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In the Matter of the Application of)
Columbia Gas of Ohio, Inc. for Approval) Case No. 16-1309-GA-UNC
of Demand Side Management Program for)
its Residential and Commercial Customers.)

In the Matter of the Application of)
Columbia Gas of Ohio, Inc. for Approval) Case No. 16-1310-GA-AAM
to Change Accounting Methods.)

Over 1.4 million Ohioans are asked to pay too much in subsidies for energy efficiency (exceeding \$200 million over six years) with too little benefit under both the application of Columbia Gas of Ohio, Inc. ("Columbia") and Columbia's settlement with other parties. Under the settlement, 97% of Columbia's customers will pay over \$30 million a year to subsidize programs that they do not participate in.

Concern over customer-funded subsidies in utility-run natural gas energy efficiency programs is not new. Ten years ago, the Staff of the Public Utilities Commission of Ohio ("PUCO") testified against subsidies for natural gas energy efficiency: "I don't believe charging customers for the cost of implementing natural gas DSM programs is justified."¹ The Northwest Ohio Aggregation Coalition ("NOAC" or "Toledo-Area Communities") similarly describes Columbia's approach as "grossly inequitable" and a "hidden tax."² There are numerous free-market alternatives, online and in stores, for consumers to shop for deals on natural gas energy efficiency measures

¹ See Prefiled Testimony of Stephen E. Puican, Case No. 05-1444-GA-UNC (Mar. 20, 2006).

² See Comments by NOAC at 1-2, Case 16-1309-GA-UNC (Aug. 15, 2016).

without subsidized rebates and discounts and without customers paying for programs that do not provide system-wide benefits.

The Settlement³ is largely an adoption of Columbia's application⁴ to continue its demand side management ("DSM" or "energy efficiency") programs, which in general are an inadequate value proposition for consumers.⁵ The Settlement does not represent diverse interests and a broad consensus that Columbia's energy efficiency programs are reasonable and beneficial to customers. The parties to the Settlement (the "Settling Parties") represent a narrow set of special interests. Ohio Partners for Affordable Energy ("OPAE") and Mid-Ohio Regional Planning Commission ("MORPC") have business interests, which rely on utility funding to implement energy efficiency programs. Interstate Gas Supply, Inc. ("IGS") and the Retail Energy Supply Association ("RESA") represent the interests of unregulated natural gas marketers and appear to be concerned primarily with thermostat rebates (for types of thermostats that IGS and other RESA members market directly to their customers). The Ohio Hospital Association ("OHA") receives energy data from Columbia and represents 220 Ohio hospitals, which is a small segment of the commercial class. And the PUCO Staff is not an advocate or representative of a particular customer class. There may be six signatures on the Settlement, but those six parties represent only a tiny fraction of the many individuals and entities that are affected by, and pay for, Columbia's energy efficiency programs.

³ See Stipulation and Recommendation, Case No. 16-1309-GA-UNC (Aug. 12, 2016) (the "Settlement").

⁴ Application of Columbia Gas of Ohio, Inc. to Continue its Demand Side Management Program, Case No. 16-1309-GA-UNC (June 10, 2016) (the "Application").

⁵ See Comments on Columbia Gas of Ohio Inc.'s Application to Charge Customers for Demand Side Management Programs by the Office of the Ohio Consumers' Counsel, Case No. 16-1309-GA-UNC (Aug. 15, 2016) (the "Initial OCC Comments").

Based on the filings in this case, the Settlement fails the three-prong test that the PUCO uses to evaluate settlements. The Settlement is not the product of serious bargaining. The Settling Parties (other than PUCO Staff) did not need to bargain for anything because the Application already provided financial and other benefits to them or their businesses at no cost to them. The Settlement does not benefit customers or the public interest because, among many other things, Columbia's natural gas energy efficiency programs cost customers over \$30 million a year but provide benefits to only a select few and without the sort of system-wide benefits that electric energy efficiency programs can provide. And the Settlement violates important regulatory principles including that natural gas service to customers should be reasonably priced.

As the statutory representative of Columbia's 1.3 million residential customers, the Office of the Ohio Consumers' Counsel ("OCC") respectfully requests that the PUCO protect consumers from the unjust, unreasonable, and costly Settlement by rejecting it.

I. THE PUCO SHOULD PROTECT CONSUMERS FROM COLUMBIA'S SETTLEMENT, WHICH FAILS THE PUCO'S THREE-PRONG TEST FOR EVALUATING SETTLEMENTS.

The PUCO should reject the Settlement because it fails the PUCO's three-prong test for evaluating settlements. Under the test, the parties to a settlement must show that (i) the settlement is the product of serious bargaining among capable, knowledgeable parties, (ii) the settlement benefits customers and the public interest, and (iii) the settlement does not violate any important regulatory principle or practice.⁶ All three criteria must be met for the PUCO to approve the Settlement. This Settlement is not the

⁶ See *Ohio Consumers' Counsel v. Pub. Util. Comm'n*, 110 Ohio St.3d 394, 397 (Ohio 2006).

product of serious bargaining, does not benefit customers or the public interest, and violates important regulatory principles.

A. The Settlement is not the result of serious bargaining.

The Settlement is not the result of serious bargaining, with the possible exception of the PUCO Staff's efforts. Indeed, several parties had little reason to bargain because signing the Settlement gave them access to other people's money. As filed, the Application provides substantial financial and other benefits to various of the Settling Parties at no cost to them because the programs are subsidized by other Ohioans.

The Settlement appears to provide some concessions from Columbia regarding its shared savings (profit) mechanism and a commitment to remove Columbia's proposal to charge customers \$70,000 for food and drink. But otherwise, the Settlement is an adoption of Columbia's Application. The alleged "serious bargaining" resulted in essentially no significant movement toward the positions of consumer and community advocates (OCC and the Toledo-Area Communities) who seek customer protection from paying large-scale subsidies.

1. The stakeholder meetings that pre-dated the filing of the Application did not have serious bargaining.

Columbia referenced two stakeholder meetings in its initial comments to show the alleged serious bargaining. But those two meetings were not occasions where serious bargaining occurred. Further, the fact that non-parties were invited to those meetings reflects that the meetings were more about the stakeholder process than formalized settlement negotiations for a case.

The first meeting Columbia referenced, held on May 13, 2016, was a stakeholder group meeting.⁷ At that meeting, Columbia gave a presentation to stakeholders on its 2012-2016 DSM programs and a preview of the proposed 2017-2022 programs.⁸ The May 13 Presentation was a high-level briefing of the proposed DSM programs and items that might be included in a future application; it was not a negotiation of a pending application or case with bargaining. It included a brief description of program changes, projected budgets, Mcf targets, cost-effectiveness test scores, a list of purported program benefits, non-energy benefits, and changes to the shared savings tiers. The May 13 Presentation did not include any information on participation rates, natural gas prices and projections, avoided costs, the increased profits (shared savings) that Columbia wanted by raising the profit cap, the new tax gross-up that is added to the shared savings incentive, or other material details necessary to fully evaluate the proposed DSM programs.

Additionally, the circumstances of the May 25 stakeholder meeting constrained the ability to seriously bargain. Columbia advised at the May 13 Presentation that it would send a draft of the Application (that was not yet filed) to the stakeholder group on May 13 (*i.e.*, the same day). Ultimately, Columbia sent the draft Application 11 days later on May 24, 2016, at 4:40 p.m., just 18 hours (mostly non-business hours) in advance of the May 25 stakeholder meeting at 11 a.m. As a result of that timing, any stakeholders

⁷ In its initial comments, Columbia states that it held two stakeholder group meetings before the Application was filed. *See* Initial Columbia Comments at 3. OCC assumes that Columbia is referring to the May 13, 2016 and May 25, 2016 meetings.

⁸ Attached is Exhibit A, the May 13, 2016 DSM Stakeholder Group Meeting presentation (the "May 13 Presentation").

interested in bargaining on May 25 lacked the needed preparation time with the draft Application. Serious bargaining was thus stymied for that meeting.

Nevertheless, several stakeholders voiced their support at the meeting on May 25 for Columbia's proposal without modification, in essence reflecting that they did not need to bargain. The Application proposed a continuation of programs that provide financial and other support to certain stakeholders at no cost to them (*i.e.*, using other Ohioans' money). The May 13 and May 25 stakeholder meetings referenced by Columbia do not demonstrate serious bargaining under the PUCO's standard for review of settlements.

2. An "opportunity" for serious bargaining is not the same as actual serious bargaining under the PUCO's settlement standard.

Columbia claims that the Settlement is the product of serious bargaining because the Settling Parties had "opportunities to interact and seriously bargain with Columbia on its proposed DSM Program continuation."⁹ For those opportunities, Columbia referenced the two pre-Application stakeholder meetings and three in-person settlement meetings after the Application was filed.¹⁰

The plain language of the PUCO's three-prong test does not require an opportunity for serious bargaining. It requires actual serious bargaining. If parties have an opportunity to seriously bargain but they choose not to, and then they sign a stipulation, that stipulation is not the "product of serious bargaining," as required by the three-prong test. Columbia did not provide any support for its assertion that the Settling Parties actually engaged in serious bargaining. And, on its face, the Settlement suggests that the Settling Parties (with the exception of the PUCO Staff) signed the Settlement

⁹ See Initial Columbia Comments at 3.

¹⁰ *Id.*

without bargaining for much of substance. Furthermore, of the six parties that signed the stipulation, two (OHA and RESA) attended only one of the five meetings that Columbia references in its initial comments.¹¹

3. Columbia's agreement to "work with" MORPC, OPAE, and OPAE's member agencies does not represent serious bargaining.

Of the nine substantive provisions in the Settlement,¹² three require Columbia to "work with" MORPC, OPAE, and OPAE's member agencies (which include MORPC) on energy efficiency initiatives. These three provisions, however, are essentially meaningless.

The first provision (paragraph 6)¹³ requires Columbia to work with OPAE and its members "to participate in Columbia's Home Performance Solutions Program." If OPAE and its members are able to provide the most effective and least-cost implementation of Home Performance Solutions, as demonstrated through competitive bidding, then Columbia would be required to work with OPAE and its members even in the absence of this provision. A promise to work with OPAE and its members is an empty gesture in the context of the Settlement because Columbia is merely committing to do what it would be required to do anyway.¹⁴

¹¹ OHA and RESA are not members of the stakeholder group and therefore did not attend the pre-application stakeholder group meetings. RESA filed its motion to intervene on July 27, 2016, after the first four meetings took place. OHA filed its motion to intervene on July 28, 2016, a day after the intervention deadline expired, which was also after the first four meetings took place. If the PUCO denies OHA's intervention as untimely, then OHA's Settlement signature should be given no weight.

¹² The Stipulation contains 12 numbered paragraphs. Paragraph 1 simply states that the Settling Parties support the Application as filed, except as amended by the Stipulation. Paragraphs 11 and 12 contain boilerplate language.

¹³ Application at 3, ¶ 6.

¹⁴ If OPAE and its members are not able to provide the most effective and least-cost implementation of Home Performance Solutions, as demonstrated through competitive bidding, then Columbia should be required to hire someone else to implement the program.

The second provision (paragraph 7)¹⁵ requires Columbia to work with OPAE and its members "to develop and execute community-based weatherization initiatives throughout Columbia's service area and to permit WarmChoice contractors the discretion to collect a landlord contribution¹⁶ when weatherizing low-income customer property."¹⁷ Community-based initiatives are a standard coordination effort between energy efficiency program administrators and their program providers or vendors. If Columbia continues to administer such programs, it should work with the WarmChoice program implementers to consider those initiatives, whether or not there is a stipulation.

The third provision (paragraph 8)¹⁸ requires Columbia to work with MORPC "to further its energy partnership that involves energy benchmarking, energy audits, community education, and challenge programs and competitions." As with the previous "work with" commitments, this provision does not actually require Columbia to take any specific action. And if MORPC's "energy partnership" is an effective means for implementing one of Columbia's proposed programs, then Columbia should support it even in the absence of the Settlement.

In sum, OPAE and MORPC appear to have negotiated three terms in the Settlement that require Columbia to take actions that, if prudent, it could be required to

¹⁵ Application at 3, ¶ 7.

¹⁶ This discretion is a change from the current practice whereby a contribution from the landlord toward costs of the energy efficiency service is required for the service (that consumers subsidize) to be performed. The contribution should continue to be required from those receiving the subsidized energy efficiency service.

¹⁷ In response to discovery, Columbia stated that customers' funds in the WarmChoice program are used to make non-energy efficiency repairs to homes. *See* Exhibit B (Columbia response to OCC Interrogatory Set 3 No. 68). This arrangement is not acknowledged in the Settlement. The PUCO should address this issue, toward determining whether bills to natural gas consumers should (and can) include charges for non-utility repairs.

¹⁸ Application at 3, ¶ 8.

take even in the absence of the Settlement. These terms are not a demonstration of serious bargaining with Columbia.

4. Columbia planned to provide a learning thermostat rebate of \$75 before the Settlement was signed, so the provision requiring a \$75 rebate was not the product of serious bargaining.

Paragraph 9 of the Settlement states that Columbia will provide a \$75 rebate for learning thermostats and that Columbia will "engage in discussions with RESA, IGS, and Staff on mechanisms to streamline and/or enhance the rebate process."¹⁹ Columbia, however, already committed to a \$75 learning thermostat rebate before the Settlement was signed.²⁰ Thus, even if paragraph 9 were omitted from the Settlement, Columbia would still offer a \$75 rebate for learning thermostats. This term does not demonstrate serious bargaining as it was already Columbia's proposal to offer the rebate at that level.

B. The Settlement, as a package, does not benefit customers or the public interest.

OCC explained in its initial comments the numerous ways in which Columbia's proposed energy efficiency programs do not benefit Columbia's 1.3 million residential customers. Among other things, OCC explained that:²¹

- Non-participating customers do not benefit from natural gas energy efficiency programs because there are no system-wide benefits.
- The majority of Columbia's customers pay program costs and profits to Columbia but do not participate in Columbia's natural gas energy efficiency programs.

¹⁹ Application at 3, ¶ 9.

²⁰ See Exhibit C (Columbia response to OCC Interrogatory Set 2 No. 17) (stating that Columbia would offer a \$75 rebate per learning thermostat).

²¹ See generally OCC Initial Comments.

- WarmChoice could cost customers over \$7,000 per participant (and over \$14 million per year in total) with less than 1% of Columbia's low-income customers participating in WarmChoice each year.
- The proposed DSM portfolio includes three programs (On Line Audit, Energy Design Solutions, and EPA Portfolio Manager) that cost customers \$5.74 million but provide no energy savings.
- Customers should not pay for lunch and beverages for Columbia employees and stakeholder group members.
- Customers should not pay excessive amounts to subsidize other customers' thermostat purchases.
- Natural gas prices are historically low and are projected to stay low for the foreseeable future, which substantially reduces the value of natural gas DSM programs for customers.
- Columbia's proposed shared savings mechanism in the Application more than triples the amount of shared savings that customers would pay to Columbia.
- Columbia's proposed shared savings mechanism adds a new tax gross-up that increases the amount of shared savings that customers pay by an additional 50%.
- Non-energy benefits should not be counted.
- The portfolio should have a term of no more than three years so that the PUCO can evaluate whether customers should continue to subsidize natural gas energy efficiency programs.
- All programs should be competitively bid to minimize the costs that customers pay to subsidize the programs.

The Settlement addresses a few of these issues. But the Settlement largely embraces the original Application. In so doing, it does not benefit the great majority of customers and is not in the public interest.

1. The Settlement does not address the core problem with the proposed energy efficiency programs, which is that customers will pay over \$30 million a year for programs that benefit less than 3% of all customers.

As OCC described in its initial comments, less than 3% of all customers will participate in programs other than Columbia's behavioral program.²² Likewise, less than 1% of low-income customers will participate in Columbia's low-income program, WarmChoice.²³ These programs will cost Ohioans in Columbia's service territory over \$30 million a year.²⁴ These low participation rates are unchanged by the Settlement. The Settlement does not require or even encourage Columbia to seek ways to increase program participation rates or to reduce the extent to which Columbia's 1.3 million residential customers have to subsidize programs for the 40,000 customers who participate in the programs. If the Settlement is approved, customers will pay on average about \$153 each for programs that they do not participate in and receive no benefits from.²⁵

2. The shared savings cap under the Settlement requires excessive customer funding of utility profits on energy efficiency.

Several of the changes to the shared savings mechanism in the Settlement may be better for customers than the original Application. The improvements, however, still require customers to pay too much profit (shared savings) to Columbia.

²² See OCC Initial Comments at 9. Under the behavioral program, customers receive a report in the mail comparing their natural gas usage to other customers' usage.

²³ *Id.* at 9-10.

²⁴ See Application, Appendix B, Table 3; Settlement ¶ 3.

²⁵ See OCC Initial Comments at 5.

The shared savings cap contained in the Settlement is too high (meaning customers can be charged too much for Columbia's profits).²⁶ Although the reduced shared savings cap of \$4.5 million (\$6.9 million when grossed up for taxes) is an improvement over the \$10 million cap (\$15.4 million when grossed up for taxes) provided in the Application, it still represents a substantial increase in Columbia profits (shared savings) that customers would pay compared to Columbia's current DSM portfolio. It should not be approved.

Columbia's current profit (shared savings) mechanism requires customers to pay up to \$3.9 million over five years, or an average of \$780,000 per year.²⁷ Columbia's current profit (shared savings) mechanism is not grossed up for taxes (meaning customers currently are not made to pay Columbia's taxes on the profit).²⁸ Under the Settlement, customers would pay Columbia up to \$4.5 million in utility profit over six years. But now, the Settlement will make customers pay Columbia's taxes on its profits. Grossed up for taxes, this payment from customers would be \$6,923,077²⁹ over six years, an average of \$1,153,846 per year. Thus, under the Settlement, Columbia is still receiving a 48% increase (from \$780,000 a year to \$1,153,846 a year) in profit from customers.

There is no justification for making customers pay a 48% increase in shared savings to Columbia. In its initial comments, Columbia stated that the \$6.9 million shared savings cap is justified because Columbia is "committing to do more, but

²⁶ See OCC Initial Comments at 15-23.

²⁷ See OCC Initial Comments at 16.

²⁸ *Id.* at 19.

²⁹ Using a 35% tax rate, $\$4,500,000 / 0.65 = \$6,923,076.92$. See also Exhibit D (Columbia response to OCC Interrogatory Set 3 No. 45) (estimating that \$4.5 million grossed up for taxes is approximately \$6.9 million).

generally keeping its current incentive structure."³⁰ Columbia also claims that it is committing to "a greater level of Mcf savings . . . with roughly the same opportunity for shared savings on a capped basis as contained in the current DSM Programs."³¹ These statements are simply untrue.³²

In 2015, Columbia's DSM programs achieved natural gas savings of 794,286 Mcf.³³ In 2017, Columbia is targeting natural gas savings of 722,245.³⁴ Columbia, therefore, is targeting natural gas savings that are 10% lower than the savings that it achieved under substantially the same programs last year. There is no reasonable way to interpret this as "committing to do more." Likewise, as described above, customers could pay 48% more in profits to Columbia under the proposed Settlement (an increase from \$780,000 a year to \$1.15 million a year). Columbia describes this increase as "keeping its current incentive structure" and as "roughly the same opportunity for shared savings." This is not true. Columbia is committing to do less than it did in recent years (by targeting lower natural gas savings than it has achieved recently) but asking customers to pay 50% more profits to Columbia.

Columbia stresses that the \$6.92 million shared savings cap under the Settlement is lower than the \$15.38 million³⁵ cap proposed in the Application. But the size of the reduction alone does not make the new cap reasonable. The \$6.92 million cap is nearly

³⁰ See Initial Columbia Comments at 4.

³¹ *Id.*

³² Even if the statements were true, doing "more" customer-subsidized natural gas DSM is not in the public interest at this time because of historic low prices in the natural gas market and the lack of system-wide benefits.

³³ See Application, Schedule DSM-5, Case No. 15-1918-GA-RDR (Feb. 26, 2016).

³⁴ See Application at 24.

³⁵ See Initial OCC Comments at n. 4.

50% greater than the current cap. It requires customers to pay excessive profits to Columbia and does nothing to encourage natural gas savings. The cap does not benefit the customers who pay shared savings and is not in the public interest.

3. Other provisions in the Application do not benefit customers, are not in the public interest, and should be rejected.

As stated in OCC's initial comments, there are other provisions in the Application that should be rejected because they do not adequately benefit customers and are not in the public interest. Those provisions include the following:

- Customers and the public interest do not benefit from a six-year term. A six-year term is excessive because it locks customers in to paying over \$30 million a year for a long period of time with no opportunity to re-visit whether customers should continue to pay for natural gas DSM programs in a low-price environment.³⁶
- Customers and the public interest do not benefit from programs that require 97% of customers to pay over \$30 million a year for programs that they do not participate in.³⁷
- Customers and the public interest do not benefit from WarmChoice because over 99% of low-income customers do not participate in WarmChoice each year, and WarmChoice could cost over \$7,000 per participant.³⁸
- Customers and the public interest do not benefit when many customers pay excessive subsidies for the purchase of thermostats for a few customers.³⁹

³⁶ *Id.* at 23-25.

³⁷ *Id.* at 6-9.

³⁸ *Id.* at 9-10, 26-27.

³⁹ *Id.* at 12-13.

- Customers and the public interest do not benefit when programs are not competitively bid. Competitive bidding is the best way to ensure that customers do not overpay for program implementation costs.⁴⁰
- Customers and the public interest do not benefit from the On Line Audit, Energy Design Solutions, and EPA Portfolio Manager programs because these programs do not result in any natural gas savings.⁴¹

The Settlement fails to address any of these concerns. A settlement that does not modify the Application to address these concerns is unjust and unreasonable, does not benefit customers, and is not in the public interest. For these reasons and others, Columbia's proposed implementation of costly natural gas DSM programs should be denied.

C. The Settlement violates important regulatory principles that protect customers.

The Ohio General Assembly enacted state policies that stand as applicable regulatory principles for natural gas service to Ohioans. The policy of Ohio is to promote "**reasonably priced**" natural gas services.⁴² The policy of Ohio is to encourage "**market access** for cost-effective supply- and demand-side natural gas services and goods."⁴³ The policy of Ohio is to promote "effective competition in the provision of natural gas services and goods by **avoiding subsidies** flowing to or from regulated natural gas services and goods."⁴⁴ And the policy of Ohio is to promote "an alignment of natural gas

⁴⁰ *Id.* at 27-28.

⁴¹ *Id.* at 11.

⁴² R.C. 4929.02(A)(1) (emphasis added); see also R.C. 4905.22.

⁴³ R.C. 4929.02(A)(4) (emphasis added).

⁴⁴ R.C. 4929.02(A)(8) (emphasis added).

company interests with consumer interest in energy efficiency and energy conservation."⁴⁵

It is not consistent with any of these policies to make Columbia's customers pay over \$30 million a year for six years for natural gas energy efficiency programs that they do not participate in. It is inconsistent with reasonably priced natural gas service, under R.C. 4929.02(A)(1), to make 1.3 million residential customers pay for natural gas energy efficiency that provides no system-wide benefits to them.

It is inconsistent with market access for demand-side services and goods, under R.C. 4929.02(A)(4), to subsidize natural gas energy efficiency instead of relying on free-market purchases of goods and services. And foreclosing competitive bidding for those providing the subsidized services is inconsistent with a policy requiring market access.

Further, it is inconsistent with avoiding subsidies, under R.C. 4929.02(A)(8), to institutionalize the payment of large-scale subsidies for natural gas energy efficiency by the entire residential customer base (1.3 million consumers) of the utility. And it is inconsistent with aligning the interest of the natural gas utility with consumer interests, under R.C. 4929.02(A)(12), to have a utility-sponsored program that provides no benefit to the great majority of 1.3 million consumers but requires them to subsidize the relatively few who do benefit.⁴⁶

⁴⁵ R.C. 4929.02(A)(12).

⁴⁶ As stated in OCC's initial comments, low-income assistance programs should be supported; however, the subsidy funds for low-income programs should be revamped to provide benefits for far more low-income consumers than what is in the Settlement and Application.

II. THE PUCO SHOULD REJECT THE SETTLEMENT BECAUSE THE SETTLING PARTIES REPRESENT NARROW INTERESTS THAT ARE NOT REPRESENTATIVE OF THE BROAD BASE OF THE PARTIES AND THE PUBLIC AT LARGE.

Columbia argues in its initial comments that the Settlement is "supported by a broad range of interests"⁴⁷ and that there is a "wide array of Settling Parties supporting the Joint Stipulation."⁴⁸ This is not true. Other than Columbia, six parties signed the Settlement. These six parties are not diverse but instead represent a distinctly narrow range of interests.

In reviewing stipulations, the PUCO has considered the nature of the signatory parties. For example, in AEP Ohio's 2011 distribution investment rider case, the PUCO considered the diversity of the signatory parties:

Based upon our three-prong standard of review, we find that the first criterion, that the settlement process involved serious bargaining by knowledgeable, capable parties, is met. Counsel for the signatory parties have been involved in many cases before the Commission, including a number of prior cases involving rate issues. Further, the signatory parties represent a variety of diverse interests, including the Companies, residential customers and consumer advocacy groups, industrial and commercial customers, environmental advocacy groups, and Staff.⁴⁹

The PUCO has considered the diversity of the signatory parties in numerous other cases involving stipulations.⁵⁰ In one recent case, the PUCO stated that the first prong

⁴⁷ Initial Columbia Comments at 3.

⁴⁸ Initial Columbia Comments at 4.

⁴⁹ *In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company, Individually and, if Their Proposed Merger Is Approved, as a Merged Company (collectively, AEP Ohio) for an Increase in Electric Distribution Rates*, Case No. 11-351-EL-AIR, et al., Opinion and Order (December 14, 2011) at 9.

⁵⁰ *See, e.g., In re Application of the Dayton Power & Light Co. for Approval to Modify its Competitive Bid True-up Rider*, Case No. 14-563-EL-RDR (Sep. 9, 2015); *In re Application of the Columbus S. Power Co. & Ohio Power Co. for Authority to Recover Costs Associated with the Ultimate Construction and Operation of an Integrated Gasification Combined Cycle Electric Generation Facility*, Case No. 05-376-EL-UNC (Feb. 11, 2015).

does not incorporate a diversity requirement.⁵¹ Nevertheless, the PUCO did consider the diversity of the signatory parties in that case.⁵² Further, in another case decided the same day, the PUCO did not deny that diversity among the signatory parties is a consideration in a stipulated case. In fact, the PUCO touted the diversity of signatory parties to the stipulation in that case.⁵³ The diversity of the Settling Parties to the settlement in this case is a significant issue, given that only one Settling Party (OHA) represents a customer class (commercial customers), and it represents only a small portion of the class (220 hospitals).

A. IGS and RESA represent identical, limited interests of natural gas marketers.

IGS and RESA represent overlapping, if not identical, interests in this case and are therefore not two diverse interests. RESA, the Retail Energy Supply Association, represents the interests of retail electricity and natural gas suppliers.⁵⁴ IGS is a retail electricity and natural gas supplier.⁵⁵ IGS is a member of RESA.⁵⁶ Thus, IGS and RESA each represent the interests of natural gas marketers.⁵⁷

⁵¹ *In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider*, Case No. 14-1693-EL-RDR, et al., Opinion and Order (March 31, 2016) at 52.

⁵² *Id.*

⁵³ *In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for Authority to Provide a Standard Service Offer Pursuant to R.C. § 4928.143 in the Form of an Electric Security Plan*, Case No. 14-1297-EL-SSO, Opinion and Order (March 31, 2016) at 43.

⁵⁴ See <https://www.resausa.org/about-us/who-we-are>.

⁵⁵ See <http://www.igsenergy.com/>.

⁵⁶ See <https://www.resausa.org/members?state%5B%5D=13>.

⁵⁷ O.A.C. 4901-1-11(A)(5) includes consideration of whether a party's interest is represented by others, for purposes of whether to grant intervention. O.A.C. 4901-1-11(D)(1) allows for granting merely limited intervention if parties have a limited interest and "no real and substantial interest with respect to the remaining issues or the person's interest with respect to the remaining issues is adequately represented by existing parties."

Furthermore, IGS and RESA's interest in this case appears to be focused on thermostat rebates. As discussed above, paragraph 9 of the Settlement pertains to the amount of the rebate for learning thermostats, and Columbia agreed to "engage in discussions with RESA, IGS, and Staff on mechanisms to streamline and/or enhance the rebate process."⁵⁸ IGS's recent advocacy in electric utility energy efficiency cases has also focused largely on thermostat rebates.⁵⁹ IGS and other RESA members promote Nest learning thermostats on their websites.⁶⁰ Given the limited interests of IGS and RESA, the PUCO should give little or no weight to their signatures on the Settlement.

B. OPAE and MORPC share the common (not diverse) interest of related entities.

OPAE and MORPC appear to represent identical (or at least widely overlapping) interests in this case. MORPC is an OPAE member.⁶¹ OPAE's and MORPC's interests in this case appear to relate to WarmChoice and related programs. MORPC is one of four WarmChoice providers, and each of the other three WarmChoice providers is an OPAE member as well.⁶²

As providers of the WarmChoice program, OPAE and MORPC have a financial interest in continuing Columbia's customer-subsidized natural gas energy efficiency

⁵⁸ See Stipulation at 3, ¶ 9.

⁵⁹ See, e.g., Objections of Interstate Gas Supply, Inc. at 2-3, Case No. 16-574-EL-POR (Aug. 15, 2016) (advocating for higher thermostat rebates in AEP's pending energy efficiency portfolio case); Objections of Interstate Gas Supply, Inc. at 1-2, Case No. 16-574-EL-POR (Aug. 15, 2016) (advocating for wider availability of thermostat rebates in Duke's pending energy efficiency portfolio case); Objections of Interstate Gas Supply, Inc. at 2-3, Case No. 16-649-EL-POR (Aug. 15, 2016) (advocating for higher thermostat rebates in DP&L's pending energy efficiency portfolio case).

⁶⁰ See, e.g., <http://www.igsenergy.com/nest/>; <https://www.directenergy.com/nest>.

⁶¹ See <http://www.ohiopartners.org/index.php?page=membership>.

⁶² See <https://www.columbiagasohio.com/ways-to-save/warmchoice/find-your-warmchoice-provider> (identifying Corporation for Ohio Appalachian Development, Ground Level Solutions, MORPC, and Neighborhood Housing Services of Toledo as the four WarmChoice providers); <http://www.ohiopartners.org/index.php?page=membership> (identifying each of these entities as an OPAE member).

programs. Between 2014 and 2016, MORPC's budget included over \$7.7 million from utilities to implement energy efficiency programs.⁶³ This represents over 20% of MORPC's annual budget. Contracts with utilities represent the second biggest source of revenue for MORPC, after federal grants and contracts.⁶⁴ OPAE's income is likewise dominated by administrative fees and grants paid by utilities to OPAE.⁶⁵ Accordingly, these related entities are not two diverse interests for purposes of the PUCO's settlement review and the alleged broad range of interests that Columbia characterized.

C. In this case, OCC and the Toledo-Area Communities oppose the Settlement, and none of the parties to the Settlement represents Columbia's 1.3 million residential customers, so the PUCO should find cause to reject the Settlement.

The PUCO's rule (Ohio Admin. Code 4901-1-30(E)) is that no settlement is binding on the PUCO. Far from this Settlement being binding, the PUCO should weigh heavily the limited scope of the Settling Parties' interests and give little weight to this Settlement. As described above, the parties to the Settlement represent narrow and overlapping special interests. IGS and RESA represent natural gas marketers that do not pay for Columbia's natural gas energy efficiency programs. And they appear to be participating largely, if not exclusively, to address issues related to thermostats that they themselves promote. MORPC and OPAE represent their financial and business interests, which are bolstered by the continuation of Columbia's natural gas energy efficiency

⁶³ See MORPC Comprehensive Annual Financial Report, Fiscal Year Ended December 31, 2015 at 10, available at <http://morpc.org/Assets/MORPC/files/072716CAFR%202015%20-%20Final%206.28.16.pdf>.

⁶⁴ *Id.*

⁶⁵ See Ohio Partners for Affordable Energy, Profit & Loss, January through December 2014 at 1 (showing total income of \$17,606,464.65 for 2014, which includes a \$10 million grant from AEP, a \$4.9 million grant from FirstEnergy, a \$984,000 grant from Dayton Power and Light, a \$500,000 administrative fee from AEP, and a \$250,000 administrative fee from FirstEnergy, among other things).

programs.⁶⁶ OHA represents 220 hospitals, a small segment of the commercial class.⁶⁷ The PUCO Staff considers the interests of all stakeholders (including the utility and the PUCO), without being a representative of any particular stakeholder's interest.⁶⁸ No party to the Settlement represents Columbia's 1.3 million residential customers, the people who are being tapped to pay \$200 million for these programs. Their representative, OCC, is asking the PUCO to protect them by rejecting the Settlement. A settlement that ignores the interests of residential customers — particularly when the preeminent issue in this proceeding is the amount of the charges imposed upon them — cannot be found to represent a variety of diverse interests.

III. COLUMBIA HAS NOT SHOWN THAT THE PROPOSED ENERGY EFFICIENCY PROGRAMS ARE COST-EFFECTIVE.

It is a fundamental principle of utility-run energy efficiency and DSM programs that the portfolio must be cost effective.⁶⁹ If Columbia's portfolio is not cost-effective, then, by definition, customers will pay more for the programs than the total amount of benefits that they receive.

By Columbia's own admission, four of its 11 proposed programs are not cost-effective.⁷⁰ And although Columbia states in its Application that the portfolio as a whole passes cost-effectiveness tests, the Application provides no details on these test results other than the purported scores. Neither the Application, the Stipulation, nor Columbia's

⁶⁶ See *Ohio Consumers' Counsel v. PUC*, 109 Ohio St. 3d 328, 335 n.11 (2006) (noting that OPAE "operates a weatherization program" and concluding that a stipulation signed by OPAE and other parties, but not OCC, was not supported by "customer groups").

⁶⁷ See <http://ohiohospitals.org/Ohio-Hospitals/Member-Hospitals.aspx>.

⁶⁸ See <http://www.puco.ohio.gov/puco/index.cfm/how-the-puco-works-for-you/organization/#sthash.jALfQ3wg.dpbs>.

⁶⁹ See Application at 2 (Columbia stating that one of the "key purposes" of its portfolio was to provide cost-effective programs).

⁷⁰ See Application Appendix B, Table 1. See also OCC Initial Comments § II.D.

initial comments provide any of the information that is necessary to confirm the accuracy of Columbia's reported cost-effectiveness results. There is no evidence of the methodology used, the inputs and assumptions (other than Columbia's projected gas prices, which are based on outdated projections),⁷¹ calculations that Columbia performed, data, sources, or any other information that the PUCO could use to evaluate cost-effectiveness.

Toward ensuring that customers are not paying for a portfolio that results in net losses, OCC is analyzing Columbia's claims. OCC has conducted discovery and will continue to conduct discovery as needed regarding Columbia's cost-effectiveness calculations. OCC continues to assess Columbia's discovery responses, including responses received three days ago on Friday, August 26.

The PUCO should evaluate whether Columbia's proposed energy efficiency portfolio is cost-effective, and OCC will supplement its comments as appropriate with information to assist the PUCO in that evaluation.⁷²

IV. CONCLUSION

The Settlement fails the PUCO's three-prong test and should be rejected. Rejection will mean protection for 1.3 million Ohioans. The PUCO should adopt OCC's recommendations in its initial comments for resolving the Application.

⁷¹ See OCC Initial Comments at 14-15 (noting that Columbia based its projections for future natural gas prices on 2015 EIA data, even though more recent 2016 EIA data is available).

⁷² And consistent with OCC's position in its initial comments and these reply comments, even if the PUCO concludes that individual programs or the DSM portfolio are cost-effective, that does not compel the result that consumers who do not participate in programs should subsidize programs for the small subset of customers who do.

Respectfully submitted,

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*Outside Counsel to the Office of the Ohio
Consumers' Counsel*

CERTIFICATE OF SERVICE

I hereby certify that a copy of these Reply Comments was served on the persons stated below via electronic transmission this 29th day of August 2016.

/s/ Christopher Healey

Christopher Healey


Assistant Consumers' Counsel

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DSM Stakeholder Group Meeting

May 13, 2016


Columbia Gas[®]
of Ohio
A NiSource Company



Agenda

- Welcome and Introductions
 - Opening remarks
 - Dan Creekmur, President
 - Shawn Anderson, Vice President
 - Melissa Thompson, Director
 - Safety/logistics
 - Introductions
- 2012 – 2016 DSM Action Plan Review
- 2017 – 2022 DSM Action Plan Review
- Next Steps
- Adjournment

Overview of Columbia Gas of Ohio (COH)

Largest LDC in Ohio

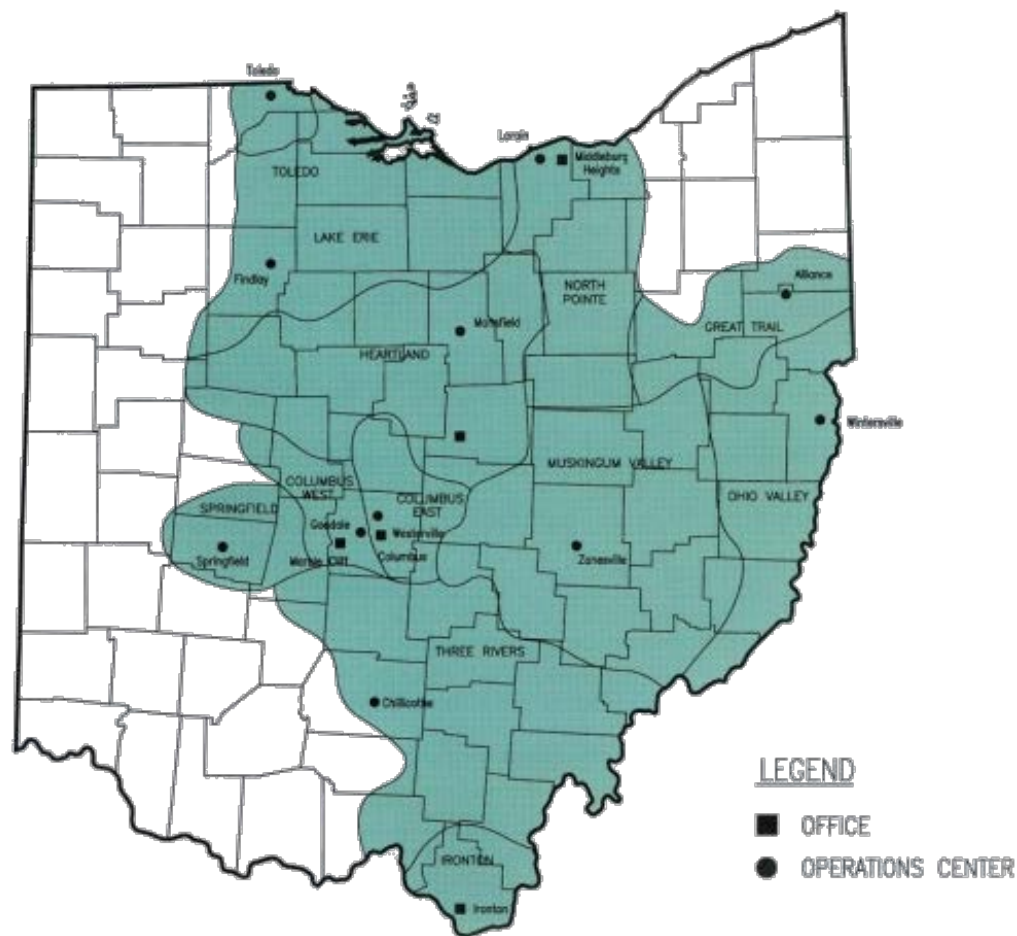
61 of 88 Counties

+1,000 Communities Served

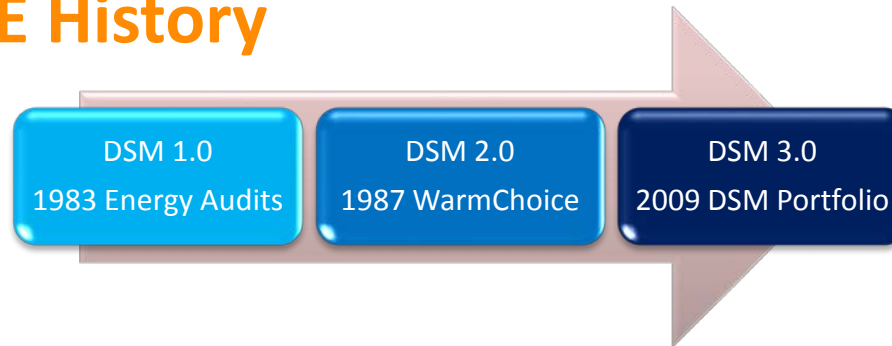
~19,900 Miles of Distribution Main

~1.4 Million Customers

~1,300 Employees



COH DSM/EE History



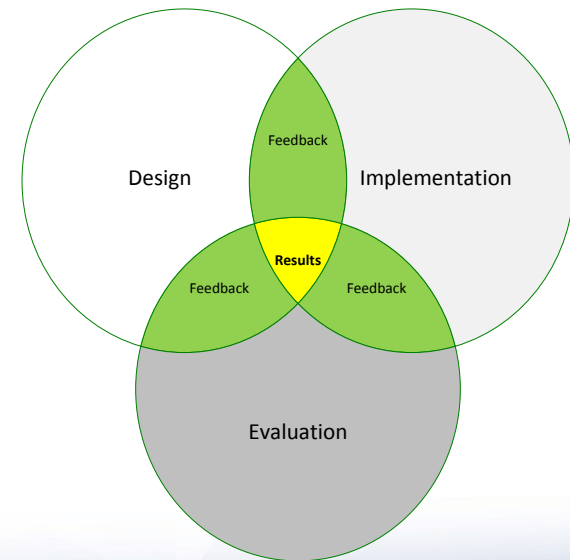
- 1983: Residential Conservation Service (RCS) Energy Audits (Operation Home Check)
 - 1982: Central Ohio heating system replacement pilot
 - 1986: Columbia Ohio Weatherization Program
- 1987: WarmChoice®
- 2009: 1st DSM Portfolio
 - 2012: 2nd DSM Portfolio expansion/continuation

DSM 3.0

Current DSM Action Plan – Review

- Application: 9/9/2011
- Joint Recommendation and Stipulation: 10/28/2011
- Finding and Order: 12/14/2011

- Design
- Implementation
- Evaluation



Current DSM Action Plan – Review

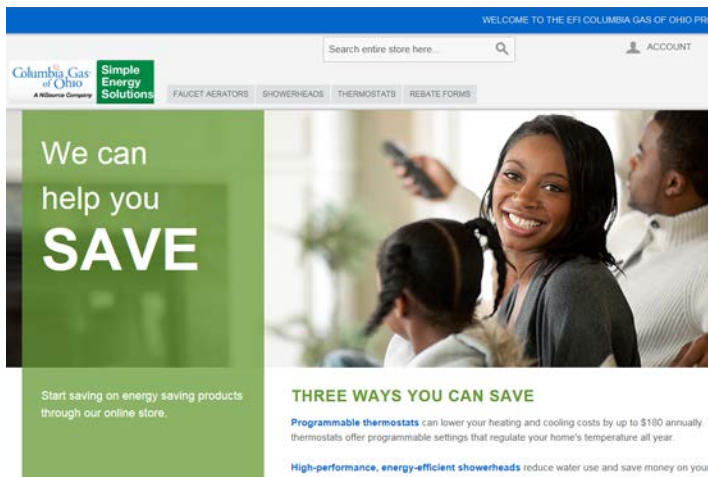
- ~\$30M/year
- Sustainable growth
- Continuity of services for customers
- Stability for business partners
- ENERGY STAR® Partner



- Incentivizes achievement of energy savings targets in DSM portfolio

Program Implementers/Partners

Current DSM Portfolio



Residential Programs

WarmChoice®	Weatherize low-income customer homes
Home Performance Sol.	Low-cost home energy audits & rebates
Simple Energy Solutions	Thermostats and showerhead rebates
HE HVAC Rebates	Rebates for energy-efficient furnaces
Home Energy Reports	Energy usage comparison reports
Home Energy Checkup	Online energy audit tool
E3smart	Student education program & kit
EfficiencyCrafted®	Incentives for homes 30% more efficient
Residential Code Training	Code training for officials/trade allies

Commercial Programs

Energy Design Solutions	New commercial building above energy code education and incentives
Innovative Energy Solutions	Rebates on energy audits and measures for non-profits and businesses
EPA Portfolio Manager	Online energy use benchmarking for commercial buildings

DSM Program Highlights

In 2015, the DSM Program:

- Performed over 4,790 energy audits
- Weatherized 2,085 low-income customers' homes
- Processed over 10,200 thermostat and furnace rebates
- Educated over 21,000 students
- Provided over 407,000 customers with energy usage comparison reports

2012 - 2015 DSM Program Health and Safety:

- Identified and mitigated nearly 7,000 venting, combustion safety and wiring issues and 745 homes with interior natural gas leaks

DSM Environmental Impacts Equate To:

- 381,128 cars off the road
- 1.48 million acres of U.S. forests

Customer Benefits:

- Over 600,000 customers served
- Measures have saved customers 34 million Mcf of natural gas



HOME 2014 PROGRAM RESULTS COMMUNITIES TESTIMONIALS CONTACT

Neighbors!
LET'S SAVE

Community Energy Savers

Athens County - Congratulations for meeting goals!

Athens County exceeded its participation goals in both AEP Ohio and Columbia Gas of Ohio energy efficiency programs, making the county eligible to receive two significant awards:

1. \$85,602 to go towards energy efficiency upgrades within the county's public libraries
2. Technical assistance towards the development of a Sustainability Roadmap

Everyone is welcome to join the team that led this effort (AEP Ohio, Columbia Gas of Ohio and county representatives and organizations) to celebrate. Snacks and more information about energy efficiency programs will be available. Come and chat with us!

Columbia and AEP sponsored a contest in Athens County to increase program participation

Columbia sponsored "Weatherize Nelsonville" in coordination with COAD and AEP Ohio.



Current DSM Action Plan – Budgets

Program	2012	2013	2014	2015	2016	Totals
Home Performance Solutions	\$ 8,706,469	\$ 9,026,922	\$ 9,275,159	\$ 9,533,076	\$ 9,799,464	\$ 46,341,090
WarmChoice	\$ 4,972,254	\$ 5,334,422	\$ 5,707,454	\$ 6,091,678	\$ 6,487,428	\$ 28,593,236
HE HVAC Rebates	\$ 1,509,931	\$ 1,519,248	\$ 1,528,265	\$ 1,538,100	\$ 1,523,214	\$ 7,618,759
Energy Efficient New Homes	\$ 1,856,717	\$ 1,784,133	\$ 1,767,324	\$ 2,150,776	\$ 2,641,285	\$ 10,200,235
Home Energy Reports	\$ 716,150	\$ 1,192,775	\$ 1,193,625	\$ 1,194,500	\$ 1,195,401	\$ 5,492,451
Simple Energy Solutions	\$ 495,669	\$ 520,535	\$ 530,723	\$ 541,247	\$ 552,118	\$ 2,640,292
Residential Energy Code	\$ 200,000	\$ 125,000	\$ 200,000	\$ 100,000	\$ 100,000	\$ 725,000
Student Education	\$ 415,000	\$ 415,000	\$ 390,000	\$ 405,000	\$ 405,000	\$ 2,030,000
On Line Audit	\$ 140,000	\$ 138,000	\$ 141,090	\$ 144,273	\$ 147,551	\$ 710,914
Subtotal: Residential DSM	\$ 19,012,190	\$ 20,056,035	\$ 20,733,640	\$ 21,698,650	\$ 22,851,462	\$ 104,351,976
Innovative Energy Solutions	\$ 585,000	\$ 585,000	\$ 585,000	\$ 585,000	\$ 585,000	\$ 2,925,000
Energy Design Solutions	\$ 137,171	\$ 143,504	\$ 150,242	\$ 157,183	\$ 164,331	\$ 752,431
EPA Portfolio Manager	\$ 9,168	\$ 9,441	\$ 9,741	\$ 10,025	\$ 10,317	\$ 48,691
Subtotal: Commercial DSM	\$ 731,339	\$ 737,945	\$ 744,983	\$ 752,207	\$ 759,648	\$ 3,726,122
DSM Stakeholder Group Support/I	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 350,000
Admin (non-program specific)	\$ 440,000	\$ 451,000	\$ 462,275	\$ 473,832	\$ 485,678	\$ 2,312,785
Total : selected programs	\$ 20,253,529	\$ 21,314,980	\$ 22,010,897	\$ 22,994,689	\$ 24,166,788	\$ 110,740,882
Total Budget	\$ 20,253,529	\$ 21,314,980	\$ 22,010,897	\$ 22,994,689	\$ 24,166,788	\$ 110,740,882
Residential Low Income Program	2012	2013	2014	2015	2016	Totals
WarmChoice Base Funding	\$ 7,100,000	\$ 7,100,000	\$ 7,100,000	\$ 7,100,000	\$ 7,100,000	\$ 35,500,000
Subtotal: low Income programs	\$ 7,100,000	\$ 7,100,000	\$ 7,100,000	\$ 7,100,000	\$ 7,100,000	\$ 35,500,000
TOTAL DSM PORTFOLIO	\$ 27,353,529	\$ 28,414,980	\$ 29,110,897	\$ 30,094,689	\$ 31,266,788	\$ 146,240,883

Current DSM Action Plan – MCF Targets

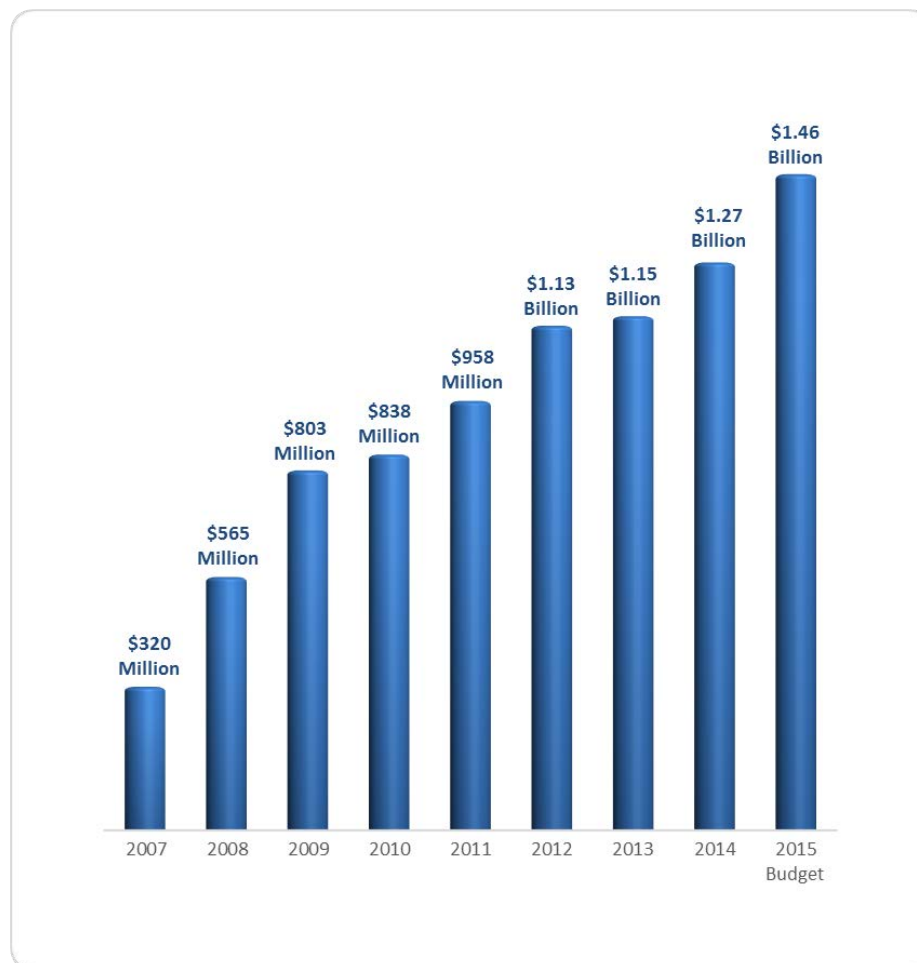
	Gas Savings: Annual Incremental Mcf/yr					
Program	2012	2013	2014	2015	2016	Total MCF
Home Performance Solutions	70,207	73,793	74,156	74,552	74,953	367,661
WarmChoice	78,000	78,000	78,000	78,000	78,000	390,000
HE HVAC Rebates	26,881	26,881	26,881	26,881	26,881	134,404
Energy Efficient New Homes	31,018	35,510	40,429	45,810	51,470	204,236
Home Energy Reports	58,226	145,338	145,338	145,338	145,338	639,577
Simple Energy Solutions	14,450	14,518	14,591	14,668	14,749	72,976
Residential Energy Code	TBD					-
Student Education	8,654	8,655	8,656	8,657	8,658	43,280
On Line Audit	TBD					-
Innovative Energy Solutions	TBD					-
Energy Design Solutions	TBD					-
EPA Portfolio Manager	TBD					-
Totals	287,436	382,695	388,050	393,905	400,048	1,852,134

Current Shared Savings Mechanism

% Savings Target	Shared Savings Level
75.0%	5.0%
80.0%	5.5%
85.0%	6.0%
90.0%	6.5%
95.0%	7.0%
100.0%	7.5%
105.0%	8.0%
110.0%	8.5%

AGA Nationwide Natural Gas DSM Investments

**Commitment
to Efficiency**



2017 – 2022 DSM Continuation: Programmatic Changes

Residential Retrofit Programmatic Changes	WarmChoice – Increase weatherization assistance to customers in rental properties
	Home Performance Solutions – Provide audits to multi-family, residential buildings, add an option for walk-through audit
Rebate Programmatic Changes	Simple Energy Solutions – Higher rebates for learning thermostats, direct install component, partner with AEP
	High Efficiency Appliance Rebates – Add energy-efficient water heater rebates to the program
Other Residential Programmatic Changes	Home Energy Reports – Optimize mail versus email reports, enhance customer segmentation
	EfficiencyCrafted Homes – Incorporate Residential Energy Code Training into the program, expand to more builders
Commercial Programmatic Changes	Innovative Energy Solutions – Include Preliminary Energy Audit (PEA) to increase audit to measure conversion rate
	Energy Design Solutions – Expand square footage eligible based on market
Term	Columbia requests a six-year extension of its DSM portfolio to align the DSM Program end date with Columbia's Infrastructure Replacement Program

Proposed 2017-2022 DSM Action Plan – Budgets

Program	2017	2018	2019	2020	2021	2022	Total
Home Performance Solutions	\$ 7,369,691	\$ 7,621,030	\$ 7,757,603	\$ 8,019,555	\$ 8,167,033	\$ 8,365,611	\$ 47,300,524
WarmChoice	\$ 6,682,051	\$ 6,882,513	\$ 7,088,988	\$ 7,301,658	\$ 7,520,707	\$ 7,746,329	\$ 43,222,246
HE HVAC Rebates	\$ 2,474,613	\$ 2,511,614	\$ 2,479,126	\$ 2,547,162	\$ 2,515,739	\$ 2,584,874	\$ 15,113,129
Energy Efficient New Homes	\$ 2,850,140	\$ 2,943,908	\$ 3,210,465	\$ 3,330,773	\$ 3,625,866	\$ 3,776,857	\$ 19,738,010
Home Energy Reports	\$ 1,654,422	\$ 1,741,492	\$ 1,713,136	\$ 1,755,902	\$ 1,826,691	\$ 1,757,503	\$ 10,449,145
Simple Energy Solutions	\$ 811,456	\$ 853,611	\$ 825,980	\$ 868,570	\$ 841,388	\$ 884,440	\$ 5,085,444
Student Education	\$ 325,771	\$ 385,244	\$ 345,001	\$ 405,051	\$ 365,403	\$ 426,065	\$ 2,252,535
On Line Audit	\$ 349,349	\$ 198,135	\$ 199,459	\$ 200,823	\$ 202,227	\$ 203,674	\$ 1,353,668
Subtotal: Residential DSM	\$ 22,517,494	\$ 23,137,547	\$ 23,619,758	\$ 24,429,493	\$ 25,065,055	\$ 25,745,354	\$ 144,514,701
Innovative Energy Solutions	\$ 1,308,250	\$ 1,335,798	\$ 1,348,722	\$ 1,362,033	\$ 1,375,744	\$ 1,389,866	\$ 8,120,413
Energy Design Solutions	\$ 538,178	\$ 553,723	\$ 569,735	\$ 586,227	\$ 603,214	\$ 620,710	\$ 3,471,786
EPA Portfolio Manager	\$ 208,000	\$ 140,300	\$ 140,909	\$ 141,536	\$ 142,182	\$ 142,848	\$ 915,775
Subtotal: Commercial DSM	\$ 2,054,428	\$ 2,029,821	\$ 2,059,365	\$ 2,089,796	\$ 2,121,140	\$ 2,153,424	\$ 12,507,975
DSMSG Support/DSM Planning	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 420,000
Admin (non-program specific)	\$ 556,300	\$ 572,989	\$ 590,179	\$ 607,884	\$ 626,121	\$ 644,904	\$ 3,598,377
Total : selected programs	\$ 25,198,222	\$ 25,810,356	\$ 26,339,302	\$ 27,197,174	\$ 27,882,316	\$ 28,613,682	\$ 161,041,052
Total Budget	\$ 25,198,222	\$ 25,810,356	\$ 26,339,302	\$ 27,197,174	\$ 27,882,316	\$ 28,613,682	\$ 161,041,052

Proposed 2017 - 2022 DSM Action Plan – MCF Targets

Program	2017	2018	2019	2020	2021	2022	Total
Home Performance Solutions	87,582	87,582	87,582	87,582	87,582	87,582	525,493
WarmChoice	68,515	68,515	68,515	68,515	68,515	68,515	411,088
HE HVAC Rebates	81,431	81,431	81,431	81,431	81,431	81,431	488,584
Energy Efficient New Homes	55,553	59,789	64,347	69,254	74,535	80,218	403,695
Home Energy Reports	336,000	344,000	351,000	354,000	354,000	354,000	2,093,000
Simple Energy Solutions	40,277	40,277	40,277	40,277	40,277	40,277	241,663
Student Education	13,226	13,226	13,226	13,226	13,226	13,226	79,355
On Line Audit	-	-	-	-	-	-	-
Innovative Energy Solutions	39,662	39,662	39,662	39,662	39,662	39,662	237,972
Energy Design Solutions	-	-	-	-	-	-	-
EPA Portfolio Manager	-	-	-	-	-	-	-
Totals	722,245	734,481	746,040	753,946	759,227	764,910	4,480,849

Proposed 2017 - 2022 DSM Action Plan – Cost Effectiveness

Cost Test Results, no NEBs					
Program	SCT	TRC	PCT	UCT	RIM
Home Performance Solutions	2.38	1.69	10.46	1.24	\$ 0.0059
WarmChoice	1.09	1.08		0.74	\$ 0.0054
HE HVAC Rebates	3.32	2.57	4.41	2.89	\$ 0.0020
Energy Efficient New Homes	2.55	1.72	3.48	2.79	\$ 0.0025
Home Energy Reports	2.02	1.75		1.38	\$ 0.0014
Simple Energy Solutions	4.51	2.95	7.34	3.85	\$ 0.0007
Student Education	1.78	1.27		0.99	\$ 0.0003
On Line Audit	-	-		-	\$ 0.0002
Innovative Energy Solutions	1.81	1.49	3.96	1.86	\$ 0.0011
Energy Design Solutions	-	-		-	\$ 0.0005
EPA Portfolio Manager	-	-		-	\$ 0.0001
DSM Stakeholder Group Support/DSM Planning					\$ 0.0001
Admin (non-program specific)					\$ 0.0005
Total	2.19	1.61	6.05	1.41	\$ 0.0205

Multiple Benefits of DSM/EE

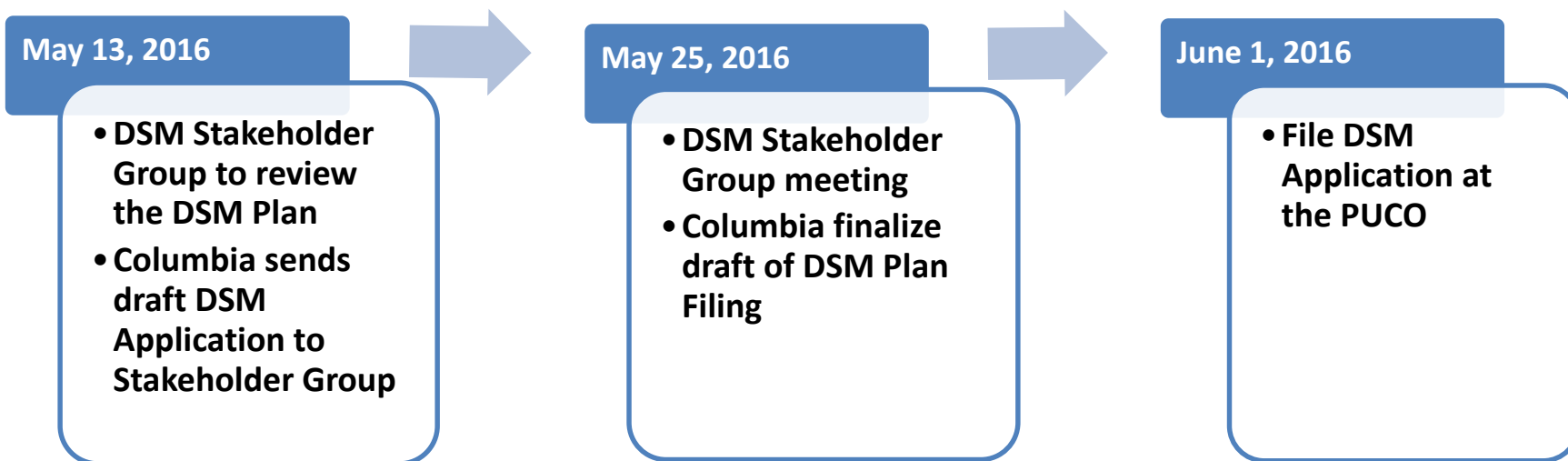
- 10. Energy security
- 11. Energy delivery
- 12. Energy price impact
- 13. Macroeconomic impacts
- 14. Industrial productivity
- 15. Local air pollution
- 16. Resource management
- 17. Public budgets/interest
- 18. Asset values

Non-Energy Benefits

2017 – 2022 Proposed Shared Savings Mechanism

% Savings	Shared Savings
75.0%	5.0%
80.0%	5.5%
85.0%	6.0%
90.0%	6.5%
95.0%	7.0%
100.0%	7.5%
105.0%	8.0%
110.0%	8.5%
115.0%	9.0%
120.0%	9.5%
125.0%	10.0%

Next Steps/Timeline



Contact Information

- jlaverty@nisource.com
- 614-460-4714

COLUMBIA GAS OF OHIO, INC.
RESPONSE TO OCC'S INTERROGATORIES
DATED AUGUST 5, 2016

INT-68. Are costs for non-DSM measures (for example, but not limited to, home repairs, fixing carbon monoxide leaks, health and safety measures) paid for with program costs from WarmChoice? If so, please describe the types of non-DSM measures that would be eligible for funding from WarmChoice. If so, please provide a summary showing the total cost of such non-DSM measures for 2013, 2014, and 2015.

RESPONSE:

Yes, non-energy efficiency measures are funded by the WarmChoice® program, which are generally described in OCC Set 3, Interrogatory No. 68, Attachment A, which are excerpts of Columbia's WarmChoice® program manual and the Federal HWAP guidelines. Columbia tracks the actual costs of some non-energy efficiency measures, which are detailed in OCC Set 3, Interrogatory No. 68, Attachment B in yellow. Columbia tracks actual costs of other measures, which may include non-energy efficiency measures as well as energy efficiency measures, and are detailed in OCC Set 3, Interrogatory No. 68, Attachment B in green. With the implementation of Columbia's WarmChoice® program inspection and reporting system software, Columbia will be tracking non-energy efficiency measures in a more granular fashion starting in 2017.

Columbia notes that through WarmChoice®, Columbia is able to fund repairs that would otherwise prevent the home from receiving weatherization services.



Section 3 - Policy and Procedure Manual

- 1.1.1.1. Documentation approving the weatherization of mobile homes must be maintained in the customer file.

1.2. Re-Weatherization

- 1.2.1. Residences that have received Weatherization Services subsequent to September 30, 1994 will not be eligible for weatherization under this program, unless the dwelling is still high use and is approved in advance and in writing by Columbia Gas of Ohio.

1.3. Initial Inspections

- 1.3.1. The Provider will perform and document the results of Initial Inspections of Eligible Residences. The Initial Inspection must be conducted using the procedures specified in the 10th edition of the WPS and this Manual. The Initial Inspection will include the following structural, mechanical and energy analyses:

- 1.3.2. **Gas Appliances.** A **safety and efficiency inspection** of all natural gas-fired appliances including heating unit(s), cook stoves, domestic hot water heaters and clothes dryers which shall include the following testing procedures:

- 1.3.2.1. **Gas Leakage.** Use a combustible gas leak detector to check for gas leaks at gas-fired heating appliances, cook stoves, water heaters and house and accessible exterior gas lines. Verify leaks with a commercial leak detection solution. Upon discovery of any gas leak upstream from the shut off valve for any heating appliance, cook stove, dryer, or water heater, the Initial Inspector shall immediately contact local Columbia personnel, and the Initial Inspector shall remain at the residence until the Columbia service personnel arrive. Only Columbia Gas of Ohio personnel are permitted to turn the gas back on. All such gas leaks shall be considered safety problems;
- If the gas shutoff has a handle with similar appearance to a water shutoff handle, it should be *considered* for replacement. If the gas line must be disassembled for repairs, this type of shutoff *must* be replaced with a listed shut-off.
- 1.3.2.2. **Vent System.** Perform an inspection of the vent system, if applicable, including:
- Visually check for excessive corrosion, rust, cracks or holes, and for loose, unsealed or disconnected sections;
 - Inspect the venting system to determine that it is in compliance with NFPA-54;
 - If corrective work is needed to ensure that the venting system is in compliance, choose the least cost corrective option.
 - Perform a worst-case draft test in accordance with the WPS.
 - The WarmChoice Program requires the draft be tested on both sides of the draft diverter on boilers.
 - “Grandfather” clause for Exposed B-vent
 - Providers may leave existing B-vent in place if the following conditions are met:
 - Provider is not replacing the appliance; and,



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- The appliance is drafting properly and the vent pipe meets all the other NFPA requirements such as clearance, height above the roofline, etc.;, and,
 - There is no evidence of water damage, particularly in the lateral vent section.
- If Provider encounters exposed B-vent that needs repairs, such as a new section or extension to the proper height above the roofline, Provider may repair it with B-vent but Provider must enclose the B-vent per manufacturers' instructions, or if the chimney is over/undersized, per NFPA 54.
- If Provider is installing a new gas fired appliance and Provider plans to use B-vent on the outside as the chimney, Provider must enclose the B-vent.
- If Provider is replacing an appliance that was hooked up to B-vent that was drafting and met other venting requirements, Provider must still enclose the B-vent.
 - If Provider is faced with having to enclose a B-Vent chimney, consider the following:
 - The cost to install a direct vent appliance compared to installing B-Vent and enclosing it.
 - The cost to install a power vent to the appliance compared to installing B-Vent and enclosing it.
 - The cost to move the appliance to a good chimney if one exists compared to installing B-Vent and enclosing it.
 - Labor, materials, and engineering could be significant depending on height and finishing materials. Thoroughly investigate the options before proceeding with a strategy such as this to stretch the resources of the WarmChoice program.
- All B-vent shall be installed and sized in accordance with NFPA 54 and local codes, if applicable.

3.4.2.4. **Combustion Air Requirements.** Determine that the combustion air requirements are in compliance with NFPA-54;

3.4.2.5. **Electrical Service.** Inspect the electrical service including the following:

- Check for charred, frayed or missing insulation or loose connections; and,
- Inspect the main electrical power supply to the heating appliance, when applicable, to determine that it is in compliance with NFPA-70;

3.4.2.6. **Internal Heating System Components.** Inspect internal components, which shall include the following:

- Examine the heat exchanger, checking for cracks, corrosion and debris; check boilers and water heaters for water leakage;
- Examine the blower assembly, checking for cleanliness and proper operation;
- Examine the burners, checking for proper operation and accumulated debris; and,



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- Check the thermostat for proper operation;
- Perform a temperature rise calculation in accordance with the WPS.

3.4.2.7 **Heating System Controls.** Inspect the heating system controls to assure that they are operating properly, including the following:

- Inspect the gas valve to determine that there are no fuel leaks and that it has 100% shutoff;
- A gas valve that does not provide 100% shutoff in the event of a pilot outage or ignition failure must be replaced. The only exceptions are:
 - A situation where the entire heating unit would have to be replaced to achieve 100% shutoff, or,
 - The repairs exceed \$300.
 - In those cases, the provider has the option to leave the existing gas valve or to replace the entire heating unit.
- Inspect the fan/limit switch for proper operation;
- Inspect all boiler controls to ensure that they are operating properly;
- Perform a visual inspection to ensure that all room heaters are equipped with safety controls; and,
- Mobile homes manufactured after 1975 with a central forced-air heating system must have a direct-vent type heating system. When Provider encounters a mobile home manufactured after 1975 that does not have a direct-vent type heating system, the existing heating system must be replaced in accordance with NFPA 54.

3.4.2.8. **Domestic Natural Gas Water Heaters.** Other items specific to domestic hot water heaters:

- Perform a visual inspection to determine that domestic hot water heaters have an existing temperature/pressure relief valve and approved discharge pipe;
- If the domestic hot water heater is to be replaced, new installations also must have, in addition to the above, a dielectric union.
- Location
 - Existing domestic hot water heaters in bathrooms, which pass the safety inspection, may be left in place if:
 - The domestic hot water heater is "boxed in," in accordance with NFPA 54, to ensure that it is drawing its combustion and ventilation air from the outside.
 - When a domestic hot water heater in a bathroom must be replaced, the options for the new installation are:
 - Install the unit in another area, but not the bedroom, or;
 - Install a direct vent unit in a bathroom, or;
 - Enclose a new atmospheric unit (if it has to be installed in the bathroom) in accordance with NFPA 54 to ensure that combustion and ventilation air is drawn from the outside.
 - Install a natural gas-fired on demand (tank-less) unit, or standard electric unit, after receiving approval from Columbia for either approach.



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- New installations for use in mobile homes must be HUD-approved for that installation and installed in accordance with NFPA 54.
- 3.4.2.9. **Natural Gas Cook Stoves and Ovens.** Test and inspect cook stove burners and ovens in accordance with the WPS.
- Burners or ovens, that are working and can be tested, must have any excessive CO situation mitigated before weatherization can proceed.
 - If any burners and/or the oven are non-functional, the Provider may not replace those individual parts or the entire range with Columbia WarmChoice funds. The home can be weatherized and the customer should have the non-functioning parts fixed or should replace the cook stove at his/her own expense.
 - If the oven and/or any of the burners are not emitting unsafe amounts of CO or leaking any natural gas, but still need some repairs, the Provider may not repair the individual items or replace the entire range with Columbia WarmChoice funds. The home can be weatherized and the customer should repair or replace the cook stove at his/her expense. The only exception to this policy is when the inspector feels the electronic ignition or the cook stove door should be replaced for the customer's immediate safety.
 - Providers may only replace cook stoves if the CO emissions from a functioning burner or oven cannot be mitigated or if a natural gas leak within the cook stove cannot be repaired.
 - Landlords who are not low-income, and who own the natural gas cook stove, must pay for any replacement.
 - Landlord contributions for repairs and clean and tune are highly encouraged.
 - Low-income tenants who own their cook stove can have it repaired. As mentioned in previous sections, replacements should be at his/her own expense.
- 3.4.2.10. **Carbon Monoxide (CO).** Inspect all natural gas heating appliances, cook stoves, and domestic hot water heaters, in accordance with the WPS, for carbon monoxide (CO) using a CO tester sensitive to 10 parts per million. The inspection shall include an analysis of the following:
- Inspect for CO in the supply duct work or plenum in the forced air system and in the ambient air in the living area near the appliance, while the appliance is operating;
 - Inspect for excessive CO in the flue gases; and,
 - Inspect for CO at a natural gas cook stove in accordance with the WPS.
 - Providers are authorized to install CO alarms when natural gas cook stoves do not have mechanical ventilation, when secondary unvented heating systems or wood stoves are present, or return air systems draw air from another combustion appliance zone within the home.
- 3.4.2.11. **Heating Distribution System.** Inspect the distribution system, if applicable, to include an analysis of the following:
- Inspect forced air distribution systems for blockages, holes, and loose, missing, leaky or unsealed sections, and insulation on any ducts in an unconditioned area;



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- Inspect boiler systems for leaks in the pumps, vents, condenser supply lines or return lines; proper operation of the aquastat; and insulation on any water lines in an unconditioned area;
 - Inspect the domestic hot water heater for water line leaks; and,
 - Test and inspect for duct leakage in accordance with the WPS.
- 3.4.2.12 **Combustion Efficiency Test.** Perform a combustion efficiency test on natural gas heating systems and water heaters in accordance with the WPS;
- 3.4.2.13 **Appliance Clearances.** Inspect the appliance to determine that proper clearances from combustible surfaces are maintained in accordance with NFPA-54, or in accordance with manufacturers' instructions;
- 3.4.2.14 **Existing Appliance Installations.** Determine whether existing appliances are installed in compliance with NFPA-54. Appliances that are not properly located must be removed, modified to meet NFPA-54 requirements, or replaced with equipment that does meet NFPA-54 requirements. Prioritize modifications over replacement;
- 3.4.2.15 **Mobile Home Furnaces and Water Heaters.** Determine that mobile home furnaces are HUD-approved for use in mobile homes and have the correct set-up for venting, combustion, and ventilation air. Determine that mobile home domestic hot water heaters have the proper venting, combustion and ventilation air set-up;
- 3.4.2.16 **BTU Input.** Clock the gas meter serving all natural gas-fired furnaces and domestic hot water heaters to estimate the BTU input of the appliances. Use the firing rate data in conjunction with combustion efficiency test results to determine whether corrective actions are necessary;
- 3.4.2.17 **Natural Gas Clothes Dryer.** Inspect the clothes dryer in accordance with the WPS;
- 3.4.2.18 **Unsafe Natural Gas Appliance.** Upon discovery of an unsafe appliance, the Initial Inspector shall turn off the unsafe appliance and instruct the customer in writing not to turn the appliance on until authorized to do so by Columbia or WarmChoice personnel.
- Should the procedures in the above paragraph leave a residence with inadequate heat during the heating season, the Initial Inspector may make an emergency referral to a heating contractor in order to resolve the problem.
 - Local Columbia service personnel will be immediately notified of all natural gas leaks upstream of the appliance shut off valve by telephone from a safe location.
 - All cracked heat exchangers discovered by Provider or its subcontractors, or by Columbia personnel, must be documented in writing regarding the size and location of the crack(s). The method(s) used to detect the crack must be documented.
 - The reason a natural gas-fired appliance was replaced must be documented. Heating systems should be replaced with a similar system; exceptions must be approved by




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Columbia prior to replacement and must be documented in the customer file.

Documentation may include email or written documentation.

- When replacing forced-air heating systems, providers may install either 80%+ or 90%+ AFUE-rated appliances. When replacing floor furnaces, wall furnaces, and space heaters, choose the highest available efficiency for a similar heating system. Decisions to replace appliances should be based on overall installation costs, practical considerations and customer input (especially when extensive venting and plumbing costs are involved). Columbia encourages the installation of 90+ heating systems due to the increased energy savings they produce. Columbia requires that a new 90+ appliance be a two-pipe system, unless a two-pipe system is technically impossible to install.
- Unvented room heaters are not permitted in bathrooms and bedrooms, and are not permitted as primary heating systems. NOTE: NFPA does not prohibit the installation of freestanding, vented heaters in bedrooms or bathrooms if the room can be made into an unconfined space in accordance with NFPA 54. However, Columbia does not permit this practice in the WarmChoice Program.
- A copy of the documentation for situations referred to in this section must be in the Provider's customer file.

 <p>State of Ohio Weatherization Program Standards</p>	Section	MECHANICAL SYSTEMS INSPECTION
	Subject	Heating Units

NON-OPERATIONAL UNITS 201-1.1

No weatherization work may be done until a non-operational primary heating unit is repaired or replaced.

repair/replace
201-1.1a



If the heating unit must be replaced, a NEAT audit must be performed if weatherization funds are used to replace the heating unit.

cost-effectiveness
201-1.1b



All unvented, fuel-fired primary heating units, unvented fuel-fired water heaters, or unvented, gas, clothes dryers present in a dwelling which cannot be vented, must be removed or replaced with properly-vented units before proceeding with any weatherization work. Notify the client/owner/authorized agent and arrange to have the unit replaced/removed.

**unvented primary
heating units**
201-1.1c

In dwellings where an unvented, secondary heating unit is present, inform the client/owner/authorized agent verbally and in writing of the potential health hazards of operating an unvented appliance in the post-weatherized dwelling and provide information on safe alternatives. Document the presence of the unvented, secondary heating unit in the HWAP client file. Install a carbon monoxide detector.

**unvented secondary
heating units**
201-1.1d

FUEL SUPPLY 201-1.2

Fuel must be available (except for solid fuel units) to begin the inspection process.

fuel availability
201-1.2a

When no fuel is available for solid fuel units, check for:

solid fuel
201-1.2b

- i. Heat exchanger leakage and corrosion.
- ii. Unsafe and/or improper wiring, if applicable.
- iii. Unsafe and/or improper venting and clearances.

MECHANICAL SYSTEMS INSPECTION—Heating Units

OWPS 201-1

fuel leakage, gas
201-1.2c

Use a combustible gas leak detector to check for liquefied petroleum (LP) or natural gas leaks from all accessible gas supply lines and gas-fired appliances. Verify every suspected leak with a commercial leak detector solution. Determine the source and severity of the problem and corrective actions.

major gas leaks
201-1.2d



If the gas leak is major (see 1504 Abbreviations and Definitions), immediately inform the owner/occupant and leave the dwelling. Contact the fuel vendor, and have the problem corrected. Document all actions taken in the customer file.



No weatherization work may be done until major gas leaks are corrected.

minor gas leaks
201-1.2e

If the gas leak is minor (see 1504, Appendices and References), inform the owner/occupant and have the problem corrected.

fuel leakage, oil
201-1.2f

Visually check for fuel leakage in kerosene and fuel oil heating units. Visually check the fuel oil storage tank for leaks.



No weatherization work may be done until oil or kerosene leaks are corrected.

Btu input
201-1.2g

When appropriate, test to determine if the heating unit is over- or under-fired by clocking the meter on natural gas units and calculating the actual Btu input. On propane units, the heating technician/heating contractor may take a gas pressure test, measure the orifice, and calculate the actual Btu input. Determine corrective actions.

ELECTRICAL POWER SUPPLY 201-1.3

main power safety
201-1.3a

Inspect the main electrical power supply to the heating unit to determine whether it is safe.

dedicated circuit
201-1.3b

Inspect the wiring to the heating unit. Determine whether the electrical circuit to the heating unit is in accordance with the applicable NFPA code for the fuel type (#54 for gas, #31 for fuel oil, #211 for solid fuel).

If no dedicated circuit exists, it is not necessary to install one unless the wiring is in poor condition, or there is a history of circuit failure, or a new heating unit is to be installed.

MECHANICAL SYSTEMS INSPECTION—Heating Units

OWPS 201-1

Visually inspect all wiring at, or in, the heating unit to detect charred, frayed, or missing wire insulation, and improper or loose connections.

If the wiring is hazardous, inform the customer of the problem and have it corrected before doing any weatherization work.

hazardous wiring
 201-1.3c



HEATING UNIT CLEARANCES 201-1.4

Visually inspect the heating unit to determine whether clearances from combustibles are in accordance with the applicable NFPA code for the fuel type (#54 for gas, #31 for fuel oil, #211 for solid fuel).

heating unit clearances
 201-1.4a

VENT SYSTEM VISUAL INSPECTION 201-1.5

Determine whether the vent system is in accordance with the applicable NFPA code for the fuel type (#54 for gas, #31 for fuel oil, #211 for solid fuel). Visually inspect the vent system to determine that it extends from the heating unit to the outside of the dwelling. Look for excessive corrosion or rust, cracks, holes and loose, unsealed, or disconnected sections. Repair of an existing problem is mandatory.

clearance and termination
 201-1.5a

Inspect the vent/chimney connections to determine whether they are securely fastened.

vent connections
 201-1.5b

Determine whether the vent connector is installed with no dips or sags, and rises at least 1/4" per foot of run.

vent slope
 201-1.5c

Determine whether the number of elbows exceeds that allowed in the codes cited in Table 201-1.5.

vent elbows
 201-1.5d



Determine whether any chimney in use is in sound condition. Determine whether existing liners, bricks or blocks and mortar are in good condition.

chimney condition
 201-1.5e

MECHANICAL SYSTEMS INSPECTION—Heating Units**OWPS 201-1**

chimney liner
201-1.5f

Determine whether chimney repair or a new liner is needed. All fan-assisted appliances shall vent into a properly-sized lined chimney.

DRAFT TESTING 201-1.6

draft, "worst case"
201-1.6a

Set up the "worst case scenario" for draft testing (see 1506-4). All draft tests must be taken under "worst case scenario" conditions.

Table 201-1.6 Draft Test Locations and Acceptable Readings

Heating Unit Type	Draft Gauge Probe Placement	Worst Case Acceptable Draft Readings at Listed Outdoor Temperatures (F)				
		<20	21-40	41-69	61-80	>80
Gas Atmospheric Appliances (Furnace, Space Heater, Boiler Floor Furnace)	Flue (after diverter)	-5 Pa -.02 wc'	-4 Pa -.016 wc"	-3 Pa -.012 wc'	-2 Pa -.008 wc"	-1 Pa -.004 wc"
Gas Fan-Assisted	Flue (1 1/2 times the diameter of the flue from the flue collar or elbow)	-5 Pa -.02 wc'	-4 Pa -.016 wc"	-3 Pa -.012 wc'	-2 Pa -.008 wc"	-1 Pa -.004 wc"
Oil Burners	Flue (before Barometric Damper)	-15 Pa -.06 wc'	-13 Pa -.053 wc"	-11 Pa -.045 wc'	-9 Pa -.038 wc"	-7 Pa -.03 wc"
Gas 90+ Furnace	Exhaust Pipe	PMI	PMI	PMI	PMI	PMI

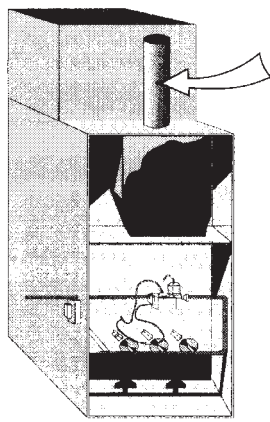
draft
201-1.6b

Start the heating unit. Insert the draft probe into the appropriate location listed in Table 201-1.6 and illustrated in Figure 201-1.6. At two minutes, measure the draft and determine whether the draft reading is within the acceptable ranges identified in Table 201-1.6.

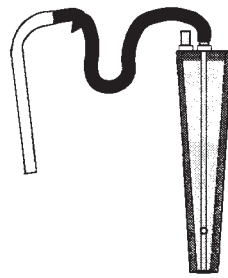
COMBUSTION SAFETY AND EFFICIENCY TESTING 201-1.7

carbon monoxide (CO)
201-1.7a

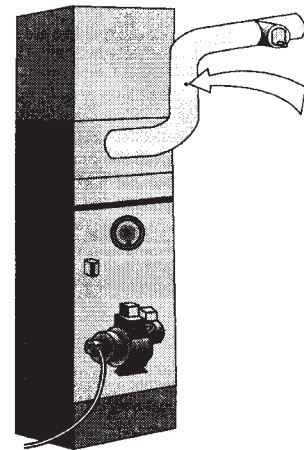
With the heating unit operating in winter operating condition, insert the sampling probe into the appropriate location listed in Table 201-1.7a and illustrated in Figure 201-1.7. Measure and record the amount of CO in the flue gasses. The low reading must be 100 ppm or less.



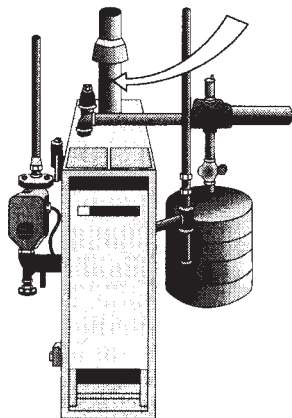
Atmospheric Furnace



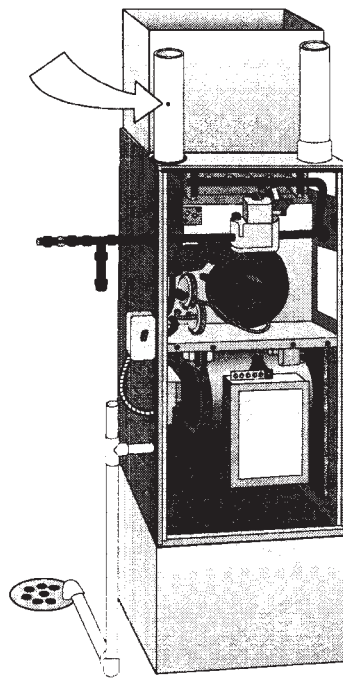
PROPER PROBE
PLACEMENT FOR
DRAFT TESTING



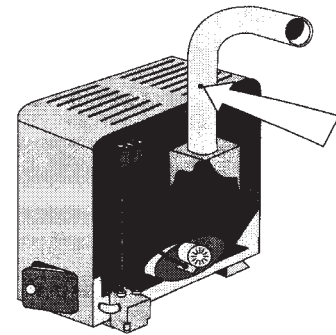
Fuel Oil Furnace



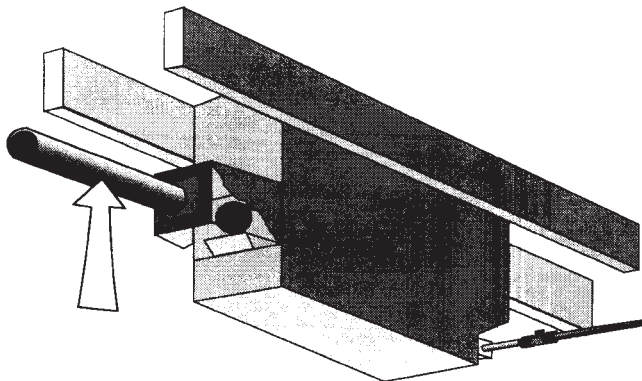
Atmospheric Boiler



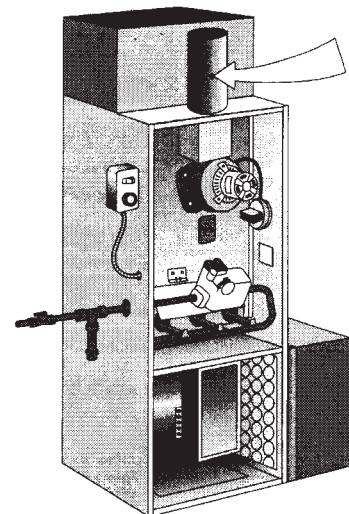
90+ Condensing Furnace



Space Heater



Floor Furnace



80+ Induced-draft Furnace

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Figure 201-1.6

Table 201-1.7a CO and Combustion Analyzer Probe Placement Locations

Heating Unit Types	Probe Location
Gas-fired Central Furnaces and Direct Heating Equipment	Each heat exchanger port
Oil-fired Central Furnaces and Direct Heating Equipment	Twice the diameter of the vent pipe down stream from any elbow and ½ the diameter of the vent pipe before the single acting barometric draft control
Gas-fired Boilers	Vent pipe before draft diverter
Sealed Combustion Units/Fan-assisted appliances	Exhaust vent pipe

Table 201-1.7b Acceptable Combustion Test Analysis Measurements

Heating Unit Type	(O ₂) Oxygen	Stack Temp.	Smoke Test	(CO) Carbon Monoxide Max. ppm
GAS (Natural Gas, Propane) Atmospheric	4-9%	300-600° F	N/A	100
Fan-assisted	4-9%	300-480° F	N/A	100
Condensing	PMI	PMI	N/A	100
Space Heaters	5-15%	300-650° F	N/A	100
Standard Power Burner	4-9%	275-550° F	N/A	100
OIL				
Standard Oil Burner	4-9%	325-600° F	1 or less	100
Flame Retention	4-7%	325-600° F	1 or less	100
Condensing	PMI	PMI	1 or less	100

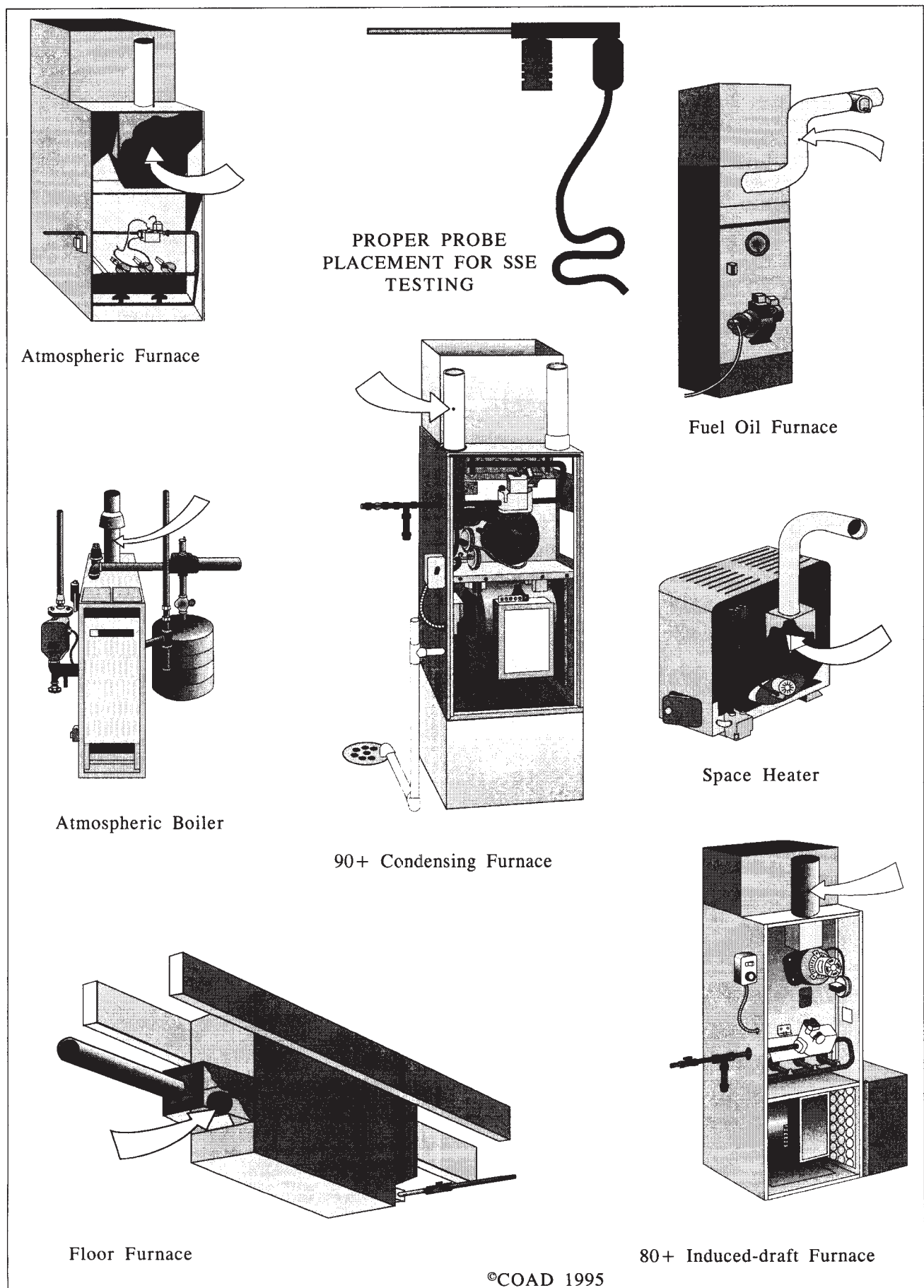


Figure 201-1.7

With the heating unit operating in winter operating condition, insert the sampling probe of a calibrated digital combustion analyzer into the appropriate location listed in Table 201-1.7a and illustrated in figure 201-1.7.

combustion analysis
201-1.7b

After the stack temperature stabilizes, measure and record the O₂ and the stack temperature readings. Determine whether the readings are within the acceptable limits listed in Table 201-1.7b or PMI.

Determine whether the combustion air requirements are in accordance with the applicable NFPA code for the fuel type (#54 for gas, #31 for fuel oil, #211 for solid fuel). (See 1506-11 Combustion Air/Specifically Engineered Systems). If the requirements are met, and carbon deposits and corrosion exist around the draft diverter, recheck for proper venting and backdrafting potential.

combustion air
201-1.7c

HEAT EXCHANGER INTEGRITY 201-1.8

Visually inspect the heat exchanger for evidence of deterioration and cracks or holes. Inspect for water leakage in boilers. Inspect for air leakage between boiler sections.

visual inspection
201-1.8a

With the heating unit operating, use a CO tester sensitive to at least 10 parts per million to test for CO in the distribution system and in the ambient air. If the source of CO is not the heating unit, then look for other possible sources of CO.

carbon monoxide (CO)
201-1.8b



During the combustion efficiency tests on forced-air systems, measure and record any change in the O₂ reading when the furnace blower motor comes on. If there is a change in the reading, reinspect the heat exchanger. Other industry accepted tests may be performed to confirm the problem.

**oxygen fluctuation,
forced air systems**
201-1.8c

If a crack in the heat exchanger is verified, then the heat exchanger or the heating unit must be replaced.

verified crack
201-1.8d

No weatherization work may be performed on a building until any cracked heat exchanger is repaired or replaced.

**cracked heat
exchanger**
201-1.8e

TEMPERATURE RISE 201-1.9

With the heating unit and blower operating, measure the temperature in a duct within 12 inches of the supply and return plenums. Determine whether the temperature rise is PMI, or within the acceptable range of 40° F - 70° F for mid to high efficiency furnaces, or if a data plate is not present on an atmospheric unit, within the acceptable range of 60° F and 90° F.

measurement
 201-1.9



CONTROLS 201-1.10

Determine whether the fan is activated properly by the fan control.

fan control, forced-air units
 201-1.10a

Check the high limit setting on forced-air heating units. Determine whether it is working correctly.

high limit control, forced-air units
 201-1.10b

Determine whether the blower motor, belt, and fan are clean and operating properly. Determine if the blower motor needs lubrication.

blower operation/condition
 201-1.10c



Determine whether there is an aquastat on the boiler and whether it is working correctly.

aquastat, boiler
 201-1.10d


Determine whether the water pump is operating properly.

water pump, boiler
 201-1.10e

Inspect the operating condition of the thermostat. Determine whether the thermostat will properly activate the heating unit.

thermostat
 201-1.10f

OWPS 201-2

 <p>State of Ohio Weatherization Program Standards</p>	Section	MECHANICAL SYSTEMS INSPECTION
	Subject	Electric Heat Pump/ Central Air Conditioning

NON-OPERATIONAL UNITS 201-2.1

A dwelling unit may not be weatherized until a non-operational, electric heat pump unit that is the primary heating unit is repaired or replaced.

repair/replace
201-2.1a



If the unit must be replaced, a NEAT audit must be performed if weatherization funds are used to replace the unit.

cost-effectiveness
201-2.1b



Do not test heat pumps when the exterior air temperature is above 70° or below 30°.

heat pump test
201-2.1c

Do not test air conditioning units when the exterior air temperature is below 70°.

air conditioner test
201-2.1d

THERMAL FLUID LEAKAGE 201-2.2

Use a refrigerant leak detector to inspect for thermal fluid leakage. If leakage is detected, promptly contact an EPA-certified technician to correct the problem.

**thermal fluid
leakage test**
201-2.2a

ELECTRICAL POWER SUPPLY 201-2.3

Inspect the main electrical power supply to the unit to determine that it is safe.

main power safety
201-2.3a

Inspect the wiring to the heat pump/AC unit. Determine whether the heat pump/AC unit has a dedicated circuit that is properly sized and fused.

dedicated circuit
201-2.3b

Determine whether there is an operational disconnect switch on outdoor units.

disconnect switch
201-2.3c

Visually inspect all wiring at, or in, the heat pump/AC unit to detect charred, frayed or missing wire insulation, and for improper or loose connections.

hazardous wiring
201-2.3d



If a hazard exists, inform the customer and have the problem corrected before performing weatherization work.



OWPS 201-2 MECHANICAL SYSTEMS INSPECTION—Heat Pump/Central Air

HEATING/COOLING UNIT CLEARANCES 201-2.4

**unit clearances,
indoors**
201-2.4a

Visually inspect the unit to determine whether clearances from combustible surfaces are PMI.

**unit clearances,
outdoors**
201-2.4b

CEE

Visually inspect the outside unit to determine that clearances are PMI. Make sure that the cooling fins are not obstructed or dirty. Determine whether access to the unit is blocked. Explain to the customer why this is important.

BACK-UP SYSTEM INSPECTION 201-2.5

back-up system
201-2.5a

Determine the back-up system fuel type and perform an inspection in accordance with the standards in 201-1.

AIR HANDLER 201-2.6

condensate drainage
201-2.6a

Visually inspect the inside unit to determine if there is proper condensate drainage. Make sure that there are no puddles or residue present.

A-coil
201-2.6b

Visually inspect the A-coil for existence of cracks or holes. If any are present, contact an EPA-certified technician to repair them.

fins/filters/ducts
201-2.6c

Visually inspect for dirty or obstructed fins, filters, or ducts.

**temperature rise/
drop airflow test**
201-2.6d

With the unit operating, measure the temperature at the supply and return ducts close to, but not in, the plenums. Subtract the measured temperatures to determine temperature rise/drop. Determine whether the temperature rise/drop is PMI.

CONTROLS 201-2.7


blower
201-2.7a

Determine whether the blower motor, belt, and fan are clean and operating properly. Determine if the blower motor needs lubrication.

thermostat
201-2.7b

Determine whether the thermostat is operating correctly. Adjust the temperature to determine whether the thermostat properly activates the heating and cooling units.

OWPS 201-3

	Section	MECHANICAL SYSTEMS INSPECTION
	Subject	Other Combustion Appliances

201-3.1 FUEL SUPPLY

Use a combustible gas leak detector to check for propane or natural gas leaks on accessible rigid and flexible lines leading to cook stoves and gas combustion appliances other than the primary heat source or domestic hot water tank. If a dwelling unit has more than one secondary gas combustion appliance, inspect all appliances that are connected to the gas supply. Verify suspected leaks with soap solution. Determine the source and severity of the problem. Replace defective flexible range connectors.

gas leaks

201-3.1a

If the gas leak is major (see 1504 Abbreviations and Definitions), immediately inform the customer and leave the building. Contact the fuel vendor and have the problem corrected. Document all the actions taken in the customer file.

major gas leaks

201-3.1b



No weatherization work may be done until major gas leaks are corrected.



If the gas leak is minor (see 1504, Definitions), inform the customer and have the problem corrected.

minor gas leaks

201-3.1c

If there are gas shut-off valves present, determine whether they work properly.

gas shut-off valve

201-3.1d

201-3.2 OVEN VENT

Determine whether the oven is vented to the outside. If so, determine whether the vent is securely fastened.

vent to outside

201-3.2a

201-3.3 GAS COOK STOVE EXHAUST FAN

Determine whether there is an operational kitchen exhaust hood or fan that is vented to the outside. If an exhaust fan is present, but is not operational, have the unit repaired or replaced.

exhaust fan, vented to outside

201-3.3a

Inform the customer about the reasons for, and the importance of, using the kitchen exhaust fan while cooking.

proper use

201-3.3b

CEE

OWPS 201-3 MECHANICAL SYSTEMS INSPECTION—Other Combustion Appliances

RANGE INSPECTION AND OPERATION 201-3.4

cook stove condition

201-3.4a

CEE

Note the general condition and cleanliness of the cook stove. If the unit is visibly dirty, perform the inspection and test it as it is. Ask the customer to clean the oven so that it can be retested at the final inspection. Explain to the customer why this is necessary.

type of ignition

201-3.4b

Determine the type of ignition for the burners, oven, and broiler. If the unit has standing pilot lights, ensure that the pilot lights are lit.

operable burners

201-3.4c

Determine whether the burners are operable. If they are not operable, it is allowable to have them repaired.

CARBON MONOXIDE (CO) TESTING 201-3.5

stove top burners

201-3.5a

Using a digital combustion analyzer, individually test each burner for the presence of CO (see section 1506-2). Record the reading for each burner.

oven vented outside

201-3.5b

The oven test is not necessary if the oven is vented to the outside.

oven/broiler testing

201-3.5c

Turn on the oven/broiler unit. Ensure that the oven burner fires. Note the time that the oven fires, and allow it to run 10 minutes before beginning the oven test (see 1506-2).

CLOTHES DRYERS (ALL ENERGY SOURCES) 201-3.6

vent to outside

201-3.6a

Determine whether the clothes dryer is vented outside to daylight.

dryer vent duct material (rigid-metal)

201-3.6b

Determine whether the dryer vent is a rigid-metal duct that has a smooth interior surface, is a minimum 30 gauge galvanized steel or aluminum and is equipped with a backdraft damper.

dryer vent duct material (flexible-metal)

201-3.6c

Determine whether the dryer vent duct is a transition duct used to connect the dryer to the exhaust duct. The transition duct may be flexible-metal duct for this application, installed in a manner that minimizes overall length. The preferred material for transition and exhaust duct is rigid metal.


MECHANICAL SYSTEMS INSPECTION—Other Combustion Appliances OWPS 201-3

Determine whether the diameter of the dryer vent duct is at least the diameter of the appliance outlet. Determine the length of a 4-inch diameter dryer vent duct. The maximum length shall not exceed 25 feet from the clothes dryer outlet to the termination point.

**dryer vent duct
sizing (rigid-metal &
flexible-metal)**
201-3.6d

If the length exceeds 25 feet, increase the duct diameter to 5". (A reduction in maximum length of 2.5 feet for every 45-degree bend and 5 feet for every 90-degree bend shall apply).

OWPS 201-4

 <p>State of Ohio Weatherization Program Standards</p>	Section	MECHANICAL SYSTEMS INSPECTION
	Subject	Domestic Hot Water

FUEL SUPPLY 201-4.1

Fuel must be available to begin the inspection process of the DHW heater.

fuel availability
201-4.1a

Use a combustible gas leak detector to determine if propane or natural gas is leaking from all accessible gas supply lines and gas-fired appliances. Verify every suspected leak with soap bubble solution. Determine the source and severity of the problem.

fuel leakage, gas
201-4.1b

If the gas leak is major (see 1504 Abbreviations and Definitions), immediately inform the customer and leave the dwelling. Contact the fuel vendor and have the problem corrected. Document all actions taken in the customer file.

major gas leaks
201-4.1c



No weatherization work may be done until major gas leaks are corrected.



If the gas leak is minor (see 1504, Definitions), inform the customer and have the problem corrected.

minor gas leaks
201-4.1d

Visually check for fuel leakage in kerosene and fuel oil DHW units.

fuel leakage, oil
201-4.1e

When appropriate, test to determine if the gas DHW unit is over- or under-fired by clocking the meter on natural gas units and calculating the actual Btu input. On propane units, take a gas pressure test, measure the orifice, and calculate the actual Btu input. Determine corrective actions.

Btu input
201-4.1f

ELECTRICAL POWER SUPPLY 201-4.2

Inspect the main electrical power supply to an electric tank to determine that it is safe.

main power safety
201-4.2a



Inspect the wiring to the DHW unit and determine whether the electrical line to the heating unit is a dedicated circuit that is properly sized and fused. If no dedicated circuit exists, it is not necessary to install one unless the wiring is in poor condition, there is a history of circuit failure, or the unit is to be replaced.

dedicated circuit
201-4.2b



OWPS 201-4 MECHANICAL SYSTEMS INSPECTION—Domestic Hot Water

hazardous wiring
201-4.2c



Visually inspect all wiring at or in, the DHW unit to detect charred, frayed or missing wire insulation and improper or loose connections. If the wiring is hazardous, inform the customer of the problem and have the problem corrected.

DHW UNIT CLEARANCES 201-4.3

unit clearances
201-4.3a

Note whether combustion-type DHW tanks are located with the required clearances from combustibile materials PMI or the appropriate NFPA code. If they are not, have the DHW tank moved to achieve required distance from combustibile surfaces.

VENT SYSTEM VISUAL INSPECTION 201-4.4

clearance
201-4.4a



Determine whether the vent system is in accordance with the applicable NFPA code for the fuel type (#54 for gas, #31 for fuel oil, #211 for solid fuel). Visually inspect the vent system to determine that it extends from the heating unit to the outside of the dwelling. Look for excessive corrosion or rust, cracks, holes and loose, unsealed, or disconnected sections. Repair of an existing problem is mandatory.

vent connections
201-4.4b

Inspect the vent/chimney connections to make sure that they are securely fastened.

vent slope
201-4.4c

Determine whether the vent connector is installed with no dips or sags, and rises at least 1/4" per foot of run.

vent elbows
201-4.4d

Determine whether the number of elbows exceeds that allowed in the codes cited in Table 201-4.4a.

chimney condition
201-4.4e

Determine whether any chimney in use is in sound condition. Determine whether existing liners, bricks or blocks and mortar are in good condition.

chimney liner
201-4.4f

Determine whether chimney repair or a new chimney liner is needed.

**combustion air/
backdrafting**
201-4.4g

Determine whether the combustion air requirements are in accordance with the applicable NFPA code for the fuel type (#54 for gas, #31 for fuel oil, #211 for solid fuel). If the requirements are met, and carbon deposits and corrosion exist around the draft diverter, recheck for proper venting and backdrafting potential.

MECHANICAL SYSTEMS INSPECTION—Domestic Hot Water OWPS 201-4

DRAFT TESTING 201-4.5

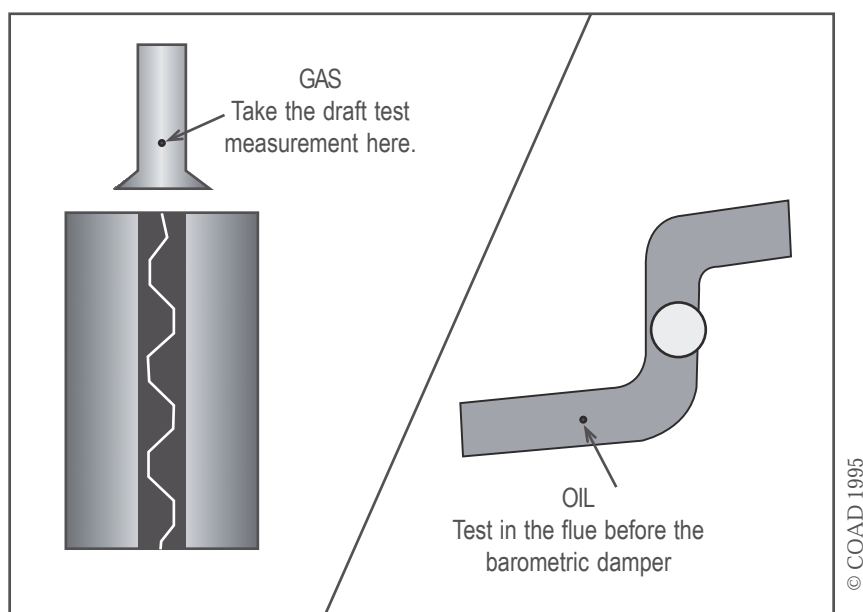
Set up the "worst case scenario" for draft testing (see 1506-4). All draft tests must be taken under "worst case scenario" conditions.

draft, "worst case"
201-4.5a

Start the DHW unit. Insert the draft probe into a hole in the vent pipe above the draft diverter (see figure 201-4.5.) Measure the draft at two minutes and determine whether the draft reading is within the acceptable ranges identified in Table 201-4.5.

draft
201-4.5b

Figure 201-4.5 Draft Test Probe Placement



COMBUSTION SAFETY & EFFICIENCY TESTING 201-4.6

With the DHW unit operating, insert the sampling probe into the appropriate location illustrated in Figure 201-4.6. Measure and record the amount of CO in the flue gasses. More than 100 ppm in the flue is not permitted.

carbon monoxide (CO)
201-4.6a

OWPS 201-4 MECHANICAL SYSTEMS INSPECTION—Domestic Hot Water

Table 201-1.6 Draft Test Locations and Acceptable Readings

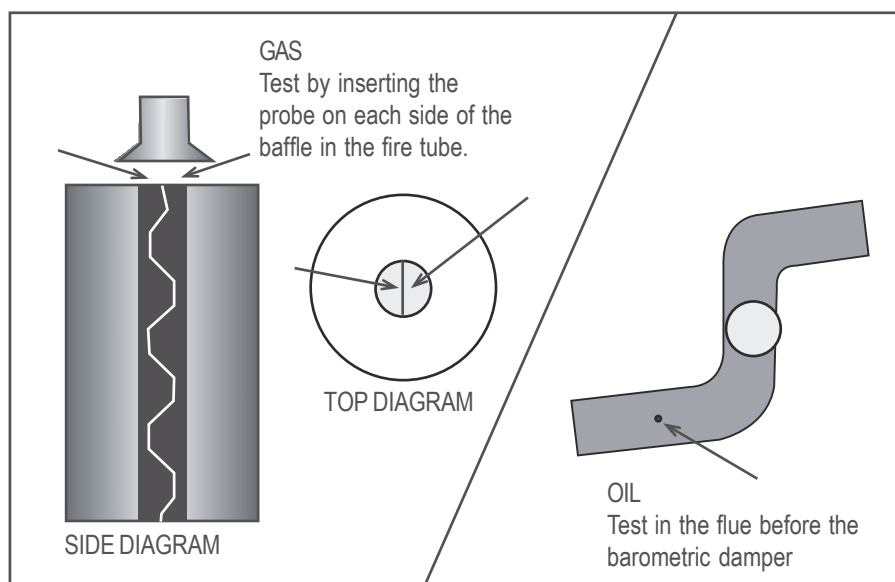
Heating Unit Type	Draft Gauge Probe Placement	Worst Case Acceptable Draft Readings at Listed Outdoor Temperatures (F)				
		<20	21-40	41-69	61-80	>80
Gas Atmospheric Appliances (Furnace, Space Heater, Boiler Floor Furnace)	Flue (after diverter)	-5 Pa -.02 wc'	-4 Pa -.016 wc"	-3 Pa -.012 wc'	-2 Pa -.008 wc"	-1 Pa -.004 wc"
Gas Fan-Assisted	Flue (1 1/2 times the diameter of the flue from the flue collar or elbow)	-5 Pa -.02 wc'	-4 Pa -.016 wc"	-3 Pa -.012 wc'	-2 Pa -.008 wc"	-1 Pa -.004 wc"
Oil Burners	Flue (before Barometric Damper)	-15 Pa -.06 wc'	-13 Pa -.053 wc"	-11 Pa -.045 wc'	-9 Pa -.038 wc"	-7 Pa -.03 wc"
Gas 90+ Furnace	Exhaust Pipe	PMI	PMI	PMI	PMI	PMI

combustion analysis 201-4.6b



With the DHW unit operating, insert the probe of a calibrated digital combustion analyzer into the appropriate location illustrated in Figure 201-4.6. After the unit has been operating at least ten minutes, measure and record the O₂ and the stack temperature readings. Determine whether the readings are within the acceptable limits listed in Table 201-4.6.

Figure 201-4.6 Proper Probe Placement for Testing DHW Tanks



MECHANICAL SYSTEMS INSPECTION—Domestic Hot Water OWPS 201-4**Table 201-4.6 Acceptable Combustion Test Analysis Measurements**

DHW Unit Type	(O₂) Oxygen	Stack Temp.	Smoke Test	(CO) Carbon Monoxide Max. ppm
GAS (Natural Gas, Propane) Atmospheric	4-9%	300-600° F	N/A	100
Fan-assisted	4-9%	300-480° F	N/A	100
OIL Conventional Oil Burner	4-9%	325-600° F	1 or less	100
Flame Retention	4-7%	325-600° F	0 or trace	100

Determine whether the combustion air requirements are in accordance with those listed in the codes in Table 201-4.4g. If the requirements are met, and carbon deposits and corrosion exist around the draft diverter, recheck for proper venting and backdrafting potential.

combustion air
201-4.6c

WATER TANK CONDITION 201-4.7

Determine if the tank is leaking water. If it is leaking, it may be replaced using HWAP Health and Safety funds.

tank leakage
201-4.7a



Determine whether a pressure relief valve and a discharge pipe are present. If the relief valve and/or the discharge pipe is not present and there is an existing location for them, have them installed. If the relief valve and/or discharge pipe are not present and there is no existing location for them, have them installed in the hot water line.

**pressure relief valve/
discharge pipe**
201-4.7b



Do not call for insulation on tanks that have a manufacturer's warning against adding additional insulation.

**tank insulation
warning**
201-4.7c



Determine whether the tank is insulated. Measure the tank to determine the amount of insulation needed to cover the tank.

tank insulation
201-4.7d



Examine the temperature setting on the gas valve or thermostat. Consult with the customer to determine if lowering of the temperature can be accomplished without affecting the customer's life-style.

**temperature
setting**
201-4.7e



OWPS 201-4 MECHANICAL SYSTEMS INSPECTION—Domestic Hot Water

flame roll-out
201-4.7f

Turn up the thermostat to activate the water heating system. For a combustion-type system, determine whether flame roll-out is occurring.

gas valve
201-4.7g

If the DHW tank is a gas-fired model, determine whether the gas valve is functioning properly (see 1506-8).

thermostat
201-4.7h

Determine whether the thermostat is operating properly.

DHW DISTRIBUTION 201-4.8

water lines
201-4.8a

Inspect the water lines leading into, and out of, the water tank to determine whether they are leaking. If water lines are leaking, inform the customer and repair the leaks.

water line insulation
201-4.8b



CEE

Determine whether there is insulation present on the first six feet of both the hot and cold water lines.

fixture leaks
201-4.8c

CEE

Examine plumbing fixtures to determine if they are leaking. If plumbing fixtures are leaking, inform the customer. Repair of hot water leaks is mandatory. Determine whether cold water leaks are contributing to moisture problems.

low-flow devices
201-4.8d

CEE

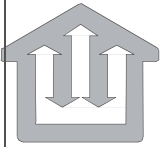
Examine plumbing fixtures to determine whether low-flow devices are present. Consult the customer to determine whether low-flow devices can be installed in the shower and at sink fixtures.

consumer energy education
201-4.8e

CEE

Provide consumer energy education to the customer(s) regarding the management of hot water usage.

OWPS 201-6

	<p>State of Ohio Weatherization Program Standards</p>	<p>Section MECHANICAL SYSTEMS INSPECTION</p>
		<p>Subject Mechanical Ventilation</p>

EXHAUST FANS 201-6.1

201-6.1a

Note and record the locations of all exhaust fans, including clothes dryers, and whether they are properly vented to the outside.

201-6.1b

Record the type and condition of existing venting duct material.

201-6.1c

Note whether the venting duct extends to the outside of the house, i.e., through the roof, soffit or side of the house. Specify the installation of rigid duct or flexible duct for any duct that needs to be replaced or extended to the outside. Dryervent ducts for clothes dryers must be smooth-surfaced, rigid duct or non-combustible metal, flexible duct. Specify insulation to be installed on all ducts extending through unconditioned areas (excluding dryers).

201-6.1d

Check for the presence of a damper and whether the vent connection is tight.

201-6.1e

Note the type of switch or control that is present.

201-6.1f

Inspect fan and switch wiring and connections, and note any hazards. Note whether the wiring is connected properly and working correctly.

201-6.1g

Test each exhaust fan to see if it is operable and effective. Note inoperative, ineffective, or improperly vented fans.

201-6.1h

onsult with the customer to determine the usage pattern and frequency of use for each fan.

201-6.1i

If no fans are present, determine whether there is a need for a venting system according to the OVERALLS Scale, Building Tightness Limits or IAQ concerns. Consult with the customer about excess moisture and other IAQ problems.

201-6.1j

Determine the proper fan size PMI in CFM for the area to be ventilated.


201-6.1k

For new installations only, determine whether the fan should be wired into a separate timer control or the light switch.

201-6.1l

Determine the proper use of the exhaust fans. If the residence is rated at or below the Building Tightness Limit (BTL), recommend that the resident open a window or other fresh air intake on the opposite end of the room or house whenever they use the exhaust fans. Otherwise, backdrafting of combustion appliances may occur. Consult the draft reading from the worst case scenario draft test.

OWPS 201-8

 <p>State of Ohio Weatherization Program Standards</p>	Section	MECHANICAL SYSTEMS INSPECTION
	Subject	Electrical Safety

SERVICE ENTRY BOX 201-8.1

Note the location and condition of the main service entry box. Note if it is properly mounted in an appropriate location.

location of box
201-8.1a

Determine if the main service entry box is properly grounded according to the NEC.

grounding
201-8.1b

Determine the type and amp rating of the main service box.

type of box
201-8.1c

Determine existing wire types and the location and condition of each type present.

type of wiring
201-8.1d

Note the sizes of the existing fuses/breakers and determine if they are properly sized for their circuits.

fuse/circuit size
201-8.1e

If the inspector determines that a hazardous situation exists, inform the customer of the problem. Have the problem corrected if it is possible within the scope of the HWAP.

hazards
201-8.1f



Year	Central Heating Unit Replacement \$	Central Heating Unit Repair \$	Central Heating Unit Venting \$	Space/Floor Heater Replacement \$	Space/Floor Heater Repair \$	Space/Floor Heater Venting \$	Water Heater Replacement \$	Water Heater Repair \$	Water Heater Venting \$	Interior Gas Line Repair or Replacement \$	Exterior Gas Line Replacement \$
2013	\$ 1,784,280	\$ 533,492	\$ 189,036	\$ 33,314	\$ 10,731	\$ 9,087	\$ 321,590	\$ 123,429	\$ 128,816	\$ 57,385	\$ 20,168
2014	\$ 1,910,976	\$ 558,042	\$ 153,940	\$ 41,137	\$ 11,913	\$ 8,303	\$ 378,388	\$ 145,179	\$ 127,687	\$ 42,616	\$ 17,620
2015	\$ 1,824,617	\$ 622,471	\$ 168,044	\$ 30,085	\$ 17,956	\$ 6,429	\$ 365,487	\$ 156,622	\$ 148,596	\$ 41,454	\$ 9,630

PUCO Case Nos. 16-1309-GA-UNC and 16-1310-GA-AAM
OCC Interrogatories Set 2 No. 17
Respondent: John A. Lavery

COLUMBIA GAS OF OHIO, INC.
RESPONSE TO OCC'S INTERROGATORIES
DATED JULY 20, 2016

INT-17. Section 3.2.4 of the Application pertains to the Simple Energy Solutions (Energy Efficient Products) program.

- a. Please state the rebate amount for each type of thermostat that will be offered under this program. Is the rebate amount the same for wifi thermostats without learning capability and wifi thermostats with learning capability?

RESPONSE:

- a. Columbia plans for a \$25 rebate per standard programmable thermostat and a \$75 rebate per learning thermostat. The rebate amount for wifi thermostats without learning capability is planned to be \$25 and the rebate amount for wifi thermostats with learning capability is planned to be \$75.

PUCO Case Nos. 16-1309-GA-UNC and 16-1310-GA-AAM
OCC Interrogatories Set 3 No. 45
Respondent: Larry Martin

COLUMBIA GAS OF OHIO, INC.
RESPONSE TO OCC'S INTERROGATORIES
DATED AUGUST 5, 2016

INT-45. In response to OCC Set 2, RPD-3, Columbia provided a copy of a draft "Stipulation and Recommendation." Columbia states that the shared savings cap will be \$4.5 million "grossed up for taxes." Please provide an estimate of what the proposed \$4.5 million shared savings cap would cost customers pre-tax.

RESPONSE:

The proposed \$4.5 million shared savings cap is estimated to cost \$6.9 million pre-tax over the 6-year life of the Program; notwithstanding the tax gross up, Columbia's maximum incentive on the DSM Program is 2.8% of the total programmatic budget (\$4.5 million/\$160 million).

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in

Case No(s). 16-1309-GA-UNC, 16-1310-GA-AAM

Summary: Reply Comments on Columbia Gas's Application and Settlement to Charge Consumers for Energy Efficiency Programs by The Office of the Ohio Consumers Counsel electronically filed by Ms. Jamie Williams on behalf of Healey, Christopher Mr.