OMB Control No. 2060-0722
Approval expires 08/31/2021

Natural Gas STAR Methane Challenge Program
Implementation Plan

Partner Name

Consumers Energy Company

Current as of (date)

Aug 1, 2019

Partner Implementation Manager

Name: _____

Title: _____

Address: _____

City/State/Zip: _____

Telephone/Fax: _____ E-mail: _____

Partner Methane Challenge Commitments[1]

BMP Commitment Option

	Source	Start Date	Achievement Year
	Onshore Production		
☐	Pneumatic Controllers		
☐	Fixed Roof, Atmospheric Pressure Hydrocarbon Liquid Storage Tanks		
	Gathering and Boosting		
☐	Pneumatic Controllers		
☐	Fixed Roof, Atmospheric Pressure Hydrocarbon Liquid Storage Tanks		
☐	Reciprocating Compressors - Rod Packing Vent		
☐	Centrifugal Compressors - Venting		
	Natural Gas (NG) Processing		
☐	Reciprocating Compressors - Rod Packing Vent		
☐	Centrifugal Compressors - Venting		
	NG Transmission & Underground Storage		
☐	Reciprocating Compressors - Rod Packing Vent		
☐	Centrifugal Compressors - Venting		
☐	Transmission Pipeline Blowdowns between Compressor Stations		
☐	Pneumatic Controllers		
	NG Distribution		
■	Mains – Cast Iron and Unprotected Steel *(Commitment Rate:* 3% *)*	Sep 30, 2016	2021
☐	Services – Cast Iron and Unprotected Steel		
☐	Distribution Pipeline Blowdowns *(Commitment Rate:)*		
☐	Excavation Damages		

Partner Methane Challenge Commitments

ONE Future Emissions Intensity Commitment Option

Segment:		Intensity Target:		Target Year:	

[1] Partners may delete unused rows within the table, and may duplicate rows and add relevant details as needed (e.g., a corporate parent partner that has different commitments for each LDC can duplicate relevant rows to list the commitments for each LDC).

Milestones/Timeframes for Meeting Commitments

Provide information on steps for achieving commitments such as anticipated rate of progress, key milestones, or other context (e.g., referencing work to be done during the next planned shutdown of a facility).

Consumers Energy was pleased to join the EPA in a partnership to reduce methane emissions. Continued investment in natural gas distribution infrastructure minimizes the risk of natural gas leakage which provides safety, environmental and financial benefits. Therefore, Consumers Energy proudly signed on as a Founding Member of the Natural Gas STAR Methane Challenge Program under the Natural Gas Distribution: Mains-Cast Iron and Unprotected Steel BMP Commitment Option. Based on our January 1, 2016 inventory of cast iron and unprotected steel Distribution Mains, our initial commitment is to reduce cast iron and unprotected steel mains at a minimum rate of three percent (3%) per year by 2021.

In 2012, Consumers Energy implemented its Enhanced Infrastructure Replacement Program (EIRP). The goal of this program is to ensure continued public safety and reliable systems operations by replacing 2,600 miles of pipeline, including almost 350 miles of vintage pipeline. Consumers Energy has regulatory approval[1] for this comprehensive main replacement program, with the goal of eliminating all cast iron and unprotected steel mains by 2037.

Completion of the EIRP projects, along with additional voluntary pipeline replacement activities, like portions of our civic-related replacement work, will ensure success with our Methane Challenge targeted main replacement rate commitment of 3% annually by 2021.

Consumers Energy Company
Cast Iron/Unprotected Steel Miles
(from Annual DOT Report)

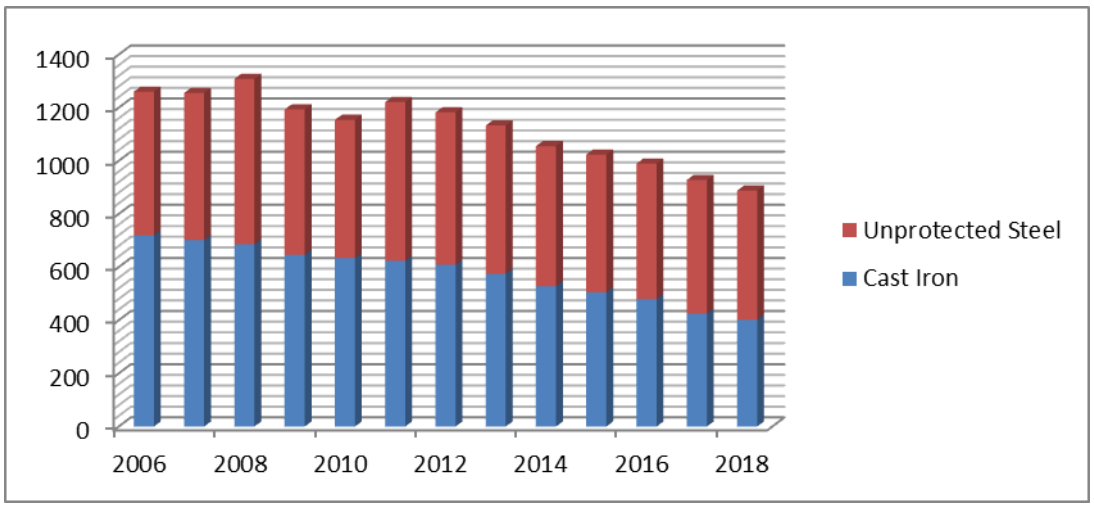

Figure 1. Inventory of Cast Iron and Unprotected Steel Miles

As mentioned above, the EIRP is central to our Methane Challenge Commitment. The EIRP scope includes more projects than just cast iron and unprotected steel main replacement activity. The EIRP scope includes the following:

- Replacement of all cast iron mains;
- Replacement of all bare, oxyacetylene welded, threaded and coupled, copper, Xtrube, and unprotected steel main;
- Replacement of 100 miles of transmission pipeline located in High Consequence Areas (HCAs); and
- Replacement of approximately 70 miles of low frequency electric-resistance-weld (ERW) piping located in gas storage fields.

Additional Information/Context:

Consumers Energy has been actively replacing vintage natural gas pipelines with modern materials for years. Simply put, modern materials have a much lower leak rates than older materials like cast iron and unprotected steel. In the last 12 years, our pipeline-based emissions have decreased almost 15 percent, despite simultaneously increasing our total pipeline length by 7 percent. Our customers benefit from a safety, reliability and environmental perspective from modernizing our distribution network.

Consumers Energy has been an active, consistent participant in the EPA Natural Gas STAR program since 1994. Actions taken under pipeline safety programs, as well as voluntary emissions avoidance activities have resulted in a reduction of carbon dioxide equivalent emissions by over 1.1 million metric tons. Our participation in the Natural Gas STAR program will continue. Included below is a graphical representation of our work in this area.

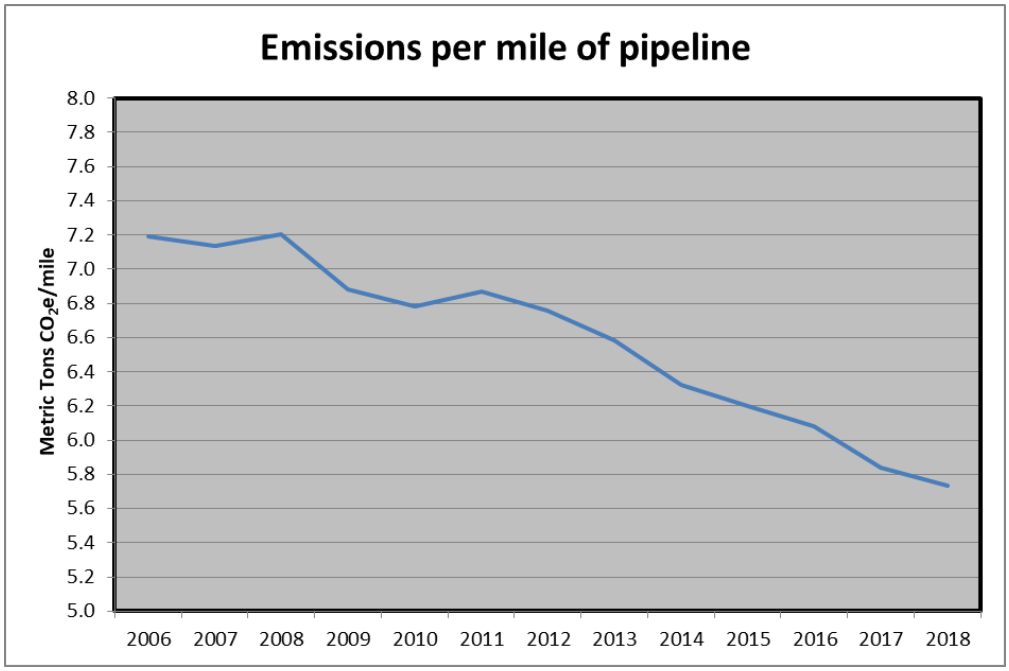

Figure 2. CO_2e Emissions From the Distribution Network

Note: the above calculations are based on emission factors applied over our total distribution network.