3. General Appraiser Site Valuation and Cost Approach	15 Hours
4. General Appraiser Income Approach	45 Hours
5. General Appraiser Report Writing and Case Studies	10 Hours
	100 Total Hours

(J) Trainee appraisers, state-licensed real estate appraisers, and state-certified residential real estate appraisers wishing to upgrade to certified general real estate appraiser must also satisfy the requirements in subsections (5)(A) and (5)(B) above.

AUTHORITY: sections 339.509 and 339.544, RSMo 2016. Original rule filed May 9, 2024.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars ($500) in the aggregate.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with the Real Estate Appraisers Commission, PO Box 1335, Jefferson City, MO 65102, by facsimile at (573) 526-3489, or via email at reacom@pr.mo.gov. To be considered, comments must be received within thirty (30) days after publication of this notice in the ***Missouri Register****. No public hearing is scheduled.*

TITLE 20 – DEPARTMENT OF COMMERCE AND INSURANCE
Division 4240 – Public Service Commission
Chapter 10 – Utilities

PROPOSED AMENDMENT

20 CSR 4240-10.030 Standards of Quality. The commission proposes amending section (1), removing sections (10)–(15), and adding new sections (10)–(15).

PURPOSE: This amendment updates gas quality standards.

(1) This rule applies to all gas, electric**,** and water corporations, as these terms are defined in section 386.020, RSMo, engaged in the business of furnishing gas or electricity for light, heat**,** or power, or supplying water for domestic or commercial uses within Missouri. The word utility, when used in these rules, shall be construed to mean any gas corporation, electric corporation**,** or water corporation engaged in the designated business. **Sections (10), (11), and (12) of this rule additionally apply to all persons, municipalities, or corporations owning, leasing, operating, or controlling facilities used in the transportation by pipeline and distribution to customers within Missouri of manufactured gas and renewable natural gas (RNG) as defined in 20 CSR 4240-40.100.**

[(10) The monthly average total heating value of manufactured gas shall be not less than five hundred seventy (570) British Thermal Units (BTUs) per cubic foot at any point within at least one (1) mile of the manufacturing plant, and shall be at no time the total heating value of the gas at that point less than five hundred twenty (520) BTUs per cubic foot, unless a different standard of heating value is specifically authorized by the commission, and provided that no utility shall lower its present standard heating value without first obtaining the approval of the commission. To arrive at the monthly average total heating value, the result of all tests made on any one (1) day shall be averaged and the average of all these daily averages shall be taken as the monthly average. The term heating value of the gas, as used in this rule and as the value is determined in the tests referred to in this rule, shall be the total heating value as it is defined in the Bureau of Standards Circular No. 405 Standards For Gas Service.

(11) Each utility whose output exceeds twenty (20) million cubic feet of manufactured gas per year shall provide and maintain a calorimeter and all necessary accessories therefor, and such utility shall determine the heating value of manufactured gas supplied by it under the requirements set forth by this rule on at least three (3) days of each week. If the gas supplied by the utility is natural gas, it is excused from providing and maintaining a calorimeter; provided, it has available to it information by which it may keep itself fully informed respecting the heating value of the gas delivered by it. If the gas supplied by the utility is liquefied petroleum gas and it has installed adequate facilities by which it is able and does control continuously the heating value of the gas as furnished to the customers' premises and by which it may keep itself fully informed respecting the heating value of the gas delivered by it, the utility is excused from providing and maintaining a calorimeter. Heating value tests should be made or secured on natural gas at least three (3) times per year. A record of these tests or the information secured shall be maintained available for inspection by the commission and preserved for a period of at least two (2) years.

(12) All gas distributed in this state shall not contain more than a trace of hydrogen sulphide. The gas shall be considered to contain not more than a trace of hydrogen sulphide if a strip of white filter paper moistened with a solution containing five percent (5%) by weight of lead acetate is not distinctly darker than a second paper freshly moistened with the same solution after the first paper has been exposed to the gas for one (1) minute in an apparatus previously purged through which gas is flowing at the rate of five (5) cubic feet per hour and not impinging directly from a jet upon the test paper. Tests shall be made daily on manufactured gas leaving the holders, for the presence of hydrogen sulphide, in the manner specified, and a record of the result of these tests shall be filed available for inspection by the commission and preserved for a period of at least two (2) years. Each utility supplying natural gas shall make tests for hydrogen sulphide with a frequency as is necessary to keep itself informed that the gas distributed by it does not contain more hydrogen sulphide than the trace previously defined and at other times as the commission may require. A record of these tests shall be kept for a period of two (2) years.

(13) It is recommended that all gas delivered by the utilities shall possess a strong and distinctive odor. If the cost of introducing an odor into the gas to obtain the condition continuously is excessive, a suitable odorant shall be introduced during the early part of the heating season and once during the nonheating season each year. During periods of odorizing gas to detect leaks, there may be more than a trace of sulphur in the gas and this temporary condition is permissible.

(14) Each gas utility should set up and follow a rigid program of preventive maintenance of its gas distribution system.

(15) All manufactured gas distributed shall contain not more than thirty (30) grains of total sulphur nor more than five (5) grains of ammonia in each one hundred (100) cubic feet. Each utility whose output exceeds fifty (50) million cubic feet of manufactured gas per year shall provide and maintain the apparatus and facilities as are necessary for the determination of total sulphur and ammonia in gas and each utility shall regularly determine the amount of total sulphur and ammonia in the manufactured gas distributed by it at sufficiently frequent intervals to insure compliance with the foregoing requirements; provided, however, that any such utility supplying only water gas or oil gas shall not be required to provide apparatus or make determinations of the amount of ammonia in gas. A record of these tests shall be maintained available for inspection by the commission and preserved for a period of at least two (2) years.]

(10) Unless otherwise ordered by the commission, all gas, including manufactured gas and RNG delivered to customers in the state other than gas that is delivered on an interstate natural gas pipeline subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC), shall conform to the following specifications:

(A) The gas shall have a gross heating value between nine hundred fifty (950) and one thousand two hundred (1,200) British thermal units (Btu) per dry standard cubic foot. For purposes of this rule, the term "gross heating value" when applied to a cubic foot of gas shall mean the number of BTUs produced by the complete combustion of the amount of gas that would occupy a volume of one (1) cubic foot at fourteen and seventy-three hundredths (14.73) pounds per square inch absolute (psia) at a temperature of sixty degrees Fahrenheit (60ºF);

(B) The gas shall not contain more than seven (7) pounds of water in vapor phase per million cubic feet;

(C) The gas shall be free from hydrocarbons and water (H_2O) in liquid state at the temperatures and pressures delivered, and shall not have a hydrocarbon dew point in excess of the lower of forty degrees Fahrenheit (40ºF) or the gas delivery temperature;

(D) The gas shall not contain in excess of one percent (1%) by volume of oxygen (O_2), and every reasonable effort shall be made to keep the gas completely free of oxygen;

(E) The gas shall not contain more than four-hundred (400) parts per million (ppm) of hydrogen (H_2);

(F) The gas shall not contain more than one-half (0.5) grain of hydrogen sulfide (H_2S) per one hundred (100) cubic feet;

(G) The gas shall not contain more than twenty (20) grains of total sulfur per one hundred (100) cubic feet;

(H) The gas shall not contain more than two percent (2%) by volume of carbon dioxide (CO_2);

(I) The gas shall not contain more than three percent (3%) by volume of nitrogen (N_2);

(J) The gas shall be at a temperature between forty degrees Fahrenheit (40ºF) and one hundred degrees Fahrenheit (100ºF);

(K) The gas shall be substantially free from impurities that may cause excessive fumes when combusted in a properly designed and adjusted burner;

(L) The gas shall not contain, either in the gas or in any liquid within the gas, any microbial organism, active bacteria, or bacterial agent capable of contributing to or causing corrosion or other operational problems. For purposes of this rule, microbial organisms, bacteria, and bacterial agents include sulfate reducing bacteria (SRB) and acid producing bacteria (APB); and

(M) Each gas utility, including municipal systems, receiving or transporting manufactured gas or RNG on its gas transmission and distribution systems shall further limit the quantity of impurities and physical and chemical properties in the manufactured gas and RNG as necessary so that the gas is delivered within the limits of its system.

(11) Each gas utility, including municipal systems, receiving or transporting manufactured gas and RNG on its gas transmission and distribution systems shall provide, install, operate, maintain, and continuously monitor sensors and testing equipment to determine if the quality of manufactured gas and RNG meets the requirements of section (10) of this rule.

(12) Each gas utility, including municipal systems, receiving or transporting manufactured gas or RNG on its gas transmission and distribution systems shall install an isolation device at each location where manufactured gas or RNG is delivered to its natural gas pipeline systems. Each isolation device shall be designed and operated to completely isolate the source of manufactured gas or RNG from the downstream pipeline when the gas does not meet the quality standards in section (10) of this rule, as determined by the monitoring and testing performed in section (11) of this rule.

(13) Reserved.

(14) Reserved.

(15) Reserved.

*AUTHORITY: section**s 386.310 and** 393.140, RSMo [1986] **2016, and 386.895, RSMo Supp. 2023**. This rule originally filed as 4 CSR 240-10.030. Original rule filed March 5, 1953, effective March 15, 1953. Amended: Filed Sept. 22, 1959, effective Oct. 1, 1959. Amended: Filed May 2, 1968, effective May 16, 1968. Moved to 20 CSR 4240-10.030, effective Aug. 28, 2019. Amended: Filed May 15, 2024.*

PUBLIC COST: This proposed amendment will cost state agencies or political subdivisions nine hundred ninety-four thousand dollars ($994,000) in the aggregate, if a political subdivision (municipal gas distribution system) chooses to accept RNG at an interconnect.

PRIVATE COST: This proposed amendment will cost private entities $1,491,000 in the aggregate.

NOTICE TO SUBMIT COMMENTS AND NOTICE OF PUBLIC HEARING: Anyone may file comments in support of or in opposition to this proposed amendment with the Missouri Public Service Commission, Nancy Dippell, Secretary of the Commission, PO Box 360, Jefferson City, MO 65102. To be considered, comments must be received at the commission's offices on or before July 17, 2024, and should include a reference to Commission Case No. GX-2024-0337. Comments may also be submitted via a filing using the commission's electronic filing and information system at http://www.psc.mo.gov/efis.asp. A public hearing regarding this proposed amendment is scheduled for July 23, 2024, at 10 a.m., in Room 310 of the Governor's Office Building, 200 Madison St., Jefferson City, Missouri. Interested persons may appear at this hearing to submit additional comments and/or testimony in support or in opposition to this proposed amendment, and may

be asked to respond to commission questions. Any persons with special needs as addressed by the Americans with Disabilities Act should contact the Missouri Public Service Commission at least ten (10) days prior to the hearing at one (1) of the following numbers: Consumer Services Hotline 1-800-392-4211 or TDD Hotline 1-800-829-7541.

FISCAL NOTE
PUBLIC COST

I. Department Title: Title 20--DEPARTMENT OF COMMERCE AND INSURANCE
Division Title: Division 4240—Public Service Commission
Chapter Title: Chapter 10—Utilities

Rule Number and Name:	20 CSR 4240-10.030 Standards of Quality
Type of Rulemaking:	Proposed Amendment

II. SUMMARY OF FISCAL IMPACT

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate
Public Service Commission	$0 No additional costs to the Commission are anticipated However, it is expected that the proposed rule will result in some benefit to the Commission and other affected agencies because it updates the Commission's rules in order to align them with the requirements set out in Section 386.895, RSMo, and newly proposed rule 20 CSR 4240-40.100.
Municipal Natural Gas Distribution Systems	$0-$994,000

III. WORKSHEET

The number of entities that will be affected by this rule is unknown because the proposed rule amendments will only apply to natural gas utilities that choose to accept renewable natural gas onto their natural gas distribution systems. Acceptance of renewable natural gas is not mandatory. In the event a natural gas utility does not accept any renewable natural gas, the monitoring requirement will not apply, and no cost impact is anticipated.

The cost of compliance per installation is estimated as follows:
- Capital Cost Per Installation: $458,000.
- Annual Operating Cost Per Installation: $3,400 per year, with the total annual operating cost adjusted for inflation over the ten- (10-) year life of the rule being $39,000.
- The estimated sum of capital and operating cost is $497,000 per installation.
- The estimated aggregate cost for two (2) installations is $994,000.

$458,000 installation cost + $39,000 operating costs adjusted for inflation = $497,000 per municipal installation

$497,000 cost per installation in the aggregate x 2 installations = $994,000 possible cost in the aggregate for the 10-year life of the rule

IV. ASSUMPTIONS

There are currently forty (40) municipal gas utilities to whom these rule amendments may apply, should those utilities elect to accept renewable natural gas.

As proposed, Section (11) requires each gas utility receiving or transporting RNG to install, operate, maintain, and continuously monitor the quality of the RNG received. Section (12) would require installation of a device to isolate renewable natural gas that does not meet the quality standards proposed in Section (10). The estimated costs are the incremental costs of the monitoring equipment and control device, and assumes that the monitoring and control will be integrated within existing utility control rooms.

The Commission Staff received information from Roeslein Alternative Energy, a company that is experienced in these types of installations. Roeslein provided information that indicated it would cost roughly $450,000 to comply with the monitoring proposed in section (11) and $8,000 to comply with the control device proposed in section (12), with total being $458,000. However, the true costs are unknown at this time as the number of municipal entities (currently 40) that would accept Renewable Natural Gas (RNG) into their systems is unknown.

For purposes of estimating aggregate costs of compliance, the Commission made the following assumptions:

- Up to five percent (5%) of the forty (40) municipal natural gas systems in Missouri (40 * 5% = 2) will elect to accept RNG at one (1) location in their respective natural gas distribution systems.
- The estimated annual operating costs, including electricity, communications, and supplies is $3,400 in current dollars.
- The life of the rule is ten (10) years.
- There will be an annual inflation rate over ten (10) years of three percent (3%) per year.

FISCAL NOTE
PRIVATE COST

I. Department Title: Title 20--DEPARTMENT OF COMMERCE AND INSURANCE
Division Title: Division 4240—Public Service Commission
Chapter Title: Chapter 10—Utilities

Rule Number and Title:	20 CSR 4240-10.030 Standards of Quality
Type of Rulemaking:	Proposed Amendment

II. SUMMARY OF FISCAL IMPACT

Estimate of the number of entities by class which would likely be affected by the adoption of the rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
3	**Privately Owned Natural Gas Utilities**	**$0 - $1,491,000**

III. WORKSHEET

The number of entities that will be affected by this rule is unknown because the proposed rule amendments will only apply to natural gas utilities that choose to accept RNG onto their natural gas distribution systems. Acceptance of renewable natural gas is not mandatory. In the event a natural gas utility does not accept any renewable natural gas, the monitoring requirement will not apply, and no cost impact is anticipated. There are five (5) private utilities[1] to whom these rule amendments may apply, should those utilities elect to accept renewable natural gas.

The cost of compliance per installation is estimated as follows:
- Capital Cost Per Installation: $458,000.
- Annual Operating Cost Per Installation: $3,400 per year, with the total annual operating cost adjusted for inflation over the ten- (10-) year life of the rule being $39,000.
- The estimated sum of capital and operating cost is $497,000 per installation.
- The estimated aggregate cost for two (2) installations is $994,000.

$458,000 installation cost + $39,000 operating costs adjusted for inflation = $497,000 per municipal installation

$497,000 cost per installation in the aggregate x 3 installations = $1,491,000 possible cost in the aggregate for the 10-year life of the rule

[1] Spire Missouri, Ameren Missouri, Liberty (Empire), Liberty (Midstates), and Summit Natural Gas.

IV. ASSUMPTIONS

As proposed, Section (11) requires each gas utility receiving or transporting RNG to install operate, maintain and continuously monitor the quality of the RNG received. Section (12) would require installation of a device to isolate renewable natural gas that does not meet the quality standards proposed in Section (10). The estimated costs are the incremental costs of the monitoring equipment and control device, and assumes that the monitoring and control will be integrated within existing utility control rooms.

The Commission Staff received information from Roeslein Alternative Energy, a company that is experienced in these types of installations. Roeslein provided information that indicated it would cost roughly $450,000 to comply with the monitoring proposed in section (11) and $8,000 to comply with the control device proposed in section (12), with total being $458,000. However, the true costs are unknown at this time as the number of private entities who would accept Renewable Natural Gas (RNG) into their systems is unknown.

For purposes of estimating aggregate costs of compliance, the Commission made the following assumptions:

- Three (3) of the privately-owned natural gas utilities will elect to accept RNG at one (1) location in their respective natural gas distribution systems.
- The estimated annual operating costs, including electricity, communications and supplies is $3,400 in current dollars.
- The life of the rule is ten (10) years.
- There will be an annual inflation rate over ten (10) years of three percent (3%) per year.