installed Underground and in Subsurface Structures".

- All steel service piping, above ground and buried (before or after the gas meter), must be protected per the requirements in Gas Specification G-8205, “Corrosion Control of Buried Steel Gas Mains and Services.”

- The cathodic protection of the steel service shall be checked prior to and after backfilling.

- Galvanized piping cannot be used for below grade installations and or be used as a sleeve for a gas pipe. Please refer to the appropriate specifications listed in this book for sleeved installation requirements.

Plumber/Contractor required documents checklist:

1. Operator Qualification Cards with required covered tasks (CTs)
2. Operator Qualification Certification
3. For Steel:

- Welder’s Certification
- Notify CE for coordination of two inspections with CE Corrosion prior to backfill (first inspection for pipe coating, anode, and isolation fitting, second inspection for pipe to soil testing)

4. For plastic –Notify CE a few days prior to install to schedule for a second level inspection.
5. As-Constructed Sketch
6. Notify CE prior to backfill to schedule for a witness to document Hold Point Inspection

- Note: CE needs to witness backfill even if contractor is qualified in Tasks 70/71.

9. Copper Tubing Service Pipe

9.1 To perform all work associated with installing copper tubing service pipe (e.g. joining with mechanical couplings, installation of pipe in trench, pressure test, backfill, etc.), the individual must either be Operator Qualified or under the direct observation of one who is Operator Qualified. "Direct observation" means that the Operator Qualified individual remains in direct visual and verbal contact at all times with the individual performing the task.

9.2 Protective bushings must be installed on the ends of the existing service pipe (after the pipe is cut, removed and reamed) and prior to insertion to protect the copper from damage.

9.3 The leading open end of the copper must be sealed prior to insertion.

10 Pressure Testing of Service pipe

10.1 New and replacement gas service pipe shall be pressure tested, by the installer, as per Con Edison specification G-8204. Pressure testing from the head of service valve to the first fitting upstream of the meter shall be done, as per G-8204:

https://www.coned.com/-/media/files/coned/documents/es/specs/eo-specs/G-8204

- Note: Pressure tests performed on buried service piping must be performed by, or done in direct observation of, someone operator qualified in task 34A. Task 87A only applies to above ground service piping.

10.2 The test pressure must be maintained at or above the required test pressures for the following minimum times:

- 2" diameter and smaller: 15 minutes
- Greater than 2" diameter: 30 minutes

10.3 Note : All Fuel Gas Code requirements still apply

10.4 Pressure Tests shall be documented within the Gas Meter Pipe Pressure Test Verification form

(see Exhibit B)

2.4 Welding:

All welding on below grade gas service piping must be in accordance with Operator Qualification requirements. See above Section 1.T for full OQ instructions. Separate and apart from operator qualification requirements, all welding on gas service piping must be performed in accordance with Con Edison's welding procedures, including but not limited to API 1104 and/or ASME Boiler and Pressure Vessel Code, Section IX welder certification requirements. See Gas Specifications, G-1064, G-1065 and G-8227

All welders working on a customer's distribution piping inside buildings must be qualified in accordance with the requirements of the local authorities having jurisdiction.

2.4.1 New York City:

Welders installing gas distribution piping within buildings at any pressure shall comply with the NYCFGC.

- Certain portions of the service line have overlapping jurisdiction, where both Con Edison specifications and the NYCDOB regulations would apply. For example: when there is an outdoor meter, the service line that extends after the outlet of the outdoor meter until it reaches the building. In these cases, the NYCDOB rules require welding in accordance with ASME Boiler and Pressure Vessel Code, Section IX. Con Edison has determined that ASME welding certification is compliant with federal and state pipeline safety regulations, and therefore, will be an acceptable form of welding for the plumber installed service line piping. NYC Fuel Gas Code sections 406.1.1.2 outlines Welding Requirements for piping after the outlet of the meters. Welding of piping after the outlet of the meter must be performed in accordance with ASME Boiler and Pressure Vessel Code, Section IX.

- **New York City Fuel Gas Code – Section 403.1.1**
  Pipe Size and Pressure Limitations – Welding Inside Building

  - Gas distribution piping operating at a pressure of over ½ psig shall be welded.
  - Exception: Manufactured gas trains provided with the appliance may be threaded.
  - Threaded piping may be used up to 4" in diameter and a pressure no greater than ½ psig.
  - All piping greater than 4" in diameter shall be welded, regardless of operating pressure.
  - All welded piping 2 ½" or greater in diameter shall be butt-welded, and welded piping less than 2 ½" in diameter may be socket or butt-welded.

2.4.2 Westchester County:

Welders are required to follow the New York State Fuel Gas Code for welding on distribution piping.

- The Customer, it's Agent or licensed Plumbing Contractor must submit a "Welding Certification Form" showing compliance with the local building codes in the Municipality where work was performed. The Company's "Welder Certification Form" form can be found on our Energy Services Resource website located at https://www.coned.com/en/small-medium-size-businesses/building-project-center/contractor-resources or refer to Exhibit – E.

2.5 Corrugated Stainless Steel Tubing (CSST) Distribution Pipe & MegaPress-G Fittings (aka Cold Press Fittings):

2.5.1 New York City:

- Corrugated Stainless Steel Piping (CSST) and MegaPress-G fitting (aka cold press fitting) installation is not permitted on distribution piping in New York City.

2.5.2 Westchester County:

- CSST and cold press fittings are **not** permitted for use on utility jurisdictional piping. When installed on non-utility jurisdictional piping, they shall be installed in accordance with the requirements set forth in the Fuel Gas Code of New York State.
- In municipalities in Westchester that allow CSST and/or cold press fittings, all manufacturers' installation guidelines and authorities having jurisdiction (AHJ) requirements shall be followed.

2.6 Pressure Testing of Utility Jurisdictional (Service) Pipe:

All the service piping and meter piping shall be tested in accordance with the following requirements:

1. All below grade piping, before the building wall, shall be pressure tested per the requirement of Gas Specification G-8204, "Pressure testing Requirements for Gas Mains and Services".

2. All buried piping shall be blocked, supported, and held in place with sandbags for the leakage test and coating inspection.

3. The test medium shall be air.

4. The pressure source shall be isolated from the piping prior to the start of the test.

5. All joints, fittings, valves, or other potential leak sources shall be checked for leakage during the pressure test using leak detection solution (soap water).

6. Test duration times are to be measured after the test medium has stabilized.

7. Pressure readings shall be performed using a calibrated pressure gauge.

8. Prior to tie-in, Con Edison will pressure test buried pipe to the head of service/riser valve.

2.7 Meter Piping: Test Pressure and Duration:

Low Pressure:

Pressure test for 30 minutes at a pressure of 3 psig from **HOS to meter.**

For Intermediate, Medium & High Pressure refer to G-8204 for pressure test requirements:

https://www.coned.com/-/media/files/coned/documents/es/specs/eo-specs/G-8204

- The gas meter and associated gas regulating equipment **SHALL NOT** be installed prior to any pressure/leakage test. This equipment is to be leak tested at service line pressure.

2.8 Restoring Gas Service after a Repair:

In NYC, a valid EWN or Gas Authorization to restore gas service must be submitted and received by Con Edison Energy Services Group prior to restoring a gas service to a meter that was previously locked-off or isolated for inside customer piping repairs. In the event of an emergency, a valid EWN supplied by the Licensed Master Plumber from DOBNOW Build will be accepted in lieu of Gas Authorization in NYC. In this case, a valid EWN and all required paperwork must be submitted within 5 days of the gas being turned off. For Westchester County, a Blue Card will be required for gas restoration after repairs. All requests for service restoration shall detail the type of repairs made, location of repair and the gas equipment to be turned on.

All repairs on utility jurisdiction piping as defined in this book must be done by OQ Task 87, 87A or 87B personnel.

In cases where emergency work is already being performed under an EWN and a meter bar is leaking or does not exist, the LMP shall replace or install a meter bar. This corrective work can also be performed under an EWN, as long as the LMP notes the meter bar installation or replacement on their LAA filing.

Prior to restoring a gas service, an integrity test shall be performed by Con Edison to establish the customer's gas piping does not leak. This is separate from the required Licensed Master Plumber Pressure Tests that are required in exhibits A and B in this Book and Project Center

On service restorations for a high pressure Building of Public Assembly (BOPA) turn-on where repairs have been made, the location shall be visited by an Energy Services representative to verify if the completed repairs require a Gas Approval (i.e. REQ-GA Approved or Blue Card) and **"Gas Integrity Test and Gas Turn-On Form"** Exhibit - A prior to issuing a work authorization. A Gas Operations supervisor shall be present after inside repairs have been completed and prior to the turn-on of all elevated pressure piping upstream of the service regulator inside BOPAs.

On service restorations to either a building or a multi-dwelling (4 or more families) or a master- metered building with risers, in which the licensed master plumber has corrected a warning tag condition, it is the responsibility of the building owner to provide **ALL** of the following for an acceptable integrity test:

2.8.1 An **Approved Gas Authorization** (old terminology Blue Card in NYC) or equivalent in Westchester, when required by local building code requirements.

2.8.2 A completed **"Gas Integrity Test and Turn-on Form"** signed by a licensed plumber, including license number. The Company's "Gas Integrity Test and Turn-On Form" form can be found on our Energy Service Resource website located at https://www.coned.com/en/small-medium-size-businesses/building-project-center/contractor-resources or refer to exhibit – A.

2.8.3 A final check list OR Emergency Repair Certificate within 30 days of repair

2.8.4 A OQ Certification Form if repair work, testing, or purging involved utility jurisdictional piping.

2.8.5 A shut-off valve for each appliance, if there is no gas valve found, there will be no appliance turn-on.

2.8.6 Each riser shall be equipped with a lockable valve and 1/8" test port.

No customer contractor is allowed to perform any repair work, test, or purge on utility jurisdictional pipe, unless operator qualified and part of a DOT Drug & Alcohol Program.

Inside Service Line Inspections:

For customers with indoor meters, Con Edison (or a qualified representative) is required to perform periodic safety inspections of that service line. In attempts to complete these inspections, Con Edison has communicated with our customers to make appointments; however, access to some meters has proven difficult. Refusal to grant access for these inspections can result in fees added to a customer's bill, termination of service, or a disallowance of a shut-off service to be returned. If you are aware of meters that need to be inspected by the company, please contact 1(800)643-1289 option 3. This inspection is above and beyond any required Local Law152 inspections in NYC. Please work with your licensed plumber to ensure that your Local Law 152 inspection is completed as well.

Con Edison is requiring the following be completed, prior to any turn-on requests being made to Con Edison. When performing any type of repair or modification work on the jurisdictional pipe up to the meter outlet (i.e.- task 86/87, 87A or 87B work), prior to a turn-on request being issued, the plumber or his qualified employee must conduct a visual inspection for atmospheric corrosion of the service line and other abnormal operating conditions and correct any substandard conditions, to ensure a turn-on can proceed. Additionally, the plumber must make arrangements for the full-service line inspection to be completed, by Con Edison, on the day of turn on. The Gas Meter Piping Pressure Test Verification Form has been updated to affirm the visual inspection has been conducted and access will be granted.

2.9 Restoring Gas Service to Buildings with Risers:

Master metered buildings where there is more than one riser, and the risers are integrity tested individually; the gas-in of each riser shall occur immediately after an acceptable integrity of that riser off for the repair. Purpose is to prevent the possibilities of conditions changing after the test is performed and gas is introduced into the riser.

At the scheduled appointment, the building owner or superintendent (agent) must provide the company mechanic access to a minimum of two (2) apartments on each affected riser. One of these apartments must be the furthest apartment; the other shall be at the discretion of the company.

In each apartment accessed, the company will verify that:

- Each appliance has a shut-off valve.
- Visible piping is continuous and adequately supported up to the appliance valve.
- All appliance valves are open and properly connected to appliances with electronic ignition.
- All appliance valves not connected to appliances are closed and plugged/capped.
- All meter valves have been left open in premises which have meters in the apartments so that the integrity test is complete to the appliance valves. A lockable riser valve and a ⅛-inch diameter pressure tap downstream of, and in close proximity to the lockable riser valve, must be installed on any riser or branch that is off for repair. The ⅛-inch pressure tap is to be used to connect a manometer for the continuity test.

It is REQUIRED that lockable riser valve(s) with 1/8 test ports be installed on all risers in a building (New construction or gut rehab) even if the riser is not being repaired. The purpose of the lockable riser valves is to make the gas turn-on easier, and to reduce the need for a complete shutdown if there is a leak in the future. Riser valves are not required for 1, 2, or 3 family-residential homes.

Any existing non-lockable riser valves can be left in place for risers not being repaired.

An existing drip leg with a lockable valve located downstream and in close proximity to the gas valve or a new ½-inch diameter reducer T fitting may be used in lieu of the ⅛-inch diameter pressure tap. If no riser valve or pressure tap fittings are present, contact supervisor for guidance.

- Identification of the risers and gas shutoff valves shall be identified as required in section FGC 409 of the New York City Fuel Gas Code – Shutoff Valves. In NYC and Westchester each line shutoff valve shall be plainly marked with an identification tag attached by the installer so that the piping systems supplied by such valves is clearly identified. All building risers shall be identified (I.e. A, B, C, D etc.). The riser shutoff valve shall be properly identified to correspond to the riser that it will turn off.

2.10 Minimum Insulation Standards for Existing Dwellings Converting to Gas Space Heating:

2.10.1 Conversion to Gas Space Heating:

Existing one, two, three and four family homes converting to gas heating are required to meet the minimum insulation standards set by the New York State Public Service Commission.

Basic standards are:

- The roof or ceiling must have at least six inches of insulation or insulation with an R-value of 19 or greater. This requirement does not apply to dwelling having a flat roof provided that four or more inches of insulation are in place or if insulation can be installed only by cutting into the roof.

- Dwellings must have storm windows or thermal windows with multiple glazing. A storm window is not required on any window opening into a fire escape.

- All entrances must have storm or thermal doors.

2.10.2 Certificate of Compliance Requirement

Gas service will not be provided to any premises subject to this minimum installation standard until an executed Certificate of Compliance has been furnished to Con Edison. The Company's **"Certificate of Compliance"** form can be found on our Energy Services Resource website located at https://www.coned.com/en/search?search=certificate%20of%20compliance or refer to Exhibit – F.

2.10.3 Waivers:

Con Edison may waive the requirements where the applicant can:

- Establish through two independent estimates or a heat loss survey, that the purchase price and installation charge (excluding interest charges) will be greater than seven times the anticipated annual savings to be obtained (based on the present cost of the fuel currently used in the building).

- Establish that the dwelling is a historical building.
- Establish that other measures have been taken so that the overall heat loss for the building envelope does not exceed the total heat loss which would result from conformance with the minimum insulation standards. A licensed architect or engineer must certify the heat loss calculation.

Note: Waiver requests must be submitted to Con Edison using the company's form titled "Request for Waiver – Minimum Insulation Standard" located on the Energy Services Resource web – site located at https://www.coned.com/en/search?search=certificate%20of%20compliance or refer to Exhibit – G.

2.11 Emergency Natural Gas Generator:

2.11.1 Customer Emergency Power Equipment:

The customer or customer's agent should electronically file through Energy Services Project Center at https://www.coned.com/en/small-medium-size-businesses/building-project-center for a gas service ruling. Energy Service will ensure all information is acceptable to service customer equipment and the natural gas generator.

In New York City, where a building is required to maintain emergency power equipment i.e., elevator bank, emergency lighting, fire pumps and the customer elects' natural gas as the fuel source for the emergency generator, the customer is required to install a separate gas service and shut-off valve as per NYC Fuel Gas Code (Appendix E, Section E.6(5)). The Customer shall pay all costs associated for the second gas service under Excess Distribution Facility (EDF). See **"Rates and Terms of Service"** and **"Special Services Provided at Cost"** of this guide.

Additional requirements on Operator Qualification may need to be followed when installing rooftop generators and or for storm hardening projects i.e.. elevated boiler or mechanical rooms utilizing gas. Please refer to the Appendix M drawings for additional information and guidance.

2.11.2 Storm and Disaster Preparedness

When a customer requests gas service for the purpose of supplying a generator for power during an electric system blackout, [storm damage or preparation for a major natural or accidental disaster declared by AHJ emergency officials] it will be used during an interruption of electricity service and duration will be completed when the electric system is returned to normal operation.

Energy Services representatives will be in contact with the customer regarding customer cost, billing service classification rates, service layouts, electric and gas procedures. It is important prior to purchasing any generating equipment to contact Con Edison so we can assist on the connection to both our gas distribution system and the electric grid network.

Where a customer elects to install a natural gas generator for electric power use during a storm and/or natural disaster preparedness and the existing gas service is no longer adequate, the Customer shall pay all costs associated with the installation including, if necessary, all costs for system reinforcement, gas mains and additional gas service. See **"Rates and Terms of Service"** and **"Special Services Provided at Cost"** of this guide. **See Gas Rate LEAF 38 PSC No. 9 III 3.H.**

2.11.3 Con Edison's Review of Customer's Installation

Before the customer's emergency equipment is installed, the customer shall submit for company review:

1. A one-line electrical diagram showing the proposed installation, its interconnection to the electrical service and the means used to prevent parallel operation. Con Edison reserves the right of field inspection to ensure compliance.

2. A written statement signed by the customer stating that the emergency facilities will be used only during an interruption of the company's electrical service, or a Company announced voltage reduction, and for

necessary testing purposes. Customers using emergency generating equipment under other than the above specified circumstances will be required to take service classification that permits parallel operation.

2.12 Oil to Gas Conversion:

Requirements:

Before you submit an application for gas service, we encourage you to obtain your property's internal conversion costs from a licensed professional.

If you decide natural gas is right for you, Con Edison recommends that you have a licensed professional submit your application for gas service.

Your application must include the following:

- Addition of "Convert to Natural Gas" option as request type for all oil to gas conversions
- Authorization from customer to submit this request
- Property's block and lot number
- Requirement for a unique customer email address
- Existing oil type (2, 4, or 6)
- The type of service you will require (firm, interruptible, or both)
- Property's point-of-entry (POE)
- Property's invoiced oil bills for the last 24 months must be submitted as an attached file
- Boiler configuration for the installation of two or more boilers (e.g. lead lag, 100% redundant)
- Contractors are now required to complete the load information screen. Load letter attachments are no longer accepted.

After your application has been submitted, you will receive an acknowledgement letter detailing the next steps in the process. Be sure to use the provided case number when making inquiries about your application.

When converting from oil to natural gas it is a building rule requirement that your licensed heating specialist submit to the customer's AHJ a written report that masonry chimney has been inspected and upgraded to accommodate natural gas flue gases.

Building Code References:
New York City and State Fuel Gas Code – Masonry Chimney Utilized to Vent Boiler NYCFGC - Section 501.3 and 503.5.3 titled: Masonry Chimneys

2.13 Odor fade:

There are some important safety precautions that should be taken when working on or near natural gas equipment:

Natural Gas, which is mainly composed from methane, is odorless. Mercaptan used as an odorant, has a distinct rotten egg smell (mercaptan contains sulfur, carbon, and hydrogen) and is added to natural gas to assist in the detection of leaks. Sometimes the odorant may not be detected by smell alone. Certain conditions may cause the odor to fade, to the point where it is no longer readily detectable. Odor fade occurs when the odorant in the gas is reduced due to physical and/or chemical processes including adsorption, absorption, and oxidation. Odor fade predominantly occurs with newly installed metal piping, but it can also occur with plastic piping.

Odor fade is a serious concern, because if present, a gas leak would not be able to be detected through the smell of mercaptan.

Other factors that may cause odor fade include the size, length, and configuration of piping; the presence of rust, moisture, liquids or other substances in the pipe during storage and the construction process; gas composition, pressure, and/or flow. Intermittent, little or no flow over an extended period may also result in the loss of odorant until gas flow increases or becomes more frequent. These factors need to be considered in the design and construction of gas piping.

While Con Edison will provide adequate odorant up to the gas meter(s) outlet(s), it is the customer's responsibility to ensure odorant up to the end-use equipment. Some things to consider, in order to avoid odor fade, are:

- Installation of equipment that will provide a consistent demand for gas use, particularly in high-rise and larger buildings.
- Use of a consultant experienced in odor fade to provide additional support and guidance on eliminating odor fade.
- Ensure inside pipe diameter area is clean and free of foreign debris, rust, cutting oil and pipe dope.
- Ensure pipe caps are installed and the pipe is protected and covered if exposed to outside elements.
- Best practice is to store pipe indoors in a moisture-controlled environment away from damp/moist areas which could cause rust. Dehumidifiers/space conditioning may be utilized where practical to mitigate moisture content in the area where pipe is stored.

Requirements prior to Gassing In.

Buildings more than 9 stories and or greater than 25,000 square footage and those that have seasonal occupancy are required to adhere to the following conditions prior to gassing in after Gas Authorization has been received from the Authority Having Jurisdiction

Protect and New – Piping to be installed is to be new and protected from foreign material.

Blowdown- Piping is to be blown clean from any foreign material and debris.

Purge with Nitrogen – As required by the NYC FGC Section 406 or equivalent NYS code requirement.

Pickle/Odorize – If Odor Fade is suspected or the building meets the criteria described above then the house piping must be pickled by a professional contractor and in line with the appropriate Building Code requirements prior to gassing in. Check with the local AHJ on permit requirements.

All OQ requirements to work on jurisdictional piping and Gas Qualification from the AHJ must be followed.

It is recommended that the design of risers seeing minimal natural gas flow incorporate an approved and permitted constant burn appliance at the end to induce flow in otherwise low flow risers.

If pickling/odorizing of the internal piping is required, please follow the checklist below:

Odor Fade / Plumber Checklist

- **Phase 1 Con Ed to purge for 24 hours (2-12-hour days):**

- Con Ed will introduce gas for 24 business hours to help correct odor issue on customer piping. If after 24 hours the odor fade still exists Con Edison will shut down and isolate the affected areas and continue with Phase 2 after communication with the building owner and/or plumber.

- **Phase 2 Con Ed to introduce gas for additional week (5 days / 12 hours per day)**
  List of information needed at this time to move forward:

- Riser diagram / # of apartments per riser (Occupancy on Avg.).
- Number of floors in building.
- Occupancy detail of the building, end use equipment, seasonal use?
- Is there a constant burn device at the end of any riser? If yes, please supply additional information.
- Letter of agreement for reimbursement of Con Edison accommodation billing rate.
- For occupied apartments building is required to turn off Appliance valve at stove, disconnect and plug the same. Plumber to provide documentation of apartments locked off.

If after the week of introducing gas and the odor fade still exists Con Edison will shut down and isolate the affected area and continue with Phase 3 after the developer/building owner and/or plumber have secured a third-party vendor to assist with the further conditioning of the affected piping.

- **Phase 3 Con Ed to assist Third party vendor with pipe odorization / pipe treatment:**

- Piping has been cleaned and any debris blown out followed by a Nitrogen purge done by the licensed master plumber.
- An active NYCDOB/AHJ permit is required to perform this work.
- Require FDNY / City Agency review.
- Con Ed to determine whether insurance sufficient (Legal).
- Con Ed to be added to owner/developer insurance policy at full limits.

- Certificate of insurance.
- Insurance to be primary and non-contributory, with waiver of subrogation.
- Gas Accommodation Letter / Accommodation work request.
- Written plan by the third-party vendor and plumber to be approved by Con Edison.
- Hold Harmless letter.
- Threshold needed to be met for adequate odorant at furthest appliance on riser as measured by Con Edison Odorator machine (.25-.5 reading).

When working with Natural Gas the following should be followed:

When existing gas piping has been removed from service for repairs or new piping has been installed, the affected section of piping must be cleaned[i] and purged with an inert gas prior to gassing in by Con Edison. All applicable safety and local codes must be followed when purging a line with an inert gas.

DO NOT purge the contents of a gas line into a confined space. Any purging of a gas line with an inert gas or natural gas should be done by venting the contents to the outside atmosphere away from potential ignition sources and people.

Always use gas detection equipment (combustible gas detector) during purging operations or when otherwise working on or around gas piping systems.

DO NOT rely on your sense of smell alone to detect the presence of natural gas.

Consult the National Fuel Gas Code (NFPA, Chapter 8), local Authority Having Jurisdiction codes, New York City Fuel Gas Code in NYC (Section 406 Inspection Testing and Purging), and all applicable laws and regulations for additional purging requirements, when purging a line with natural gas and/or an inert gas.

When installing gas appliances or equipment, the manufacturer's instruction manual should be followed in accordance with the applicable national, state, and local codes.

Please be advised that Con Edison provides this information solely as a service. You are responsible for working safely and understanding and complying with all applicable laws, regulations, and safety provisions when working on or near natural gas piping and equipment.

If an odor fade condition is suspected, call Con Edison immediately at 1-800-75-CONED (1-800-752-6633).

Important:

- Follow safe and code compliant plumbing practices.
- In NYC the purging of piping shall be in accordance with Sections NYC FGC 406.7.1 through 406.7.3

[1] Follow safe and code compliant plumbing practices.

2.14 Natural Gas Detectors:

Natural Gas Detectors (NGDs) are an important gas safety tool. The Company will be installing this equipment in the area where Con Edison's gas service pipe enters a customer's home or building.

All new services, upgrades, or changes to the customer's gas meter will be required to have the NGD installed prior to gas service being introduced or restored. Tampering with the device will result in penalties for the customer. **Refusal to allow the Company to install an NGD will result in service termination**

Customers in New York City are required under Local Law 157 to install non-connected devices near appliances. Local Law 157 is a complement to, not a substitution for, the installation of the connected device the Company will install. Customers may not refuse to comply with the Company's requirement, nor LL157.

How the devices work:

If levels of natural gas indicate a potential leak, the NGD will beep loudly and sound the following audible alarm: "Danger. Gas leak explosion risk. Evacuate, then call 911." It will also send an alert to Con Edison. Con Edison and the fire department will then respond and investigate. The alarm will continue to sound until Con Edison arrives and silences the unit.

When performing work on a customer premise that has an NGD, please make sure you keep the area free of natural gas. If the NGD is activated, contact Con Edison at 800-75-CONED immediately and remain nearby until a first responder arrives.

For more information, please visit: https://www.coned.com/naturalgasdetector

Section 3 – Gas Pressure Regulator Equipment

A gas service line to a customer includes equipment to reduce the pressure from distribution pressure to the pressure required by the customer. Such equipment is specifically sized to meet the customer's needs. Con Edison will furnish the gas service regulator(s) for the installation by the customer's licensed master plumber. Con Edison may install any regulator instrumentation lines. Where design conditions require external control piping or pilot regulators, only qualified Con Edison personnel (i.e. Gas Pressure Control) shall perform the installation.

3.1 General Installation Requirements

NOTE: Services fed from Con Edison's low pressure distribution systems, which operate below twelve inches (12") WC, do not require gas pressure regulator equipment.

The following provisions apply:

- Delivery pressures to individual living spaces within multi-unit residential buildings shall not be greater than 7″ WC (¼ psig).

- If the customer is supplied from the Con Edison low pressure gas system and requires a higher pressure than the Con Edison gas system pressure providing service, the Customer may request Con Edison approval for using a gas booster. If approved, the gas booster shall meet the requirements in **Gas Specification G-2040 "Requirements for the Installation of Gas Boosters, Micro-Turbines and Associated Protective Devices."** In all other cases where Con Edison can provide the Customer's required delivery pressure through the use of gas regulators, on the Con Edison medium, intermediate, or high-pressure gas system, gas boosters are not allowed.

- If the Customer is supplied from the Con Edison medium, intermediate or high-pressure gas system and requires higher pressure than the normal delivery pressure, approval for elevated delivery pressure is required.

- Con Edison's delivery pressures to all customers are always as low as reasonably allowable.

- If a Customer requires elevated delivery pressure, documentation from the manufacturer of the equipment requiring elevated delivery pressure is required with the customer's load letter.

- Increments of elevated delivery pressure are 1/2 psig (14″ WC), 1 psig, 2 psig, and one psig increments thereafter.

- Refer to **Gas Drawing EO-17118, "Regulator Vent Installation"** for regulator vent requirements including sizing, location and tagging.

- If multiple meters and/or regulators are installed, refer to **Gas Specification G-703, "Requirements for Branch Lines Supplying Multiple Regulators and/or Meters"** for valve and pipe size requirements.

Normal Delivery Pressure:

For Con Edison low pressure gas system customers, this pressure is a minimum of 4 inches of water column (WC). Exceptions to the 4 inches WC may be warranted for commercial or industrial customers who can demonstrate special fuel pressure needs and if no other reasonable alternative exists. Higher delivery pressure requires the prior approval of the company. In such cases, the customer shall provide written documentation on equipment specifications and fuel requirements.

3.10 Con Edison System Elevated Delivery Pressure:

Medium and High Pressure - For medium and high gas pressure system customers, this pressure is 5″ WC to 7″ WC (¼ psig).

Elevated Delivery Pressure - A Con Edison delivery pressure greater than 7″ WC (¼ psig) used by customer equipment.

3.11 Available Delivery Pressure:

Elevated delivery pressures are available according to the gas main system operating pressure. Con Edison will determine the method of supply based on supply system capabilities.

- The minimum elevated delivery pressure is 1/2 psig (14" WC).

In New York City, per NYCFGC Section 402.6, no gas distribution piping containing gas at a pressure in excess of 1/2 psig shall be run within a building for residential usage

Exceptions:

Pressure not exceeding 5 psig (34.5 kPa gauge) is permitted for: commercial and industrial occupancies where fuel requirements for appliances exceed 4,000 cubic feet per hour (113.2 m3/h) and such large volume use is supplied through separate gas distribution piping.

Gas pressure not exceeding 15 psig (100 kPa gauge) is permitted for appliances in excess of 100,000 cubic feet per hour (2830 m3/h) provided the gas distribution piping is installed as provided for in NYCFGC Section 404 and Appendix G are met.

The use of pressure in excess of 15 psig (100 kPa gauge) shall be permitted for distribution piping provided all of the requirements of Section 406 and Appendix G, “High Pressure Natural Gas Installations” are met and subject to NYC Fire Department approval and sign-off.

Inside gas meter piping operating at a pressure in excess of 15 psig shall comply with tNYCFGC Appendix E, “Meters and Gas Service Piping,” Section E.2.1.

Dedicated gas piping is required for a combined heat and power (CHP) system that uses high- pressure gas. This is to prevent accidental tapping into an elevated pressure pipe that has other uses, such as domestic

applications that operate at a lower pressure. Plans for such application shall have both NYC Building and FDNY approval.

3.12 Requirements for Buildings in Flood Zones:

For buildings in flood zones with industrial meter sets or elevated pressure gas regulators, vent lines should be elevated so the terminus is 3' above the FEMA base flood elevation (BFE). If this is not feasible, a Vent Line Protector (VLP) shall be installed on the vent line to prevent water intrusion.

- Refer to Gas Specification G-8217, "Flood-Prone Areas for the Installation of Gas Service Regulator Vent Line Protectors (VLP's)" for location listings (by M&S Plate) where water intrusion protection devices shall be installed on vent lines of elevated pressure gas services in Category 3 hurricane flood prone areas.

- For those areas not listed in Gas Specification G-8217 where there is a potential for exposure to severe water or flooding, a water intrusion protection device should be considered for installation to prevent blocking of the service regulator vent line at Con Edison's discretion.

- All outside regulators and the outside terminus for inside service regulators shall have an approved vent line cap (peck vent) or water intrusion protection device aka vent line protector (VLP).

- Each Water Intrusion Protection Device shall:

1. Terminate outdoors with VLP facing downward.
2. Be weather and insect resistant.
3. Not be covered or obstructed in any way that would prevent or interfere with the operation of the gas regulator.
4. Have a minimum clearance of eighteen inches (18") from the final outdoor grade to the lower end of the protection device.

    - Refer to Gas Specification G-699, "Installation and Inspection of Gas Service Regulator Vent Line Protectors (VLPs)" for proper sizing of device and properly matched 90 deg. elbow and pipe strap.

Section 4 – Gas Meter Equipment

The company reserves the right to designate or approve all gas meter locations. The size of gas metering and regulating facilities varies widely depending upon the gas load needs of different commercial and industrial businesses. Due to the many determinants associated with meter and regulator selection, it is imperative that the customer, or the customer's agent, contact the assigned Con Edison representative in Energy Services early in the project's engineering design phase to determine the exact requirements for specific gas meter installations, including meter location and space requirements. Gas meters and gas service regulators shall be selected by the Gas Measurement section based on information provided by the customer or the customer's agent. Consulting with Con Edison early in the process may eliminate the need for changes to the gas metering facilities at a later date at the Customer's expense.

Installation of a gas meter(s) inside a building requires approval by the company prior to a customer's gas line installation. If approved by Con Edison, the meter shall be located as near as practical to the point of entry of the gas service in an area meeting venting and building code requirements of the local authority having jurisdiction. The gas service line valve (head of service valve) shall be in an accessible location and **within 2 feet from the point where the gas service enters the building.**

Outdoor Gas Meter Refusal Forms for medium and high-pressure gas meters and regulators will not be granted.When located inside the building, meters shall be located as near as practicable to the point of entrance of the Service.

Meters and Regulators are NOT to be located in a separate room from the Head of Service valve.

Gas Specification G-48 – Gas Metering and Service Regulator Sizing - is provided for reference only. All projects must have a final equipment ruling from Con Edison before Meter Set Design and Construction Begins.

The meter location shall be clean, dry and free of refuse, steam or chemical fumes and located not less than 3 feet from any source of ignition or any source of heat which might cause damage to the meter. Meters shall be adequately protected against extreme cold or heat and shall be readily accessible for reading and inspection. The area in which the meter is located shall be properly ventilated in accordance to local building codes.

For NYC consult Appendix E, Section E.4 of the NYC Fuel Gas Code for Gas meter room fresh air ventilation requirements. For Westchester check with local Authority Having Jurisdiction Venting Requirements.

For residential meter installations at apartments, condominiums, cooperatives and townhouses, as well as for certain commercial installations, gas meters are often "ganged" at a meter manifold at one location on the building. Allowance shall be made in the design of the building to provide adequate space to install multiple meters. Horizontal and vertical distances are defined per applicable Con Edison gas meter and regulator drawing(s). The location shall be reviewed with, and approved by, a company representative prior to scheduling the installation.

Applicants should consult Section 7 for specific gas meter specifications and drawings which provide dimensional and physical details of standard gas meter installations. For further information please contact your company representative.

4.1 Approved Locations for Gas Metering

Each meter and service regulator on new and replacement service lines must be installed outside of the building unless it is impractical or unsafe to do so. For multifamily residential and commercial buildings (does not apply to 1-3 family homes or medium/high pressure designations), Outdoor Gas Meter Refusal Forms (Exhibit J) must be submitted to and approved, in writing, by Con Edison. The following describes the Con Edison policy regarding Outdoor Gas Meter Refusal Forms for the Gas Tariff requirement that gas meters be installed in an outdoor location. Outdoor Gas Meter Refusal Forms may be submitted according to the below guidelines:

To refuse outdoor metering, the Customer may be asked to submit:

1. Outdoor gas meter refusal form – See Exhibit J
   Including reasons for the refusal.

2. Plot plan of the building (if available for existing buildings, required for new buildings).

3. Plan/Instructions for providing Con Edison representatives 24/7 access to gas metering facilities.

An Outdoor Gas Meter Refusal Form for gas metering locations associated with New Business, Major Renovations, and Oil-to-Gas Conversions in addition to planned gas service replacements is NOT required if the building meets one of the following exception criteria.

- Local building codes or regulations preclude outside meters.
  - Examples include:
  - Building line and property line are the same and the gas meter would interfere with public right-of-way.
  - Building is identifying as being landmarked or in a landmarked district.

Note: The customer shall provide documentation from the NYC DOB or Municipality specifically stating that either do not allow a gas meter to be placed outdoors.

- Space Constraints/Physical Barriers
  Examples include:
  - Meter would block a door, window, driveway, etc
    Note: A finished basement, landscaping, or other aesthetic reasons do not constitute a space constraint/physical barrier

- Safety Considerations
  Examples include:
    - Meter would block the required 3’ of fire egress
    - Meter would be in a high traffic area without protection provided by bollards or a cage

For all other buildings, both residential and non-residential, the Company will locate and install gas meters outside the Customer’s building when installing a new service. The Company will relocate and install gas meters outside of the Customer’s building when performing any planned service line replacement or under other circumstances that offer the Company and the Customer the opportunity to relocate the gas meter outside, such as a major property renovation.

Customers that exercise an option to refuse an outdoor meter installation:

- Will be asked to submit the Outdoor Gas Meter Refusal Form explaining the reason(s) for refusal, and acknowledging that they are aware of the benefits of having their meters outside.
- Will be subject to a fee per building for costs related to survey/inspection of inside piping if Customer refusal is the sole reason for the meter remaining/being located inside and none of the other above stated exceptions applies.

(See Gas Tariff Leaf 44 updated 7/20/2023)

Notes:

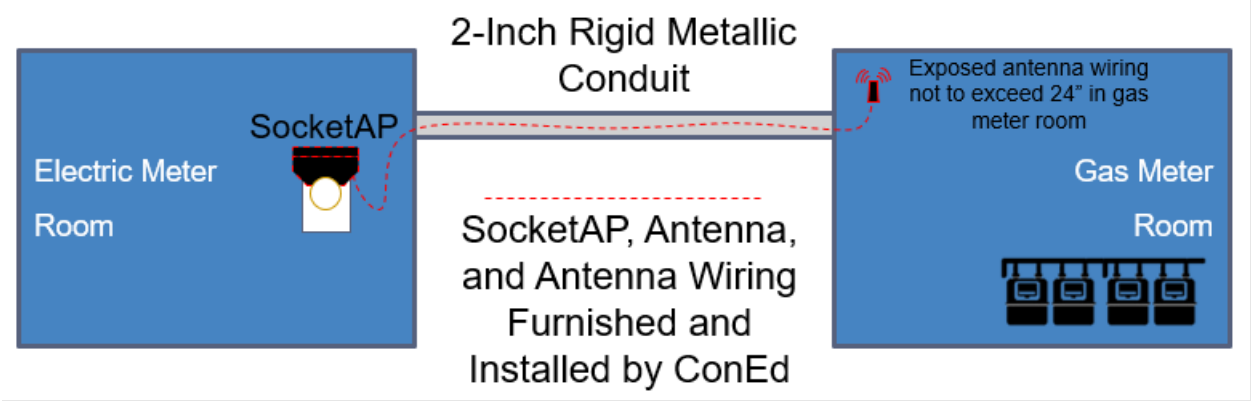
4.1.2 Installation of gas service regulators and metering associated with a high-pressure gas service is not subject to the above exemption criteria and will be located outside unless unsafe or impractical to do so. Locations will be assessed on a case-by-case basis. Upon Gas Engineering medium/high pressure designation, Con Edison will conduct an additional Project Case detailed review and analysis to including safety and practicality for an outdoor location.

4.1.2 1-3 Family Homes may not utilize the Outdoor Gas Meter Refusal form for New Business, Major Renovations, and Oil-to-Gas Conversions. Meter must be located outside for customer-initiated work.

4.1.3 Installation of inside meters will be as near as reasonably practical to the point of service line entrance (exterior wall) and requires plan for 24/7 accessibility for Con Edison.

4.1.4 For new Construction Only- installation of inside meters that are located below grade (e.g., Basements) requires a 2” fire sealed, proofed and approved conduit from the closest electric meter room to accessible location in the gas meter room. The conduit shall be reserved for Con Edison’s use for meter communications. Conduits must be installed as required by local building code and all other requirements by the authority having jurisdiction.

4.1.5 Meters must communicate with each other and, ultimately, to access points (AP) or socket access points (Socket APs) using a mesh radio frequency network. All Socket Access Points (Socket AP) act as the communications link to transfer meter data back to Con Edison.


2-Inch Rigid Metallic Conduit
SocketAP
Electric Meter Room
Exposed antenna wiring not to exceed 24" in gas meter room
Gas Meter Room
SocketAP, Antenna, and Antenna Wiring Furnished and Installed by ConEd

4.2 Outdoor Installations:

4.2. 1 Gas meters and associated equipment installed outdoors that may be subject to vandalism as determined by Con Edison, must be protected by a 6 feet high lockable fence, chain-link or equivalent. The fence must be equipped with a double hasp lock to allow access by Con Edison and the customer.

4.2. 2 All outdoor industrial sets must be protected by a 6 feet high lockable fence, chain-link or equivalent. The fence must be equipped with a double hasp lock to allow access by Con Edison and the customer.

4.2. 3 Gas meters, regulators and associated gas piping that may be subjected to vehicle damage must be adequately protected. Pipe posts or bollards shall be installed by the customer. Certain installations may require more substantial protection at the discretion of Con Edison.

4.2. 4 Gas meters may be placed to within one foot under, over or to either side of an electric meter.

4.2. 5 Although not desirable and should be avoided, gas meters may be placed under windows provided no other suitable location is available.

4.2. 6 Gas regulator vent pipes must be placed at the greatest horizontal distance and a minimum of 18-inches where practical, from any opening which would allow vented gas to enter the building.

4.2. 7 Installation of a gas service regulator vent line protector (VLP) is required on new and existing gas service regulator (indoor and outdoor) vent outlet terminus.

4.2. 8 The building exterior should be complete with siding, brick etc., installed at the meter location prior to the installation of a gas service.

4.3 Indoor Installations (Requires Approval):

4.3. 1 After written approval from Con Edison has been received, the indoor meter must be installed as near as practicable to the point of entrance of the gas service pipe.

4.3. 2 Gas meters, regulators and associated gas piping that may be subjected to vehicle damage must be adequately protected. Pipe posts or bollards shall be installed by the customer. Certain installations may require more substantial protection at the discretion of Con Edison.

4.3. 3 Gas meters **may not** be placed within three feet (3’) of either side of an electric meter. Gas meters may not be placed under or above an electric meter. If field conditions prevent the obtaining of the 3-foot clearance required, it is permissible to erect a barrier between the electric and gas meters provided all other normal clearances for gas and electric meter installations are met. The

barrier should be a permanently fixed, fire resistant partition or wall such as 3/8-inch sheetrock on either side of a frame made from 2-inch x 3-inch lumber, extending from floor to ceiling and 24-inches out from the wall. Other materials may be accepted but must be submitted to the company for approval before erecting.

4.3. 4 In a meter room or other space that is adequately ventilated, dry and free from corrosive vapors, not subject to extreme temperatures or to extreme temperature variations.
(See ventilation requirements for large general, mix-used buildings as per 2024 NYC Fuel Gas Code, Appendix E).

4.3. 5 Gas meters must be kept away from flues, un-insulated steam pipes or other sources of heat (i.e. boiler room).

4.3. 6 Gas meters are to be installed in an accessible location in accordance with the requirements of Con Edison and the Authorities Having Jurisdiction (AHJ). A clear space, as designated by Con Edison, shall be provided around this equipment.

4.3. 7 Installed at a horizontal distance of at least ten feet (10') from the cellar termination of a stairway. Where the width of the building is such that the required ten-foot distance cannot be obtained, the maximum distance practicable from such stairway termination shall be maintained and suitable protection may be required.

4.3. 8 At a clear distance of at least five feet horizontally or vertically from any high-pressure tanks containing liquid or gas, or combination thereof, under a pressure in excess of 15 psig.

4.4 Prohibited Locations for Service and Metering Equipment Outdoors and Indoors:

When a Gas Meter has been shut off for any reason, corrective action shall be taken to relocate the gas meter from the prohibited location to an approved location.
Please speak with a company representative for approved locations

Service head valves, meters, pressure regulators, and associated equipment shall not be located:

- In a designated boiler or fire pump room of a multi-family or commercial building.
- Gas meters may not be installed within three feet (3 ft.) of sources of ignition including burners, electric panel boxes or machinery.
- Where they could become a hindrance, obstruction or exposed to mechanical damage.
- In sleeping quarters, toilets, bathrooms, washrooms, unventilated closets, stairways, and stair landings.
- Indoors on walls of elevator or dumbwaiter shafts, over doorways.

- Under water pipes or other pipes which may be subject to sweating.
- In any recess or enclosure unless its design and location have been approved by Con Edison.
- Gas piping shall not be installed within six inches of electric meter equipment.
- **Gas meters shall not be installed above gas ranges (New or relocated meters only)**

Relocation of existing gas meters located WITHIN a tenant space.

- The customer at their expense may relocate an existing gas meter from the tenant space to an approved location within the building or to an approved outside space.
- Whenever an existing gas service riser is shut down and needs to be replaced, the customer, at their expense, must relocate the existing gas meters from the tenant space to an approved location within the building or an approved outside space.
- Whenever a building is going to undertake a major renovation where the gas piping systems are going to be replaced the customer at their expense must relocate the existing gas meters from the tenant space to an approved location withing the building or to an approved outside space.

Notes:

Where gas is supplied to 12 or more apartments (cooking only), a master meter and regulator set, consisting of a twin set of meters and a twin set of regulators, if applicable, shall be installed. Follow Gas Specification G-48 section 6.2 referenced in this book.

The customer at their expense shall install an approved gas meter(s) as listed in the appropriate specifications in this book.

If individual gas meter(s) are removed, it shall be the individual meter account holder's responsibility to close out their existing gas meter account.

Please contact Con Edison for further guidance on the location of the meters and the applicable rate.

4.5 General Installation Requirements:

4.5. 1 Where the customer's high-pressure gas service requires a gas meter room it is the responsibility of the applicant (customer agent, architect, professional engineer, project manager) to meet the local municipal building and fire code. Documentation of an accessible sign off from the authority having jurisdiction shall be required prior to installing gas meter equipment.

4.5. 2 The Customer shall provide at all times a clear passage for deliveries and removal of gas meter(s) to a gas meter location in a building. For those instances where large gas meters are required the customer shall provide elevators, lifts or ramps of adequate strength and openings of adequate size for the passage of gas meter(s).

4.5. 3 When facing the piping for a gas diaphragm meter, the gas service riser should be to the left and the Customer owned piping to the right of the meter. For rotary gas meters, refer to applicable gas meter drawing specifications.

4.5. 4 Existing Gas Meter Installation/Replacements and Upgrading

- Whenever gas is interrupted to any existing gas service or individual gas meter and there is no gas meter bar installed the customer at their expense shall install an approved gas meter bar as listed in the appropriate specification of this book.

- In cases where emergency work is already being performed under an EWN and a meter bar is leaking or does not exist, the LMP shall replace or install a meter bar. This corrective work can also be performed under an EWN, as long as the LMP notes the meter bar installation or replacement on their LAA filing.

- Whenever gas is interrupted to any existing gas meter and the entire gas line is to be replaced the customer at their expense shall replace the existing gas meter bar with an appropriate gas meter bar as listed in the appropriate specification in this book.

- Whenever gas is interrupted to any existing gas meter and the line is subject to repair or modification the Company may require the customer at their expense to replace the existing gas meter bar with an approved gas meter as listed in the appropriate specification(s) in this book. The Company will make that determination when the ruling for the case is issued to the customer's licensed master plumber. If a minor repair is completed under the emergency procedure and gas is inspected, tested and restored by company personnel the gas meter bar need not be replaced.

- Whenever gas is interrupted to any existing gas meter and the gas piping system is subject to only an integrity or pressure test the Company will not require the customer to replace the existing gas meter bar. Check with the local AHJ and permit requirements on the replacement of existing appliance valves when required.

- All of the work listed above requires the individual working on utility jurisdictional piping to be DOT Task 87,87A or 87B OQ qualified. All gas meter bars must be properly supported and installed within the guidelines listed in the appropriate specifications. It is the responsibility of the installing contractor to install plugs or caps on an open-ended pipe or fittings to maintain the integrity of that system. This includes plugs on both the line and load side of the gas meter bar.

- If a gas meter inlet control valve is found closed but not locked it is the responsibility of the licensed master plumber to notify the utility immediately and wait on site to provide access for the corresponding utility personnel.

- Please contact Con Edison for further guidance for any additional information. The work scope should be determined prior to commencement of any work.

4.5. 5 In a building where two or more customers are to be supplied from a single service, the meters should be grouped and located in a designated meter room.

4.5. 6 Information on space requirements for service and metering equipment should be obtained in advance from the company, while building or alteration plans are in the preliminary stage and before any construction work is started.

4.5. 7 Where more than one service pipe supplies any building or units within a building or premises, no connection shall be made between piping systems on the load side of the meter.

4.5. 8 Where the customer's service piping supplies two or more buildings, each outdoor branch of the service pipe shall have its own outdoor shut-off and the piping must be catholically protected according to code standards.

4.5. 9 Supports for pressure regulators and meter piping shall be securely fastened in a manner acceptable to Con Edison. Con Edison will not accept nails, wood plugs or dowels as a means of fastening such supports.

4.5. 10 If multiple meters and/or regulators are installed, refer to Gas Meter Specification G-703, Titled “Requirements for Branch Lines Supplying Multiple Regulators and/or Meters” for valve and pipe size requirements.

4.5. 11 For Utility Jurisdictional piping only. Galvanized piping and fittings in existing installations will be allowed to remain only if the scope of work does not impact their immediate location. All repair work is to be done in accordance with all Con Edison specifications and subject to all inspections and approvals from the Con Edison field representatives and Authority having Jurisdiction. Galvanized piping is not allowed for new installations on Utility Jurisdictional piping work.

4.5. 12 Indoor meter utility jurisdiction is from the POE to the outlet of the meter and may include pipes and fittings that are customer owned. Outdoor meter utility jurisdiction is to the outside of the foundation wall.

4.5. 13 The insulating side of the compression coupling, insulated, with 1/8-inch plug must be installed facing the line side (rubber facing the road).

New York City (See NYCFGC, Appendix E, Paragraph E, 2.1):

Inside gas meter piping operating at a pressure in excess of 15 psig, shall comply with the following:

i. Where such piping is greater than 4 inches in diameter, the meter piping shall be installed in a properly ventilated meter room of three (3) hour fire rated construction.

ii. The maximum distance shall be limited as per Table 1:

Table 1	
Service Line Valve Size	**Maximum Distance (Linear Feet of Pipe)**
Through 2-Inch Pipe Size	4 Feet
Over 2-Inch through 4-Inch Pipe Size	8 Feet
Over 4-Inch through 8-Inch Pipe Size	15 Feet
10-Inch Pipe Size and Larger	20 Feet

NOTE: Measurement to be taken in linear feet of pipe (including elbows and offsets) from the outlet of the service head valve to the inlet of the farthest regulator. In the case of industrial type regulator installations (i.e. parallel runs of two stages of regulation), the measurement shall be taken to the inlet of the farthest second stage regulator.

iii. Where these maximum distances cannot be met, refer to Table 2:

Table 2	
Footage (Linear Feet of Pipe) In Excess of Above Requirements	**Additional Requirements**
Up to 5 Feet	The meter room shall have 3 hour fire rating construction and adequate ventilation.
Over 5 Feet through 10 Feet	Above requirements plus a combustible gas detection alarm system.
Over 10 Feet through 15 Feet	Above requirements plus controlled inspection by the customer or his representative as required by the New York City Building Code.
Over 15 Feet through 20 Feet	Above requirements plus explosion venting per NFPA 68 and NFPA 69 or alternative ventilation acceptable to the Commissioner and automatic shutoff devices.
Over 20 Feet	Above requirements plus suitable fire protection as approved by the Building Commissioner.

NOTE: In new gas installations made in existing buildings, the above requirement shall be used to the extent feasible. Alternative designs may be considered, approved, and certified by the Office of the NYC Building Commissioner.

Westchester County

Piping systems inside buildings, in excess of 5 psig shall comply with one or more of the conditions specified in:

- Section 402.6 of the – "Fuel Gas Code of New York State".

4.6 Welding of Gas Meter Piping:

- In NYC and Westchester County, all meter piping (piping from head of service valve to meter outlet) shall meet the following welding requirements. If radiographs are required, as per Con Edison specification, ESD shall collect the radiograph test results

Con Edison Meter / Regulator	Type of Drawing	Welding Requirements
308657, 361100, 361571, 361693, 384872, 502164, 514590 and 514486	Industrial	Except for where flanged components are called for, all meter piping (piping from the head of service valve to meter outlet) shall be butt welded. All butt welds from the head of service valve to the regulator closest to meter shall be radiographed. For customer operating pressures exceeding 5 psig, all meter piping shall be radiographed.
507003, EO-16511, 507002	Large Commercial	All meter piping (piping from the head of service valve to meter outlet) greater than 4 inches in diameter shall be welded. Elevated delivery pressure piping shall be radiographed.
EO16390, 514789	Turbine, Low Pressure	All meter piping (piping from the head of service valve to meter outlet) shall be butt welded.
All other meter and regulator drawings	Residential / Small Commercial	None.
G-703	Multiple Meters and / or Regulators	Meet the welding requirements for the specific Con Edison meter/regulator in this Section.
If meter piping (piping from the head of service valve to meter outlet) **not** requiring welding by Con Edison is welded by Customer, it shall be pressure tested in accordance with the Yellow Book, Section 2H to ensure the adequacy and safety of meter piping.		

4.7 Identification of Customer's Piping:

In buildings where two or more customers are to be served from a single gas service, the portion of the building supplied through each meter must be permanently identified at the gas meter. In multi- tenant buildings, the designation at each meter shall be the same as the permanent designation of the apartment, store, office, or loft etc. which the gas meter serves. Stenciled letter characters ¾-inch to 1½-inches in height is recommended.

4.8 Aesthetics:

Outdoor gas metering is a requirement. Con Edison understands that maintaining an aesthetically appealing exterior is critical for builders, developers, and residential customers, where a new buyer's decision between similar homes can be decided on curb appeal. Energy Services will work with builders, developers, and gas customers by assisting in the selection and planning of the layout of gas metering equipment.

The specifications for outdoor gas meter and regulator installations allow for low profile installations with a few restrictions. Customers can install a gas meter a minimum of six inches from the bottom of the meter to finished grade. On a meter installation with a gas pressure regulator, installation requires a minimum finished grade clearance of 18 inches between the gas meter and the relief vent outlet terminus.

Painting of the equipment is allowed if the meter dials, vent screen and relief device of a regulator are maintained free from paint.

Screen the metering equipment with shrubbery, a fence, or a trellis.

The option is available to enclose the gas meter and regulator equipment in a meter closet or a cabinet.

Enclosing the equipment is possible as long as it remains properly ventilated, the spacing requirements are maintained, and the equipment is still accessible. Consult with an Energy Service Representative in the planning stage and prior to purchasing and/or installing an enclosure.

The Company reserves the right to require:

- Protective enclosures (typically a fence), if warranted by the physical conditions of the site.
- Concrete pad (for certain larger meter installations).
- Free-standing support bracket, if not able to attach the company's equipment to the building wall.

When a fence is required, it shall be provided with a 6' high lockable fence, chain-link or equivalent. In lieu of the chain link fence, the customer may provide another form of suitable enclosure if approved by the company. The customer is responsible for keeping the area within the enclosure readily accessible and free from debris, weeds, brush, snow, etc.

4.9 Gas Meter Seals:

Gas Meters and associated equipment are sealed and/or locked to prevent tampering. No persons, except a duly authorized employee of Con Edison, shall be permitted to break or replace a seal or lock, or to alter or change a meter, its connections or location, or to alter a gas pressure regulator.

4.10 Removal of Con Edison's Equipment During Building Alteration:

When necessary for building alterations and upon suitable advance written notification to the company, Con Edison will shut off service and remove meters and pressure regulators to protect them from damage and to expedite such alterations. Meters and pressure regulators shall be re- installed under conditions governing new installations.

4.11 Demolition:

No building demolition shall commence until Con Edison's meters and regulators have been removed and the gas service has been cut off outside of the structure to be demolished.

4.12 Installation of Gas Service Regulator Vent Line Protection Device:

Water intrusion protection devices shall be installed on vent lines of gas services designed at elevated pressures (new and existing) installed within Category 3 hurricane flood prone areas. Refer to **Gas Metering Specification G-699** titled "**Installation and Inspection of Vent Line Water Intrusion Protection Devices"** for installation requirements. Refer to **Gas Engineering Specification G-8217** titled **"Flood-Prone Areas for the Installation of Gas Service Regulator Vent Line Protectors (VLP's)"** for location tables listing the current designated flood-prone areas
(By Gas M&S Plate).

Notes:

- Where the installation of a VLP is impractical, the vent shall be raised to a minimum of three feet (3') above the Base Flood Elevation (BFE) provided on the Federal Emergency Management Agency (FEMA) maps.

- In areas outside of Category 3 hurricane flood prone areas where there is a potential for exposure to severe water and/or flooding, a water intrusion protection device will be considered for installation to prevent blocking of the gas service regulator vent line at Con Edison's discretion.

- Each water intrusion protection device shall:

  I. Be weather and insect resistant.

  II. Not be covered or obstructed in any way that would prevent or interfere with the operation of the gas service regulator.

4.13 Commercial & Industrial Customer Equipment Interaction with Con Edison Gas Regulator & Gas Meter:

The following types of Customer boiler and generator equipment are known to have an adverse effect on Con Edison's gas regulator and meter with possible safety and billing implications:

- High efficiency modulating boilers.
- High efficiency boilers.
- Any equipment with negative pressure combustion systems.
- Pulse boilers.
- Any equipment with solenoid and/or snap acting valves that shuts down immediately (or too quickly) instead of modulating or ramping down.
- Any equipment with equipment control system that shuts down immediately (or too quickly) instead of modulating or ramping down.
- Any equipment using spark ignition.

If the Customer installs any of the above types of equipment, valves, or controls, the Customer must do the following to ensure that Con Edison's regulators and meters operate correctly and safely:

1. If equipment manufacturer's literature requires or recommends the installation of additional regulators, governors, control valves or other devices, they shall be installed per the manufacturer's recommendations for each piece of equipment. The equipment shall be installed using the piping sizes recommended for the equipment.

2. If equipment manufacturer recommended regulators, governors, control valves or other devices do not correct issues that impact the operation of Con Edison's regulator or meter, the manufacturer's representative shall be consulted. The Customer will work with the equipment manufacturer and configure the equipment as necessary to ensure that it does not adversely affect the operation of Con Edison's gas regulation and metering equipment.

3. If Con Edison deems that their regulators and meters are working properly, it is the customer's responsibility that their equipment works with Con Edison's.

4. If the above actions do not correct adverse interaction with Con Edison's regulation and metering equipment, Con Edison will shut off and safety tag equipment until corrected.

Section 5 – Distributed Generation (DG) – New Technology

Combined Heat and Power Technology uses one fuel source to simultaneously produce both heat and electricity using highly efficient systems. Energy is supplied in the form of electricity, heat, and hot water. This can produce savings and can cut the amount of energy needed from a utility company. CHP systems also improve our environment by lowering the demand on New York City's and Westchester's electrical grid – helping local power plants be more efficient by reducing our carbon emissions. While CHP systems may use a variety of fuel or renewable sources, this guide addresses turbines and reciprocating engines which use natural gas to generate electricity. Turbines and reciprocating engines capture waste heat, but they generate electricity differently. A mechanical engineer skilled in CHP systems can recommend the appropriate system type for a specific building. **It is recommended that you do not purchase any CHP equipment until a complete evaluation has been made.**

5.1 Fuel Source and Pressure:

This guide only addresses CHP systems that utilize natural gas as the fuel source. Some cogeneration systems require elevated gas pressure to operate efficiently. Different zones within the city are supplied with different pressure, and different city agencies have varying standards for what constitutes high-pressure. The infrastructure investment required to deliver adequate volumes of natural gas to your building may make a CHP system impractical.

A CHP system which uses high-pressure gas requires dedicated gas piping to prevent accidental tapping into an elevated pressure pipe that has other uses, such as domestic applications that operate at a lower pressure. Plans for such application shall have both NYC Building and FDNY approval. Refer to the New York City Construction Codes, the New York City Fire Code, and the rules and regulations of the New York City Department of Environmental Protection for complete information. Consult with a New York State licensed professional engineer with expertise in CHP systems if you are unclear on how to proceed.

5.2 Installing a Natural Gas-Fueled CHP System:

Con Edison's Energy Services website provides the resources necessary to process requests for new, additional, removal or relocation of gas service provided by Con Edison. Customers can also access existing requests through the Project Center. Con Edison will assign a Customer Project Manager (CPM) to the application. The CPM will act as the single point of contact throughout the permit process. A gas customer should expect the following steps:

1. Notification: Con Edison must be notified before the purchase of a CHP unit by the Customer or his/her Agent.

2. Load Letter: Developers are now required to complete the load information screen in project center.

3. Gas Specifications: Con Ed will inform the applicant of the required gas specs to follow for service.

4. Planning Group Meeting: All parties involved should meet to discuss all construction aspects of the project. Timelines and milestones should be agreed upon by all parties.

5. CPM Follow-up: The CPM will follow up with the owner, consultant, and contractor with a complete package so the project can be worked.

6. Gas Meter Authorization: The CHP unit requires a dedicated gas connection line, and a separate meter is necessary to apply for the Cogeneration Rate.

7. A Department of Buildings' gas authorization is required for all new gas meters and associated piping.

Section 6 – Customer Responsibility

General – Customer Piping Adequacy and Safety of Installation

Con Edison reserves the right to withhold service or discontinue service until the Customers have been authorized by the authorities having jurisdiction; and Con Edison further reserves the right to withhold its service, or discontinue its service, whenever such installation or part thereof is deemed by the Con Edison to be unsafe, inadequate, or unsuitable for receiving Con Edison gas service, or to interfere with or impair the continuity or quality of the Con Edison service to the Customer or to others. Con Edison has a "warning tag" procedure in accordance with 16 NYCRR Part 261 Piping beyond The Meter, to cover hazardous conditions found on a customer's premise. It is the Customer's responsibility to correct such deficiencies before a gas service will be restored.

6.1 Liability:

6.1.1 Continuity of Supply:

Con Edison will always endeavor to provide regular and uninterrupted supply of service, but in case the supply of service shall be interrupted or irregular or defective or fail from causes beyond its control or through ordinary negligence of employees, servants or agents, Con Edison will not be liable therefor. Con Edison may, without liability therefore, interrupt service to any Customer or Customers in the event of emergency threatening the integrity of its system if, in its sole judgment, such action will prevent or alleviate the emergency condition.

6.1.2 Customer's Equipment:

Neither by inspection or non-rejection, nor in any other way, does Con Edison give any warranty, expressed or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, pipes, appliances or devices owned, installed, or maintained by the Customer or leased by the Customer from third parties.

6.1.3 Company Equipment and Use of Service:

Con Edison will not be liable for any injury, casualty or damage resulting in any way from the supply or use of gas or from the presence or operation of the Company's structures, equipment, wires, pipes, appliances, or devices on the Customer's premises, except injuries or damages resulting from the negligence of the Company.

6.1.4 Selection of Service Classification:

Con Edison will endeavor to assist a customer in the selection of the Service Classification which may be in most favorable to the Customer's requirements, but in no way can Con Edison make any warranty, expressed or implied, as to rates, classifications or provisions favorable to the future service requirements of the Customer.

6.2 Repairs after the Indoor Meter – Leakage of Gas / Warning Tag Condition:

The customer shall give immediate notice to Con Edison (800)75-coned of any leakage, damage or escape of gas. When a hazard, gas leak, condition involves the customer's gas piping and/or equipment is found, our mechanic will disconnect or shut off the effected gas piping/equipment. When the owner or no other occupant will provide signature to the warning tag, Con Edison shall communicate a written follow-up letter describing the condition, which must be corrected/repaired to the billing customer.

The letter will explain what is needed on the Customer's part to restore gas service. Alterations, repairs and the gassing-in of the affected gas piping and equipment are to be made by a qualified gas equipment service company and/or a licensed plumber. Con Edison recommends the customer contact us for a safety inspection to verify the repair and that no further action is required.

6.2.1 Corrosion Inspections:

Interior gas service line is subject to periodic utility and NYC inspection. Con Edison has updated its warning tag to identify level of corrosions and requirements. The utility inspection covers the piping from the Head of Service Valve to the meter. Under NYC Local Law LL152 NYC inspections of interior gas piping will be required for dwellings with the exception of R-3 occupancy buildings. Always check current NYC and AHJ requirements for corrosion inspections. All corrosion repairs before and after the meter require Gas Authorization for service restoration from the AHJ. Work on Utility Jurisdictional piping to be done by Licensed Master plumber with OQ Task 87, 87A or 87B.

6.3 Gas Booster and Jeweler Torch Safety – May Induce Back-Pressure and Suction:

6.3.1 Scope:

When the nature of the customer's utilization equipment may induce back-pressure or suction in the piping system carrying Con Edison's gas supply, the customer shall install suitable protective devices, follow the manufacturer's installation instructions and be in compliance with the applicable Gas Specification G-2040, "Requirements for the Installation of Gas Boosters, Micro-Turbines and associated system protective devices" for gas boosters and Gas Specification G-2041 for the requirements for the installation of gas utilization equipment that mixes pressurized oxygen with natural gas jewelry torch equipment before gas can be authorized to specified customer equipment.

6.3.2 Gas Booster may produce excessive suction causing gas service "poor pressure" condition:

Excessive suction may be produced if positive displacement type boosters, piston type pumps or centrifugal fan type boosters, which are capable of developing pressure 4-inch water column or more, are started with the meter inlet or service valve closed or restricted. In such installations check valves and a low-pressure electrical switch, which will stop the pump or booster, shall be installed.

For gas booster installation requirements refer to Gas Specification G-2040, "Requirements for the Installation of Gas Boosters, Micro-Turbines and associated system protective devices".

Where the installation of the low-pressure gas switch near the gas service point of entry is impractical or prohibitive due to the location of the gas service head valve relative to that of the gas booster, the switch may be installed at an alternate location if approved by the booster manufacturer or authorized representative, and the local Gas Distribution Services (GDS) Department. Please consult with your Energy Services Department prior to deciding where to locate the low-pressure gas switch.

6.3.3 Where protection is required on jeweler torch:

Protection is required whenever an installation uses pressurized air or oxygen that might accidentally or otherwise cause air or oxygen to enter the gas piping. Whenever air or oxygen is mixed with gas, and the mixing takes place in the usual enclosed type-mixing tee before the burner nozzle, a check valve is required. The check valve must be installed and maintained by the customer/contractor (See Approved Equipment / Table 24). They are to be visible, accessible, and located downstream of the meter and as close to the utilization equipment as practical. Torches must have flame arrestors installed in their supply lines. Customer/contractor is to contact Con Edison when this application is to be used.

6.4 Signage for Multiple Gas Services:

When more than one service pipe supplies any building or units within a building or premises, visible signage shall be provided, installed, and maintained by the customer both inside and outside the building to indicate the location of the other service(s). All signs shall be made of durable, weatherproof material, minimum size 8½" wide x 5½" high. Outside signs shall be permanently mounted on the building directly over or as close as possible to the gas service point of entry and/or curb valve location.

Example Text:

Second Gas Service Located 27 Feet Right of Left Wall on West 57 Street

Second Gas Service Located 34 Feet Left of Right Wall.

Inside signs shall be permanently mounted near each service point of entry, preferably on the wall over the head of service valve. The wording shall indicate the Street/Avenue from which the service pipe enters, as well as identifiable locations with the building. Example: Second Gas Service Located on Lexington Avenue Side in Storage Room.

The appropriate wording, measurements, and location for the signs can be discussed and approved by your Energy Service Representative.

Sample Signage (Installed and Maintained by Customer)

Second Gas Service **Located 27 feet right of the left wall on W.57th St.**	**Second Gas Service** **Located 34 feet left of the right wall**

Section 7 – Reference Material

Abbreviations

AHJ Authority Having Jurisdiction

AGA American Gas Association

ANSI American National Standards Institute

ASME American Society of Mechanical Engineers

ASTM American Society of Testing Materials

BTU British thermal unit

BTUH British thermal unit per Hour

CCF Hundred Cubic Feet

CF Cubic Foot

CFH Cubic Foot per Hour

CHP Combined Heat and Power

CWI Certified Welding Inspector

DOB Department of Buildings

DOT Department of Transportation

kWh Kilowatt hour

MBTUH Thousand British Thermal Units per Hour

MCF Thousand Cubic Feet

MCFH Thousand Cubic Feet per Hour

MMBTUH One Million British Thermal Units per Hour

NYCFGC New York City Fuel Gas Code

PSC Public Service Commission

PSIG Pounds per Square Inch Gauge

UL Underwriters Laboratories

WC Pressure in Inches of Water Column

Definitions

Appliance:
Any device that utilizes natural gas as a fuel or raw material to produce light, heat, power, steam, refrigeration, or air conditioning.

Areaway:
A space below grade, adjacent to a building, enclosed by walls but open to the outside air.

British thermal unit (Btu):
The quantity of heat required to raise the temperature of one pound of water one degree of Fahrenheit from 58.5 to 59.5 degrees Fahrenheit under standard pressure of 30 inches of mercury at or near its point of maximum density.

Building:
A structure that stands alone or is cut off from adjoining structures by firewalls as defined by the municipality or the authority having jurisdiction with no openings or penetrations with doorways to be protected by approved fire doors.

By-Pass:
An auxiliary piping arrangement, generally to carry gas around specific equipment or an integral section of a piping system. A bypass is usually installed to permit passage through the line while adjustments or repairs are made on the section that is bypassed.

Butt-Welding:
Type of weld where two pieces of metal are joined by fastening their ends together without overlapping.

Cathodic Protection:
Installation of Magnesium anodes, insulating fittings and effective coating on buried steel pipe to minimize galvanic corrosion activity.

Certificate of Inspection:
Blue Card: Certification issued by a municipal authority, or any other agency legally authorized to regulate or inspect the customer's installation or equipment.

Combustible Material:
Any material such as wood, paper, sheet rock, fibers or other materials that will smolder, ignite or burn when adjacent to or in contact with heat producing appliances, vent connectors, gas vents, chimneys or hot water pipes.

Combustion Air:
Air supplied to an appliance specifically for the combustion of fuel.

Commodity Cost:
The cost of the natural gas or electricity commodity and related charges to deliver it to the marketplace.

Company:
Consolidated Edison Co. of NY, Inc., its subsidiaries and our agents.

Contractor:
An individual, or group of individuals licensed by the authorities having jurisdiction retained by the customer to perform plumbing work.

Cubic Foot of Gas (Standard):
The most common unit of measurement of gas volume. The amount of gas that occupies one cubic foot of space when a temperature of 60 degrees F, and under pressure equivalent to that of 29.92 inches of mercury.

Customer:
A present customer or an applicant for the company's natural gas service.

Customer's Agent:
Architects, Engineers, Contractor's, Excavators, Builders, and Developer who are acting on behalf of a customer or applicant

Daily Average Send-Out:
The total quantity of gas delivered for a period of time divided by the number of days in the period.

Dekatherm:
A unit of heating value equivalent to 10 therms or 1,000,000 Btu's.

Demand:
The rate at which gas is delivered to or by a system, part of a system, or a piece of equipment, expressed in cubic feet or therms or multiples thereof, for a designated period of time called the demand interval.

Direct Vent Appliance:
An appliance that is constructed and installed so that all air for combustion is obtained from the outside atmosphere and all flue gases are discharged to the outside atmosphere.

Distribution:
The delivery of natural gas through pipeline systems to an end-user.

Distribution Piping (aka- Customer Piping):
Refers to all piping from the meter outlet to customer equipment or appliances. However, on an outdoor meter set, the distribution piping would start at the point of service termination, at the building wall.

Elevated Pressure:
Gas supplied to a customer's equipment at pressures greater than 7" W.C. (0.25 PSIG).

Expense:
Includes all labor material and other applicable charges including overheads involved with the work to be performed.

Fan Assisted Appliance:
An appliance with a venting system designed to remove flue or vent gases by mechanical means that may consist of an induced draft portion under non-positive static pressure or forced draft portion under positive static pressure.

Firm Service:
Delivery of gas to a customer on a continuous basis with no anticipated interruptions.

Fire wall:
A wall or portion that is rated and intended to retard the spread of fire or products of combustion. Fire walls must be in accordance with NYS and Local Building Codes.

Fuel Line:
The piping that is installed after the company's meter or regulator that connects the customer's appliances and equipment to the gas supply. Fuel lines are the responsibility of the customer.

Gas Main or Main Extension:
The piping system owned by the Company that is used for the distribution of gas that is (a) located within the limits of any public highway or on a private right of way or (b) is used to supply gas to two or more gas service.

Gas Meter Room:
A gas meter room is space within a municipal building occupancy classification group that is solely used to house the natural gas meter and regulator equipment. Residential occupancy is exempt from building code requirement as the gas meter is available for continuous supervision.

Gas, Natural:
A naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in porous geologic formations beneath the earth's surface, often in association with petroleum. The principal constituent is methane.

Gas Service:
The piping and accessory equipment owned by the company that is connected to the gas main and installed on a customer's property to supply gas to a residence or business. The service from the property line to the building is customer owned but under Utility (Con Edison) Jurisdiction.

Grid:
The layout of a gas distribution system in which pipes are laid in both directions in the streets and frequently connected at intersections.

House Riser, Gas:
The principal vertical pipe that conducts the gas from the meter to the different floors of the building.

Inches of Water Column:
A unit of measuring pressure (1 psig = 27.7" WC).

Input Rate:
The rate at which natural gas is supplied to an appliance. It may be expressed in Btu per hour (Btuh), thousands of Btu per hour (MBtuh); in cubic feet per hour (cfh); or thousands of cubic feet per hour (Mcfh); in therms (th) or dekatherms (Dth) per hour.

In Service:
A term used to indicate equipment is connected to the system and fulfilling its designated function.

Interruptible Service:
Low priority service offered to customers under schedules or contracts which anticipate and permit interruption on short notice, generally in peak-load seasons, due to system supply or capacity limitations that threaten a local distribution company's ability to continue to serve its firm customers and higher priority users. Customers taking interruptible service generally have alternate energy sources to supply their service, for example, boilers which are capable of consuming fuel oil in addition to natural gas.

Loads (Connected):
The total sum of the rated BTUH input of all connected gas equipment. Can also be expressed in total cubic feet per hour (CFH).

Load:
The amount of gas delivered or required at any specified point or points on a system; load originates primarily at the gas consuming equipment of the customers. Also, to load a pressure regulator is to set the regulator to maintain a given pressure as the rate of gas flow through the regulator varies.

Make-Up Air:
The volume of either outside or inside air that is supplied to a space to replace air consumed by the gas burning appliances, exhausted or otherwise removed from the space.

Mechanical Exhaust Appliance:
An appliance with a venting system designed to remove flue or vent gases by mechanical means utilizing induced draft under non-positive pressure or forced draft under positive pressure.

Meter Bar:
A specialized item of hardware that functions as a connecting device between the gas service line and the gas meter. Newer meter bars on updated specification are of the bypass kind for utility use

Meter, Gas:
An instrument installed by the company to measure the volume of Natural Gas delivered to a customer.

Meter Piping:
Also known as, extension service pipe from the first fitting inside the building to the gas utility meter. Customer's plumber is responsible to meet all company specifications, procedures and drawing requirements. A Gas Meter Piping Pressure Test Verification form will be required.

Multiple Occupancy Building:
A structure, including row houses, enclosed within exterior walls of fire rated wall construction, erected and formed of component structural parts and designed to contain four or more individual dwelling units for permanent residential occupancy.

Non-Compliant Fittings:
Any non-compliant piping and/or fittings shall not be used by the customer or customer's contractor. For piping and fittings not permitted in NYC or Westchester, see the chart below. For additional guidance on allowable piping and fittings, refer to the AHJ.:

1	Union before an appliance valve
2	Brass fittings
3	Copper tubing/ copper pipe
4	Flex hose that goes through a wall
5	Multiple flex hoses connected in series
6	Flex hose connecting segments of pipe
7	Multiple compression couplings or a compression coupling located at a point other than immediately after a service head valve or service regulator
8	Compression fittings located upstream of a service regulator
9	Close-quarter nipples
10	Bushings
11	Galvanized piping/fittings on utility piping: Not allowed for new installations; allowed for existing installations if condition is satisfactory.
12	Threaded plug or cap on elevated pressure inside piping between the HOS and the service regulator.

Odorant:
Mercaptan, added to natural or LP gas in small concentrations to impart a distinctive odor. The odorant helps identify leaks on pipe and raises public awareness.

Additional information relating to Odor Fade:

- Adsorption: Adsorption occurs in the gas phase and is the process by which a molecule or particle is physically attracted and adheres to a surface. Gas phase odorant molecules are usually adsorbed onto metal surfaces. This prevents the odorant from flowing through the pipeline with gas that was originally odorized.
- Absorption: Absorption is the filling of pores in a solid and is a different process from adsorption. This is more common in plastic piping.
- Oxidation: Steel gas piping is produced in steel mills. As a result of the production process the interior walls of new steel pipe can contain very reactive iron oxide compounds, which will react with mercaptan. Odor fade is more pronounced in new steel pipe of various diameter and lengths.

Operator Qualification (OQ):
OQ is a regulation of the Office of Pipeline Safety of the U.S Department of Transportation (DOT). DOT's Operator Qualification (OQ) regulation 49 CFR 192 subpart N requires operators to develop and maintain a qualification program for individuals performing covered tasks relating to gas work with oversight from the gas utility. There is no exception to this rule, all required cover tasks and regulation is to be followed and will be strictly enforced by the utility.

Pipeline:
All parts of those physical facilities through which gas is moved in transportation, including pipe, valves, and other appurtenances attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies.

Plastic Pipe:
Pipe made of high-density polyethylene.

Plastic Tubing:
Same as plastic pipe except that it is usually of smaller diameter and sized on the same system commonly used for copper tubing.

Pressure Regulator:
A device placed in a gas line for reducing, controlling and maintaining the natural gas pressure required by the customer.

Project Center:
On-line application for customers, contractors or any other interested party who wish to initiate a service request, view case status and receive email notifications on service request milestones upon key milestone completion from Con Edison's Energy Service Organization. The application is designed to provide an interactive, self-service tool. Jobs successfully initiated through Project Center will automatically initiate a case with Con Edison and proactively notify the applicant via e-mail when key milestones have been completed.

Point of Delivery:
Is defined as the outlet of the meter. For inside meter installations this is the end of utility jurisdiction. For outdoor meters joint jurisdiction exists from the outlet of the meter to the building wall

Primary Air:
The combustion air that mixes with the gas before it reaches the burner.

Qualified Installer:
An individual who is operator qualified by Con Edison or an authority acceptable to Con Edison.

Radial:
A distribution system with one source of gas supply. Also known as a one-way feed.

Secondary Air:
The air externally supplied to the flame at the point of combustion.

Service Head Valve:
The valve located at the head of the service. If the gas meters are outside, the service head valve is located on the riser. When gas meters are inside, the service head valve is located at a point just inside the building wall.

Service Pipe:
All piping, tubing and fittings that transport the gas from the main to:

- For inside meter(s) – the outlet of the meter
- For outside meter(s) – outside the building wall

System Type – Distribution:

Generally, gas mains, gas services, and gas equipment that carry or control the supply of gas from the point of local supply to and including the gas sales meters. The Con Edison gas system operates at various pressures as indicated below:

1. Normal
Con Edison low pressure gas system customers, this pressure is a minimum of 4-inches of water column (WC). For medium and high gas pressure system customers, this pressure is 5-inches WC to 7-inches WC (¼ psig).

2. Elevated
Con Edison delivery pressure greater than 7-inches water column (WC) used by customer equipment. 7-inches WC (¼ psig)

Therm:
A unit of heating value equivalent to 100,000 British thermal units (Btu).

Transportation Customer:
A customer who uses a local distribution company's natural gas pipeline and distribution system but buys the natural gas commodity from a different supplier.

Vent Line Protection Device (VLP):
A device for preventing the flow of water into a gas service regulator vent installed in designated flood-prone areas.

Governing Codes

Customer's piping and installations are to be installed in accordance with and approved by the authorities having jurisdiction and to comply with Con Edison specifications. If there is a conflict of rules, the company will make a final decision applicable to the situation.

Applicable codes are listed below:

1. **ANSI Z-223.1/NFPA 54 National Fuel Gas Code**
AGA Distribution Center
P.O. Box79230
Baltimore, MD 21279-0230

2. **Codes, Rules and Regulations of the State of New York**
Title 16 Parts 230, 255, 261, and 753

3. **Department of Transportation Title 49 CFR Part 192 & 199**

4. **ANSI B31.8 "Gas Transmission and Distribution Piping System"**

5. **Manual of Planning Standards for School Buildings — The New York State Education Department**

6. **The New York State Uniform Fire Prevention and Building Code**

7. **NYC Fuel Gas Code**
New York City Fuel Gas Code
https://codes.iccsafe.org/codes/new-york/new-york-city

8. **New York City Fire Code**
New York City Fire Department
https://www.nyc.gov/site/fdny/codes/fire-code/fire-code.page

9. **Northeast Gas Association Operator Qualification Compliance Program Written Plan**

10. **Northeast Gas Association (NGA) Plastic Pipe Joining Manual**

11. **Gas Rates & Tariffs General Rules III**
3. (A) (B) "Installation of Mains and Services" Leaf 28 to 38.2. Special Service Performed by the Company for Customers at a Charge is explained in Gas Rates and Tariffs General Rules IV (1) (2)
(3) Cost and Special Services

Applicable Gas Specifications and Drawings

Note: Check with your Con Edison Representative to ensure that you have the latest copy of the specifications listed below*

Spec. No. or Dwg. No	Title
EO-7421-B / G-317	Installation of Twin CL-250TC Diaphragm Gas Meters - Indoors
308657	Installation of Parallel Fisher 2", 3" & 4" EZR and 1098 Regulators with Turbine Meter Indoors and Outdoors 50,000 CFH and Larger
309495	Trench Excavation for Gas Mains & Services Up to 350 PSI
309808	Installation of 6", 8", 12", & 16" Polyethylene Gas Valves
G-2040 / 311296	Typical Gas Booster Installation (Attached to G-2040)
361100	Installation of Parallel 2" Regulators with Rotary Meter Indoors and Outdoors 10,000 CFH to 50,000 CFH
361571	Installation of Line Pressure 3" To 8" Turbine / Rotary Meters with Parallel 2" Regulators Indoors and Outdoors 15,000 CFH To 150,000 CFH
361693	Installation of Parallel 2" Regulators with Turbine Meter Indoors and Outdoors 10,000 CFH to 60,000 CFH
365531	Installation of Meter Piping for Twin Class 3000R (2") to 23000R (4") Rotary Gas Meters-Indoors
384872	Installation of B-838 Gas Regulator Unit Indoors
502163	Bumper Installation
502164	Outdoor Installation of B-838 Gas Regulators - 2" x 4" Flanged For Class 11000TC - 38000TC Rotary Meters
502664	Installation of Electronic Markers on Gas Mains and Services
506175	Installation of Meter Piping for Class 500TC to 1000TC Diaphragm Gas Meters - Outdoors
506214	Installation of Twin Class 500 TC to Class 1000 TC Diaphragm Gas Meters - Indoor/Outdoor
507002	Installation of Meter Piping for Class 23000R (6") to 56000R (6") Rotary Gas Meters - Indoors
507003	Installation of Meter Piping for Twin Class 23000R (6") to 38000R (6") Rotary Gas Meters - Indoors
514203	Outdoor Installation of Twin Gas Regulators - 1" to 2" Body
514486	Installation of Parallel 2" Regulators with Rotary Meter Outdoors 10,000 CFH to 50,000 CFH
514590	Installation of Parallel Regulators with Turbine Meter Outdoors 10,000 CFH and Larger
514789	Installation of Outdoor Low Pressure Gas Turbine Meter
600344	Installation Requirements for Tracer Wire on Mains & Services
609963	Installation of Multiple Class 500 Diaphragm Gas Meters Indoor/Outdoor
EO-1181	General Specification for Backfilling of Trench And Small Openings (Dist Engrg Spec)
EO-12790-B	Rigid Sleeved Elbow Unit 1" to 16" Up To 99 PSIG Max Operating Pressure
EO-13977-C	Installation of Meter Piping for Class 3000R (2") to 23000R (4") Rotary Gas Meters-Indoors
EO-14134-C	Thermit Weld Process for Attaching Wire to Pipe or Fitting
G-413 / EO-14158	Installation of Gas Service Regulators - Indoors (1" to 2")
EO-14837-B	Installation of Direct Buried Polyethylene Gas Mains
EO-16390-B	Installation of Low Pressure Gas Turbine Meters
EO-16511-B	Installation of Meter Piping for Class 3000R-TC to Class 23000R-TC Rotary Meters-Outdoors
EO-16542-B	Flexible Gas Service - Sleeve Unit 3/4" to 2" Gas Service Up to 99 PSIG Operating Pressure

EO-16546-B	Installation of Flexible Sleeve Elbow Unit Where Gas Service Enters From Beneath Building Not Exceeding 99 PSI
EO-16585-A	Installation of Meter Piping for Class 250TC Diaphragm Gas Meters - Outdoors
EO-16629-A	Installation of Steel Gas Service Piping
EO-16641-A	Installation of Plastic (Direct Burial Or Insertion) Gas Service Piping (4 Sheets)
EO-16726-A	Installation of 2 to 6 Unit Prefabricated Meter Sets for Class 250TC Meters - Indoors or Outdoor
EO-16886-B	Installation of Multiple Class 250TC Gas Meters - Indoors
EO-17118	Regulator Vent Installation
EO-04718	Bonding of Compression Couplings and Valves on Steel Mains and Services
EO-4890-A	Service Pipe/Tubing And Service Sleeve Through Vault, Open Areaway, Open Area Under Stairs, Under Enclosed Area, And Into Vaulted Basement
EO-511327	Installation of Class 250 TC Diaphragm Gas Meters - Indoors
EO-518355	Outdoor twin Rotary meter Installation Class 3000-23000
EO-6799-C	Protective Covers for Gas Main and Service Installations
EO-7043	Pipe Type Saddle Support for Gas Regulator Installations
EO-7421-B / G-317	Installation of Twin Class 250 TC Diaphragm Gas Meters - Indoor/Outdoor
EO-8085	General Backfill and Bedding Material for Excavation (Dist Energy Spec)
G-100,276	Installation of Meter Piping for Class 23000R (6”) to 56000R (6”) Rotary Gas Meters – Indoors.
G-100,298	Valves for Gas Transmission and Distribution Piping Systems
G-1064	Welding Procedure Specification for Shielded Metal Arc Welding of Steel Pipe and Fittings
G-1065	Qualification of Welders and Welding Procedures
G-11836	Integrity Tests, Meter Turn-Ons and Turn-Offs, Meter Exchanges, and Restoration of Gas Service After Repairs
G-11837	Investigation of an Inside Gas Leak or Odor Call and Issuance of a Warning Tag.
G-2040	Requirements for the Installation of Boosters, Micro-Turbines and Associated System Protective Devices
G-2041	Requirements for the Installation of Gas Utilization Equipment that Mixes Pressurized Oxygen with Natural Gas.
G-316 aka EO-7420-B	Installation of Class 500TC to Class 1000TC Diaphragm Gas Meters – Indoors
G-413 / EO-14158	Installation of Gas Service Regulators - Indoors (1" to 2")
G-414 / EO-14166	Installation of Twin Gas Regulators Indoors (1” – 2”).
G-445	Specification for Gas Meter Bars
G-48	Gas Meter and Service Regulator Sizing
G-695	Supporting Gas Service Regulators And Meters
G-699	Installation and Inspection of Gas Service Regulator Vent Line Protectors (VLPs)
G-703	Requirements for Branch Lines Supplying Multiple Regulators and / or Meters
G-704	Gas Meter and Regulator Installation Requirements
G-707	Installation of D-Mark Boxes

G-8003	Transportation, Handling and Storage of Steel Pipe for Gas Mains and Services
G-8062	Extruded Polyolefin Coating on Steel Gas Pipe
G-8094	Qualifying for Dual-Fuel Interruptible Service Under Classification No. 12, Priorities AB, C, D and E
G-8096	Sealing the Annular Space Between a Gas Pipe and a Wall, Casing Pipe, or Sleeve
G-8100	General Specification for the Installation of Gas Distribution Services
G-8104	Polyethylene Pipe, Tubing and Fittings for Gas Mains and Services
G-8107	Steel Pipe for Gas Mains and Services
G-8121	Qualification of Joiners and Inspectors of Polyethylene (PE) Plastic Pipe/Tubing and Fittings for Gas Mains and Services
G-8122	Inspection, Handling, Storage, and Transportation of Polyethylene (PE) Plastic Pipe, Tubing, and Fittings for Gas Mains and Services
G-8123	Heat Fusion Joining of Polyethylene (PE) Plastic Pipe/Tubing and Fittings for Gas Mains and Services
G-8200	Service Sizing
G-8201	Electrical Spark Inspection of Coating on Steel Pipe
G-8204	Pressure Testing Requirements For Gas Mains and Services [Interim Guideline]
G-8205	Corrosion Control of Buried Steel Gas Mains and Services, and Metallic Fittings on Plastic Mains and Services
G-8212	Operator Qualification (OQ) Compliance Program
G-8216	Vent Pipe Caps for Vent Piping Installations
G-8217	Flood-Prone Areas for the Installation of Gas Service Regulator Vent Line Protectors (VLPs).
G-8224	Repair of Gas Distribution Mains and Services
G-8227	Qualification of Plumber Welders
G-8230	General Requirements for Gas Meter Relocations
G-8232	Pipe Repair Sleeves for Gas Mains and Services
IP-20	Installation of Mechanical Fittings for Plastic Pipe and Tubing.
IP-27	Installation of Electro-fusion Fittings on PE Plastic Pipe/Tubing and Molded Fittings using a Universal Electro-fusion Processor.

Approved Gas Service Equipment Tables

Condition of Approval

The equipment listed in the following section has been approved by Con Edison for use in connection with gas service installations within the company's service territory.

Providing a list of approved equipment does not relieve the customer from ascertaining that the equipment meets Con Edison's specifications and also the requirements of the AHJ. Con Edison, by testing and/or approving gas service equipment, gives no warranty, expressed or implied, as to the adequacy, safety or other characteristics of the equipment, fitting or device, and assumes no responsibility with respect there to. The information contained in the tables provided will be revised from time to time. It is the responsibility of the customer to ensure the information is the most current available.

Contact your assigned Con Edison Commercial Services Representative for updates.

A. Special Installation Requirements

Con Edison will provide information regarding installation requirements for all high- pressure services. Elevated pressure of ¼ PSIG or 7-inches WC and higher, if available, requires Con Edison supplied service regulator that reduces gas main pressure to customer utilization equipment design pressure.

NOTE: The following applies to valves listed in Tables 1 – 4.

Wrench operated valves up to and including 4-inch must be of tamperproof construction

* For design operating pressures not exceeding 1 psig.

** For design operating pressures greater than 1 psig.

*** Rockwell equipment of the specified catalog or figure number is acceptable.

**** Figure 1796 and 1997, the manufacturer recommends changing existing non-tamperproof cap screw and replacing them with tamperproof cap screws at field site. The vendor's change out recommendation instructions must be followed completely in order to maintain material warranty.

Table 1
PLUG VALVES FOR SERVICE HEAD INSTALLATION

Reference Specification: G-100,298

Manufacturer		Nominal Size
Dresser Industries Inc.	175 GTO-0007-161	¾”
	175 GTO-0011-161	1”
	175 GTO-0012-161	1 ¼”
	175 GTO-0013-161	1 ½”
	175 GTO-0006-161	2”
Nordstrom Valves Inc. ***	350	2”, 3”
	142-T (Threaded End)	¾”, 1”, 1 ¼”, 1 ½”, 2”, 3”, 4”
	143-T (Flanged End)	2”, 3”, 4”, 6”, 8”
	149, 169 w/ Hand Wheel	6”, 8”, 10”, 12”
Walworth Company ****	1796 T	1”, 1 ¼”, 1 ½”, 2”
	1797 F	3”
	1707 F, 1727 F w/ Hand Wheel	6”, 8”, 10”, 12”

Table 1A
PLUG VALVES FOR BRANCH LINES, AND METER AND REGULATOR INSTALLATION

Reference Specifications: G-703

Reference Drawings: 365531, EO-16390-B, EO-16511-B, EO-16585-A, EO-16726-A, (EO-14158), (EO-14166), (EO-13977-C)

Manufacturer		Nominal Size
Dresser Industries Inc.	175 GTO-0004-161	¾”
	175 GTO-0007-161	
	175 GTO-0011-161	1”
	175 GTO-0012-161	1 ¼”
	175 GTO-0013-161	1 ½”
	175 GTO-0006-161	2”
Nordstrom Valves Inc. ***	142-T (Threaded End)	¾”, 1”, 1 ¼”, 1 ½”, 2”, 3” 4”
	143-T (Flanged End)	2”, 3”, 4”, 6”, 8”
	149, 169 w/ Hand Wheel	6”, 8”, 10”, 12”
	165	4”, 6”
Walworth Company ****	1796 T	1”, 1 ¼”, 1 ½”, 2”
	1797 F	3”
	1700	4”
	1700 F	4”, 6”
	1707 F	8”, 10”
	1707 F, 1727 F w/ Hand Wheel	6”, 8”, 10”, 12”
	1718 w/o Hand Wheel	6”, 8”, 10”, 12”

**** For design operating pressures greater than 1 PSIG.**

Table 2		
BALL VALVES FOR METER AND REGULATOR INSTALLATION Reference Drawings: 308657, 361100, 361571, 361693		
Manufacturer	**Catalog or Figure Number**	**Nominal Size**
Ballomax	2BMF285RP	2”
	3BMF285RP	3”
	4BMF285RP	4”
Kerotest	72566896	2”
	72566904	3”
	72566912	4”

Table 3		
Thermal Actuated Valves		
Reference Drawings: 506175, 514203, EO 14166, EP 16726 A, EO 16585 A, EO 14158 EO 16511 B		
Manufacturer	**Catalog or Figure Number**	**Nominal Size**
Teco Fire Bag	3771916	1"
Teco Fire Bag	3771917	2"

Table 4		
Diaphram METER VALVES (Lock-Wing Locks) Reference Drawings: EO-16585, G-316(aka EO-07420), EO-7421-B, G-425 (aka EO-9580)		
Manufacturer	**Catalog or Figure Number**	**Nominal Size**
Dresser Industries Inc	Style 275 (Lock Wing Lock)	¾”, 1”, 1 ¼”
Mueller Company	P-10-1 Shur-Stop 805006	
		1”
Mueller Company	H-11118-B	¾”, 1”, 1 ¼”, 1 ½”, 2”
A.Y. McDonald [1]	560 P	¾”, 1”, 1 ¼”, 1 ½”, 2”
Jomar	T-175 LW (Lock Wing Ball)	¾”, 1”, 1 ¼”, 1 ½”, 2”

Note: Only approved for use on low pressure distribution piping (<12” WC)

Table 5		
METER BARS Note: A meter valve (lock wing cock) is required before the meter bypass bar		
Manufacturer	**Catalog or Figure Number**	**Nominal Size**
A. Y. McDonald (Bypass Meter Bars)	6410-FFE-W 1”X1”X1” (Con Edison specific model)	1” X 1” X 1” X 20lt; 6” centers for Class 250 meters with horizontal inlet and outlet; Includes integral meter bypass and swivels
	6312-FFE-W 1”X1”X1” (Con Edison specific model)	1” X 1” X 1” X 20lt; 6” centers for Class 250 meters with rear center inlet and vertical outlet; Includes integral meter bypass and swivels
	6480-CCDM-V 1-1/4”X1-1/4” (Con Edison specific model)	1-1/4” X 1-1/4” X 30LT: 8-1/4”” centers for Class 500 meters with horizontal inlet and outlet; Includes integral meter bypass and swivels
	6480-CCDL-V 1-1/2”X1-1/2” (Con Edison specific model)	1-1/2” X 1-1/2” X 60LT: 11”” centers for Class 1,000 meters with horizontal inlet and outlet; Includes integral meter bypass and swivels
Richards Mfg. Co. (Manifolds)	339-0176-NB (2 Meter Manifold for A. Y. McDonald 6312)	Double Multi-meter Manifold: Header 22” long: 1.5” Diameter: For indoor/outdoor install of CL250 gas meters 2 unit meter sets. Each set to include plug and caplug
	339-0184-NB (3 Meter Manifold for A. Y. McDonald 6312)	Triple Multi-meter Manifold: Header 22” long: 1.5” Diameter: For indoor/outdoor install of CL250 gas meters 3 unit meter sets. Each set to include plug and
UPSCO, Inc. (Manifolds)	UAMB-00003548 (2 Meter Manifold for A. Y. McDonald 6312)	Double Multi-meter Manifold: Header 22” long: 1.5” Diameter: For indoor/outdoor install of CL250 gas meters 2 unit meter sets. Each set to include plug and caplug
	UAMB-00003547 (3 Meter Manifold for A. Y. McDonald 6312)	Triple Multi-meter Manifold: Header 22” long: 1.5” Diameter: For indoor/outdoor install of CL250 gas meters 3 unit meter sets. Each set to include plug and cap lug
R.W. Lyall (Manifolds)	CE4521259 (2 Meter Manifold for A. Y. McDonald 6312)	Double Multi-meter Manifold: Header 22” long: 1.5” Diameter: For indoor/outdoor install of CL250 gas meters 2 unit meter sets. Each set to include plug and caplug
	CE4521260 (3 Meter Manifold for A. Y. McDonald 6312)	Triple Multi-meter Manifold: Header 22” long: 1.5” Diameter: For indoor/outdoor install of CL250 gas meters 3 unit meter sets. Each set to include plug and caplug

Table 6			
SWIVELS			
Manufacturer	**1” x 20 Light**	**1 ¼” x 30 Light**	**1 ½” x 60 Light**
American Meter Co.	01195 P014	2290 P016	01195 P028
A.Y. McDonald	4815-511	4815-547	N/A
Central Plastics	008-1200	010-30 1250-008	N/A
Hitachi Metals America	20 S1	----------	----------
Richards mfg. Co.	OS-1-1-20LT	OS-1 ¼-1-30LT	OS-1 ½-1-60LT
Offset	1”	1”	1”
Overall Length	3 ½”	3 ½” – 3 ¾”	3 3/8” – 5 3/8”

Table 7			
SWIVEL CAPS			
Manufacturer	**P/N for 1"x 20 Light**	**P/N for 1 ¼"x 30 Light**	**P/N for 1 ½"x60 Light**
American Meter Co.	21737 P061	21737 P081	21737 P141
A.Y. McDonald	4815-507	4815-543	N/A
Central Plastics	015-0068	015-0070	007-0016
Hitachi Metals America	20 N	---	---
Richards mfg. Co	N20LT	N30LT	N60LT

Table 8		
VENT CAPS for REGULATOR and VENTED SLEEVE INSTALLATIONS		
Manufacturer	**Catalog or Figure Number**	**Nominal Size**
UPSCO, Inc. 22-24 Central Street Moravia, NY 13118-3425	UVA-E-3/4, UVA-E-1	¾", 1"
	UVA-E-2	2"
	UVA-E-3	3"
	UVA-E-4	4"
Advanced Engineering Corp.	---	¾", 1"
Richards Manufacturing Co. 517 Lyons Avenue Irvington, NJ 07111-4717	GV-3/4	¾"
	GV-1	1"
	---	---
Carolina Mouldings Inc.	RV-250	¾", 1"
Control Associates	Y602-23, Y602-25	¾", 1"

Table 9		
METER ELBOWS		
Manufacturer	**Catalog or Figure Number**	**Nominal Size**
UPSCO, Inc. 22-24 Central Street Moravia, NY 13118-3425	90 DEG. Meter Elbow	1" x 6" x 8" 1" x 4 ½" x 14"
Advanced Engineering Corp.		
Richards Manufacturing Co. 517 Lyons Avenue Irvington, NJ 07111-4717		

Table 10		
COMPRESSION END FITTING / BOLTED COUPLING for STEEL PIPE Reference Specification: G-100,285		
Manufacturer	**Style**	**Description**
Dresser Mfg. Division *	90 Universal (Restraint)	¾", 1", 1 ¼", 1 ½", 2"
	711 (Restraint)	3", 4", 6", 8", 10", 12"
	38 or 40	10", 12"
Smith Blair	Style EZ	3", 4", 8"
	Standard IPS Coupling	10", 12"

Table 11 INSULATING COUPLING (STRAIGHT) Reference Specification: G-100,285		
Manufacturer	**Style**	**Description**
Dresser Mfg. Division *	90 (Seal)	¾”, 1”, 1 ¼”, 1 ½”, 2”
	39 and 711	3”, 4”, 6”, 8”, 10”, 12”
Norton-McMurray Mfg., Co. (NORMAC)	Style 1 **	¾”, 1”, 1 ¼”, 1 ½”, 2”
Smith Blair	Style EZ	3”, 4”, 6”, 12”
	Standard IPS Coupling	10”, 12”

Table 12 REDUCING COUPLING (CONDUCTIVE) Reference Specification: G-100,285		
Manufacturer	**Style**	**Description**
Dresser Mfg. Division *	90 Universal I (Restraint)	1” x ¾”, 1 ¼” x ¾”, 1 ¼” x 1”,
		1 ½” x 1 ¼”, 1 ½” x 1”,
		1 ½” x 1 ¼”, 2” x 1”2” x 1 ¼”, 2” x 1 ½”
		2” x 1 ½”

Table 13 ELBOWS (45 and 90 DEGREE) Reference Specification: G-100,285		
Manufacturer	**Style**	**Description**
Dresser Mfg. Division *	90 Universal (Restraint)	1”, 1 ¼”, 1 ½”, 2”
	69 (Restraint)	3”

Note: Yellow-marked band on Dresser product for identification “Seal & Restraint”, with 1/8” Steel Allen Hex Socket Pipe Plug.

Table 14 INSULATING ADAPTERS & UNIONS Reference Specification: G-100,291		
Manufacturer	**Style**	**Description**
Dresser Mfg. Division	90	Male Insulok Adapter ¾”, 1”, 1 ¼”, 1 ½”, 2”
Mueller Company	P-5-12 700830	Insulated Union, NTP both Ends, 2”

Table 15	
SLEEVED ELBOW UNIT	
Manufacturer *	**Description**
Richards Manufacturing Co. 517 Lyons Avenue Irvington, NJ 07111-4717	90 Degree Gas Service Elbow Unit w/ Seamless Steel Pipe Sleeve 1", 1 ½", 2", 3" THD, 4" THD & 6" (As of 7/1/2025) 1.9" ID x 6" OD for 1" Sleeved Elbow Unit 2.875" ID x 6" OD for 1 ½" Sleeved Elbow Unit

Note: The manufacturer listed in Table 15 is the manufacturer of the sleeved elbow unit for the listed sizes. Sleeved Elbow Units are purchased from plumbing supply Distributors.

Prior approval is required by Con Edison to fabricate sleeves not manufactured by Richards. Prior to installation, the following is required for Con Edison acceptance of a SEU:

*** Signed letter/cut sheet from manufacturer, LMP or PE engineer stating that the SEU has been manufactured as per Con Edison Drawing EO-12790 and the SEU was independently tested at 150 psi for 30 minutes (as per table 1 in G-8204, 2"> = 150 psi for 30 minutes)**

*** Manufacturer's name has been placed on tested SEU within 6" from the threaded or flanged end.**

Table 16	
FLOOR SUPPORT BRACE	
Manufacturer	**Description**
ITT Grinnell www.ittgrinnell.com	Various sizes

Table 17		
RISER BENDS (STEEL SERVICE PIPE)		
Manufacturer	**Drawing**	**Description**
UPSCO, Inc. 22-24 Central Street Moravia, NY 13118-3425	10450	¾", 1", 1 ½" Coated w/ a Con Edison approved coating.

Table 18		
FLANGE INSULATING KITS		
Manufacturer	**Model**	**Nominal Service Pipe size**
PSI Company	Linebacker	2", 4", 6", 8"
GF Central Plastic	Jock	

Note 1: Refer to Purchase & Test Specification G-100,276 for Gasket Info (Sold Separately).

Note 2: A written approval must be obtained from Gas Operations (Corrosion Control) for the purchase of competitive products.

Table 19			
THERMIT WELD EQUIPMENT			
Manufacturer	**Model No.**	**Pipe Size**	**Description**
CADWELL Distributed by: Corrpro Co. Stuart Steel Protection Corp.	CAHAA-1GA CAHAA-1G	¾" thru 3 ½" 4" thru 12"	Mold(Welder) for attaching wire
	CAB-133-1H	¾" thru 12"	Adapter Sleeve for use on wire sizes AWG No. 14 thru No. 10 Solid
	CAT-320	¾" thru 12"	Flint gun for igniting welding powder
THERM-O-WELD Distributed by: Corrpro Co. Stuart Steel Protection Corp. Continental Industries Inc.	M-101	¾" thru 3 ½" 4" thru 12"	Mold(Welder) for attaching wire sizes AWG No. 14 thru No. 6 Solid
	A-200	¾" thru 12"	Adapter sleeves for use on wire sizes AWG No. 14 thru No. 10 Solid
	15-P	¾" thru 12"	Standard Therm-O-Weld power
	A-309 P	¾" thru 12"	Flint gun for igniting welding powder

Table 20		
DUAL-FUEL CHANGEOVER CONTROLS		
Manufacturer	**Model Cat No.**	**Description**
SPC Temperature	929120-00	Temperature Controller

Table 21		
ANODELESS RISER BENDS (PLASTIC SERVICE PIPE) **Reference Specification: G-8104**		
Manufacturer	**Model or Type No.**	**Description**
PERFECTION PIPE aka Honeywell	75199	1" IPS THRD x ½" CTS .090" Wall Thickness
	75607	1" IPS THRD 1" CTS .090" Wall Thickness
	79055	1 ½" IPS THRD 1 ¼" CTS .090" Wall Thickness
	79782	1 ½" IPS THRD 1 ¼" CTS .151" Wall Thickness
	79437	1" IPS THRD x 1" IPS, SDR-11
	78302	2" IPS THRD x 2" IPS, SDR-11 (Bracket Included)
	78512	3" IPS THRD x 3" IPS, SDR-11
	79912	3" IPS FLG x 3" IPS, SDR-11
	79964	4" IPS THRD x 4" IPS, SDR-11
	79965	4" IPS FLG x 4" IPS, SDR-11
RW Lyall & Co, Inc.	Con Edison 090040-A	1 ½" IPS THRD x 1 ¼" CTS .090" Wall Thickness
	Con Edison 070030-A	1" IPS THRD 1" CTS .090" Wall Thickness
	Con Edison 050010-B	1" IPS THRD x ½" CTS .090" Wall Thickness

Note: Plastic pipe to be in compliance with Gas Specification G-8100, Section 11 – Appendix F.

Table 23			
GAS BOOSTER EQUIPMENT			
Item	**Manufacturer**	**Type / Model No.**	**Size**
Service Head Valve	See Table 1		
Gas Meter Valve	See Table 1A		
Low Pressure Gas Switch	Karl Dungs Inc. Eclipse ASCO Mercoid Controls	GML-A4-4-4 AETECH 10036962** SE32D / TA31A11** PRLE-153-P1**	¼” ¼” ¼” ¼”
Vent	See Table 8		
Check Valve	Eclipse	Series 1000	½” – 4” THRD 3” – 8” FLGD
	Etter Engineering	ECV	2” – THRD 3”-4” 6” - FLGD

Note: Indicates explosion proof model.

Table 24			
PROTECTIVE EQUIPMENT for COMPRESSED OXYGEN and NATURAL GAS MIXTURES			
Manufacturer/Distributor	**Type/Model or Part No.**	**Description**	
Check-All Valve Mfg. Co. Distributed By: Valley Technical Sales One Hollywood Avenue, Suite 2A Ho-Ho-Kus, NJ 07423-1445 201.670.8070	Universal Low-Pressure Check Valve Type – Style UN-3 For ½” – 2” Sizes	2”	UN-3-200-BB-1/8
		1 ¼”	UN-3-125-BB-1/8
		1”	UN-3-100-BB-1/8
		¾”	UN-3-075-BB-1/8
		½”	UN-3-050-BB-1/8
Harris Flashback Arrestor*	Model 88-5FBT p/n 4301650	Torch Mounted	
	Model 88-5FBT p/n 4301651	Regulator Mounted	
Western Flashback Arrestor*	Flashback Arrestor Set p/n FA-10	Torch Mounted	
	Flashback Arrestor Set p/n FA-30	Regulator Mounted	
Smith Flashback Arrestor*	Smith Oxygen & Fuel Gas Pair p/n H754	Torch Mounted	
	Smith Oxygen & Fuel Gas Pair p/n H754	Regulator Mounted	

Note: To be used with G-Tech TB-15 or TB-30 Torch Booster Reference G-2041.

Table 25 (Effective 8-15-2015)		
Y-Strainer **Reference Drawings: EO-16511, G-413 (AKA EO-14158), G-414 (AKA EO-14166), 384872, 502164**		
Manufacturer	**Catalog or Figure Number**	**Nominal Size**
Titan Flow Control, Inc. (currently available through IMAC Systems, Tullytown, PA)	* YS-61-CS	2”
* YS-61-CS Y-strainers are modified to Con Edison’s engineering specification which includes: flanged carbon steel body; raised face flanges; natural gas rated washers; no blow-off plug; no gauge tap plugs; and a 40 mesh reinforced straining element.		

Note: YS-61-CS Y-strainers are modified to Con Edison’s engineering specification which includes: flanged carbon steel body; raised face flanges; natural gas rated washers; no blow-off plug; no gauge tap plugs; and a 40 mesh reinforced straining element.

Table 26 **BLEED RINGS FOR INDUSTRIAL REGULATOR INSTALLATION** **Reference Drawings: 514590, 514486**		
Manufacturer	**Catalog or Figure Number**	**Nominal Pipe Size**
Aitken	Standard Raised Face Bleed Ring ANSI 150# Carbon Steel A105/A516 Grade 70 1-1/2” Thick ½” NPT Bleed Connection	2” 3” 4”
Jamison	Standard Raised Face Bleed Ring ANSI 150# Carbon Steel A105/A516 Grade 70 1-1/2” Thick ½” NPT Bleed Connection	2” 3” 4”

Exhibit 1

Gas Integrity Test & Turn-On Form – New or Repair

This certifies that the gas piping in the building (downstream of the meter) indicated below has successfully passed a leakage test as prescribed by the local authority having jurisdiction.

(Building Address / City or Town / Zip Code)

Complete All Sections That Apply **Gas Authorization No.** _____

Lock letter submitted to AHJ? YES NO N/A (Circle One)

Lockable valves and test ports installed / exist at the base of each riser. **YES** **NO** (Circle One)

Gas Turn-On requested for the following equipment (Specify below):

Contact Information for Immediate Building Access: _____ Phone: _____

	Riser Location	GAS END USE (e.g Cooking, Heating, Hot Water, Dryer, etc)	Meter Location	Number of Apts
Location #1				
Location #2				
Location #3				
Location #4				
Location #5				

Contractor to check Appropriate Corrective Condition: I have repaired and tested,

_____**Leak at gas equipment (specify unit or equipment)** _____

_____**Control Valve** _____**Pilot Valve** _____**Appliance Valve**

_____**Hood Draft** _____**Appliance Regulator** _____**Flue Connection**

_____ **Other (Specify) and provide details for above items checked**

This certifies that all gas piping is complete and continuous up to the appliance, including appliance control valves, or end of use equipment in affected apartments or areas.

Yes **No** (Circle one)

It is also certified that in the affected area(s):

- All areas containing gas utilization equipment (e.g. boiler room, laundry room) have been inspected and that the equipment gas valves have been closed. **YES** **NO** (circle one)
- All apartments containing gas appliances have been inspected and the appliance valves have been closed. **YES** **NO** (circle one)
- All open-ended valves, stubs test connections, purge connections, or any other piping or fittings which could be left open, have been closed gas tight with a threaded plug or cap. For premises which have meters in the apartments, the meter valves have been left open, so that the integrity test is complete up to the appliance valves. **YES** **NO** (circle one)

In addition, I accept responsibility for the gas-in of any end of use equipment or appliances not gassed-in by Con Edison and identified above for turn-on. YES NO (circle one)

(Plumbing Contractor Company Name / Address/ Telephone #) (Plumber's Signature / License # / Date)

Exhibit 2

Exhibit-B: Gas Meter Piping Pressure Test Verification

Certification Statement: This document certifies that the gas meter piping from the gas head of service (HOS) valve to the gas meter connection has undergone a pressure test as per Con Edison's Yellow Book and gas specification G-8204.

Location Details:

- **Address:** _____
- **Owner:** _____
- **MC #:** _____

Pressure Test Results:

Section 1: Low Pressure Service

*Has successfully passed a pressure test for 30 minutes at a pressure of 3 psig on (Date)_____ from HOS to meter.

Section 2: Medium/Intermediate/High Pressure Service:

(A) HOS to the Regulator (Refer to G-8204 for requirements):

*Has successfully passed a pressure test for _____ minutes at a pressure of _____ psig on (Date)_____ from HOS to regulator.

(B) Regulator to Meter - Delivery from Regulator < 1psi:

*Has successfully passed a pressure test for 30 minutes at a pressure of 3 psig on (Date)_____ from regulator to meter.

(C) Regulator to Meter - Delivery from Regulator ≥ 1 psi (Refer to G-8204 for requirements):

*Has successfully passed a pressure test for _____ minutes at a pressure of _____ psig on (Date)_____ from regulator to meter.

Section 3: Tester & Plumber Information

Test Performed By (Print & Sign) _____ ITS # (if applicable)_____

Plumber's Name (Print & Sign): _____ License No.: _____

Plumbing Company Name: _____

Section 4: Span of Control

(Required only for pressure testing in Section 2A & 2C, if individual listed in "Test Performed By" section is not themselves qualified in CT-34A or CT-87A):

- **OQ Witness Company:** _____
- **OQ Witness Name (Print & Sign):** _____
- **ITS:** _____

****IMPORTANT****

Please fill out all applicable sections with the required information. For any inquiries regarding this form, contact your case representative.

Exhibit – 2.1

Operator Qualification Certificate

Case Contractor Company Name:

_____

Case #: _____

Licensed Master Plumber (LMP) Company Name: _____

LMP #: _____

Employee 1 Name/ OQ # (i.e. ITS #): _____

Employee 2 Name/ OQ # (i.e. ITS #): _____

Employee 3 Name/ OQ # (i.e. ITS #): _____

I attest that all work on Con Edison jurisdictional gas piping, which required OQ, on premises of:

(Address): _____

Owner: _____

Has been performed by the operator qualified person(s) listed above, whose OQ (ITS) profile(s) was active at the time the work was performed.

Please select at least one of the following:

☐ **Above Ground Outdoor / Indoor exposed pipe (CT86/87 ,87A or 87B)**

☐ **Below Ground - Plastic Pipe (Appendix A)**

☐ **Below Ground – Steel Pipe (Appendix B)**

Proof of such qualification(s) shall be attached to this Certificate.

Signature: _____ Signature(s): _____

LMP Contractor OQ Employee(s)

Print Name: _____ Print Name: _____

Exhibit 3

conEdison

Consolidated Edison Company of New York Inc. 4 Irving Place, New York, N.Y 10003

Gas Sleeve Installation Form

Meter Set Location (Circle one) Outdoor Indoor

Gas Sleeve diameter: _____ ID in inches Sleeve Length: _____ in feet

Case Number (from the project center): MC#_____

Job Name: _____

Customer: _____

Address: _____

Contractor Name: _____

Plumbing License No: _____

This certifies that the sleeve described above has been installed to the requirements and specifications listed in the Con Edison Yellow Book (Gas) and the specifications listed in this Customer Service Procedure and as a minimum meets the following criteria. Check all that apply below:

Sleeve meets all the specification requirements and is properly sealed ☐

Sleeve is vented if required per the required specification and local code ☐

Sleeve is installed at the location as specified by Con Edison ☐

Sleeve pictures display required measurements per instructions ☐

Indoor Service Gas Sleeve must extend 4 inches on the exterior wall and 1” on the interior wall Sleeve(s) must be grouted in place and watertight.

Completed by: _____ Date: _____

Exhibit 3.1

conEdison

Emergency Repair Certification

This document certifies that only emergency repair work was performed, as required by the Con Edison issued warning tag, in accordance with all applicable rules and regulations. The emergency work/repairs performed were on (Check one)

- ❑ Gas service line (Con Edison jurisdictional pipe)
- ❑ Customer distribution piping (house pipe)

Located at: _____

Case Number: MC- _____

Date of emergency: _____

Gas Authorization/EWN/Blue Card Issued (#): _____

Date of EWN Issuance (If applicable): _____

Description and location of Emergency Repair: _____

- ❑ Check to confirm that no other work was performed other than emergency repair stated above since gas turn off

The following items must be submitted and uploaded to Project Center before gas can be turned on:

Action Description	Yes	No	N/A
Gas meter piping pressure test Verification Form			
Welder Certificate			
Gas integrity test and turn-on Form for distribution piping (Exhibit A)			
Outdoor piping painted			
OQ Affidavit: Contractor who performed the work was properly Operator Qualified (OQ) and has submitted all applicable OQ documentation to con Edison			
OQ Card for contractor who performed the work submitted to the case			
EWN/Gas Authorization/Blue Card			

The undersign confirms that all work, at the above stated location, has been performed as per the standards set forth in the Authority Having Jurisdiction guidelines and that no work beyond the emergency repair work has been done.

Plumber's Signature: _____

License Number: _____

Welder Certificate

Exhibit 4

The customer, its agents, or license plumbing contractor must submit a "Welding Certificate" showing compliance with local building codes in the Municipality where work was performed on customer distribution piping, as well as all Con Edison Specifications when welding was performed on Utility Jurisdictional pipe.

One of the following documents are required to be submitted to Project Center:

- **Welder's License**
- **QW-484A Welder Performance Qualification (Certification must be within one year of submission)**
- **API 1104 with the equivilant Operator Qualification Covered Task(s)**

Contractors Name_____

Address_____

This certifies that all welding on gas piping on premises.

Located at:_____

Lot No:_____

Owner:_____

Has been performed by a welder who has previously been qualified in accordance with the stated welding requirements and all welding has been performed according to those requirements.

Date welding was performed:_____Signed:_____

___

Welder

_____

Plumbing Contractor

_____

License Number

_____

Owner

Consolidated Edison Company of New York, Inc

Certificate of Compliance

Exhibit 5

Dwelling Converting to Gas / Electric Heating
One of the following certificates shall be completed and signed:

a) I _____
(Owner)
am aware that the Minimum Insulation Standards for Standards for Dwellings converting to Gas / Electric Space Heating requires my house to have storm doors, storm windows and at least R-19 (usually six inches) roof insulation.

I certify that my building at _____
(Location)
Meets those requirements or that I have obtained a waiver and understand that should my building be found not in compliance, a 25 percent surcharge on my Company Bill may be imposed or gas / electric service may be disconnected.

The undersigned attests that all statements and representations contained in this certificate are true and accurate.

_____
Signature of Owner Address

b) I have inspected the building _____
(Location)
Owned by _____ and certify that it meets the requirements of the Minimum Installation Standards for Dwellings Convertingto Gas / Electric Space Heating.

The undersigned certifies that a properly executed copy of this certificate wills be delivered to the owner and further attests that all statements and representations contained in this certificate are true and accurate.

_____ _____
Date Signature of Contractor

Accepted for the Company By: _____

_____
Date

Request for Waiver

Minimum Insulation Standard

Exhibit 6

As the owner of the existing:

- ☐ 1 Family Residence
- ☐ 2 Family Residence
- ☐ 3 Family Residence
- ☐ 4 Family Residence

At _____
(Location)

I request a waiver from Con Edison of the Minimum Installation Standards for Existing Building Converting to Gas or Electric Space Heating issued by the New York Public Service Commission for the following reason(s):

- ☐ Compliance with the Standards will result in a payback period of greater than seven years. (Two estimates are attached)
- ☐ The dwelling is a historical building.
- ☐ The overall heat loss of the building does not exceed the total heat loss which would result from conformance with the Minimum Insulation Standards. (An Engineering Certificate is attached)

_____ _____
(Signature of Owner) (Date)

_____
(Address)

Received by Consolidated Edison Company of New York, Inc.

_____
(Name and Title of Representative)

_____
(Date)

Consolidated Edison Co. of New York, Inc. 4 Irving Place New York NY, 10003

Interim and Final Gas Checklists

Exhibit 7

Dear Customer/Contractor:

Thank you for your interest in natural gas. In addition to any applicable local, city, state or federal codes, Con Edison has certain requirements that you must comply with in order to obtain gas service from us.

We have revised our **Interim Gas Checklist** and **Final Gas Checklist**, which are now two separate documents. Please note the requirements have changed. Included are additional requirements for customers who are converting from oil to natural gas. These checklists are tools which will assist you in complying with our requirements and help avoid delays in your project and/or failed Con Edison inspections.

Following completion of your associated work and our receipt of a completed Interim Gas Checklist, we will make arrangements with you/your contractor to perform an inspection of the work. In addition, we will perform a second inspection following our receipt of your completed Final Gas Checklist and the associated work.

As always, we appreciate your interest in gas and the opportunity to work with you on your project. Please feel free to contact us if you have any questions or concerns.

INTERIM GAS CHECKLIST (Required when Interim Inspection is Requested)

Further Action Required for Completion of Oil to Gas Conversion Work

Job Address:_____ Borough:_____ Case No: _____

Contractor Name:_____

Phone No:_____

Please indicate "Y" in the applicable box for completed items and "N/A" where items do not apply.

Service pressure (circle one): Low Intermediate Medium High

Confirmed by Con Ed:_____

Action Description	***To be Completed by Contractor***	***For Con Edison Use Only***		
	Yes	***No***	***N/A***	***Pass / Fail***
Outdoor Gas Meter Refusal Form submitted				
Step, platform or permanent ladder installed for sleeves 6ft or higher				
Wall Sleeve installed (Extended 4” outside & 1” inside) and grouted				
Customer pipe installed between property line and building line properly installed; tracer wire/marker balls installed; OQ cards submitted; PE Joints peer-checked and marked				
Underground steel piping is properly coated and cathodically protected (between property line and building line) and checked by CE Gas Corrosion				
As-Constructed Drawings submitted				
Swing-over piping installed				
Con Edison Hold Harmless Letter signed by customer				

Contractor is properly Operator Qualified (OQ) to perform this work, and has submitted all required OQ documentation to Con Edison					
Any required payments (other than security deposit and bypass cost) (e.g. customer contribution, accommodation costs, EDF costs)					
OIL TO GAS CONVERSION WORK	Con Edison Natural Gas Commitment Letter signed by customer				

Please complete this form online via Project Center at https://projectcenter.coned.com

FINAL GAS CHECKLIST (Required when Final Inspection is Requested)

Further Action Required for Completion of Oil to Gas Conversion Work

Job Address:_____ **Borough:**_____ **Case No:** _____

Contractor Name:_____ **Phone No:**_____

Please indicate "Y" in the applicable box for completed items and "N/A" where items do not apply.

Service Pressure (circle one): Low **Intermediate** **Medium** **High**

	To be Completed by Contractor			*For Con Edison Use Only*
Action Description	***Yes***	***No***	***N/A***	***Pass/Fail***
Gas Authorization (#)				
Gas Meter Piping Pressure Test Verification				
Gas integrity test and turn-on Form				
OQ Certificate: Contractor who performed the work properly Operator Qualified (OQ) and has submitted all applicable OQ documentation to Con Edison				
Welder Certificate and Radiograph Test Results (If required)				
Certificate of compliance				
Customer's trench properly backfilled (with warning tape)				
Proper signage displayed for multiple gas services				
Appropriate insulated/non-insulated couplings or flange kits installed				
Gas Booster Design Data Sheet AND Gas Booster Installation Drawing (aka "one line")				
Volume corrector location meets all clearances – 24" of clearance on top of meter				
Turbine meters and rotary meters larger than 16M require temperature well (Thread-O-Let) downstream of meter				
Gas meter room ventilation as required in section IV in Gas Yellow Book				
Regulator vents meet all clearances and maximum lengths as per EO-17118				
Metering location meets all clearances				
Insulated Joint (I J) coupling has been installed correctly after the regulator				
Meter bar level, supported and part supplied marked				
Head of Service that is higher than 6'. Permanent ladder or platform has been installed				
Load piping tied to meter bar				
Regulators and vents properly installed				
Outdoor piping painted				
Gas piping sleeved and caulked between building and distribution piping				
All risers & appliances have appropriate isolation valves installed and accessible				
Any provision for future extension of distribution pipe must have a lockable (by Con Edison) isolation valve, with a plug/cap on the outlet of the valve.				
Gas appliances connected and ready to operate				
Commercial equipment on casters must have restraining chain installed				
Heating /AWH flue pitched & connected chimney				
Security fencing around outside meter set. (Where required)				
Vehicle protection bumpers installed				
OIL TO GAS Application for Service signed by Customer				

CONVERSION WORK	Any required security deposit payments	

Please scan and upload this completed form and any associated documents into your case via Project center at https://projectcenter.coned.com

Acknowledgement of the Climate Leadership and Community Protection Act (CLCPA) and Con Edison's Clean Energy Commitment

Exhibit 8

Acknowledgement of the Climate Leadership and Community Protection Act (CLCPA): Making Informed Decisions on Fossil Fuel Energy Sources

Dear Customer,

Before we proceed with your gas service request, you must review this important information about New York State climate policy. This information will help you make informed choices to position your property for long-term alignment with NYS goals.

NYS CLCPA

Passed in 2019, the Climate Leadership and Community Protection Act (CLCPA) is a transformative law which requires the achievement of 100 percent zero-emission electricity by 2040 and a gradual downsizing of the natural gas system. New York State envisions a clean energy future, and choosing to rely on natural gas now may leave you facing costly retrofits moving forward. Choose clean energy today to progress our communities towards a better tomorrow.

Learn more about CLCPA here: https://climate.ny.gov/.

Con Edison's Clean Energy Commitment & Affordability Programs

Con Edison's companies, which include Con Edison Company of New York, Inc. and Orange & Rockland Utilities, Inc., are committed to achieving the NYS CLCPA goals. Through their Clean Energy Commitment, Con Edison offers programs that make clean energy affordable for both residential and commercial customers.

One customer program is the NYS Clean Heat Program in which qualified residential customers can receive **up to $10,000** in incentives to upgrade their heating and cooling system to efficient air-source heat pumps. Refer to the NYS Clean Heat Program webpage (https://cleanheat.ny.gov/find-available-rebates) for a more prescriptive estimate of incentives. Incentive amount varies based on customer type and region.

Learn more about Con Edison's customer programs (Electric Advantage, Energy Exchange, etc.): https://www.coned.com/en/save-money/rebates-incentives-tax-credits.

Learn more about Orange & Rockland's customer programs: https://www.oru.com/en/save-money/rebates-incentives-credits.

Next Steps

If you are ready to take advantage of available incentives, cancel your gas request through Project Center and open a new case for all-electric service.

If you choose to move forward with your gas service request, this document must be signed by the account holder/property owner and returned to your case representative. By signing this document, you acknowledge the state and company goals related to the clean energy transition.

Name: _____

Address: _____

E-mail: _____

Consolidated Edison Company of New York

Outdoor Gas Meter Refusal Form

Exhibit 9

Con Edison requires all meters to be installed outside unless unsafe or impractical. For reasons of accessibility, future leakage surveys, and alignment with guidance from the New York State Public Service Commission, Con Edison is relocating meters of existing buildings to building exteriors and requiring new service meters to be installed at building exteriors.

Please be advised that refusing to allow a gas meter to be installed at building exteriors will result in a Con Edison customer's account charged for costs related to survey/inspection of inside piping in accordance with tariff provisions.

The gas service Con Edison provides is subject to and incorporates the rules, regulations, and rate schedules for utility service on file with the New York State Public Service Commission, as amended from time to time. Customers with meters indoors are subject to the requirement to provide access for surveys/inspections and an inspection/survey $475 for 4 family and greater, which will be added to the monthly bill the month following such inspection/survey. Failure to complete the inspection will result in additional fines and possible termination of the gas service. Meter relocation will avoid these inspections and costs and the premise will still be eligible for the installation of a natural gas detector.

Please note the following:

- This refusal form does not apply to 1-3 family residential homes.
- Customers may not refuse the outdoor placement of high-pressure regulators. In accordance with the codes and regulations of the State of New York, regulators must be located outdoors unless unsafe or impractical to do so.
- Inside meters must be installed as close as reasonably practical to the point of entry, have adequate space, and be readily accessible to Con Edison.

Building Information

Case ID#: *_____

Service Address: *_____

City: *_____ **State:** *_____ **Zip:** *_____

Customer Acknowledgement

I am the building owner of record for the service address listed above. Further, I am indicating that I do not want my gas meter relocated outside the premises at the service address indicted below and I understand that I will be subject to the requirements/penalties stated above.

Building Owner/Customer Name (Print): *_____

Building Owner/Customer Signature: *_____

Date: *_____

Contact Information for 24/7 Meter Access

(I understand that I am obligated to update this information within 48 hours of any changes)

Name(s): *_____

Phone Number(s): *_____

Email(s): *_____

Reason for customer's refusal to allow the gas meter(s) at this address to be relocated outside the premises: *

_____

_____

_____

_____

Exhibit 10

MINIMUM OUTDOOR GAS METERING SQ. FOOTAGE REQUIREMENTS

Spec. No. or Dwg. No.	Meter Drawing Title	Location **Pressure System**	**Minimum Outdoor Footprint Required**
308657	Installation of Parallel Fisher 2", 3", & 4" EZR and 1098 Regulators with Turbine Meter 50,000 CFH and Larger	Indoor/Outdoor Medium/High	22'(L) x 8'(D) x 7'(H) for 6" 24'(L) x 8'(D) x 7'(H) for 8" 30'(L) x 8'(D) x 7'(H) for 12"
361100	Installation of Parallel 2" Regulators w/ Rotary Meter 10,000 CFH to 50,000 CFH	Indoor/Outdoor Medium/High	14'(L) x 8'(D) x 7'(H)
361571	Installation of Line Pressure 3" to 8" Turbine/Rotary Meters with Parallel 2" Regulators 15,000 CFH to 150,000 CFH	Indoor/Outdoor Medium/High	30'(L) x 8'(D) x 7'(H)
361693	Installation of Parallel 2" Regulators with Turbine Meter 10,000 CFH to 60,000 CFH	Indoor/Outdoor Medium/High	22'(L) x 8'(D) x 7'(H)
365531	Installation of Meter Piping for Twin Class 3000R (2") to 23,000R (4") Rotary Gas Meters	Indoor Only Low/Medium/High	8'(L) x 5'(D) x 7'(H)
34872	Installation of B-838 Gas Regulator Unit	Indoor Only Medium/High	6'(L) x 4'(D) x 7'(H)
502164	Installation of B-838 Gas Regulators – 2" x 4" Flanged for Class 11000TC – 38000TC Rotary Meters	Outdoor Only Medium/High	6'(L) x 4'(D) x 7'(H)
506175	Installation of Meter Piping for Class 500TC to 1000TC Diaphragm Gas Meters	Outdoor Only Low/Medium/High	4'(L) x 3'(D) x 7'(H) CL500 5'(L) x 3'(D) x 7'(H) CL1000
506214	Installation of Twin Diaphragm Gas Meters Class 500TC to Class 1000TC	Indoor Only Low/Medium/High	7'(L) x 5'(D) x 7'(H)
507002	Installation of Meter Piping for Rotary Gas Meters Class 23000R (6") to 56000R (6")	Indoor Only Low/Medium/High	10'(L) x 4'(D) x 7'(H)
507003	Installation of Meter Piping for Twin Rotary Gas Meters Class 23000R (6") to 38000R (6")	Indoor Only Low/Medium/High	9'(L) x 6'(D) x 7'(H)
514486	Installation of Parallel 2" Regulators w/ Rotary Meter 10,000 CFH to 50,000 CFH	Outdoor Only Medium/High	8'(L) x 4'(D) x 7'(H)
514590	Installation of Parallel Regulators w/ Turbine Meter Outdoors 10,000 CFH and Larger	Outdoor Only Medium/High	13'(L) x 4'(D) x 7'(H) for 2" Reg. 4" Mtr. 14'(L) x 4'(D) x 7'(H) for 2" Reg. 6" Mtr. 17'(L) x 4'(D) x 7'(H) for 2" Reg. 8" Mtr. 18'(L) x 4'(D) x 7'(H) for 3" Reg. 8" Mtr. 22'(L) x 4'(D) x 7'(H) for 3" Reg. 12" Mtr. 23'(L) x 4'(D) x 7'(H) for 4" Reg. 12" Mtr.
514789	Installation of Outdoor Low Pressure Gas Turbine Meter	Outdoor Only Low	7'(L) x 4'(D) x 7'(H) for 4" 8'(L) x 4'(D) x 7'(H) for 6" 10'(L) x 4'(D) x 7'(H) for 8" 15'(L) x 4'(D) x 7'(H) for 12"
EO-7421-B	Installation of Twin Diaphragm Gas Meters Class 250 TC	Indoor Only Medium/High	6'(L) x 4'(D) x 7'(H)
EO-13977-C	Installation of Meter Piping for Rotary Gas Meters Class 3,000R (2") to 23,000R (4")	Indoor Only Low/Medium/High	10'(L) x 4'(D) x 7'(H)
EO-14158	Installation of Gas Service Regulators (1" to 2")	Indoor Only Medium/High	4'(L) x 3'(D) x 7'(H)
EO-14166	Installation of Twin Gas Regulators (1" to 2")	Indoor Only Medium/High	7'(L) x 5'(D) x 7'(H)
EO-16390-B	Installation of Low Pressure Gas Turbine Meters	Indoor/Outdoor Low	21'(L) x 7'(D) x 7'(H)
EO-16511-B	Installation of Meter Piping for Class 3000R-TC to Class 23,000R-TC Rotary Meters	Outdoor Only Low/Medium/High	5'(L) x 4'(D) x 7'(H)
EO-16585-A	Installation of Meter Piping for Class 250TC Diaphragm Gas Meters	Outdoor Only Low/Medium/High	1 Meter - 4'(L) x 3'(D) x 7'(H) 2 Meter - 5'(L) x 3'(D) x 7'(H) 3 Meter - 7'(L) x 3'(D) x 7'(H) 4 Meter - 6'(L) x 3'(D) x 7'(H)
EO-16726-A	Installation of 2 to 6 Unit Prefabricated Meter Sets for Class 250TC Meters	Indoor/Outdoor Low/Medium/High	6 Meter (3 Over 3) - 4'(L) x 3'(D) x 7'(H) 6 Meter (T Conf.) - 8'(L) x 3'(D) x 7'(H)
EO-16886-A	Installation of Multiple Class 250TC Gas Meters	Indoor Only Low/Medium/High	13'(L) x 4'(D) x 7'(H)
EO-511327	Installation of Class 250TC Diaphragm Gas Meter	Indoor Only Low/Medium/High	4'(L) x 4'(D) x 7'(H)
G-316 Aka EO-7420	Installation of Class 500TC to Class 1000TC Diaphragm Gas Meter	Indoor Only Low/Medium/High	4'(L) x 5'(D) x 7'(H)

Exhibit 10.1



Consolidated Edison Company
of New York, Inc.
4 Irving Place
New York NY 10003-0987

Natural Gas Service Commitment Letter

Dear Customer:

We appreciate your interest in obtaining natural gas service(s) for your building.

To proceed with the gas service installation, please read the following carefully and completely.

I agree in signing below to the following:

• I will complete installation of all equipment submitted on my case within six (6) months from the date gas service is installed by Con Edison. Electronic notification of gas service installation will be provided by Con Edison. Complete installation of equipment means that the building has passed the Final Inspection. I understand that if I do not complete my gas connection within the agreed timeframe, I am responsible to Con Edison for the cost of the installation of my gas service. This cost will be refunded in accordance with the terms of the applicable tariff should I complete the installation at a later date. Should extenuating circumstances prevent the completion of the installation within this six (6) month time period, I agree to request, in writing, an extension from the Company not to exceed thirty (30) days in length. I understand that this request will be subject to Con Edison's approval.

Applicant Signature: _____

Print Name: _____

Date: _____

Service Address (Please Print): _____

Phone: _____

Customer E-mail Address: _____

Case #: _____



Consolidated Edison Company
of New York, Inc.
4 Irving Place
New York NY 10003-0987

Please sign and return this letter to start the installation process for your gas service. You must sign this letter for each building you are requesting service.

Ways to Pay Your Bill

Exhibit 11

Our fast, efficient, and convenient payment options make it easy for you to do business with us.
In addition to the options listed below, please visit https://www.coned.com/customercentral/paymentoption.asp to see what option works best for you.

In Person

Customer Service Walk-In Centers are open Monday through Friday from 8:30 a.m. to 5 p.m.

- **Bronx**
  1775 Grand Concourse (Between 174th & 175th streets).
  Mon-Fri 8:30am-5pm. Exact Payments only.
- **Brooklyn**
  One Metrotech Center (at Jay Street) @ National Grid.
  Mon-Fri 8:30am-5pm Exact Payments only
- **Manhattan**
  122 East 124th Street (at Park Avenue).
  Mon-Fri 8:30am-5pm. Exact Payments only.
- **Queens**
  89-67 162nd Street, Jamaica @ National Grid.
  Mon-Fri 8:30am-5pm. Exact Payments only.
- **Staten Island**
  1140 Richmond Terrace (at the corner of Bard Avenue).
  Mon-Fri 8:30am-5pm. Exact Payments only.
- **Westchester**
  Food Bazaar Supermarket
  1 Bogopa Plaza, Mt. Vernon (corner E.3rd St & S.3rd Ave).
  Mon- Fri 8:30am-5pm. Exact Payments only.



e*bill: Good for you, good for the environment:

e*bill is a free and easy way to receive, view, and pay your Con Edison bill online while protecting the environment. More than a million customers now pay or receive their energy bills electronically—saving more than 112,000 pounds of paper and more than 1,300 trees and preventing the release of more than 6,300 pounds of greenhouse gases each year. Use the green calculator located at PayItGreen.org and see how receiving and paying your bill electronically helps reduce your carbon footprint.



Direct Payment

With nothing to mail, no checks to write, and no stamps to buy, Con Edison's Direct Payment Plan saves you time and money. It's easy, simple, free, and convenient.



Pay-by-Internet

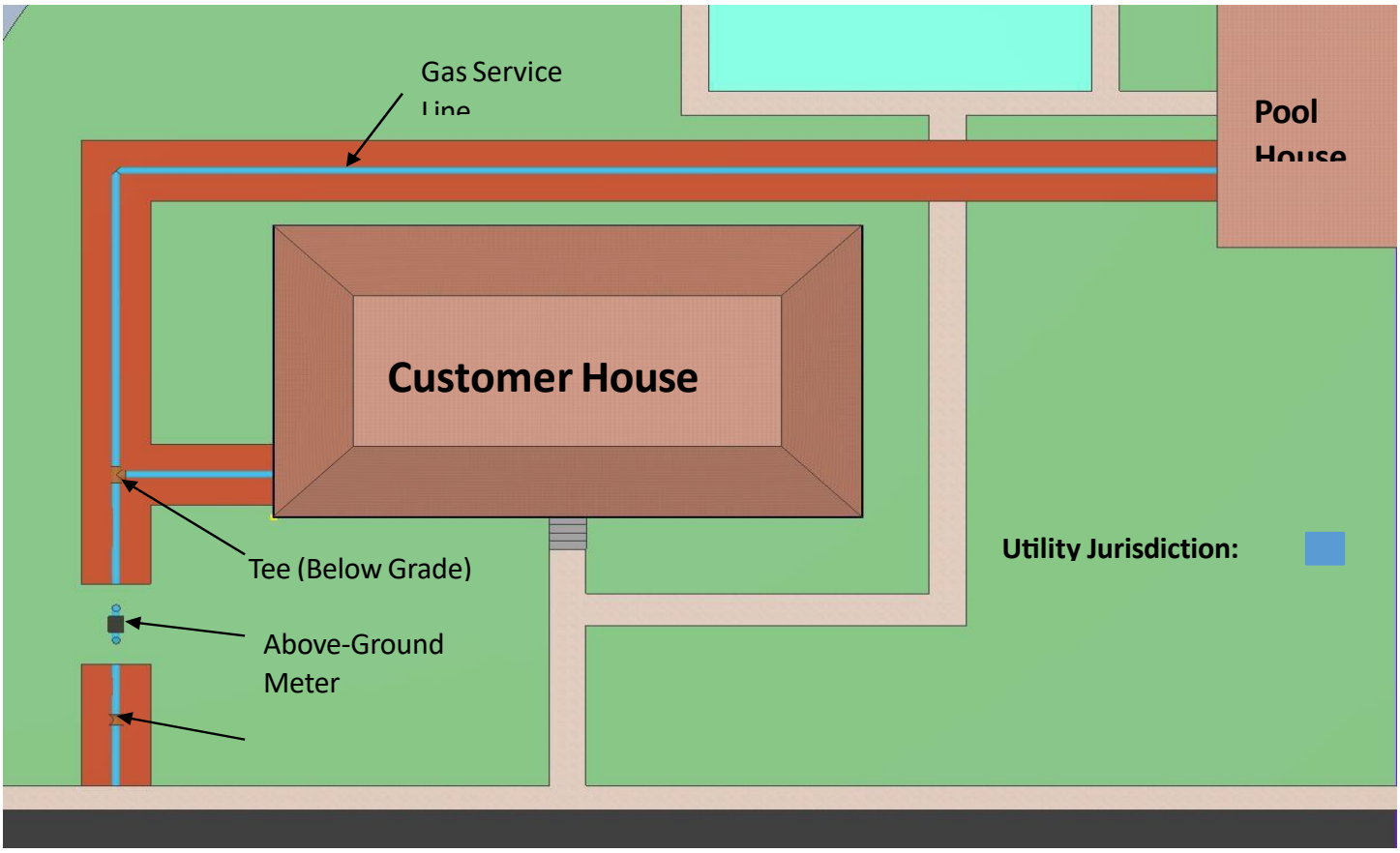
If you have a bank account and access to the Internet, you can use the Pay-by-internet program. The program is a secure and free way to transmit payment directly from your account.

The Following drawings are to be used as reference to Utility Jurisdiction piping vs. AHJ piping. All below grade piping must comply with all applicable con Edison specifications including cathodic protection where required in addition to all the OQ –Below Grade Requirements

Gas Service Line Scenario Sketches

Exhibit 12

Diagram 1



Note: The purpose of the diagram is to depict the jurisdiction of Gas Service Line vs. Customer Piping.

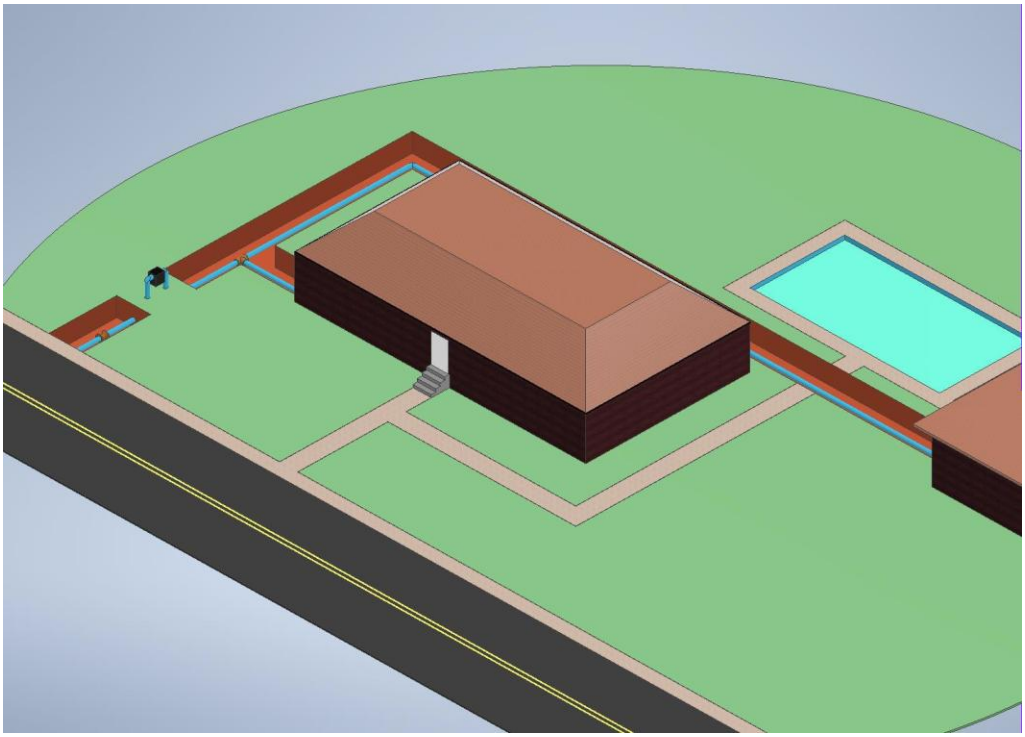
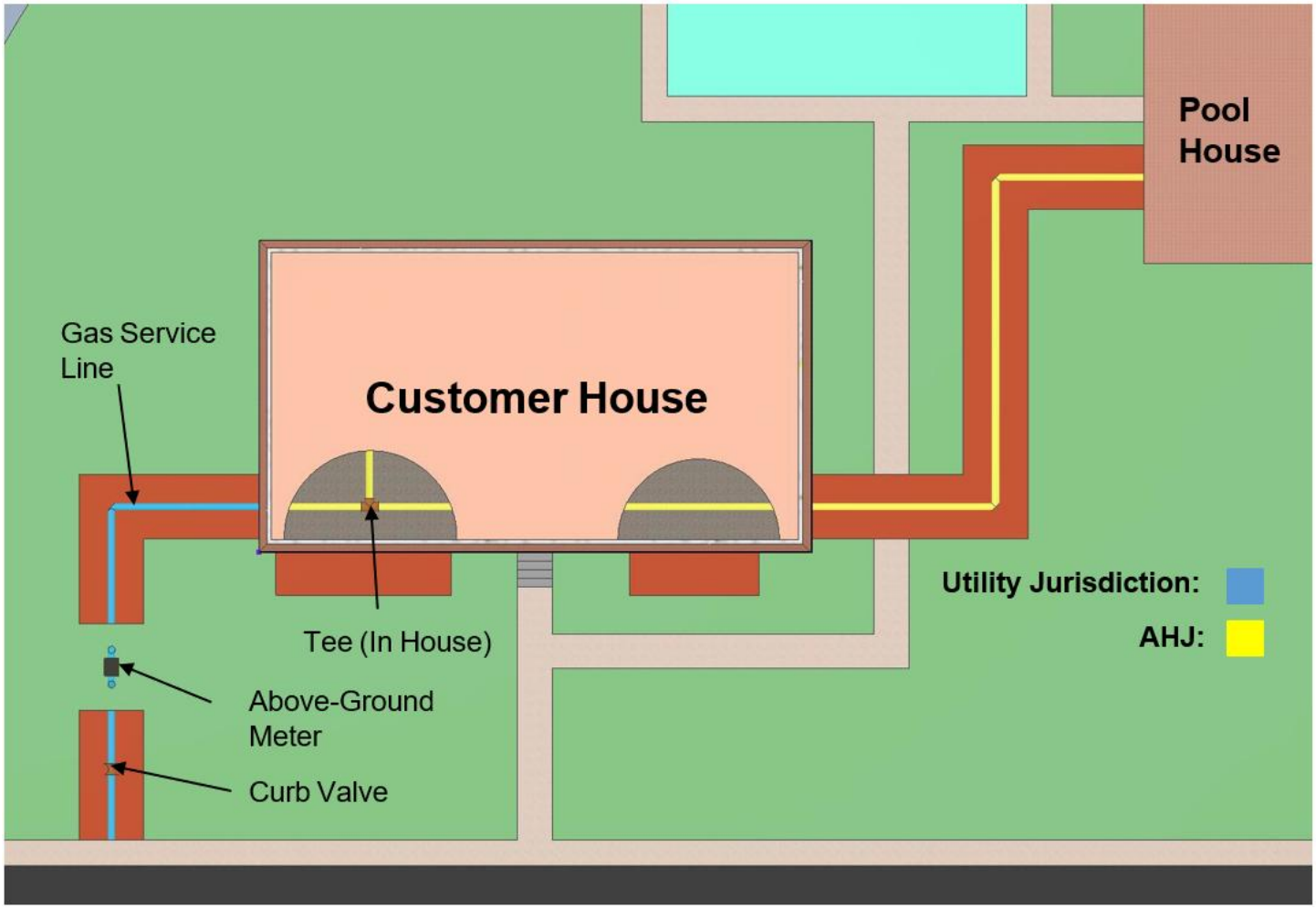


Diagram 2



Note: The purpose of the diagram is to depict the jurisdiction of Gas Service Line vs. Customer Piping.

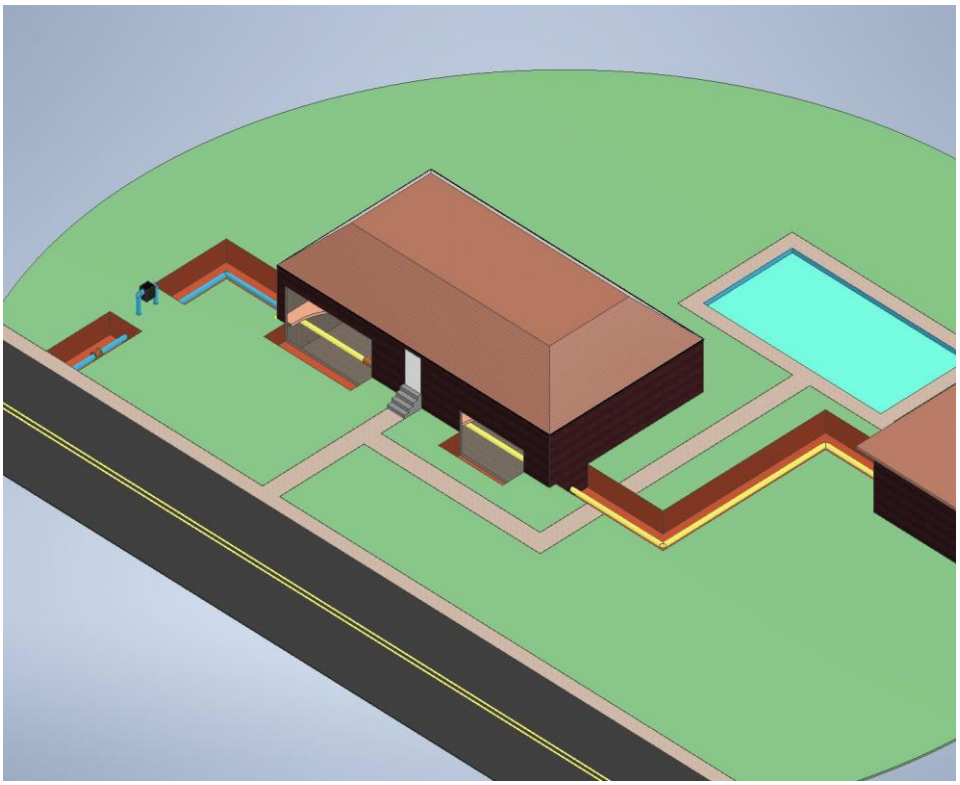
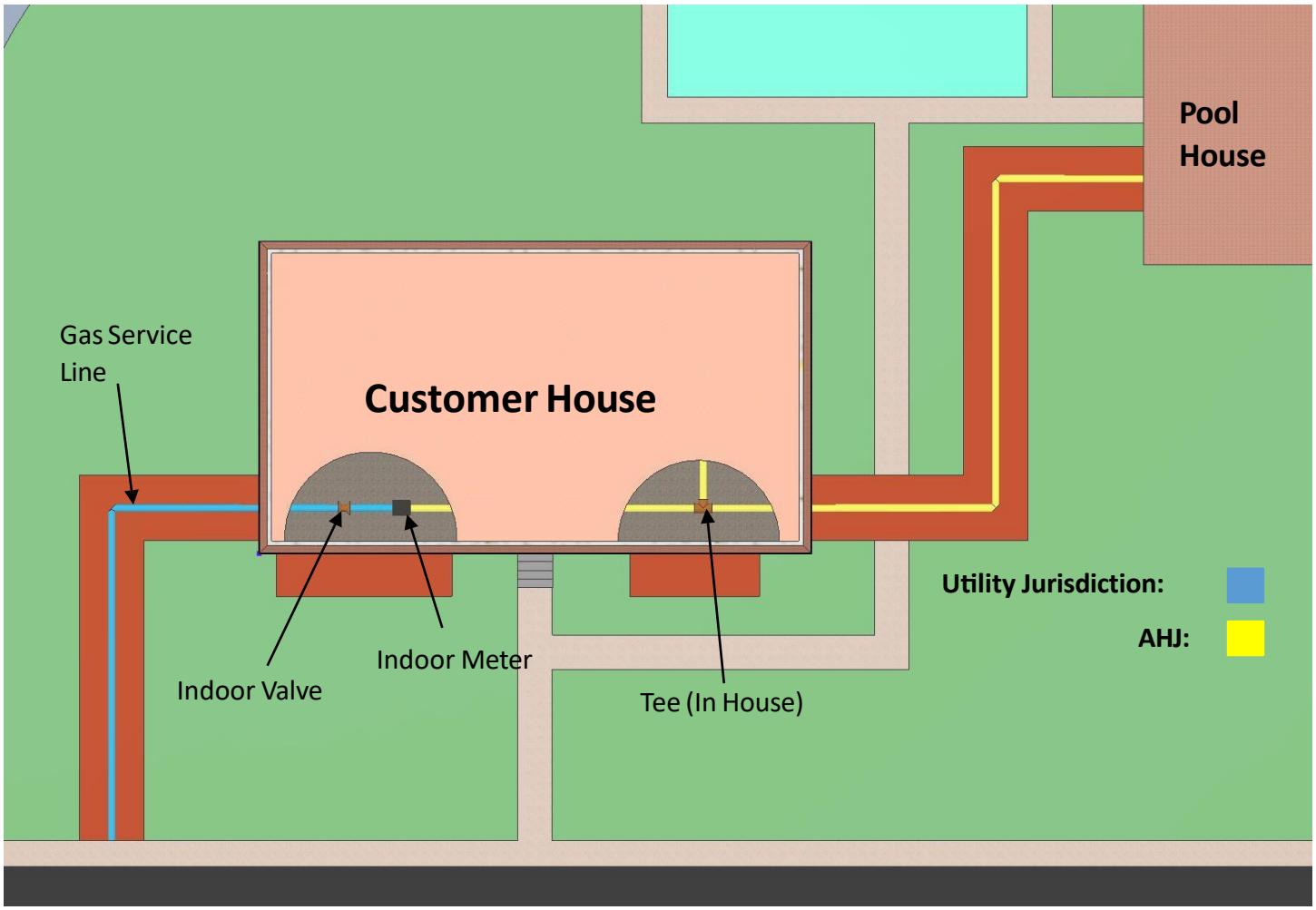
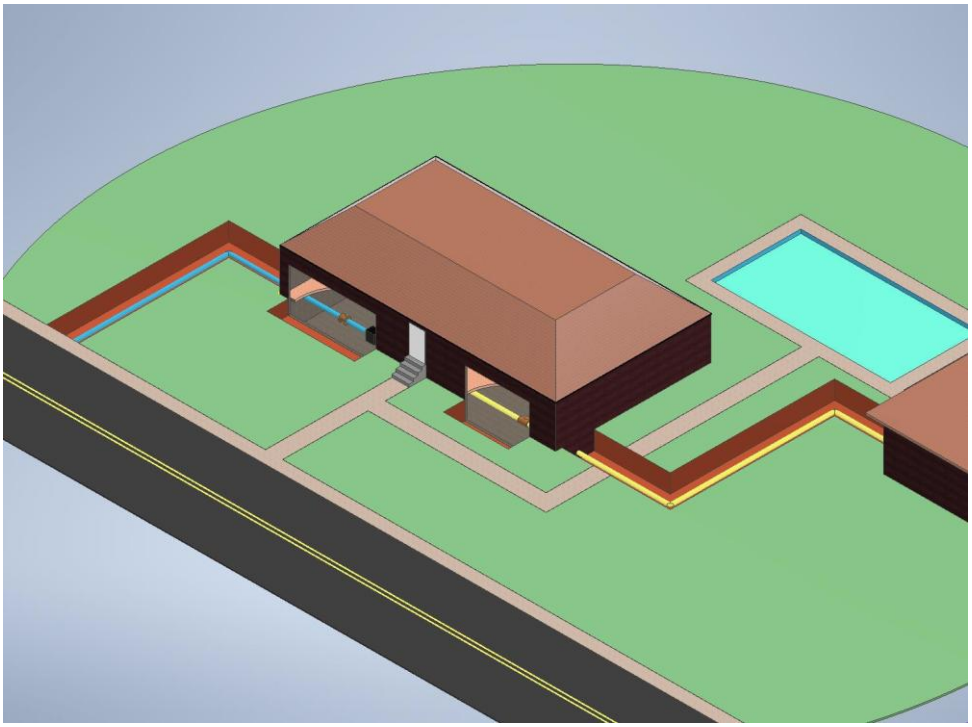
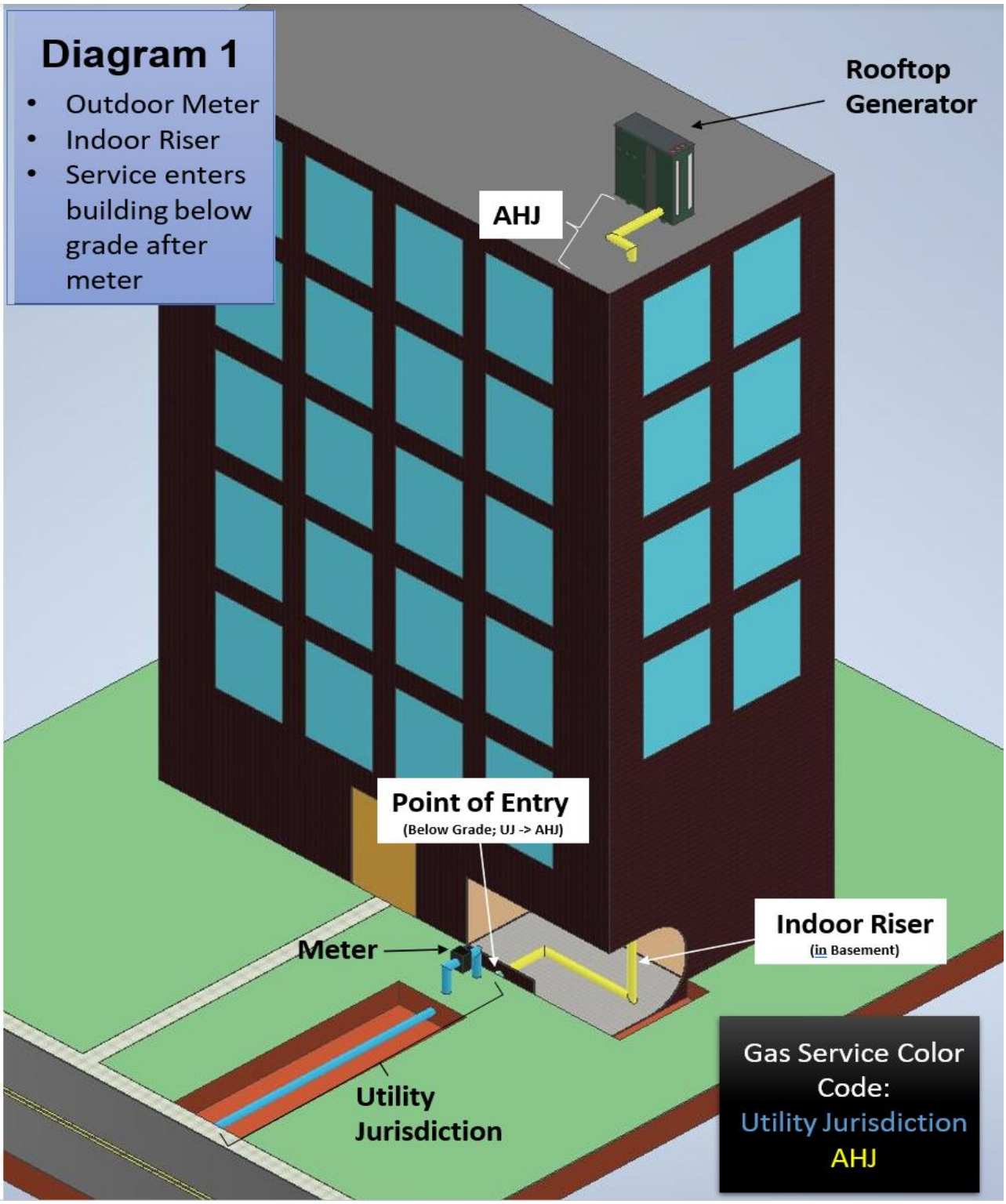


Diagram 3

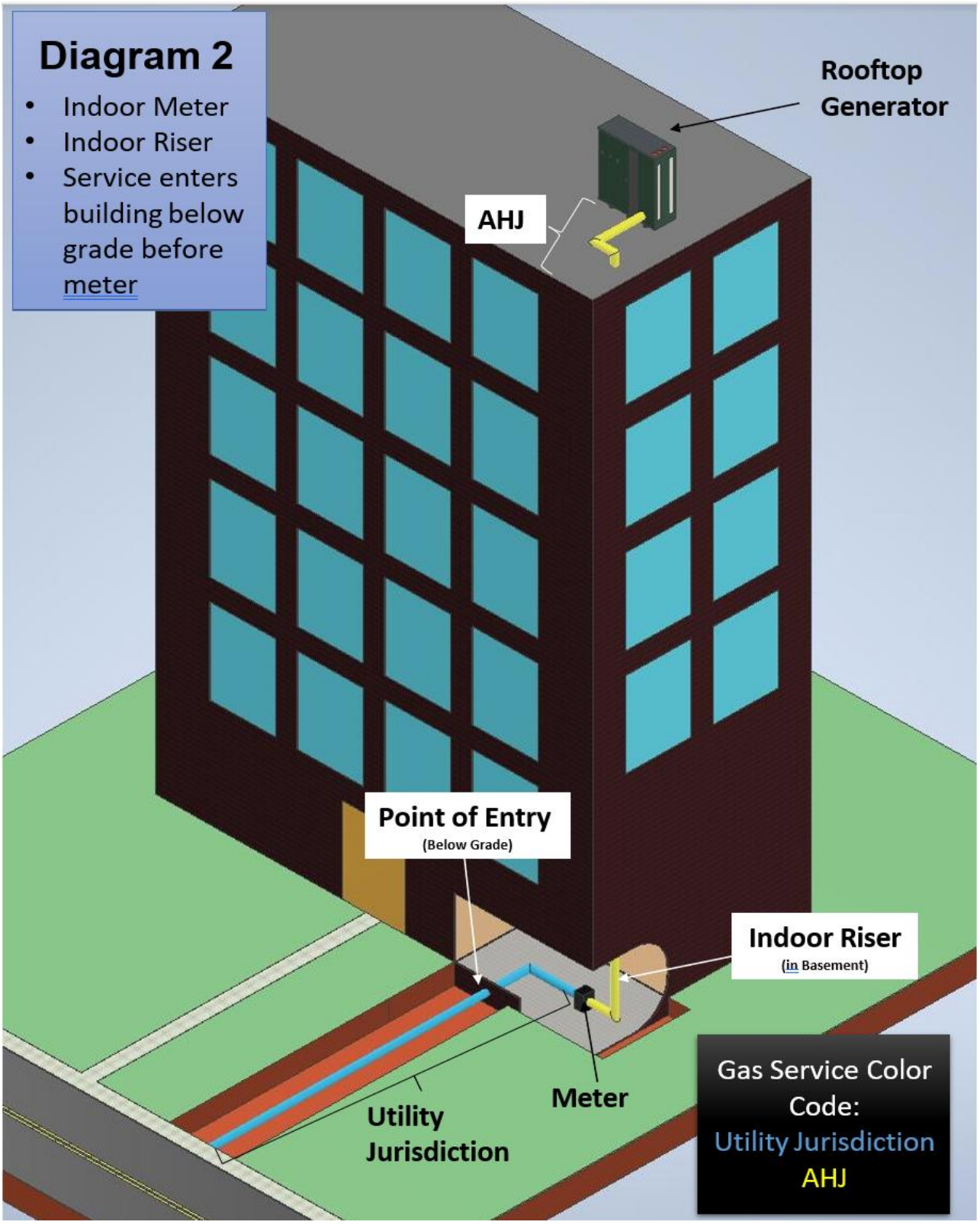


Note: The purpose of the diagram is to depict the jurisdiction of Gas Service Line vs. Customer Piping.

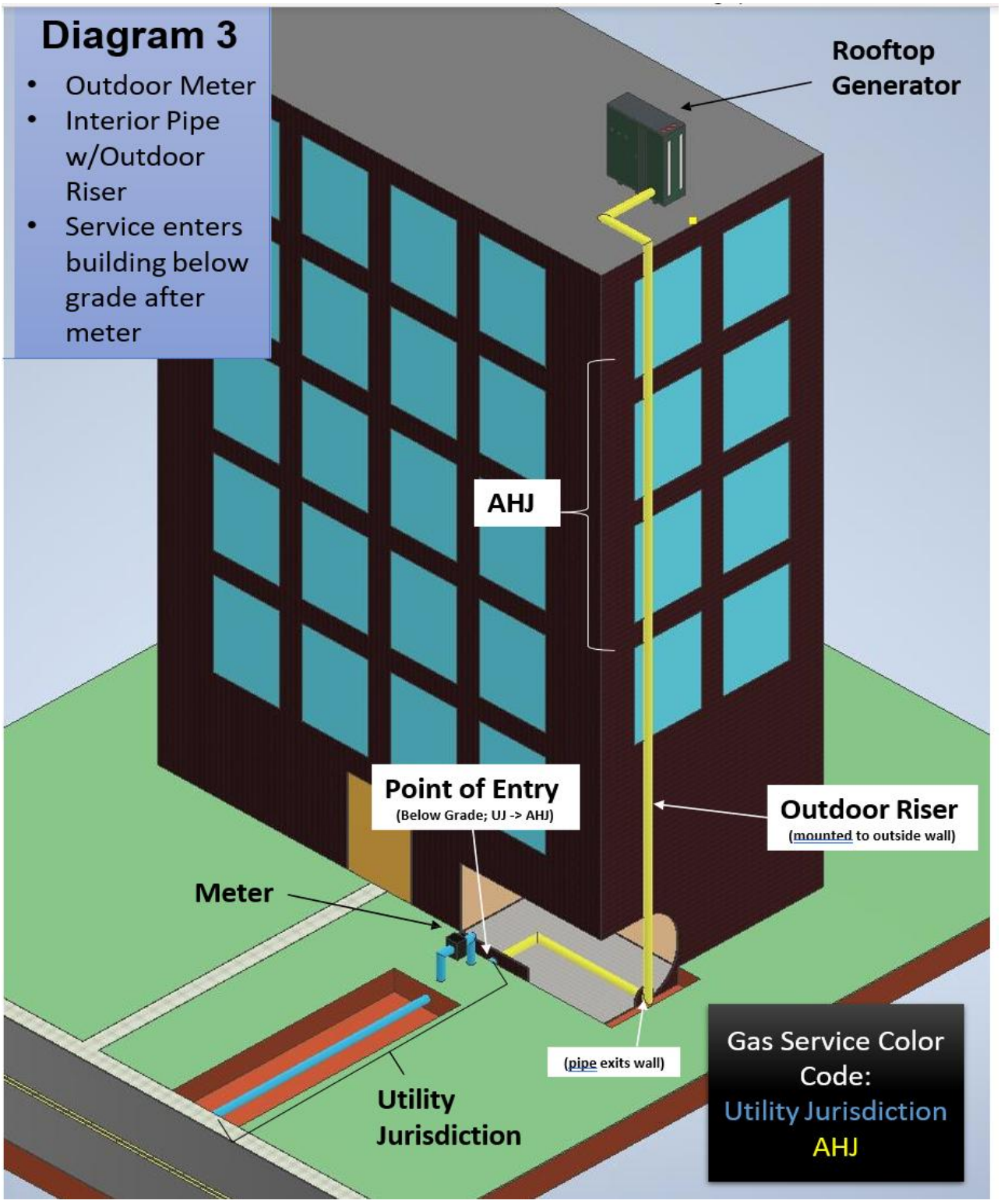




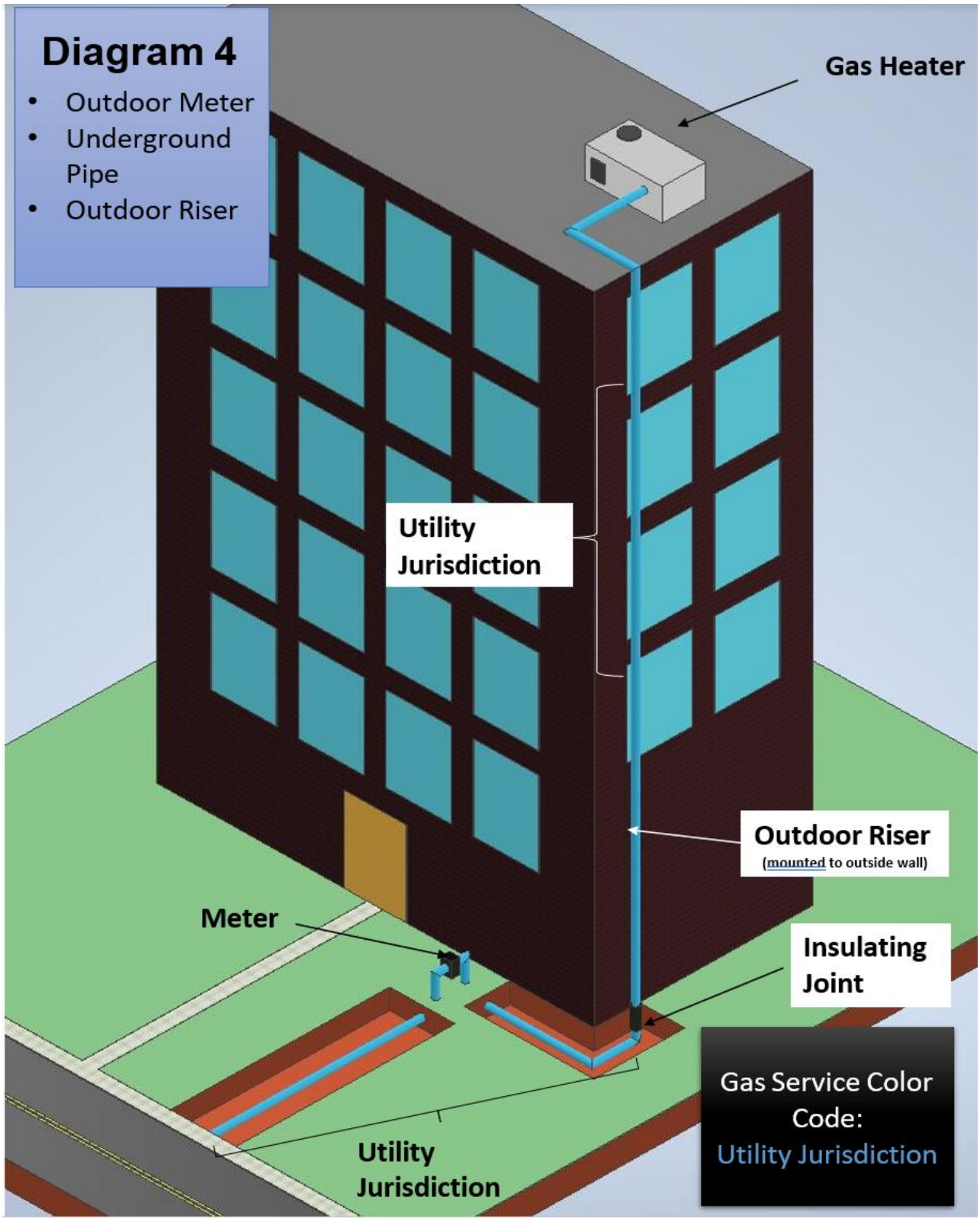
Note: The purpose of the diagram is to depict the jurisdiction of Gas Service Line vs. Customer Piping.



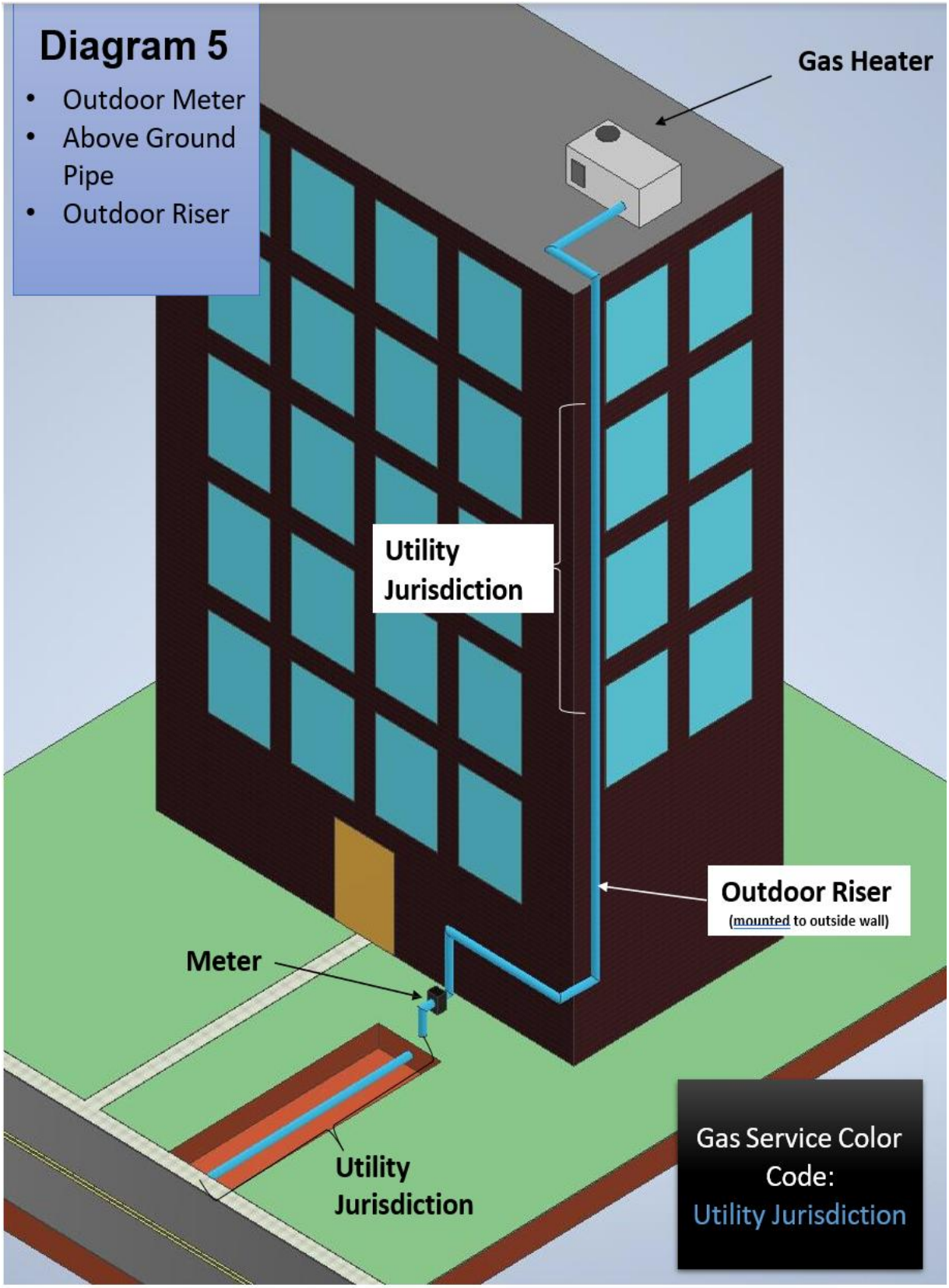
Note: The purpose of the diagram is to depict the jurisdiction of Gas Service Line vs. Customer Piping.



Note: The purpose of the diagram is to depict the jurisdiction of Gas Service Line vs. Customer Piping.



Note: The purpose of the diagram is to depict the jurisdiction of Gas Service Line vs. Customer Piping.



Note: The purpose of the diagram is to depict the jurisdiction of Gas Service Line vs. Customer Piping.

Customer Gas Service As Constructed

Exhibit 13

TICKET#: _____ LAYOUT/ PROJECT #: _____
SERVICE ADDRESS: _____ BRANCH SERVICE ADDRESS: _____
ALSO SUPPLIES: _____ BRANCH REGISTER #: _____
REGISTER #: _____ M&S PLATE: _____

	SERVICE	BRANCH SERVICE
INSTALLATION	PRESSURE: LP IP MP HP EFV INSTALLED: NO 800 1100 1800 2600 5500 METHOD: DB INSERT TRANSFER HOLE HOG MATERIAL: PE ST C ELECTRONIC MARKERS (E.M.) INSTALLED*: YES NO *(MAIN, C/V, POE, OFFSETS, EVERY 20') SIZE: _____ LENGTH (M-CL): _____ SERVICE LENGTH: _____ LENGTH (M-B): _____ POE LOCATION: _____ LENGTH (M-V): _____ VALVE LOCATION: _____ LENGTH (V-B): _____ COVER: ___ MAIN CONNECTION: _____	PRESSURE: LP IP MP HP EFV INSTALLED: NO 800 1100 1800 2600 5500 METHOD: DB INSERT TR/ HOLE HOG MATERIAL: PE ST C ELECTRONIC MARKERS (E.M.) INSTALLED*: YES NO *(MAIN, C/V, POE, OFFSETS, EVERY 20') SIZE: _____ ENGTH (M-BR): _____ SERVICE LENGTH: _____ ENGTH (BR-E): _____ POE LOCATION: _____ LENGTH (E-V): _____ VALVE LOCATION: _____ LENGTH (V-B): _____ COVER: ___ BRANCH CONNECTION: _____
PRESSURE TEST	N2 OR AIR DATE: _____ TEST PRESSURE: 90 PSIG (LP/IP/MP) 150 PSIG (HP) DURATION IN MINUTES: 15 (≤2") 30 (>2") MAIN-TO-SERVICE CONNECTION INCLUDED IN TEST? YES NO (SOAP TESTED AT LINE PRESSURE) PERFORMED BY WITNESSED BY NAME: _____ NAME: _____ EMP #/ ITS #: _____ EMP #/ ITS #: _____	N2 OR AIR \TE: TEST PRESSURE: 90 PSIG (LP/IP/ 150 PSIG (HP) DURATION IN MINUTES: 15 (≤2") 30 (>2") MAIN-TO-SERVICE CONNECTION INCLUDED IN TEST? YES NO (SOAP TESTED PERFORMED BY WITNESSED BY NAME: _____ NAME: _____ EMP #/ ITS #: _____ #/ ITS #: _____

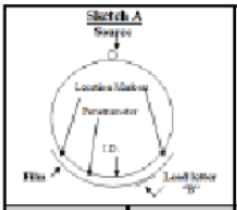
COMPANY NAME: _____ INSTALLER NAME: _____ ITS #: _____ DATE: _____
REVIEWED BY: _____ EMP #: _____ DEPT: _____ DATE: _____

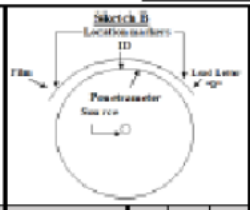
Exhibit 14

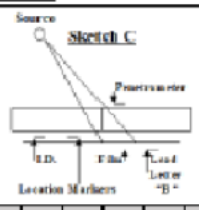
RADIOGRAPHIC INSPECTION REPORT

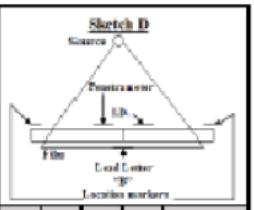
Client:			Component:				Date Radiographed:						
Location:													
Radiographic Procedure:	VTI-RT (ASME)-008 / ASME Section V				Applicable / Acceptable Standard:					ASME B31.1			
Comments:													
Radiographer/Interpreter:					Asst. Radiographer:								
Level:		Badge:			Level:				Badge:				
Type of Material:	C/S		Material/Weld Thickness:	0.154"	Penetrameter:	ASTM 1B	Sensitivity:	0.008"	Density:	2.0-4.0			
Source:	Ir192	Curies:	59.2	Focal Spot Size:	0.133"	Exposure Time:	1m13s	SFD:	15"				
U/g Factor:	<.020	Film Size:	4.5" x 10"	Film Type:	AGFA D5 28pcs			Screens:	F .010 / B .010				
FILM LOAD	Single:	X	Double:		Sketch:	C	EXPOSURE	SWE:		DWE:	X	VIEWING	SWV:		DWV:	X

WELD INTERPRETATION









Part Description	Weld Number	Film View	Welder ID	Accept	Reject	Porosity	Slag Inclusions	Elongated Gas	Lack of Fusion	Incomplete Penetration	Tungsten Inclusions	Concavity (Suck-back)	Burn Through	Drop Through	Undercut	Start/Stop	High/Low	Surface	Remarks
2" Gas	SW-1	0		X															
		90		X															
2" Gas	SW-2	0		X															
		90		X															
2" Gas	SW-3	0		X															
		90		X															
2" Gas	SW-4	0		X															
		90		X															
2" Gas	SW-5	0		X															
		90		X															
2" Gas	SW-6	0		X															
		90		X															
2" Gas	SW-7	0		X															
		90		X															
2" Gas	SW-8	0		X															
		90		X															

Comments:			
LEVEL II SIGNATURE:		DATE:	

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Mailing Address: 79 Alexander Avenue, 6th Floor, Bronx, NY 10454 Phone: (718) 601-7343

Revisions

Revision One		
Updates, Additions and Omissions – September, 2014		
Page No.	**Section**	**Description**
2	-	Changed Revision Date and updated Edition Year.
6	TOC/Section 1	Added "O" – Flat Rate Policy.
6	TOC/Section 1	Added "P" – Termination and Reconnection of Gas Service.
7	TOC/Section 4	Added "I" – Commercial & Industrial Equipment Interaction.
	TOC/Reference Material	Added "Westchester County-Meter Piping Pressure Test Verification form, re-numbered Page No.'s and changed Exhibit Titles.
	TOC Revisions	Added Updates, Additions and/or Omissions (July, 2014).
10	-	Changed No. 6 in Step-2 to read "*Gas Cost Estimates*" are….
11	-	Changed No. 5 in Step-4 to reflect new Page. No.'s.
23	Section 1 – C	Changed to read "*are valid six (6) months*".
25	Section 1 – M	Changed Exhibit and associated Page No.'s.
26	Section 1 – M	Deleted d) Con Edison requires a "Statement of Chimney Service" in NYC and Westchester County for these installations that are converting to gas home heating.
27	Section 1	Added Section "O" titled "Flat Rate (Maintain integrity of gas piping during building swing-over)". Added Section "P" titled "Termination and Reconnection of Gas Service".
28	Section 2 – A	Changed No. 6 to read *"Gas services are to be properly sleeved and vented per **EO-4890** titled **"Service Pipe / Tubing and Service Sleeve through Vault, Open Areaway, Open Area under Stairs, Under Enclosed Area and Vaulted Basement"**. If the customer elects to build and/or add an extension over an existing gas service, the customer will bear the full cost to sleeve and vent the existing gas service or the full cost to off-set same."*
30	Section 2 – C	Added bullet: •The company has the right to refuse service and make the customer change out the piping at customer / plumber's expense when the piping size is found to be inadequately sized.
32	Section F	Changed g) tracer wire from yellow to "red".
34	Section 2 – J-B	b) Westchester County b) Changed Exhibit and associated Page No.'s. Updated "Note" - Replace "in excess of LP" with "not Distribution Piping" and added ".
36	Section 2 – N	Added bullet(s): • Steel services installed prior to 1972 that have been disconnected due to unplanned work (e.g. leak repairs, contractor damages, no gas investigations, removing a blockage from a service, etc.) shall be replaced per the requirements in Section 2 of the Yellow Book. • PPE plastic, copper, & steel services installed after 1971 that have been disconnected due to unplanned work (e.g. leak repairs, contractor damages, no gas investigations, removing a blockage from a service, etc.) may be reconnected by Con Edison after the service pipe is pressure tested from the point of disconnect to the service head valve per Section 2(M) of the Yellow Book.

37	Section 2 – N	b) Changed Page No. for Exhibit Reference.
39	Section 2 – Q	b) Changed Page No. for Exhibit Reference for Certificate of Compliance" form. Note Changed Page No. for Exhibit Reference for REQUEST FOR WAIVER - MINIMUM INSULATION STANDARD" form.
40	Section 2 – R Emergency Natural Gas Generator	a) Added: In New York City, where a building is required to maintain emergency power equipment i.e. elevator bank, emergency lighting, fire pumps and the customer elects natural gas as the fuel source for the emergency generator, the customer is required to install a separate gas service and shut-off valve as per NYC Fire Department Rule. The Customer shall pay all costs associated for the second gas service under Excess Distribution Facility (EDF). See "Rates and Terms of Service" (pg. 24) and Special Services Provided at Cost (pg. 25) of this guide. b) Added: Where a customer elects to install a natural gas generator for storm and natural disaster preparedness and the existing gas service is no longer adequate, the Customer shall pay all costs associated with the installation including, if necessary, all costs for system reinforcement, gas mains and additional gas service. See "Rates and Terms of Service" (pg. 24) and Special Services Provided at Cost (pg. 25) of this guide.
43	Section 3 – C	Added "for residential usage" and changed font to BOLD and red.
45	Section 4 – A	3. Added "piping for a gas diaphragm" and "For rotary gas meters, refer to applicable gas meter drawing specifications".
47	Section 4 – C	Under b) Indoor Installations: No. 4 Changed to read "Gas meters may not be placed within" three feet (3') of either side of an electric meter.
47	Section 4 – C	Under b) Indoor Installations: No. 5 Added "for large general, mix-used buildings as per NYC Fuel Gas Code, Appendix G)."
49	Section 4 – I	Added new Section I titled "Commercial & Industrial Customer Equipment Interaction with Con Edison Gas Regulator and Gas Meter".
59	Gas Reference Definitions	Added new "Meter Piping" Definition. Meter Piping: Also known as, extension service pipe from the first fitting inside the building and the gas utility meter. Customer's plumber is responsible to meet all company specifications, procedures and drawing requirements. A NYC Meter Piping Pressure Test Verification form will be required.

62	Gas Reference Specifications and Drawings	G-695 Updated to reflect most current revision date (02/18/2014).
		308657 R8 Updated to reflect most current revision date (07/15/2014).
		361571 R4 Updated to reflect most current revision date (07/15/2014).
		361693 R3 Updated to reflect most current revision date (07/15/2014).
		G-690-R5 – EO-16310-B Updated to reflect most current revision date (07/15/2014).
		EO-14134-C Updated to reflect most current revision date (01/28/2014).

		EO-16511-B R10 Updated to reflect most current revision date (07/15/2014).
		EO-16585-A Updated to correct most current revision date (07/19/2011).
		361100 R3 Updated to reflect most current revision date (07/15/2014).
		G-8094-9 Updated to reflect most current revision date (04/28/2014).
		G-2041 / 359677 Updated to correct most current revision date (03/26/2012).
63	Gas Reference Specifications and Drawings	G-703 Updated to reflect most current revision date (04/09/2014).
		G-11836-13-IGa Updated to reflect most current revision date. (09/11/2013). Interim revision reflects recent approval and use of a new higher volume excess flow valve.
		G-11837 Updated to reflect most current revision date (01/24/2014).
		G-414 aka EO-14166 Added specification after being over looked in initial publication. Titled: "*Installation of Twin Gas Regulators Indoors (1" – 2"*)".
		502163 R0 Added New Gas Metering Specification titled: "*Bumper Installation*".
		502164 R0 Added New Gas Metering Specification Drawing titled: "*Outdoor Installation of B-838 Gas Regulators – 2"x4" Flanged for Class 1000TC – 38000TC Rotary Meters.*
		G-704 Added New Gas Metering Specification titled: "*Gas Meter and Regulator Installation Requirements*".
		EO-16726-A Added specification after being over looked in initial publication. Titled: *Installation of 2 to 6 Units Prefabricated Meter Sets for Outdoor Class 250TC Meters.*
65	Approved Gas Service Equipment Tables	Table 1-A Added Dresser valves to table. Added 1 ¼" valve to table. Added Walworth valve 1797 F to table. Table 1-A and Table 3 Highlighted (in yellow) those valves designed and approved for use on operating pressures greater than 1 PSIG.
		Table 5 Added A.Y. McDonald "By-Pass" Meter Bar - Catalog No. 6410.

74	Reference Material	Added "New York City Gas Meter Piping Pressure Test Verification" forms as Exhibit-B. Added "*Note: Form is to be used for company documentation by the performing plumber of record for all oil-to-gas conversion, natural gas generators, upgrades and or swing over work, certification.*"
75		Changed to Exhibit-C.
76		Added "Westchester County Gas Meter Piping Pressure Test Verification" forms as Exhibit-D.
77		Changed to Exhibit-E.
78		Changed to Exhibit-F.
79		Changed to Exhibit-G.
80		Changed to Exhibit-H and replaced Interim and Final Gas Checklist with most current revision available date April, 2014.

84	Revisions	Added Revisions Section to track “Updates, Additions and Omissions to the gas “Yellow Book” document.

Revision 2		
Updates, Additions and Omissions – May, 2015		
Page No.	**Section**	**Description**
2	-	Changed Revision Date and updated Edition Year.
10	Quick Start Section C Flow Process	Step-2 “Gas Service Ruling” | Added No 6. Gas Engineering Service Layouts are valid for 60 days from the date of issuance. A new load study and service layout will need to be prepared as Con Edison cannot reserve pipeline capacity.
25	Section 1 – M – 2	Added info and link to The Westchester County “Distribution” Pressure Test Verification Affidavit. Added info and link to The Westchester County Gas “Meter” Pressure Test Verification Affidavit
26	Section 1 – M/d	Removed sub-section d) for clarity. d) Read: Con Edison requires a statement from New York City and Westchester County for those customers performing oil or electric gas conversions for home heating.
26	Section 1 – N(b)	Updated “Definition of Cost” percentages to reflect current Tariff.
	Section 1 – N(f)	Updated “Definition of Cost” overheads to reflect current Tariff.
27	Section 1 – P	Updated Utility Notification Section to reflect NYCFGC language in Sect 406.6.2.2
28	Section 2 – A-9	Updated Tariff Reference Leafs No.’s to reflect current Tariff.
28, 29	Section 2 – A-9 1-111	Added the word “Firm” to reflect current Tariff language.
29	Section 2 – A-9 IV	Updated Tariff Reference Leafs No.’s to reflect current Tariff.
31	Section 2 – F - d)	Removed – “Plastic pipe joints shall be made only by qualified installers approved”. Added note to include “operator”.
33	Section 2 – J – e)	Updated Chart for Welding Inside Buildings to reflect 2014 NYCFGC for five (5) PSIG.
34	Section 2 – J (Note)	**Removed “Note” requiring all gas meter pipe that is butt-welded be radiographed.** Note read as follows: “Note: All gas meter piping that is butt-welded (not Distribution Piping) must be radiographed, regardless of whether the piping is inside or outside the building property line. Con Edison follows the Federal and State Code requirement for meter piping ending at the point of service determination for utility distribution companies. Gas distribution piping after the meter outlet where required must comply with the local municipal standard.”
	Section 2 – J	A. Updated to incorporate Welding Requirements inside buildings as per 2014 NYCFGC. f) Updated Pipe Size and Pressure Limitations – Welding In-Side Building Chart to reflect latest NYCFGC piping pressure i.e. 3psi to 5psi Added Section C “Meter Piping” and included new Meter Piping Welding Requirement Table.
35	Section 2 – K – i)	Revised Text to incorporate Test Station Requirement on steel separately protected gas services as per Gas Bulletin.
37	Section 2 –M	Updated “Test Pressure and Duration” charts to reflect latest NYCFGC distribution piping pressure i.e. 3psi to 5psi
41	Section 2 – R - a)	Removed miscellaneous text. Text read as follows; “Storm damage to our overhead electric distribution system, flood damage from hurricanes and recent building and fire code regulations, many home owners and building developers are condition by company and/or municipal Office of Emergency Management.”

	Section 2 – R - b)	Added text for clarity: “electric power use during a storm and/or” and added reference to current Tariff Leaf: See Gas Rate LEAF 38 PSC No. 9 III 3.H.
42	Section 2 – S	Updated NYCFGC Reference for Masonry Chimneys to reflect 2014 Code Sections
44	Section 3 – C	Updated Exceptions to Available Delivery Pressure to reflect 2014 NYCFGC Requirements of Appendix “G” and “E” and new NYC Fire Department approval and sign-off on natural gas installations above 15 psig.
45	Section 3 – D	Updated Gas Meter Specification to reflect current revision and title. See G-699-2.
47	Section 4 – A – b)	Updated Table 1 Title for consistency w/ NYCFGC Appendix E.
48	Section 4 – C – b)5	Updated to reference 2014 NYCFGC – Appendix “E”
50	Section 4 – H	Updated Gas Meter Specification to reflect current revision and title. See G-699-2.
63, 64	Gas Reference Specifications and Drawings	**G-699-2** Updated title and most current revision date (10/17/2014).
		EO-17118 R4 | Updated to reflect Revision 4 and most current revision date (02/13/2015).
		G-100, 276-7 | Added Purchase & Test Specification titled “Insulating Kits for Flanges on Steel Gas Pipelines” (09/02/10).
		308657 R9 | Updated to reflect Revision 9 to include revising Note 10 and the addition of Notes 22 & 23. (Rev. 04/15/15)
		361100 R4 | Updated to reflect Revision 4 to include revising Note 10 and the addition of Notes 21 & 22. Revised 6” Meters in Table 2. (Rev. 04/14/15)
		361571 R5 | Updated to reflect Revision 5 to include revising Note 10 and the addition of Notes 21 & 22. (Rev. 04/15/15)
		361693 R4 | Updated to reflect Revision 4 to include revising Note 10 and the addition of Notes 21 & 22. (Rev. 04/14/15)
		365531 R2 | Updated to reflect Revision 2 to include revising Drawing Title, Bill of Materials and Notes. Deleted 6” gas meters. (Rev. 04/14/15)
		384872 R1 | Updated to reflect Revision 2 to include revising Welding Requirements and Bill of Materials. Added “Y” Strainer requirements and notes F, G and H. Added reference to YB and July 1, 2015 start date for “Y” Strainer installation requirement. (Rev. 04/14/15)
		502164 R1 | Updated to reflect Revision 1 to include revising Bill of Materials, Notes F, M. Added Notes N and O. Deleted Note E and Item No. 9 and threaded meter piping. Added July 1, 2015 start date for “Y” Strainer installation requirement. (Rev. 04/14/15)
		EO-13977-C R15 | Updated to reflect Revision 15 to include revising Drawing Title, Bill of Materials and Notes. Deleted 6” gas meters. (Rev. 04/14/15)
		EO-14158 R26 | Updated to reflect Revision 26 to include adding Detail 1, items 24, 25 & 26. Deleted Note D and Item 7. Added July 1, 2015 start date for “Y” Strainer installation requirement. (Rev. 04/14/15)
		EO-14166 R25 | Updated to reflect Revision 25 to include adding Detail 1, items 28, 29 and 30. Deleted Item 12 and associated note. Added Note D and revised item no. 11. Added July 1, 2015 start date for “Y” Strainer installation requirement. (Rev. 04/15/15)

		EO-16390 R7 | Updated to reflect Revision 7 to include adding Notes 9 through 11. Updated ANSI STDS to ASME. Added Detail "A" and reference to gas "Yellow Book". (Rev. 04/14/15)
		EO-16511-B R11 | Updated to reflect Revision 11 to include adding Detail for 23000R Meter, Revised Bill of Materials and Note F. Added Notes N, O, P, and Q. Revised Dim "D". Deleted Item No. 11 and Note E. Added July 1, 2015 start date for "Y" Strainer installation requirement. (Rev. 04/14/15)
		507002 R0 | New Drawing. Note: info previously covered on EO-13977-C. (04/14/15)
		507003 R0 | New Drawing. Note: info previously covered on 365531. (04/14/15)
73	Approved Gas Service Equipment Tables	Table 1 & Table 1A | Added 6" and 8" sizes to Nordstrom 143 valve listing. Added 143-T in 2".
		Table 1 | Added Dresser Style 350 Valve.
		Table 1-A & Table 3 | Added Walworth Valve No. 1718 (No Wheel).
		Table 18 | Removed Stuart Steel Production Corp as "Approved" Manufacturer. Per Purchase & Test Specification, Stuart Steel Production Corp. is a distributor not a manufacturer. Added Note: Refer to Purchase & Test Specification G-100,276-7 (pg. 64) for Gasket Info (Sold Separately).
		Table 25 | Added table titled "Y-Strainer" listing Approved Y-Strainer Info and Effective Date of use as of 07/01/2015.

Revision 3		
Updates, Additions and Omissions – November, 2015		
Page No.	**Section**	**Description**
2	-	Changed Revision Date and updated Edition Year.
6	Table of Contents	F. Plastic Service Pipe – incl. “OP Qualification”.
27	Section 1 – P	• Any time a gas meter valve is being operated. Added the word “time” for correction.
31	Section 2 – F	Updated to reflect contractor OQ certification requirements for both contractor’s PE “Joiner” and “Peer” Inspector per Gas Quality Assurance. Added gas training team email/contact info.
44	Section 3 – C	Added NYCFGC and Appendix G for reference.
62	Governing Codes	Added No. 9 - Reference to 2015 Northeast Gas Association (NGA) Plastic Pipe Joining Manual.
63, 64	Gas Reference Specifications and Drawings	**EO-16546-B** | Updated to include revised Drawing Name, Chart, Notes and Bill of Materials.
		G-2040 / 311296 | Added revision date for attached drawing.
		G-2041 / 359677 | Updated last revision date (correction).
		G-11837 | Added Rev. No. and updated date to most current.
		G-100, 276-7 | Updated to reflect Latest Review Date – 09/11/15
		507002 R1| Updated to reflect Revision 1 to include the addition of Item No. 14 to Bill of Materials.
		G-8199-7-IG | Added Specification covering Qualification of Installers who Join Plastic Pipe/Tubing with Mechanical Fittings
		G-8123-16 | Added Gas Specification covering Heat Fusion Joining of Polyethylene (PE) Plastic Pipe/Tubing and Fittings for Gas Mains and Services.
		G-8121-15-IG | Added Gas Specification covering Qualification of Installers Performing Heat Fusion or Electrofusion of Polyethylene Plastic Pipe/Tubing and Fittings for Gas Mains and Services.
		IP-27-5 | Added Gas Specification covering Installation of Electrofusion Fittings on PE Plastic Pipe/Tubing and Molded Fittings using a Universal Electrofusion Processor.
		IP-20-6 | Added Gas Specification covering Installation of Mechanical Fittings for Plastic Pipe and Tubing.
85	Section 7–Exhibit - I	Added PE Plastic Joint Fusion/Customer Property | Visual Inspection Form and changed Exhibit designation to “I”.
86	Section 7–Exhibit - H	Changed Exhibit designation to “H”.
93	Revisions	Updated to reflect Revision 4 of guide (Jan., 2016)

Revision 4		
Updates, Additions and Omissions – February, 2016		
Page No.	**Section**	**Description**
2	-	Changed Revision Date and updated Edition Year.
6	Table of Contents	Added Bookmarks to Table of Contents Page for Guide Navigation.
29-30	Section 2-B	Revised Con Edison Point of Service Termination for Residential (1-3 Family) – Indoor Meter(s) for consistency with G-8100 and Gas Tariff. Added “the point-of-service termination of Con Edison’s service pipe will be the first fitting inside the building connected to the sleeved elbow unit”.
30	Section 2-B / 3 b)	Added (1-3 Family) for Residential.
	Section 2-B / 3 c)	Added (>3 Family) for Multi-Dwelling Residential.
31	Section 2-F	Updated Section F – “Plastic Service Pipe” on Contractor OP Qualification Requirements for PE “Joiner” and “Peer Inspector”. Removed Reference to G-8199 (now obsolete) - Info now combined in G-8121.
47	Section 4 / C	Added to Prohibited Locations and Updated to Reflect G-704 and read; “Gas meters may be not be installed within three feet (3 ft.) of sources of ignition including burners, electric panel boxes or machinery”. Moved from Section b) to c).
64-65	Gas Reference Specifications and Drawings	**EO-511327 |** New Drawing Added– Titled: Installation of Class 250 TC Diaphragm Gas Meter – Indoors (Contains Info Previously Shown On DWG EO-7420-B Rev 18). Effective Date: Feb. 1, 2016.
		EO-16726-A R6 | Revised Title; Added AY McDonald 6312 Two- And Three-Unit Meter Bar Manifolds, Added Reference To DWG 502163. Effective Date: Feb. 1, 2016.
		EO-16886-B R5 | Revised Drawing Title Added Detail For A.Y McDonald 6312 Bypass Meter Bars; Created Sheet 2; Revised Bill Of Material. Effective Date: Feb. 1, 2016.
		EO-16585-A R11 | Revised Drawing Title, Deleted CL500 & CL1000 Meter Details, Revised Bill of Materials, Deleted Alternate Meter Bar Detail and Bumper Detail. Effective Date: Feb. 1, 2016.
		EO-7421-B R19 | Deleted Class 500 and Class 1000 Meter Details; Revised Bill Of Material; Deleted Alternate Meter Bar Detail; Revised Title. Effective Date: Feb. 1, 2016.
		506175 R0 | New Drawing Added Titled: Installation of Meter Piping for Class 500TC to 1000TC Diaphragm Gas Meters – Outdoors (2 – Sheets). This Drawing Is Being Issued For The First Time. The Information On This Drawing Was Extracted From Drawing EO-16585. Effective Date: Feb. 1, 2016.
		506214 R0 | New Drawing Added Titled: Installation of Twin Class 500TC to Class 1000TC Diaphragm Gas Meters – Indoors. Effective Date: Feb. 1, 2016.
		G-316 R19 aka EO-7420-B | Revised Drawing Title. Deleted Detail and Associated Material for Class 250 Meter Bar. Effective Date: Feb. 1, 2016.

		G-8121-16 | Renamed, completely rewritten, and combined with Gas Specification G-8199, “Qualification of Installers Who Join Plastic Pipe/Tubing with Mechanical Fittings.” G-8199 is now obsolete. Effective Date: January 8, 2016
		G-8199 | Now Obsolete. Content combined in G-8121-16
		G-11836-13 1Ga | Updated Specification Number for consistency, noted Interim Guideline.
		G-699-2-IG-2 | Noted Interim Guideline.
		G-8123-17 | Updated to Reflect Most Current Review Date.
69	Approved Gas Service Equipment Tables	**Table 5** | Updated entirely. Deleted all class 250 meter bars and added class 250 by-pass meter bars and associated manifolds. Updated CMC designation for future clarity (Below Table).
94	**Revisions**	Updated to Reflect Revision 4 (February, 2016)

Revision 5

Updates, Additions and Omissions – July, 2016

The Customer Guide to Natural Gas Service Installation has been revised in its entirety.
Notable Updates Include;

Page No.	Section	Description
6	Table of Contents Section 1	Deleted – Sub-Section D. Standard Service Layouts and modified general information on customer responsibilities and contractors work information on gas service shutdown of buildings requiring Con Edison notification and the federal rules on OQ qualification to perform work on gas pipe. Page 19 Item S and T.
20	Table of Contents Section 2	Modified - Gas Service removed language on B through L items concerning construction task for gas services installation and Re-lettered items for the federal OQ requirements on covered task company requirements for gas service installation. Entire section was rewritten to clarify Con Edison position on gas service requirements.
31	Table of Contents Section 3	Modified – Gas Pressure Regulator added item D. Installation of the Water Intrusion Protection added language for buildings requirements in FEMA Flood Zone. Practical choice to raise vent.
34	Table of Contents Section 4	Modified – Gas Meter Equipment added language for approved location of gas meter equipment and re-lettered items to meet the State Code service line definition outlet of the meter. Each meter
43	Section 6 Item A	Omitted – c) Customer's Responsibility for Safety Inspection. The company no longer performs safety inspections to gas equipment on customer premises. State law removed Parts Plus program in
50	Section 7 Definition	Omitted – the definition of Con Edison Tariff rate leaf, Point of Gas Service Terminations from Yellow Book. Follow federal standard compliance.
53-56	Section 7 Reference Material Gas Meter and Gas Service Installation Specifications and Drawings	Revised to add gas specifications and drawings associated with covered tasks under the Operator Qualification requirements.
84	Revisions	Update to Reflect Revision 5 (July, 2016)

Revision 6		
Updates, Additions and Omissions – August, 2016		
Page No.	**Section**	**Description**
34	Section 4	Added - All gas meters shall be installed outside. Added - Installation of a gas meter(s) inside a building requires advance approval by the company prior to a customer's fuel line installation. Also added info re: contacting Con Edison during project design phase to determine the exact requirements for specific gas meter installations, including location and space requirements. b) Indoor Installations added "(Requires Approval)"
65	Approved Gas Equipment Tables	Deleted Table 22 – Approved Link Seals Approved Link Seals are provided in Gas Specification G-8096 referenced on pg.21.
78	Ways to Pay your Bill Exhibit-J	Updated – Customer Service Walk-In Center Locations and added hours of operation.

Revision 7		
Updates, Additions and Omissions – May, 2017		
Page No.	**Section**	**Description**
Cover		Updated Revision Date
2		Updated Revised to Date/Revision Yr.
9	Quick Tips	Updated Q-6 Answer – 1-3 Family residential gas meters will be placed outdoors. 4 Family and larger, commercial and mix-use will be placed outdoors unless "Waiver" exceptions apply.
10	Quick Tips	Step-One | Removed "280" reference.
17	Section 1(O) a) iii	Removed pg. no. reference for "NYC Gas Meter Pressure Test Verification Affidavit" Exhibit – B.
17	Section 1(O) b)	Distribution Piping - Removed pg. no. reference for "Westchester County Distribution Pressure Test Verification Affidavit" Exhibit – C.
17	Section 1(O) b)	Meter Piping - Removed pg. no. reference "Westchester County Gas Meter Pressure Test Verification Affidavit" Exhibit – D.
18	Section 1(P)	Updated applicable Taxes and Corp. Overheads.
19	Section 1(T)	Updated Operator Qualification requirements for "buried" service pipe, above ground outdoor meter-sets and/or new inside gas service piping between the foundation wall and the meter outlet. Removed NGA POC Info and added NGA email for OQ.
21	Section 2-5 b)4	Updated Gas Trench requirements per revised Gas Drawing 309495
21	Section 2-6(b)	Updated Backfill requirements per revised Gas Drawing 309495
24	Section 2(D)	Updated Welding Section to follow OQ requirements for buried pipe and to follow Gas Specifications for welding. Clarified NO OQ for new outdoor above ground meter sets and/or new inside gas service piping between the foundation wall and the meter outlet.
24	Section 2-2	Removed pg. no. reference for "Welder Affidavit" Exhibit – E.
26	Section 2(I) & b)	Removed pg. no. reference(2) for "Gas Integrity Test and Gas Turn-On Affidavit" Exhibit – A.
27	Section 2K-b)	Removed pg. no. reference for "Certificate of Compliance" Exhibit – F.
27	Section 2K-c)	Removed pg. no. reference for "Request for Waiver - Minimum Insulation Standard" Exhibit – G.
29	Section 2M	Removed "The following reference guide may help you understand the process and assess your options and potential cost savings." Link "No Longer" active http://www.edf.org/sitecccoilujs/default/files/11726_clean-heat-step-by-step-guide.pdf
35	Section 4-A	Added Outdoor Gas Meter Waiver Request Guidelines
39	Section 4-C Gas Meter Piping	Updated Gas Meter Piping Table. Added Industrial Gas Meter Drawings 514590 and 514486. Added Turbine Low Pressure Drawing 514789.

	Section 7 Reference Material Gas Meter and Gas Service Installation Specifications and Drawings	G-2041 Requirements for the Installation of Gas Utilization Equipment that Mixes Pressurized Oxygen with Natural Gas - Procedure for the use of jeweler torches with natural gas and oxygen mixture.
65	Approved Gas Equipment Tables	Updated Table 21 Anodeless Riser Bends (Plastic Service Pipe) To include Honeywell Corp.having merged w/ Perfection Corp.
83	Ways to Pay your Bill Exhibit-L	Updated – Customer Service Walk-In Center Locations and added hours of operation.

Revision 8		
Updates, Additions and Omissions – August, 2017		
Page No.	**Section**	**Description**
7	Table of Contents	Changed note for Exhibit C to “Obsolete”
17	Section 1 b) In Westchester County	Removed references to Muni’s that do not require “Blue-Card”
72	Ref. Exhibit - C	Obsolete, all muni’s now issue Blue Cards.
79	Final Checklist	Replace statement “Each gas connection for future appliances must have a separate lockable control valve that is currently off, locked and plugged” with “Any provision for future extension of distribution pipe must have a lockable (by Con Edison) isolation valve, with a plug/cap on the outlet of the valve”.
79	Final Checklist	Replace statement “Gas appliance connected & ready to operate” with “Vented gas appliances connected & ready to operate.”

Revision 9		
Updates, Additions and Omissions – March , 2018		
Page No.	**Section**	**Description**
9	Quick Start	Added kilowatt hour to BTU conversion
13	1 – Part C	Revised minimum gas delivery pressures to indoor and outdoor meter installations
19	1 – Part T	Revised first and second paragraphs on Op Qual requirements
20	2 - Part A	Addition – Item 6. Gas meter sets location exceptions require an approved
20	2 – Part B (1)	Addition – Item 2. Added piping must follow National, State and City Fuel Gas Code
20	2 – Part B (2)	Deleted – Item 2. “Normal delivery pressure”. Addition – Item 2. Sizing of downstream distribution gas piping/fittings/valves shall meet the municipality IFGC for Schedule 40 metallic pipe Gas Piping Installation building code
21	2 - Added Section C	Added section 2 Item C) on Installations in Specialized Areas
24	Added Section h	Added section for: All PE plastic joints, joiners, and second inspectors shall be parked and documented as per DOJTGAS6000. “Documentation and Inspection of Polyethylene (PE) Plastic Joints on Gas Mains and Services”
24	Added Section i	Added section for: Qualification of new and existing joiners and second inspectors of PE plastic pipe shall be performed and documented by Con Edison or Northeast Gas Association (NGA trained evaluators)
26	2 - Part D	Revised Section 2 Part D to reflect new requirements for service line definition
31	3 – A 3rd bullet	Addition - Con Edison medium, intermediate, or high pressure gas system, where a gas service regulator is supplying the gas meter, gas boosters equipment are not allowed.
56	Gas Meter Specifications and Drawings	Listed Gas Meter Specification EO-7421 – Twin Class 250TC Diaphragm Listed Gas Meter Specification 506214 – Twin Class 500TC to CL-1000TC Diaphragm. Note these specifications replace previous G-317 specification.
56	Review of Specification dates	Revised Heading of table to: Applicable Gas Specifications and Drawings. Verified specification names and dates. Added statement on checking with the con Edison Representative for the latest specification Revisions
66	Approved Gas Equipment Tables	Updated Table 23 Gas Booster Equipment Check Valve To add Etter Engineering Model ECV to chart.
70	Exhibit A	Revised Gas Integrity Test and Turn-On Affidavit Service Restoration Repair to include Building with Risers
71	Exhibit B	Eliminated the word New York City to combine NYC and Westchester Meter Piping Affidavits. Combine previous Exhibits B and D
72	Prev. Exhibit - C	Deleted Page Obsolete for Westchester County, all muni’s now issue Blue Cards
73	Prev. Exhibit D	Deleted page and combined NYC and Westchester Gas Meter piping affidavits

78-79	Interim and Final Gas Checklist Oil to Gas	Updated email address and inquiries to be sent through the project center

Revision 10		
Updates, Additions and Omissions – November, 2018		
Page No.	**Section**	**Description**
15	Section 1	Added foot note on outside meter set and building definition
19-22	Section 1 Part T	Added additional information on Op Qual Requirements and training instructions for NYC and Westchester
23	Section 2 – Gas Services	Added additional requirements on customer pipe size
33	Section 2 Item I	Section a) replaced Blue Card with Gas Authorization
34	Section 2 Item J	Added section g) on identifying risers and gas shut off valves
41	Section 4	Added language on gas meter and Head of Service gas valve location
45	Section 4 Tabl. 2	Added In excess of above requirements on maximum distances
61	Specs and Dwg	Update Link to G-316 EO-7420-B Bypass Meter Bar Drawing
62	Gas Spec/Dwg	Updated link to current spec 506175 to reflect bypass meter bar
77	Exhibit A	Revised Affidavit tittle to reflect New or Repair
68	Table 5	Updated Table 5 on Meter Bars/Manifolds for bypass class 500 and 1000 meter bars
78	Exhibit -B	Added Con Ed Name and Employee number for Gas Pressure Witness
79	Exhibit -E	Add Gas Sleeve Installation Affidavit Form

Revision 11		
Updates, Additions and Omissions – January, 2019		
Page No.	**Section**	**Description**
2		Revised date
61-63	Specs and Dwg	Revised links for current updates on specifications and drawings
78	Exhibit -B	Clarified affidavit to be used on meter piping, pressure test inspections above 1 Psig to be witnessed by Con Edison OP Qual personnel.

Revision 12		
Updates, Additions and Omissions – April, 2019		
Page No.	**Section**	**Description**
6	1.U	Table of contents; added Drug and Alcohol Requirements
7	7.M	Table of contents; added Exhibit M Gas Service Line Scenario Sketches
15	1- G	Added Exhibit M diagrams and description
19-20	1-T	Updated Operator Qualification Requirements
20-21	Appendix A, B	Updated Appendix A&B for repair or replacement
22	Section 1	Added section U for Drug and Alcohol Requirements
26	Section 2 C.7	Added language on second PE Joint Inspection
27	Section 2 C.8	Added OQ requirements for steel service pipe
29	Section 2 D	Added OQ requirements for welding
37	Section 2 N	Added Odor Fade Section
38	Section 3	Clarified provision for low pressure supply
58	Section 7 - Definitions	Added Service pipe definitions for Inside and Outside Meter(s)
79	Welder Affidavit Exhibit -E	Added Contractor OQ# field
83	Interim Gas Checklist	Added Contractor OP Qual Requirements field

84	Final Gas Checklist	Added Contractor OP Qual Requirements field
85	PE Joint Visual Inspection Exhibit I	Added note on scheduling inspections through the Con Edison representative
89	Gas Service Line Scenario Sketches Exhibit M	Added Diagrams 1- 5 for various gas pipe location scenarios Diagrams 6 through 8 for Operator Qualification Requirements
97	General questions and CT87 requirements	Added general questions and Op Qual requirements.
98-99	Op Qual FAQS	Added OP Qual descriptions for new and existing construction

Revision 13		
Updates, Additions and Omissions – December, 2019		
Page No.	**Section**	**Description**
12	Quick Reference	Step – 1 Item 3 and 4 added Gas Conversions
13	Quick Reference	Application for Service – added OQ Affidavit information
16	Section 1 – General Information	O.Added information on permits, Gas Authorization, defined meter piping, distribution piping, OQ and NYC Requirements
18	Section 1 – General Information	O. Added information on OQ for Westchester Requirements
19-20	1-T	Updated Operator Qualification Requirements
21	Section 1 – General Information	T.OQ instructions, added Appendix A, B for below grade installation
22-23	Section 1 – General Information	T.OQ Added information on Task 86/87, training and testing for OQ
23	Section 1 – General Information	T.OQ Added Frequent Asked Questions on OQ, and OQ instructions
24	Section 1 – General Information	T.OQ Added Task 41/42, clarified Task 70 for Appendix A. Plastic pipe below grade
25	Section 1 – General Information	T.OQ Added Task 41/42, clarified Task 70 for Appendix B. Steel pipe below grade
25	Section 1 – General Information	T.OQ Clarified the welding requirements Note:
28	Section 2 – Gas Services	C. Gas Trench.Gas Service Installation Requirements item 1. – added second level and backfill inspection prior to the backfill of pipe
29	Section 2 – Gas Services	C.5.5 Gas Trench Added task 70/71 OQ appointment
29	Section 2 – Gas Services	C.6 c,d Added Task 70/71 OQ requirements

30	Section 2 – Gas Services	C.7 b.1 Added information on second inspection of PE – Polyethylene joints32
32	Section 2 – Gas Services	C.10 Added Oil to Gas projects on witnessing meter piping test operating at 1 psig or greater by a con ed operator qualified person
33	Section 2 – Gas Services	D. Welding – Clarified welding requirements for below grade pipe, added ASME Boiler and Pressure Vessel Code, Section IX acceptance to welding requirements D. 1. f) added NYC overlapping jurisdiction acceptance35
35	Section 2 – Gas Services	G.1 Added below grade pipe
36	Section 2 – Gas Services	I. Restoring Gas Service- Added language on the NYC EWN procedure and Westchester Added Task 87 Requirements Clarified additional document requirements OQ Affidavit Added test and purge on utility jurisdictional piping work
36	Section 2 – Gas Services	J.f. Restoring Gas Service to Buildings with Risers – Highlighted the importance of installing lockable valves at the base of risers
37	Section 2 – Gas Services	L.a Emergency Natural Gas Generators – Added language on Operator Qualification Requirements for storm Hardening projects and reference to Appendix M
41	Section 2 – Gas Services	N.Odor Fade – Updated information on Odor Fade
42	Section 2 – Gas Services	O.Natural Gas Detector – Added section and information on Natural Gas Detectors
44	Section 3 – Gas Pressure Regulator Equipment	Added information on con Edison OQ personnel shall install control piping and pilot regulators
47	Section 4 – Gas Meter Equipment	Added information on location of Meters and Regulators
48	Section 4 – Gas Meter Equipment	A.2. 49Added if available plot plan for existing buildings, required for new buildings on meter waiver requirements
49	Section 4 – Gas Meter Equipment	Added new Section E. on inside gas meter requirements for buildings of 20,000 Net Square feet and or 6 stories tall.

59	Section 6 – Gas Customer Responsibility	Added new section B.1. Utility – all con Edison Gas area - and NYC Corrosion Inspection information
60	Section 6 – Gas Customer Responsibility	C.2. Added information on location of low pressure Gas Switch
66	Section 7 – Reference Material	Odorant – added related definition on Adsorption, Absorption and Oxidation Operator Qualification – Added description on OQ Point of Delivery – Added information on point of delivery description
69-71	Applicable Gas Specifications and Drawings	Updated Revision number and Revision Dates on all listed specifications and drawings
84	Operator Qualified Affidavit Exhibit B.1	Added new Operator Qualified Affidavit to be used when work, testing or purging is performed on Utility Jurisdictional piping
85	Welder Affidavit Exhibit - E	Modified welding affidavit requiring compliance with local AHJ codes and removed Contractor OQ#
97-110	Exhibit M	Updated Service Line Definition Drawings (1-5) and Below Grade Meter Drawings (6-8)
111	Exhibit M	Added Description for Drawings 9-15 on OQ requirements for storm hardening projects – installation of above grade emergency generators on customer property
112-118	Exhibit M	Added drawings 9-15 for different meter, piping and riser scenarios
98-99 version 12	Op Qual FAQS, General Information	Deleted section with appropriate content moved within the body of the OQ section in this Book

Revision 14		
Updates, Additions and Omissions – January, 2021		
Page No.	**Section**	**Description**
10	Step 2 – Quick Start	Revised all requests to be reviewed by Engineering. Added please provide accurate gas loads
16-18	Section 1 – General Information Section 1 O c	Updated Gas Authorization and Permit Requirements. Identified NYC permit requirement for piping test after the meter for integrity test affidavit
23-25	Section 1 – General Information T.OQ requirements	Added additional OQ instructions for Licensed Master Plumbers
26	Section 2 – Gas Services. Item B. Customer Pipe Size	Added additional information on interior pipe sizing and added requirements for elevated pressure
35	Section 2 – Gas Services Section I. Restoring Gas Services after a repair	Added information on Inside Service Line Inspection
40	Section 2 – N Odor Fade	Updated description and direction to the building industry, added Odor Fade Licensed Plumber/Owner checklist
47	Section 4 – Gas Metering Equipment	Added G-48 - Gas Metering and Service Regulator Sizing, added statement for Engineering review. Added reference to screen filters for Rotary Meters
49	Section 4 – Gas Metering Equipment	Section A, revised Note E. on Gas Metering Communication requirements for New Construction

50	Section 4 – Gas Meter Equipment Item c) prohibited locations	Added requirement on bypass meter bar installation during major rehabilitation work and meter bars to be properly supported. added requirement for master meter installation for 12 or more apartments
51	Section 4 – Gas Meter Equipment d) General Installation	Meter bar installation requirements
65	Section 7 – General Reference Material	Definitions: Added definition of Elevated Pressure
66	Section 7 – General Reference Material	Definitions: Added Meter Bar Definition
70-72	Applicable Gas Specifications and Drawings	Updated Specifications and Drawings EO-14158, EO-14166, EO-16511, EO-16585, 506175 added Specification and Drawings G-48, 514203
85	Appendix B Meter Piping Affidavit	Added Service Line Inspection requirement
104-106	Appendix Exhibit M	Updated below grade OQ piping drawings

Revision 15		
Updates, Additions and Omissions – April, 2021		
Page No.	**Section**	**Description**
40	Section 2 – N Odor Fade	Added additional protection items to prevent Odor Fade
35-36	Section 2 – Gas Services Section I. Restoring Gas Services after a repair	Update information on Inside Service Line Inspection
70-72	Applicable Gas Specifications and Drawings	Updated Specifications and Drawings EO-14158, EO-14166, EO-16511, EO-16585, 506175, 514203, 511327
86	Appendix B Meter Piping Affidavit	Updated affidavit to include new work

Revision 16		
Updates, Additions and Omissions – November, 2021		
Page No.	**Section**	**Description**
30	Section 2 – Gas Services, Section C	Galvanized sleeve installation prohibited
52-53	Section 4 – Gas Meter Equipment Section 4	Galvanized pipe and fittings information for existing installations on Utility Jurisdictional piping
58 and 12	Section 5 Distributed Generation Item B and Gas Workflow	Updated requirement for load letter/gas loads to be submitted through Project Center
60	Section 6 Customer Responsibility	Corrosion repairs before and after the meter require permits and gas authorization from the permitting authority and OQ Task 87
70-72	Applicable Gas Specifications and Drawings	Updated Specifications and Drawings; 506175, 514203, EO-14158 (AKA G-413), EO-14166 (AKA G-414), EO-16511-B, EO-16585-A, EO16726-A

Revision 17		
Updates, Additions and Omissions – November, 2022		
Page No.	**Section**	**Description**
27	Section 2 – Gas Services, Section B	Added/updated TA/Firebag Valve Information with related specs for Medium and High-Pressure
27	Section 2 – Gas Services, Section B	Added Maxon Valve installation location and size description
35	Section 2 Section C. Gas Service I) Restoring Gas Service After Repairs	Added Separate Licensed Master Plumber Gas Pressure Test description
60	Section 6 Customer Responsibility	Corrosion repairs before and after the meter require permits and gas authorization from the permitting authority and OQ Task 87
70-72	Applicable Gas Specifications and Drawings	Updated links to Specifications and Drawings; 506175, 514203, EO-14158 (AKA G-413), EO-14166 (AKA G-414), EO-16511-B, EO-16585-A, EO16726-A

Revision 18		
Updates, Additions and Omissions – November, 2022		
Page	**Section**	**Description**
Various		The usage of the word "affidavit" has been removed from all documents and replaced with the appropriate term.
23/24	Appendix A & B	Updated Plastic & Steel Installation Cover Task List
33	G	Changed to: All gas distribution piping operating in excess of ½ psig must be welded
34	G	Changed to "Pressure Testing of Utility Jurisdictional (Con Edison) Pipe"
34	G	Added pressure testing chart
34	H	Added: Meter Piping Test Pressure and Duration
35	I	Updated Language: Restoring Gas Service after a Repair: In NYC, a valid EWN or Gas Authorization to restore gas service must be submitted and received by Con Edison Energy Services Group prior to restoring a gas service to a meter that was previously locked-off or isolated for inside customer piping repairs. In the event of an emergency situation, a valid EWN supplied by the Licensed Master Plumber from DOBNOW Build will be accepted in lieu of Gas Authorization in NYC. In this case, a valid EWN and all required paperwork must be submitted within 5 days of the gas being turned off. For Westchester County, a Blue Card will be required for gas restoration after repairs. All requests for service restoration shall detail the type of repairs made, location of repair and the gas equipment to be turned on.
36/37	J	Added: It is REQUIRED that lockable riser valve(s) with 1/8 test ports be installed on all risers in a building (New construction or gut rehab) even if the riser is not being repaired. The purpose of the lockable riser valves is to make the gas turn-on easier, and to reduce the need for a complete shutdown if there is a leak in the future. Riser valves are not required for 1, 2, or 3 family-residential homes.
43	O	Added new description of Natural Gas Detectors installed by Con Edison
68	Definitions	Added list of non-compliant fittings as per spec G-11836

71/72/73/74	Applicable Gas Specs & Drawings	All specs and drawings have been updated to most current version
85	Exhibit A	Now called Gas Integrity Test& Turn-On Form
86	Exhibit B	Added language for pressure testing medium, intermediate or high pressure services with service regulators-to be signed by Con Edison Operator Qualified person
87	Exhibit B.1	Now called Operator Qualified Certificate
88	Exhibit C	Now called Gas Sleeve Installation Form. Also added question for meter set location, outdoor or indoor
90	Exhibit E	Now called Welder Certificate
95	Final Gas Checklist	Added "service Pressure Low - Intermediate - Medium - High" as a required field
96	Exhibit I	Removed PE Joint Visual Inspection Form
96	*New* Exhibit I	Added Acknowledgement of the Climate Leadership and Community Protection Act (CLCPA) and Con Edison's Clean Energy Commitment
97	Exhibit J	Now called Outdoor Meter Refusal Form.
100…	Exhibit M	Replaced existing Gas Service Line Definitions with 3-D models of Gas Service Line Definitions
	Exhibit N	New: Customer Gas Service As-Constructed (As-Built)

Revision 19		
Updates, Additions and Omissions – September, 2024		
Page	**Section**	**Description**
Various		Any additions to this book with be "grayed out" for the revision
10	#7	Changed
31	C2	Added OSHA standards to "Where service head valve is located 6 feet or more above floor level, an access platform (with a permanent ladder, if applicable) shall be installed".
40		Removed pressure testing chart and replaced with link to G-8204, "Pressure testing requirements for gas mains and services".
86	Table 3A	Added TECO Fire Bag Thermal Activated Shut-Off to newly created chart - Table 3A
96	Exhibit B	Gas Meter Piping Pressure Test Verification - Added required piping pressure test of 3 psi for 30 minutes by LMP from regulator to the meter when the delivery pressure is <1 psi.

Revision 20		
Updates, Additions and Omissions – March, 2025		
Page	**Section**	**Description**
	Tables 1A & 3	Merged valve tables 1A & 3, creating a revised table 1A - "Plug Valves for branch lines, and meter and regulator installation"
	Various	Any mention of Operator Qualification CT 87 (aka 87) has been changed to either 87A or 87B
	Exhibit B.1	**Operator Qualified Certificate** - **Removed** "Has been performed by the operator qualified person(s) listed above, whose OQ (ITS) profile(s) was linked with the License Master Plumber # listed on this case at the time the work was performed". **Replaced with** "Has been performed by the operator qualified person(s) listed above, whose OQ (ITS) profile(s) was active at the time the work was performed".
58	Section 4 Gas Metering Equipment "A"	**Approved Locations for gas Metering** - Removed "and Wavier Guidelines" from this statement.
58	Section 4 Gas Metering Equipment "A"	**Added** - "An Outdoor Gas Meter Refusal Form for gas metering locations associated with New Business, Major Renovations, and Oil-to-Gas Conversions in addition to planned gas service replacements is NOT required if the building meets one of the following exception criteria Approved Locations for gas Metering - Removed "and Wavier Guidelines" from this statement.

Revision 21		
Updates, Additions and Omissions – September 2025		
All changes in this revision are highlighted in yellow throughout this book.		
Page	**Section**	**Description**
21	**iii**	**Added**: In cases where emergency work is already being performed under an EWN and a meter bar is leaking or does not exist, the LMP shall replace or install a meter bar. This corrective work can also be performed under an EWN, as long as the LMP notes the meter bar installation or replacement on their LAA filing.
42	**I**	**Added:** In cases where emergency work is already being performed under an EWN and a meter bar is leaking or does not exist, the LMP shall replace or install a meter bar. This corrective work can also be performed under an EWN, as long as the LMP notes the meter bar installation or replacement on their LAA filing.
43	**G**	**Added:** Effective 1/1/2026, Con Edison will no longer witness Utility Jurisdictional pressure tests for contractors/LMPs on medium and high-pressure meter sets. LMP's will be required to utilize another LMP or journeyman with either CT 34A or CT87A to witness the pressure test.
59	Note D	**Revised**: For new Construction Only- installation of inside meters that are located below grade (e.g., Basements) requires a 2" fire sealed, proofed and approved conduit from the closest electric meter room to accessible location in the gas meter room. The conduit shall be reserved for Con Edison's use for meter communications. Conduits must be installed as required by local building code and all other requirements by the authority having jurisdiction
62	D	**Added: Gas meters shall not be installed above gas ranges (New or relocated meters only)**
61	E #4	**Added:** In cases where emergency work is already being performed under an EWN and a meter bar is leaking or does not exist, the LMP shall replace or install a meter bar. This corrective work can also be performed under an EWN, as long as the LMP notes the meter bar installation or replacement on their LAA filing.
66	F	**Added:** In NYC and Westchester County, all meter piping (piping from head of service valve to meter outlet) shall meet the following welding requirements. If radiographs are required, as per con Edison specification, ESD shall collect the radiograph test results
94	Table 15	**Added:** Prior approval is required by Con Edison to fabricate sleeves not manufactured by Richards. Prior to installation, the following is required for Con Edison acceptance of a SEU: * Signed letter/cut sheet from manufacturer, LMP or PE engineer stating that the SEU has been manufactured as per Con Edison Drawing EO-12790 * SEU was independently tested at 150 psi for 30 minutes (as per table 1 in G-8204, 2"> = 150 psi for 30 minutes) * Manufacturer's name has been placed on tested SEU within 6" from the threaded or flanged end.
99	Exhibit B	**Removed** Section 4 – Inside Service Line Inspection from the form.
112	Final Gas Checklist	**Added**: Welder Certificate and Radiograph Test Results (If required)
127	Exhibit O	**Added:** Radiograph Inspection Result Sample

Revision 22		
Updates, Additions and Omissions - October 2025		
All changes in this revision are highlighted in yellow throughout this book.		
Page	**Section**	**Description**
20	O	**Added:** When electric or gas services are to be supplied to governmental facilities, federal, city, and state-owned buildings, transit authority facilities, which do not come under the jurisdiction of the Department of Buildings in New York City, or the AHJ in Westchester, the Company requires such agencies to submit a written statement, signed and stamped by a Professional Engineer, that the installation was installed to applicable codes and standards and that the agency authorizes connection and turn-on of the required service. All NYCHA and SCA projects require Gas Authorization from NYCDOB prior to gas turn on.
21 & 22	A & B	**Added: IF gas was shut off at the HOS and no work was performed between the HOS and the meter, a Pressure Test is not required.**
35	H	**Added: Effective 10/03/2025 - Installation of the Thermally Activated Valve aka Fire Bag has been Temporarily Suspended**

Revision 23		
Updates, Additions and Omissions - February 2026		
All changes in this revision are highlighted in yellow throughout this book.		
Page	**Section**	**Description**
52	O	Natural Gas Detectors (NGDs) are mandatory
	Exhibit i	**Update - CLCPA Letter**
	Exhibit K.1	**Added - Natural Gas Comittment Letter**

Revision 24		
Updates, Additions and Omissions - October 2026		
All changes in this revision are highlighted in yellow throughout this book.		
Page	**Section**	**Description**
	All	All sections have been changed from alphabetical lettering to numerical lettering
41	2.5	CSST & MegaPress-G fittings are not permitted on Utility Jurisdictional Pipe
59	4.4	When a Gas Meter has been shut off for any reason, corrective action shall be taken to relocate the gas meter from the prohibited location to an approved location. Please speak with a company representative for approved locations
	Exhibit 4	Added API 1104 with the equivilant Operator Qualification Covered Task(s)

If you damage orpull a gas facility or SMELLGAS

Call us immediately 1-800-75CONEDor dial911 once safely away from the gas leak.

And then:

- Keep all persons away from the area

- Follow directions from Emergency Responders who arrive on-site

Do not:

- Do anything to create a spark that could cause an explosion, such as:
    - Light a match
    - Turn appliance or lights on or off (including flashlights)
    - Use a telephone or cell phone
    - Ring a doorbell
    - Start a car

