|  |  |  |  |
| --- | --- | --- | --- |
| State of Florida  pscSEAL | | Public Service Commission  Capital Circle Office Center ● 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850  -M-E-M-O-R-A-N-D-U-M- | |
| DATE: | June 3, 2021 | | |
| TO: | Office of Commission Clerk (Teitzman) | | |
| FROM: | Division of Engineering (Thompson)  Office of the General Counsel (Weisenfeld) | | |
| RE: | Docket No. 20190210-EG – Petition for approval of demand-side management plan, by Peoples Gas System. | | |
| AGENDA: | 06/15/21 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate | | |
| COMMISSIONERS ASSIGNED: | | | All Commissioners |
| PREHEARING OFFICER: | | | Administrative |
| CRITICAL DATES: | | | None |
| SPECIAL INSTRUCTIONS: | | | None |

Case Background

Enacted in 1980, Sections 366.80 through 366.83, and 403.519, Florida Statutes (F.S.), known collectively as the Florida Energy Efficiency and Conservation Act (FEECA), requires the Florida Public Service Commission (Commission) to adopt conservation goals to increase the efficiency of energy consumption. Additionally, FEECA emphasizes reducing the growth rates of weather-sensitive peak demand, reducing and controlling the growth rates of electricity consumption, reducing the consumption of expensive resources such as petroleum fuels, and encouraging demand-side renewable energy resources. The Commission most recently established conservation goals for Peoples Gas System (PGS or Utility) by Order No. PSC-2019-0361-PAA-GU, issued August 26, 2019 (2019 Goalsetting Order).[[1]](#footnote-1)

Pursuant to Section 366.82(7), F.S., after goals are established, the Commission shall require each utility subject to FEECA to develop a demand-side management (DSM) plan to meet the conservation goals. On November 20, 2019, PGS filed a petition requesting approval of its original DSM Plan. As part of this filing, PGS provided a cost-effectiveness analysis of the proposed programs pursuant to Rule 25-17.009, Florida Administrative Code (F.A.C.). The cost-effectiveness analysis includes the Gas Rate Impact Measure (G-RIM) Test and the Participants Test.

Staff issued multiple data requests to PGS regarding the original DSM Plan, which featured individual programs per measure. In June 2020, the Utility informed staff of its intention to refile its original petition in order to revise its proposed programs. On February 26, 2021, PGS filed its revised petition, regrouping the programs included in the original petition to more closely reflect the programs used to establish the Utility’s conservation goals in the 2019 Goalsetting Order. As part of its February 2021 filing, PGS provided an updated cost-effectiveness analysis for the revised programs, and provided the program administrative standards.

The Commission has jurisdiction over this matter pursuant to Sections 366.80 through 366.83 and 403.519, F.S.

Discussion of Issues

Issue 1:

 Should the Commission approve Peoples Gas Systems’ proposed DSM Plan and program standards?

Recommendation:

 Yes. The DSM Plan proposed by PGS is projected to exceed the annual numeric conservation goals approved by the Commission in the 2019 Goalsetting Order. PGS’s proposed DSM Plan is primarily a continuation, with some minor modifications, of its preliminary DSM portfolio used to establish the goals approved by the Commission in 2019 Goalsetting Order. The programs within PGS’s proposed DSM Plan are projected to be cost-effective based upon both the G-RIM and Participants Tests.

Therefore, staff recommends that the Commission should allow PGS to file for cost recovery of the programs included in its proposed DSM Plan in the Natural Gas Conservation Cost Recovery (NGCCR) proceeding. However, PGS must demonstrate that the expenditures to implement its DSM programs are reasonable and prudent in order to recover those expenditures.

PGS also submitted its administrative program standards with its proposed DSM Plan. Staff has reviewed PGS’s administrative program standards and recommends that they are consistent with the Utility’s proposed DSM Plan submitted for approval by the Commission. Staff requests that PGS notify the Commission prior to any changes being made to the program standards as filed. (Thompson)

Staff Analysis:

 The criteria used to review the appropriateness of the conservation programs are as follows: (1) whether the program advances the policy objectives of FEECA and its implementing rules; (2) whether the program is directly monitorable and yields measurable results; and (3) whether the program is cost-effective.[[2]](#footnote-2) Staff has reviewed PGS’s proposed DSM Plan, including its energy savings, cost-effectiveness, and rate impact. PGS’s proposed DSM Plan exceeds the goals set in the 2019 Goalsetting Order, and should be approved.

**Description of DSM Plan**

PGS’s proposed DSM Plan consists of 11 programs in total, 4 residential and 7 commercial/industrial. Some of these programs have been renamed, but otherwise, they are essentially continuations of PGS’s existing programs. As required by Rule 25-17.003, F.A.C., and as approved in the 2019 Goalsetting Order, PGS’s proposed DSM Plan now offers energy audits to residential customers, and PGS also now voluntarily offers audits to commercial/industrial customers. Table 1-1 provides a complete list of the programs and the program status (modified or new). A description of each program can be found in Attachment A.

**Table 1-1**

**PGS DSM Plan Program Listing**

|  |  |  |
| --- | --- | --- |
| **Program Name** | **Program Status** | |
| **Modified** | **New** |
| **Residential Programs** | | |
| Residential Customer Assisted Energy Audit |  | X |
| Residential New Construction | X |  |
| Residential Retrofit | X |  |
| Residential Retention | X |  |
| **Commercial/Industrial Programs** | | |
| Commercial Walk-Through Energy Audit |  | X |
| Commercial New Construction | X |  |
| Commercial Retrofit | X |  |
| Commercial Retrofit Combined Heat and Power (CHP) | X |  |
| Commercial Retrofit Electric Replacement | X |  |
| Commercial Retention | X |  |
| Conservation Research and Development (R&D) | X |  |

Source: Document No. 02477-2021

PGS’s proposed DSM Plan features two audit programs: the Residential Customer Assisted Energy Audit and the Commercial Walk-Through Energy Audit. PGS received approval in the 2019 Goalsetting Order to add these programs to ensure that the full requirements of FEECA are being met.[[3]](#footnote-3)

The primary changes made to the modified programs were renaming, and updates to the rebate levels available within the programs. Programs that will be replacing electric systems/equipment with energy-efficient natural gas systems/equipment will now be referred to as “Retrofit” for clarity as opposed to “Replacement” as previously named. PGS will continue to use the term “Retention,” which is the replacement of existing natural gas systems/equipment with energy efficient natural gas systems/equipment. As an example of a rebate update, PGS increased the rebate amount for the dryer in the Residential Retention Program from $100 to $150.

The other changes made to the modified programs are as follows: (1) Gas Space Conditioning was added as a measure to the respective residential and commercial retrofit and retention programs instead of continuing as a singular program; (2) the Oil Heat Replacement program was eliminated due to low historical participation totals; (3) the Commercial Retention CHP program was eliminated due to its failure to achieve cost-effectiveness; and (4) for the Conservation R&D program, PGS combined its existing Monitoring and Research program with its Conservation Demonstration and Development program to become a single Conservation R&D program.

PGS also submitted its administrative program standards along with its proposed DSM Plan, which can be found in Attachment B. Staff has reviewed the administrative program standards and they appear consistent with the Utility’s proposed DSM Plan.

***Program Participation***

PGS projects program participation based on historical program participation trends. The projected annual program participation for each program in PGS’s proposed DSM Plan is provided in Table 1-2.

**Table 1-2**

**PGS’s DSM Plan Annual Program Participation by Program**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Program Name** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** | **2027** | **2028** |
| **Residential Programs** | | | | | | | | |
| [Residential Customer Assisted Energy Audit](#RANGE!#REF!) | 4,500 | 4,500 | 4,500 | 4,500 | 4,500 | 4,500 | 4,500 | 4,500 |
| Residential New Construction | 8,700 | 8,900 | 9,000 | 9,100 | 9,200 | 9,300 | 9,400 | 9,500 |
| Residential Retrofit | 2,420 | 2,514 | 2,558 | 2,641 | 2,699 | 2,767 | 2,825 | 2,910 |
| Residential Retention | 16,400 | 16,916 | 17,332 | 17,709 | 18,061 | 18,448 | 18,800 | 19,326 |
| **Commercial Programs** | | | | | | | | |
| Commercial Walk-Through Energy Audit | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 |
| Commercial New Construction | 96 | 100 | 103 | 105 | 109 | 112 | 114 | 116 |
| Commercial Retrofit | 88 | 90 | 92 | 95 | 96 | 99 | 101 | 104 |
| Commercial Retrofit CHP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commercial Retrofit Electric Replacement | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Commercial Retention | 293 | 300 | 307 | 314 | 321 | 328 | 336 | 345 |

Source: Document No. 02477-2021

As seen in Table 1-2, the Commercial Retrofit Combined Heat and Power (CHP) program is projected to have zero participation. PGS forecasted zero participation for this DSM program based upon the program’s historical participation rate. PGS believes that participation will increase in this program as commercial customers seek technologies to reduce energy costs and greenhouse gas emissions. CHP technologies improve energy efficiency since the energy is produced at the point of use, and involves the recovery of thermal energy that would otherwise be wasted. The Utility modified the Commercial Retrofit CHP program to clarify what qualifies for the incentive. The Utility also proposed an increase to the incentive, and added the requirement to offset some amount of gas usages. PGS believes these modifications will attract participation to this DSM program.

***Comparison of DSM Plan to Goals***

As in the 2019 Goalsetting Order, PGS estimated program savings through a combination of state and national industry sources, current building code and appliance standards, and a review of historical DSM program activity. Based on staff’s review and as shown in Table 1-3, PGS’s proposed DSM Plan will exceed the Commission’s established annual goals. The annual energy savings associated with PGS’s proposed DSM Plan and the Commission’s established goals are summarized in Table 1-3 for the residential and commercial/industrial sectors.

**Table 1-3**

**Commission’s Goals vs. PGS’s DSM Plan**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Residential**  **(Therms)** | | **Commercial**  **(Therms)** | |
| **Goal** | **DSM**  **Plan** | **Goal** | **DSM**  **Plan** |
| **2021** | 355,569 | 373,753 | 227,968 | 245,612 |
| **2022** | 363,728 | 383,682 | 233,833 | 251,869 |
| **2023** | 371,562 | 389,725 | 239,661 | 258,120 |
| **2024** | 379,045 | 395,866 | 245,457 | 264,386 |
| **2025** | 386,682 | 401,594 | 251,338 | 270,678 |
| **2026** | 394,475 | 407,663 | 257,304 | 277,076 |
| **2027** | 402,429 | 413,392 | 263,357 | 283,612 |
| **2028** | 410,546 | 420,592 | 269,500 | 290,246 |
| **Total** | **3,749,583** | **3,904,732** | **2,426,634** | **2,613,791** |

Source: Document No. 02477-2021

The values presented above are projections based upon participation rates which may or may not occur. PGS will be responsible for monitoring actual participation rates and seeking Commission action, if necessary, to modify, add, or remove programs. If PGS is unable to meet the Commission’s goals, the Utility may be subject to appropriate action by the Commission, up to and including financial penalties.

Section 366.82(10), F.S., requires the Commission to provide an annual report to the Governor and Legislature on the progress of each utility toward meeting the established goals. PGS will continue to submit to the Commission an annual report no later than March 1 of each year, summarizing the achievements of its DSM Plan. Staff will continue to monitor and report the actual amount of DSM savings each year, on an annual and cumulative basis, as part of the FEECA Report.

**Cost-Effectiveness Review**

As required by Rule 25-17.009, F.A.C., PGS provided a cost-effectiveness analysis of the proposed programs using the G-RIM and the Participants Tests. Below, staff addresses PGS’s results of its cost-effectiveness analysis.

***Cost-Effectiveness Test Results***

All of PGS’s proposed programs pass both the G-RIM and Participants Tests. These tests consist of the program benefits divided by the program costs so that programs are determined to be cost-effective if the result of the test is a ratio greater than 1.00. The data PGS used to develop the costs associated with the cost-effectiveness tests was obtained from PGS’s current costs in facilitating existing programs, and from costs currently incurred by the Utility and customers for energy efficient natural gas equipment and infrastructure. The cost-effectiveness test results for each program are provided in Table 1-4.

**Table 1-4**

**PGS’s DSM Plan Cost-Effectiveness Test Results by Program**

|  |  |  |
| --- | --- | --- |
| **Program Name** | **G-RIM Test** | **Participants Test** |
| **Residential Programs** | | |
| Residential New Construction | 1.502 | 1.041 |
| Residential Retrofit | 1.321 | 1.103 |
| Residential Retention | 1.412 | 1.579 |
| **Commercial Programs** | | |
| Commercial New Construction | 2.871 | 1.098 |
| Commercial Retrofit | 3.326 | 1.316 |
| Commercial Retrofit CHP | 2.225 | 1.846 |
| Commercial Retrofit Electric Replacement | 4.404 | 1.218 |
| Commercial Retention | 1.009 | 4.094 |

Source: Document No. 02477-2021

**Rate Impact**

Staff reviewed the projected program costs for PGS’s proposed DSM Plan. Table 1-5 shows the total projected program costs for each program in PGS’s proposed DSM Plan. PGS projects that the total cost for its proposed DSM Plan will be approximately $190 million.

**Table 1-5**

**Total Program Costs of PGS’s DSM Plan**

|  |  |
| --- | --- |
| **Program Name** | **Program Costs** |
| **Residential Programs** | |
| [Residential Customer Assisted Energy Audit](#RANGE!#REF!) | $1,725,000 |
| Residential New Construction | $100,928,500 |
| Residential Retrofit | $10,153,221 |
| Residential Retention | $62,804,741 |
| **Commercial/Industrial Programs** | |
| Commercial Walk-Through Energy Audit | $720,000 |
| Commercial New Construction | $1,990,514 |
| Commercial Retrofit | $4,450,111 |
| Commercial Retrofit CHP | $0 |
| Commercial Retrofit Electric Replacement | $80,000 |
| Commercial Retention | $6,060,429 |
| Conservation R&D | $1,000,000 |

Source: Document No. 03066-2021

As shown in Table 1-5, PGS projects zero program costs for the Commercial Retrofit CHP program due the zero projected program participation previously discussed. However, staff recommends that PGS should update the Commission on program costs and all other relevant program information should program participation be achieved.

If approved, the cost to implement PGS’s proposed DSM Plan would flow through to the ratepayers through the NGCCR proceeding. In the NGCCR proceeding, PGS would file annually for recovery of incentives, and equipment and administrative costs. The NGCCR amounts represent a monthly bill impact to customers as part of the non-fuel cost of energy charges on their bills. Much like investments in generation, transmission, and distribution, investments in energy efficiency have an immediate rate impact, but may produce savings over time.

Table 1-6 is an estimate of the monthly bill impact on a typical residential and commercial customer for PGS’s proposed DSM Plan. The estimated NGCCR factors are based upon the participation rates and administrative costs used in the cost-effectiveness analysis discussed above and are not final.

**Table 1-6**

**PGS’s Estimated Monthly Bill Impact of Proposed DSM Plan**

|  |  |  |
| --- | --- | --- |
| **Year** | **Residential Customer**  **20 Therms/mo** | **Commercial Customer**  **1,500 Therms/mo** |
| **Monthly Bill Impact ($)** | |
| **2021** | 1.81 | 28.73 |
| **2022** | 2.03 | 32.24 |
| **2023** | 2.01 | 31.85 |
| **2024** | 1.98 | 31.42 |
| **2025** | 1.95 | 30.99 |
| **2026** | 1.93 | 30.57 |
| **2027** | 1.90 | 30.13 |
| **2028** | 1.88 | 29.78 |

Source: Document No. 03066-2021

**Conclusion**

The DSM Plan proposed by PGS is projected to exceed the annual numeric conservation goals approved by the Commission in the 2019 Goalsetting Order. PGS’s proposed DSM Plan is primarily a continuation, with some minor modifications, of its preliminary DSM portfolio used to establish the goals approved by the Commission in 2019 Goalsetting Order. The programs within PGS’s proposed DSM Plan are projected to be cost-effective based upon both the G-RIM and Participants Tests.

Therefore, staff recommends that the Commission should allow PGS to file for cost recovery of the programs included in its proposed DSM Plan in the NGCCR proceeding. However, PGS must demonstrate that the expenditures to implement its DSM programs are reasonable and prudent in order to recover those expenditures.

PGS also submitted its administrative program standards with its proposed DSM Plan. Staff has reviewed PGS’s administrative program standards and recommends that they are consistent with the Utility’s proposed DSM Plan submitted for approval by the Commission. Staff requests that PGS notify the Commission prior to any changes being made to the program standards as filed.

Issue 2:

 Should this docket be closed?

Recommendation:

Yes. If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, this docket should be closed upon the issuance of a consummating order. (Weisenfeld)

Staff Analysis:

 If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, this docket should be closed upon the issuance of a consummating order.

**Peoples Gas System**

**Residential Programs**

**Residential Customer-Assisted Energy Audit**

The Residential Customer-Assisted Energy Audit Program allows for residential customers to engage in an online energy audit.

**Residential New Construction**

The Residential New Construction Program offers rebates to builders and developers who construct new single family and multi-family homes with the installation of energy efficient natural gas appliances.

|  |  |
| --- | --- |
| **Natural Gas Appliance/System** | **Incentive/Appliance Installation** |
| Dryer | $200 |
| Range/Cooktop | $300 |
| Tank Water Heater | $550 |
| ENERGY STAR Tank Water Heater | $650 |
| Tankless Water Heater | $700 |
| Central Heating | $725 |

**Residential Retrofit**

The Residential Retrofit Program offers rebates to current and new natural gas customers who replace electric equipment with new, energy efficient natural gas equipment.

|  |  |
| --- | --- |
| **Natural Gas Appliance/System** | **Incentive/Appliance Installation** |
| Dryer | $200 |
| Range/Cooktop | $300 |
| Tank Water Heater | $550 |
| ENERGY STAR Tank Water Heater | $650 |
| Tankless Water Heater | $700 |
| Central Heating | $725 |
| Space Heater | $65 |
| Space Conditioner | $500/ton |

**Residential Retention**

The Residential Retention Program offers rebates to current natural gas customers who replace less efficient natural gas equipment with new, energy efficient natural gas equipment.

|  |  |
| --- | --- |
| **Natural Gas Appliance/System** | **Incentive/Appliance Installation** |
| Range/Cooktop | $100 |
| Dryer | $150 |
| Tank Water Heater | $350 |
| ENERGY STAR Tank Water Heater | $400 |
| Central Heating | $500 |
| Tankless Water Heater | $550 |
| Space Conditioner | $150/ton |

**Commercial Programs**

**Commercial Walk-Through Energy Audit**

In the Commercial Walk-Through Energy Audit Program, an audit is conducted by a trained commercial energy analyst who will provide tailored recommendations to encourage the customer to implement cost-effective measures.

**Commercial New Construction**

The Commercial New Construction Program offers rebates to builders and developers who construct commercial and industrial facilities with the installation of energy efficient natural gas appliances.

|  |  |
| --- | --- |
| **Natural Gas Appliance/System** | **Incentive/Appliance Installation** |
| Range/Cooktop | $2,000 |
| Dryer | $2,500 |
| ENERGY STAR Tank Water Heater | $2,500 |
| Fryer | $3,500 |
| Tankless Water Heater | $3,500 |

**Commercial Retrofit**

The Commercial Retrofit Program offers rebates to current and new natural gas customers who replace electric equipment with new, energy efficient natural gas equipment.

|  |  |
| --- | --- |
| **Natural Gas Appliance/System** | **Incentive/Appliance Installation** |
| Range/Cooktop | $2,000 |
| Dryer | $2,500 |
| Tank Water Heater | $2,500 |
| Fryer | $3,500 |
| Tankless Water Heater | $3,500 |
| Space Conditioner | $500/ton |

**Commercial Retrofit Combined Heat and Power**

The Commercial Retrofit Combined Heat and Power Program offers customer rebates for installing new, energy-efficient natural gas combined heat and power equipment to utilize waste heat to displace portions of natural gas usage for on-site heating, cooling, and water heating.

* Maximum Incentive: $300/kW of actual electric demand reduced of installed combined heat and power equipment

**Commercial Retrofit Electric Replacement**

The Commercial Retrofit Electric Replacement Program offers rebates to current and new natural gas customers who install new, energy efficient natural gas equipment.

* Maximum Incentive: $100/kW reduction for qualifying natural gas equipment

**Commercial Retention**

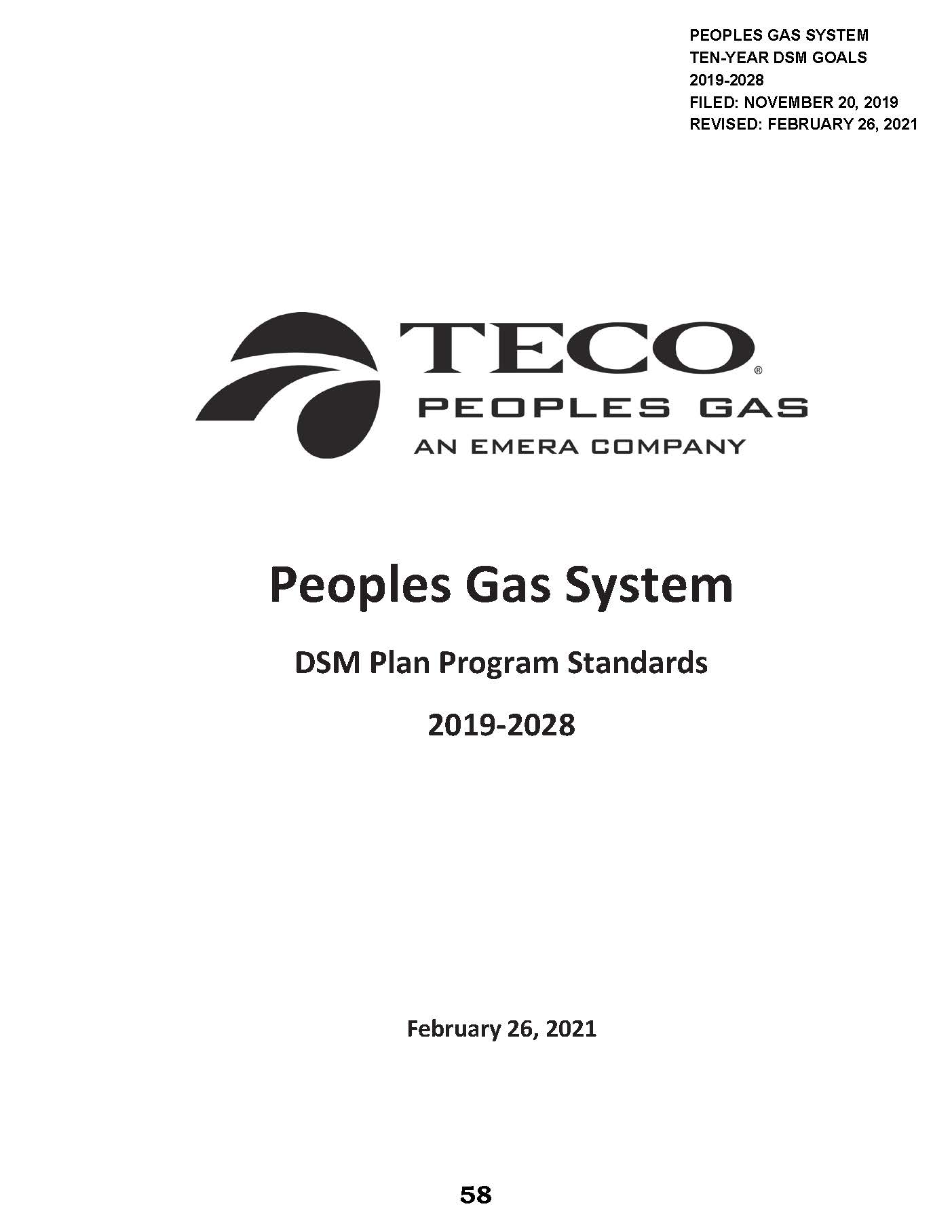
The Commercial Retention Program offers rebates to current natural gas customers who replace less efficient natural gas equipment with new, energy efficient natural gas equipment.

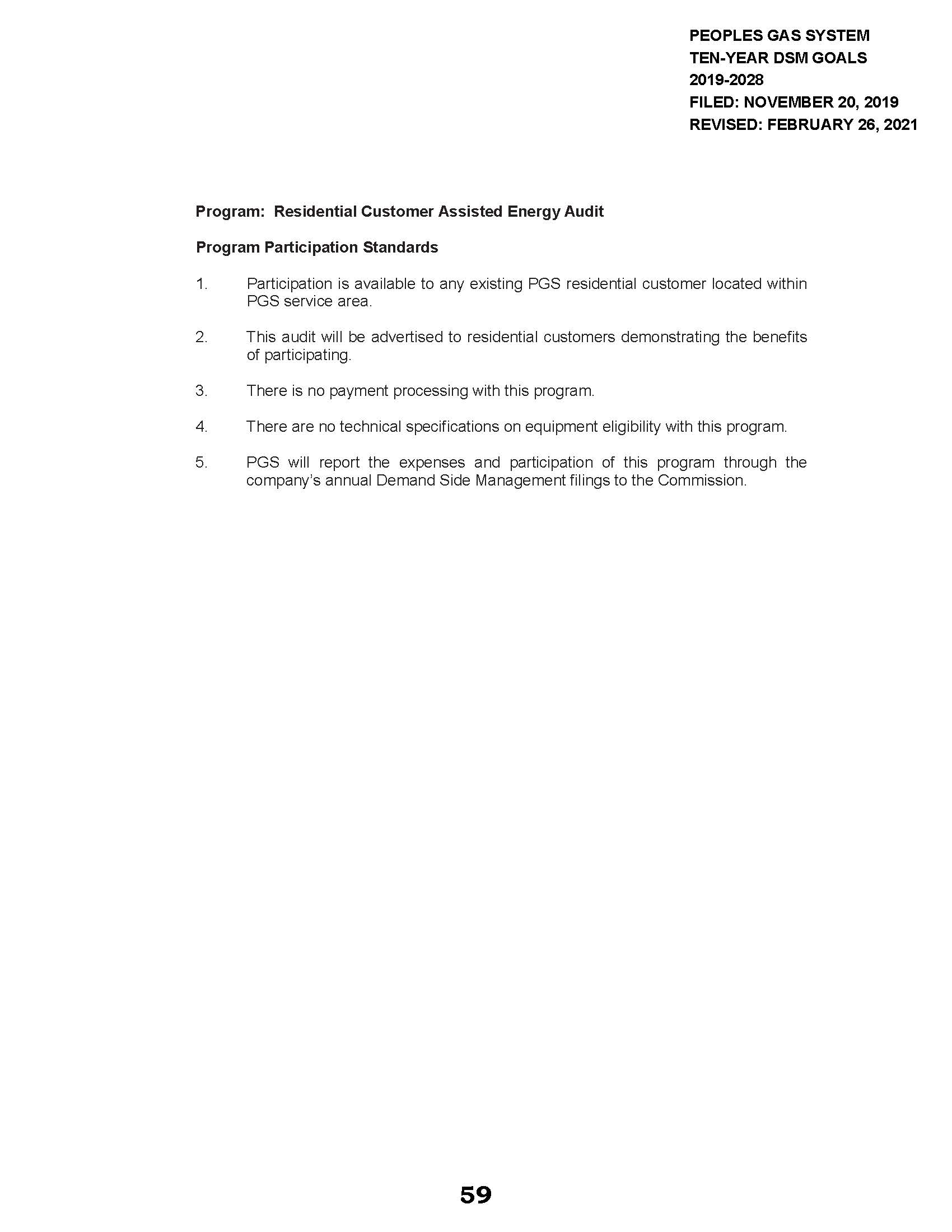
|  |  |
| --- | --- |
| **Natural Gas Appliance/System** | **Incentive/Appliance Installation** |
| Range/Cooktop | $1,500 |
| Tank Water Heater | $1,500 |
| Dryer | $2,000 |
| Tankless Water Heater | $2,000 |
| Fryer | $3,000 |
| Space Conditioner | $150/ton |

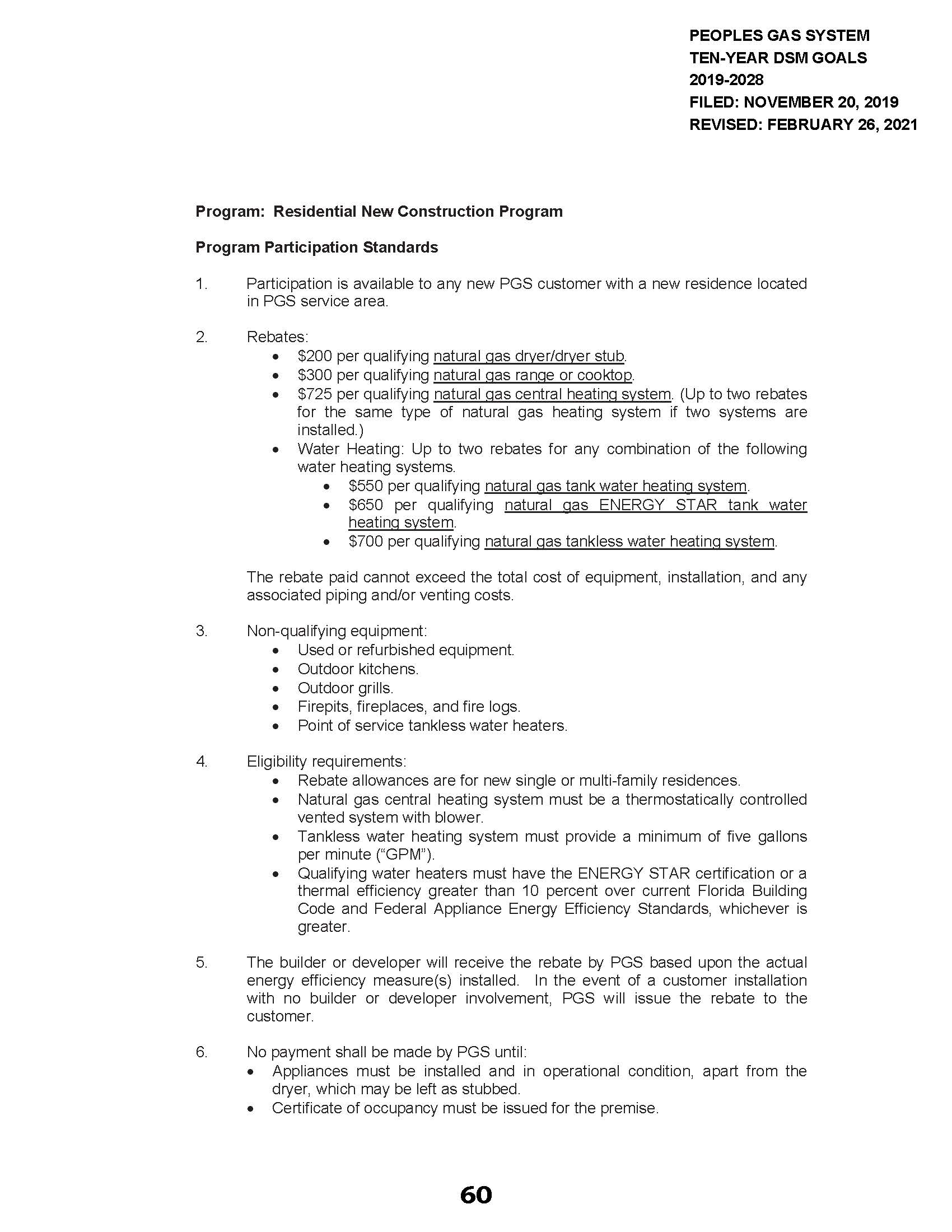
**Research and Development**

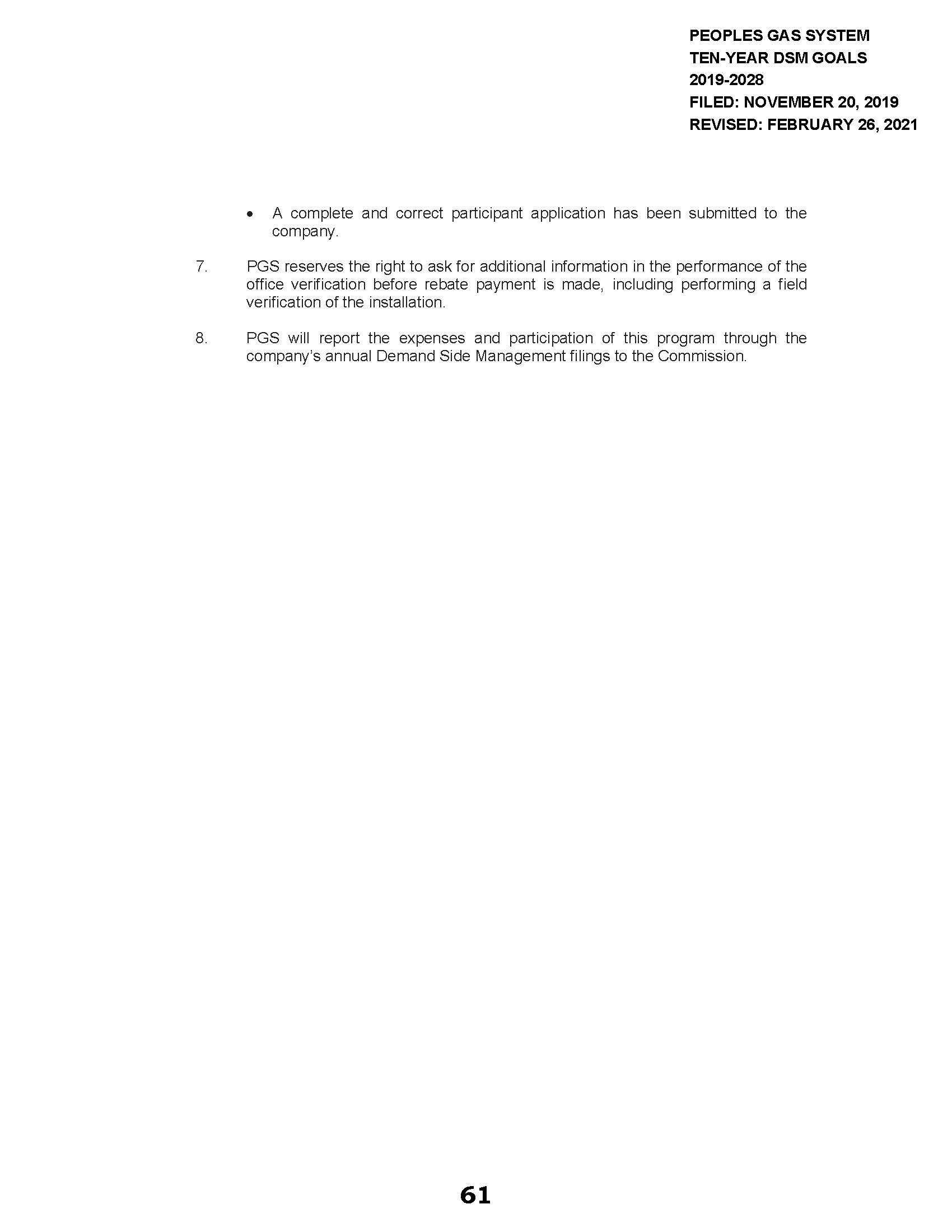
**Conservation Research and Development (R&D)**

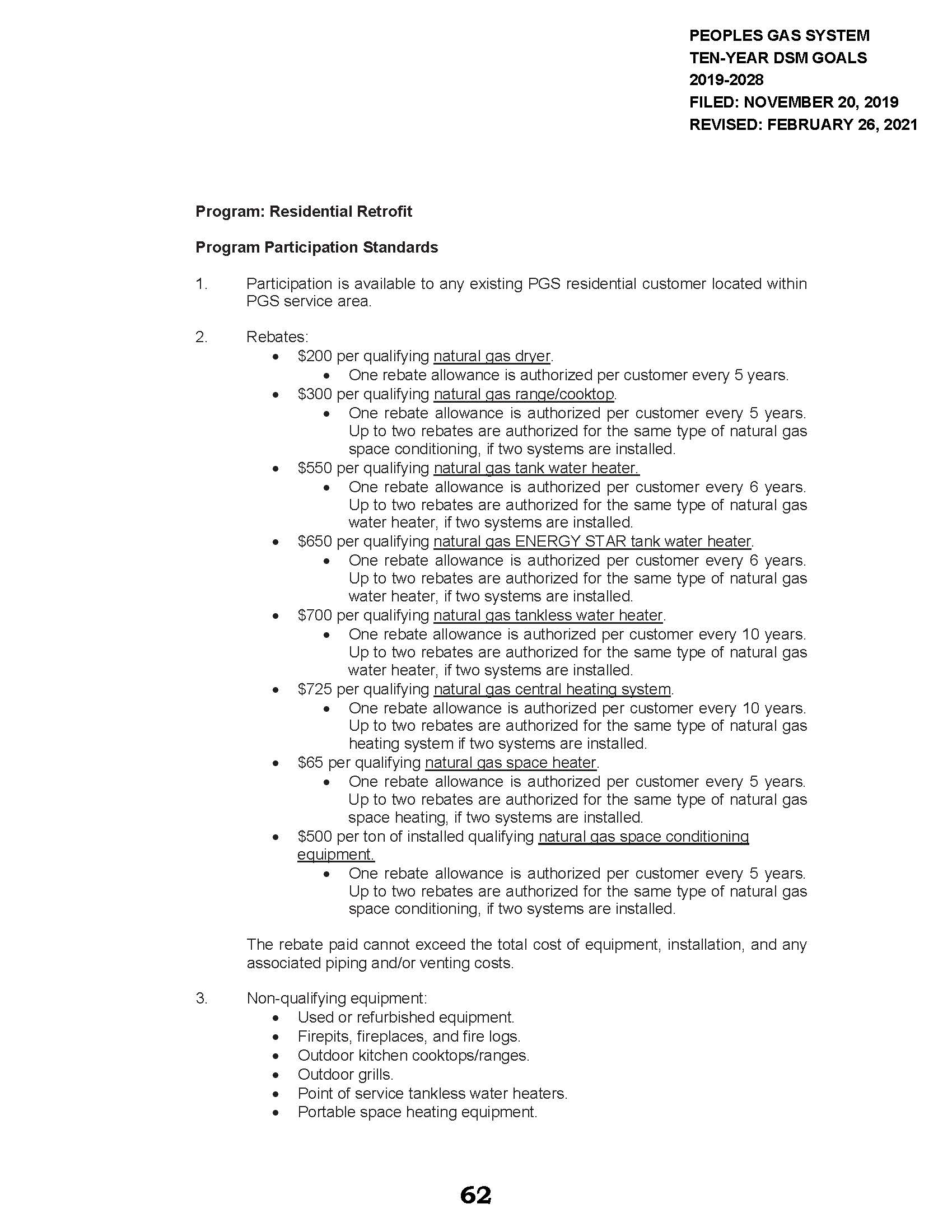
The Conservation R&D Program allows PGS to explore DSM measures that have insufficient data on cost-effectiveness, and the impact on PGS and its ratepayers. Program costs are estimated at $125,000 per year for a five-year period; however, the total program cost shall not exceed $500,000 for the five-year period.



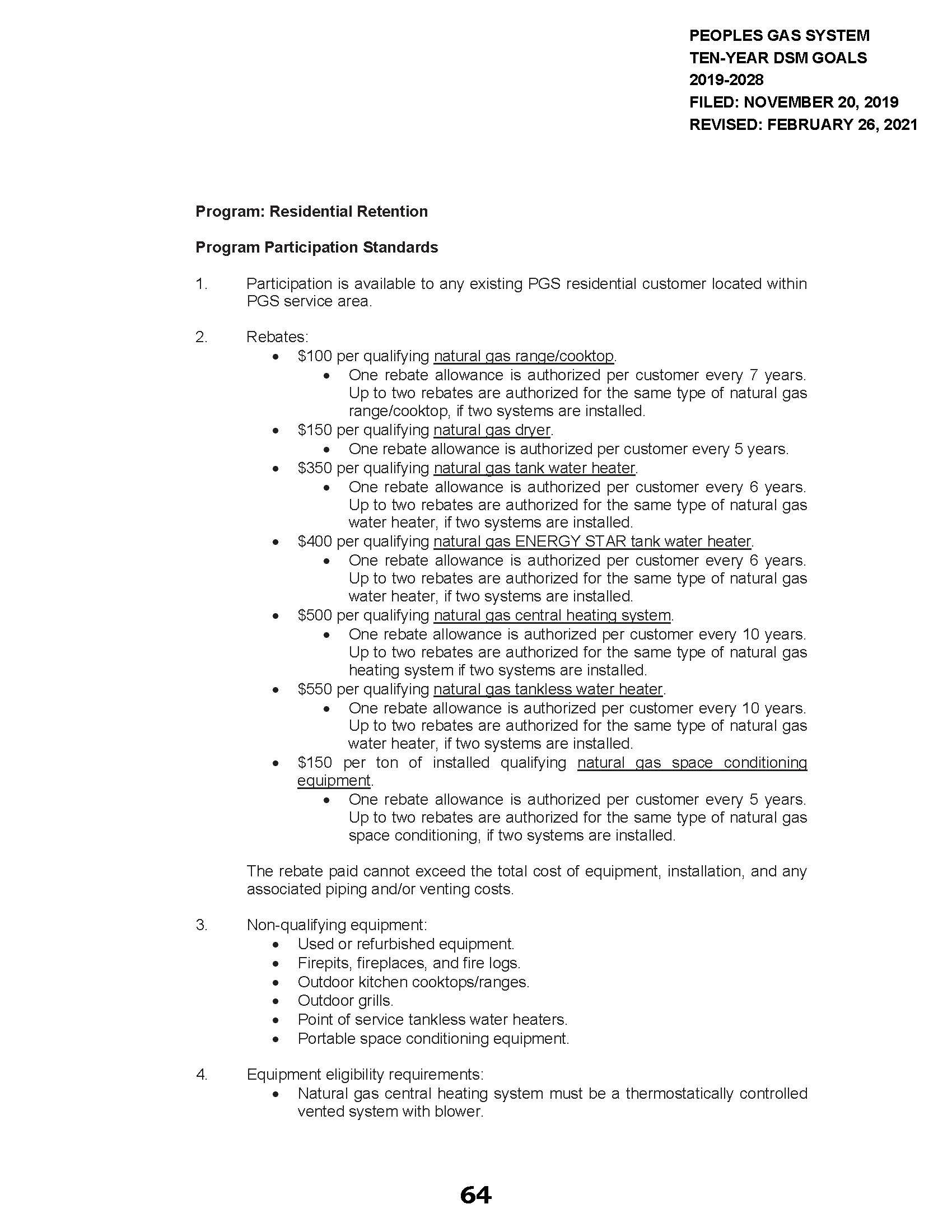


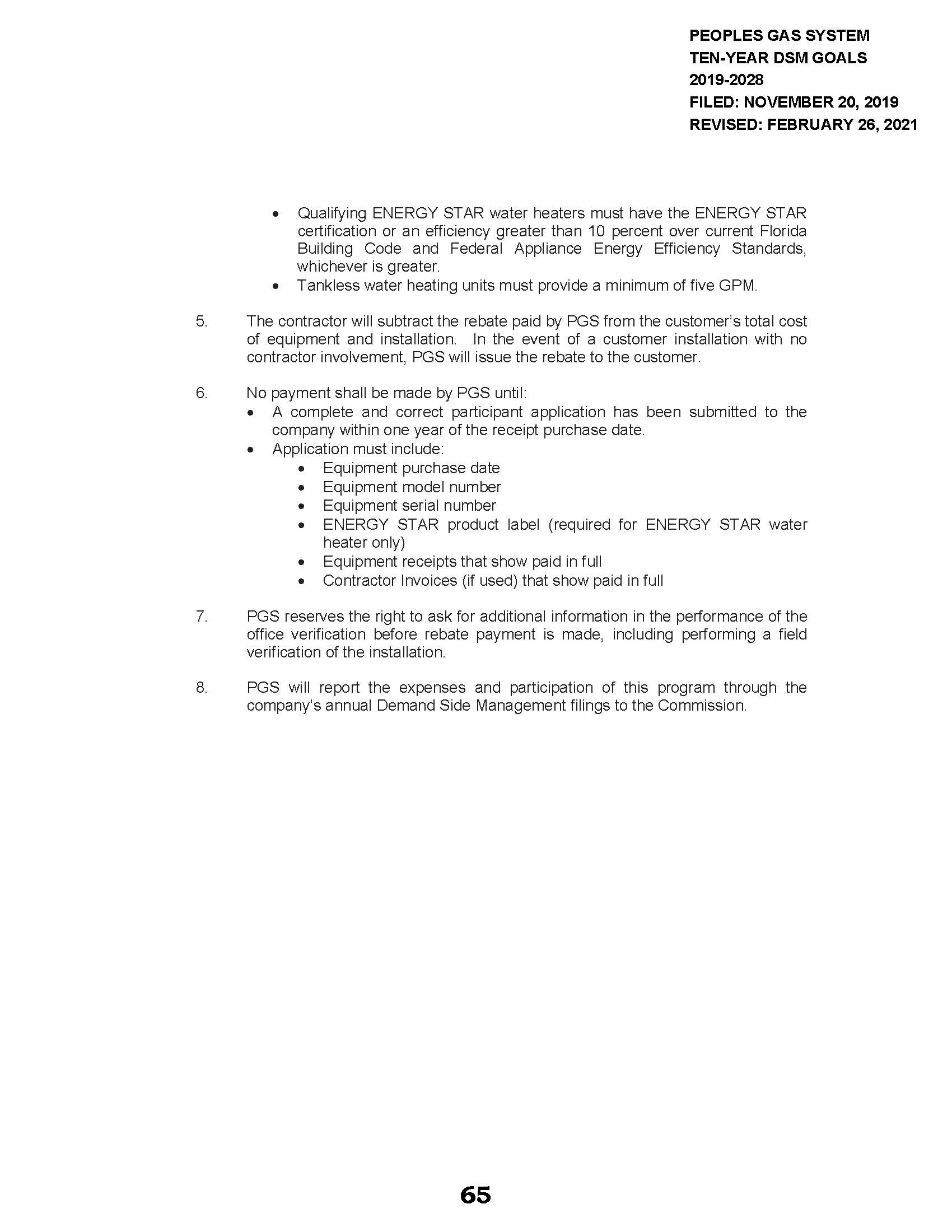


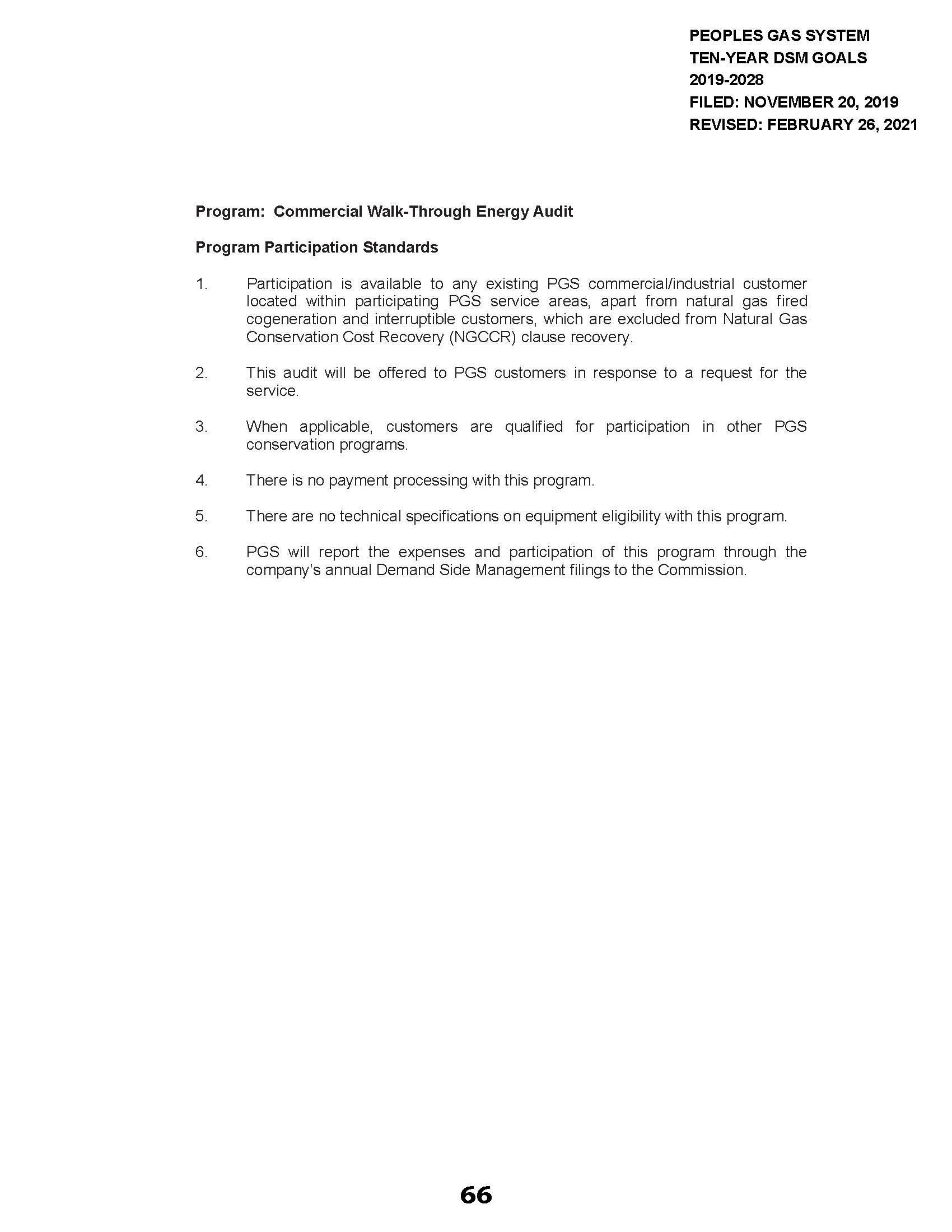


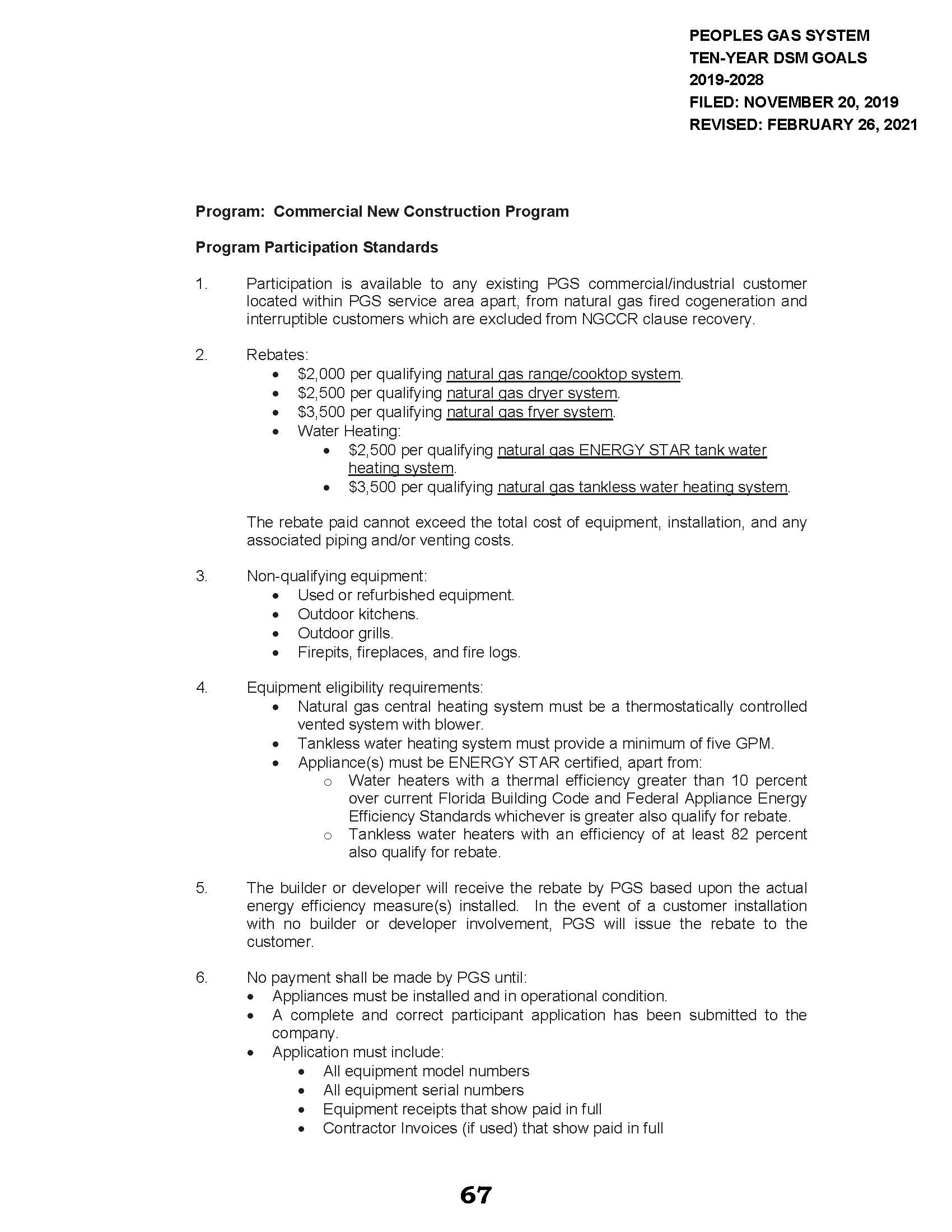


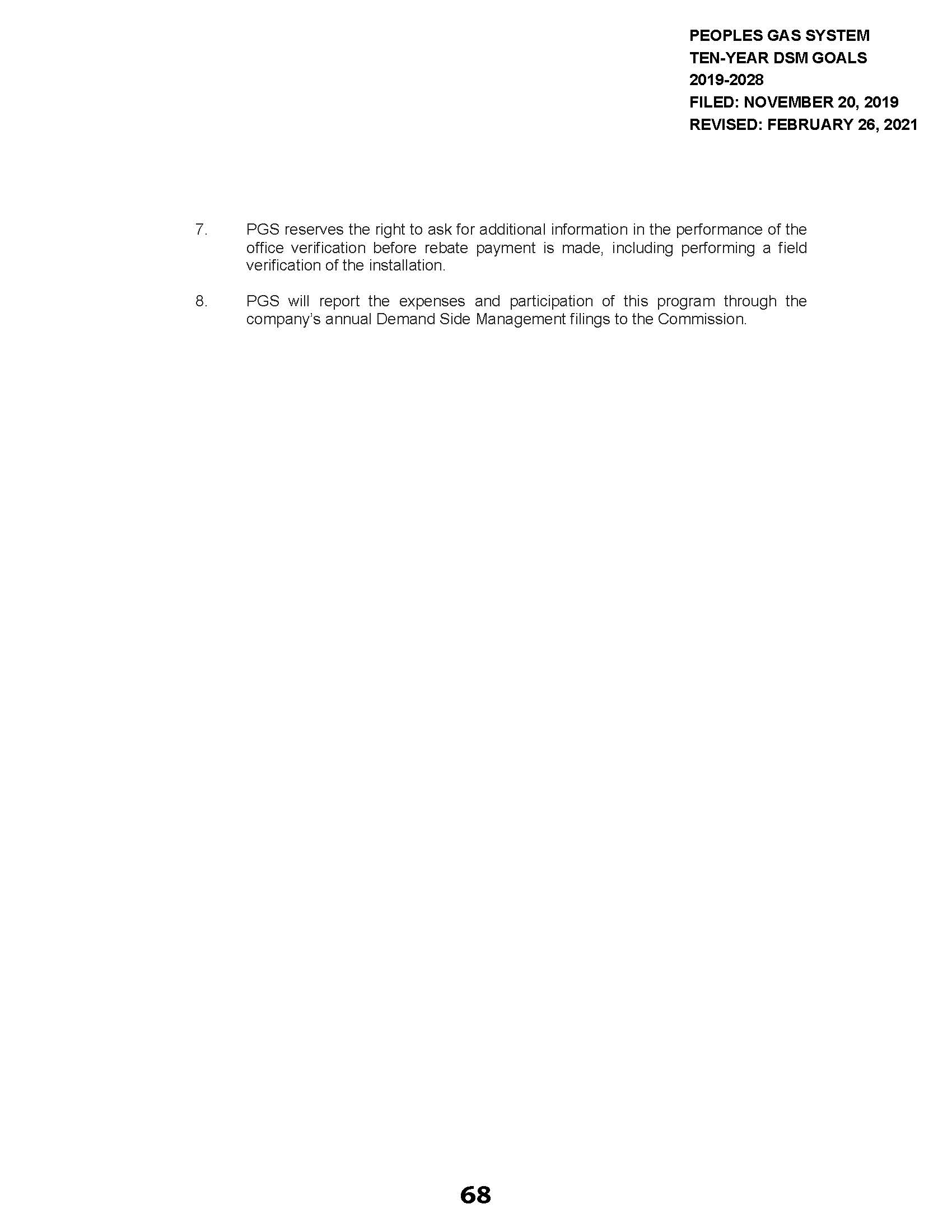


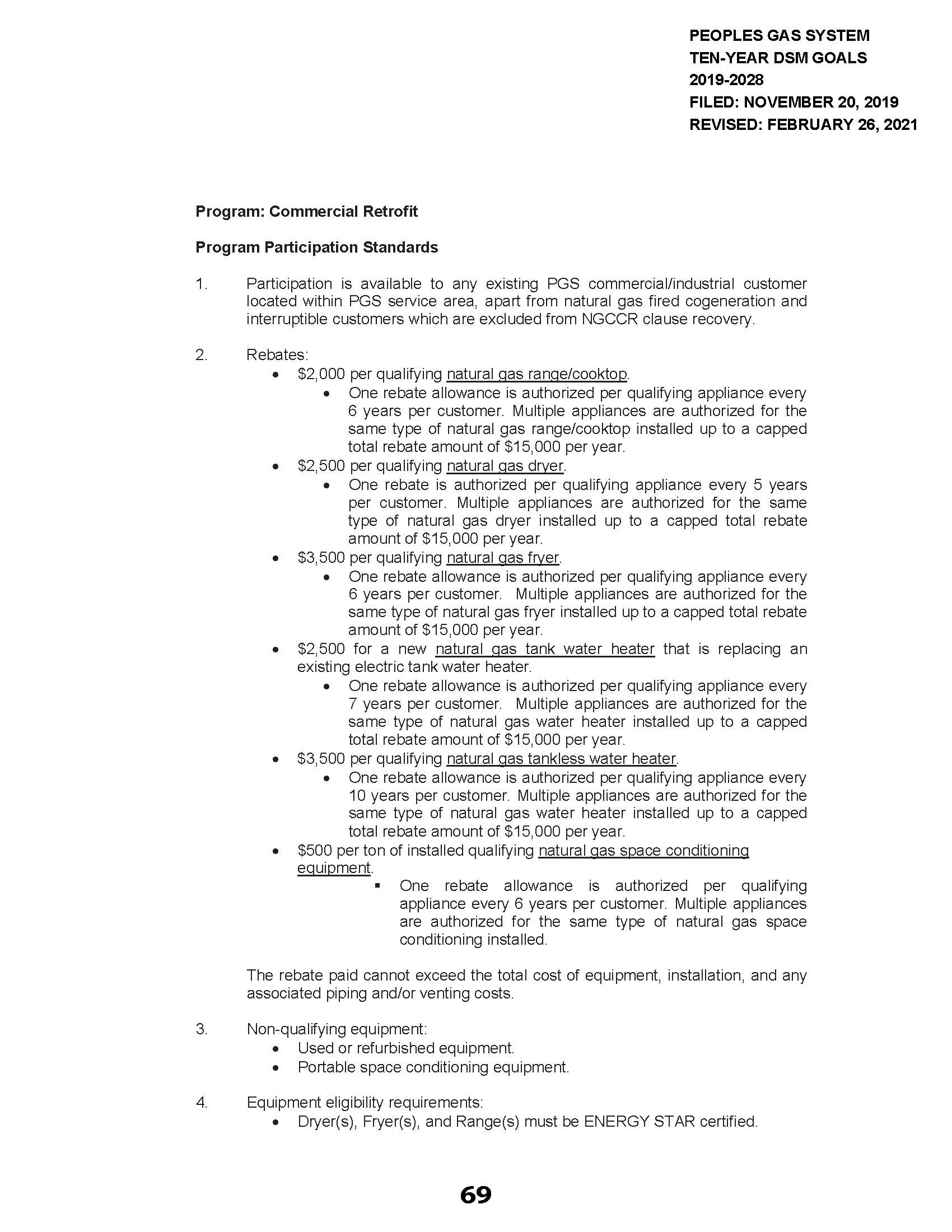


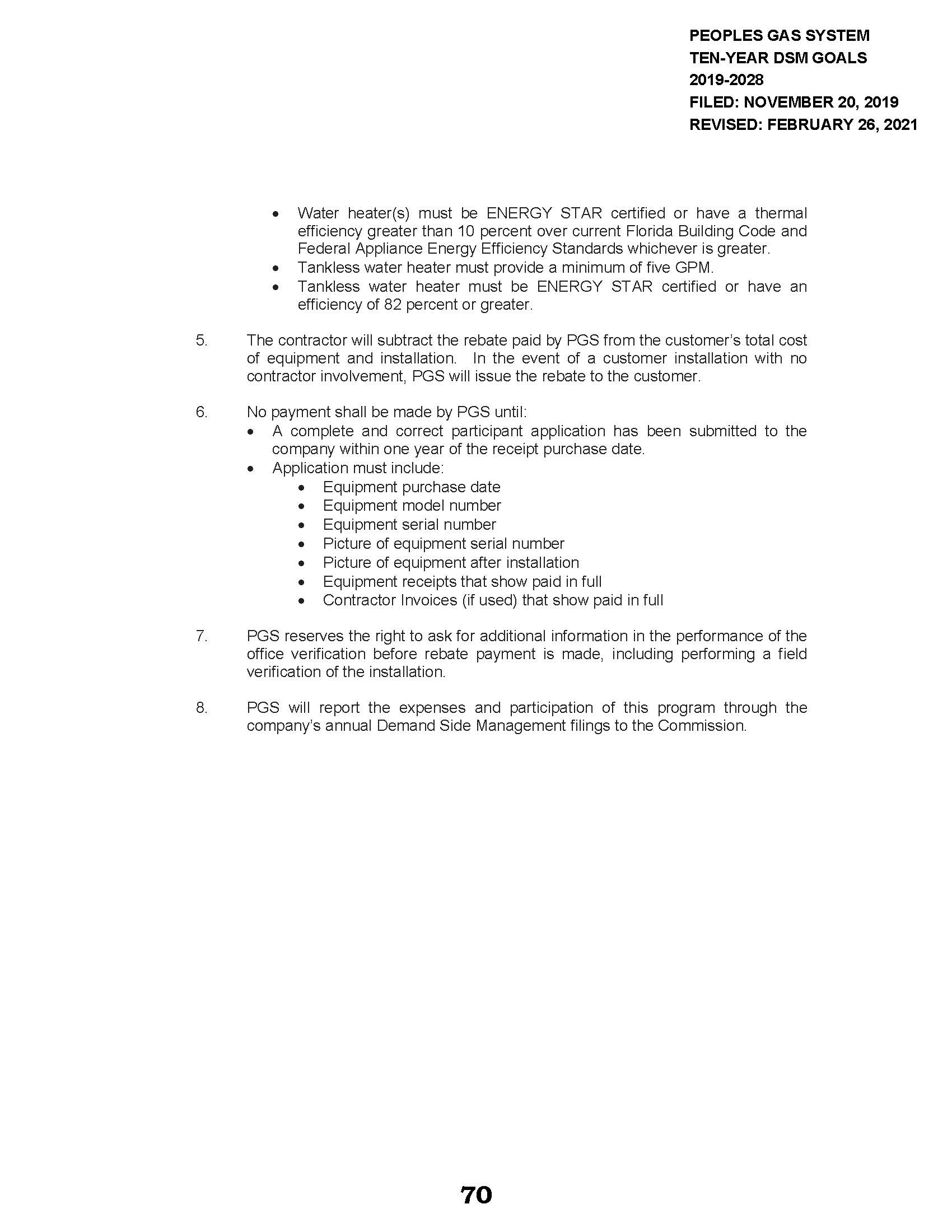


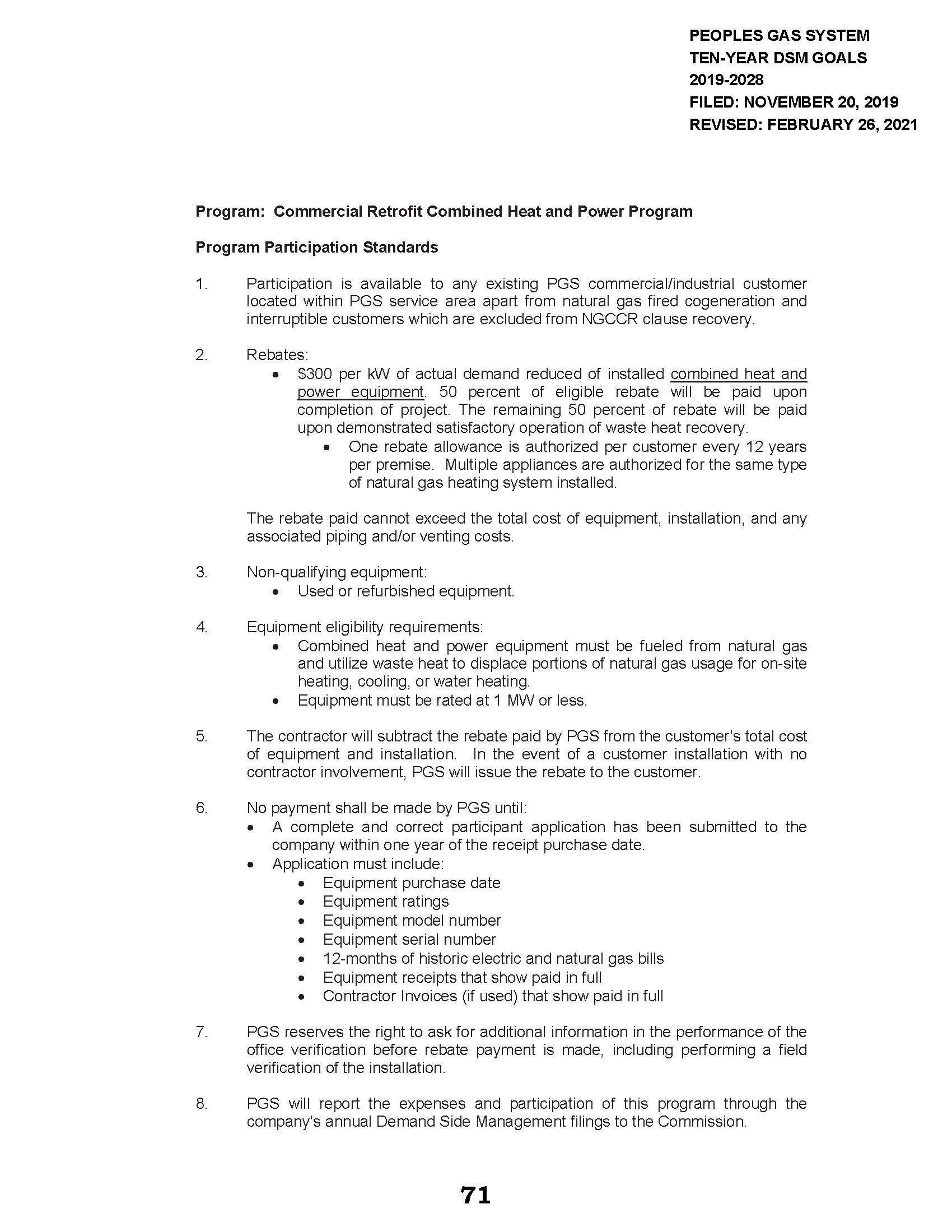


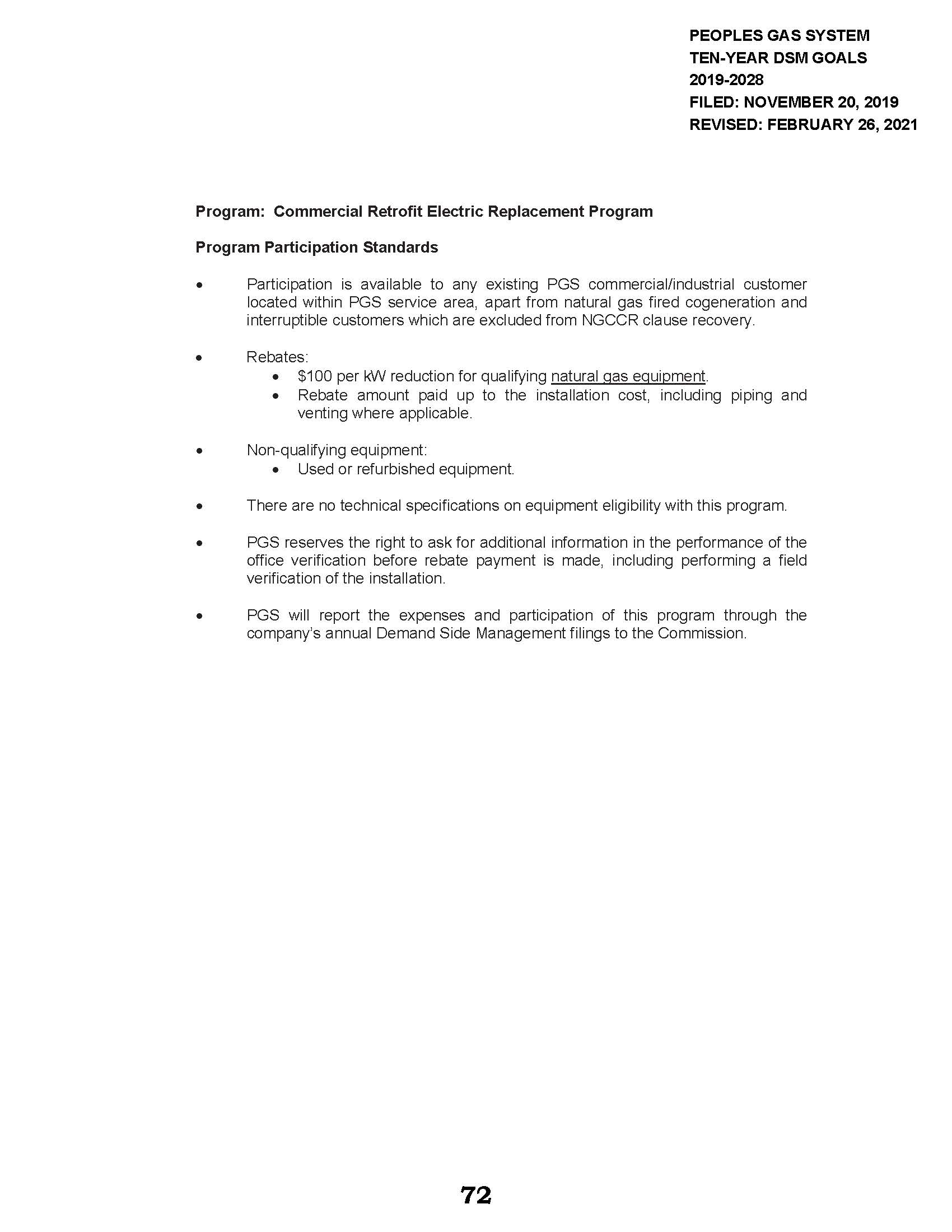


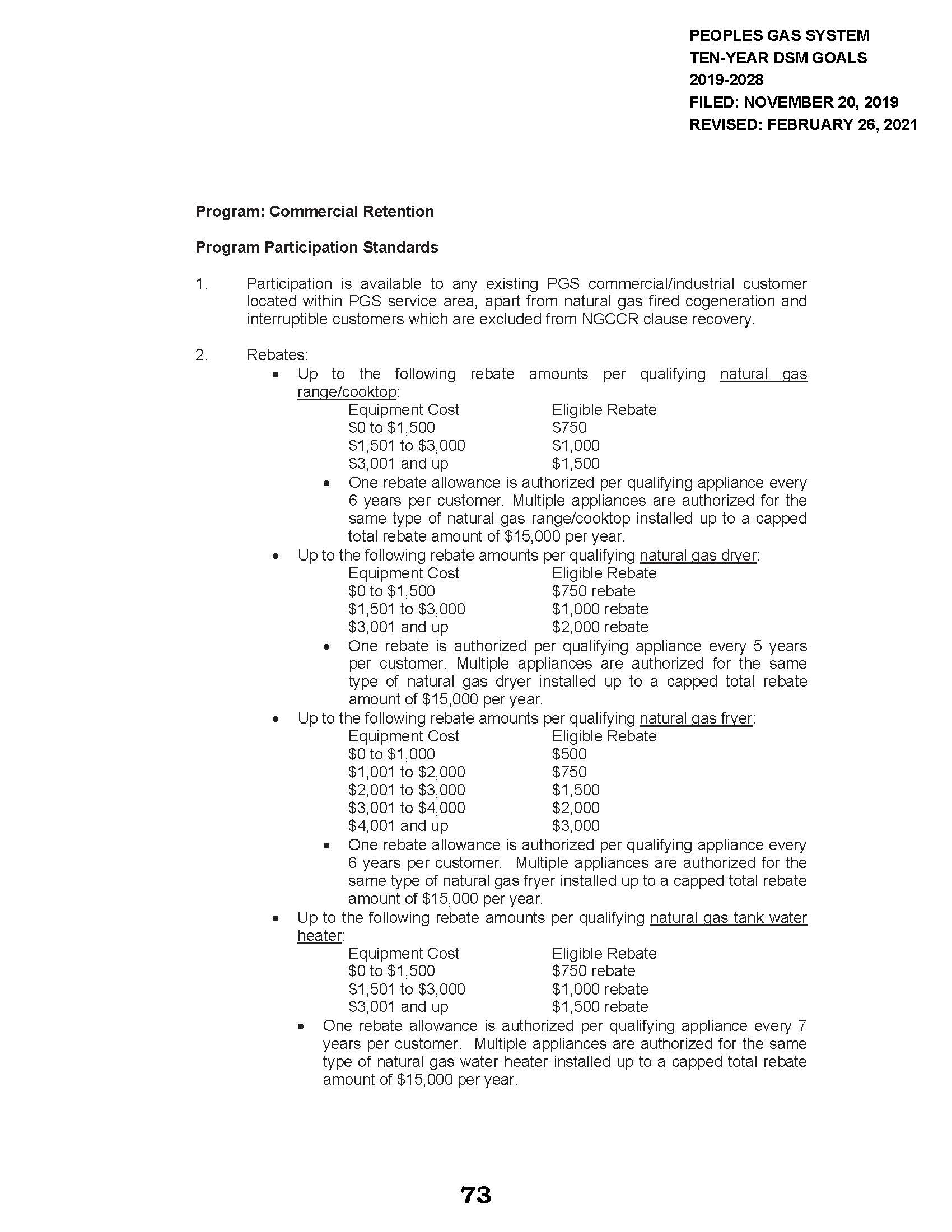


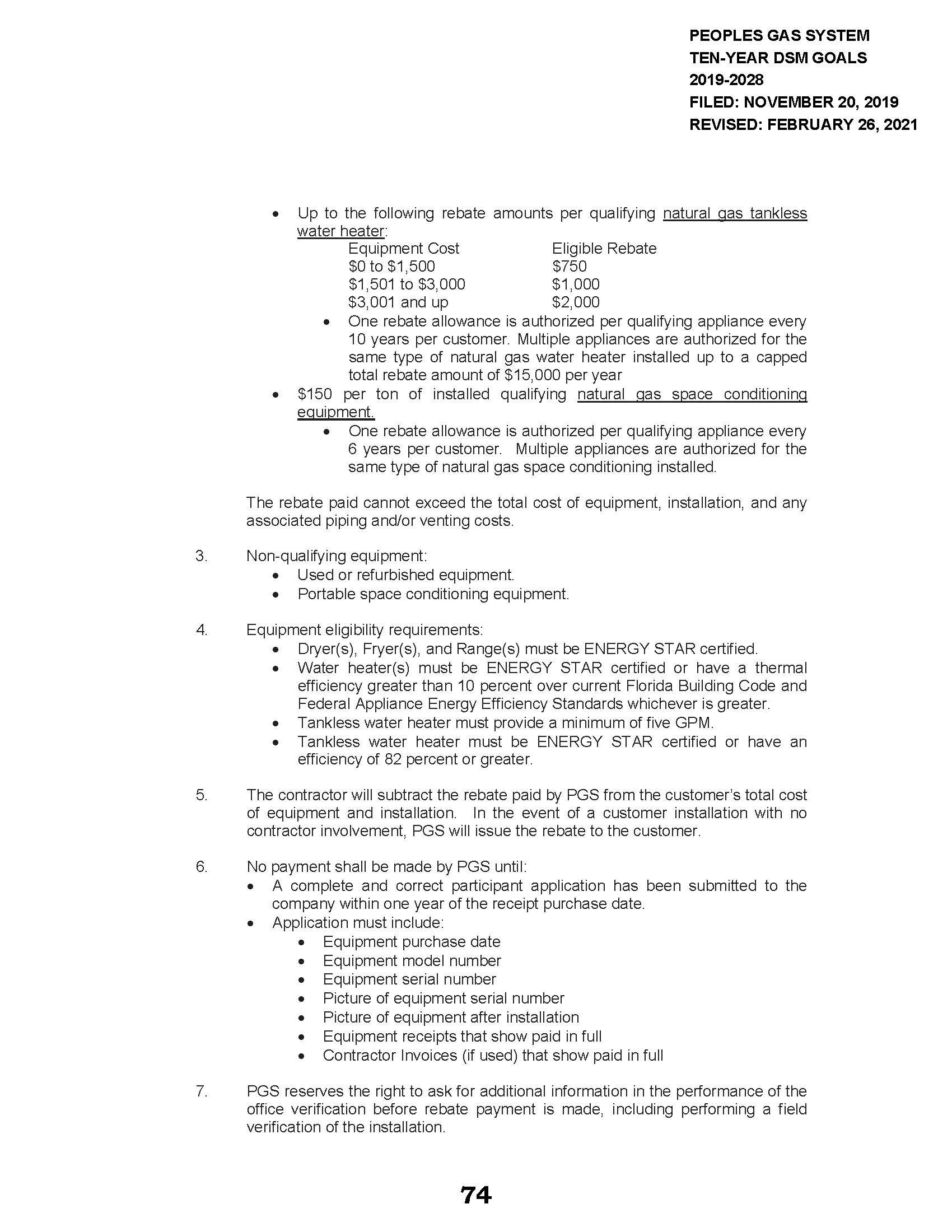




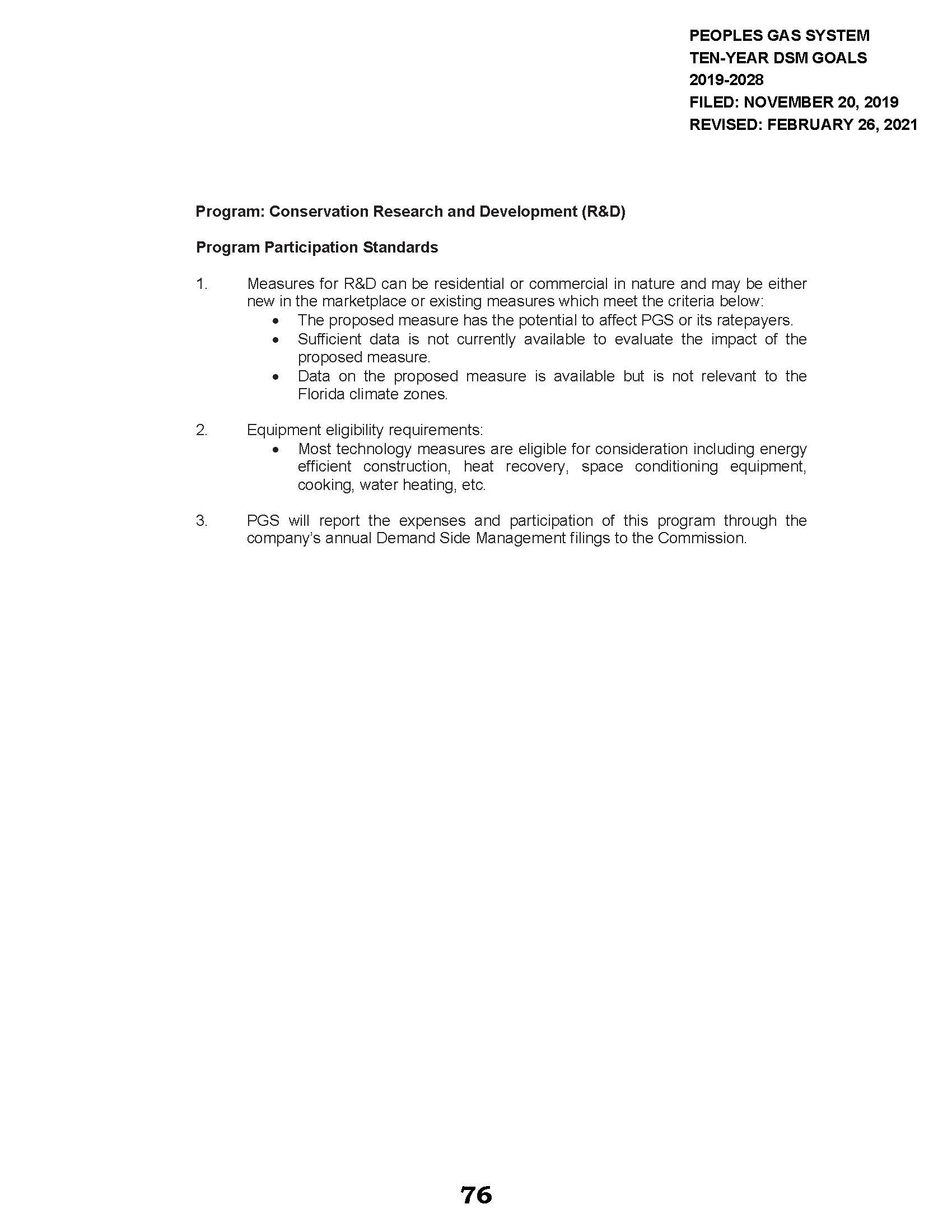












1. Order No. PSC-2019-0361-PAA-GU, issued August 26, 2019, in Docket No. 20180186-GU, *In re: Petition for approval of demand side management goals and residential customer assisted and commercial walk-through energy audit programs, by Peoples Gas System.* [↑](#footnote-ref-1)
2. PSC Order No. 22176, issued November 14, 1989, in Docket No. 19890737-PU, In re: *Implementation of Section 366.80-.85, F.S., Conservation Activities of Electric and Natural Gas Utilities.* [↑](#footnote-ref-2)
3. Order No. PSC-2019-0361-PAA-GU, issued August 26, 2019, in Docket No. 20180186-GU, *In re: Petition for approval of demand side management goals and residential customer assisted and commercial walk-through energy audit programs, by Peoples Gas System.* [↑](#footnote-ref-3)