December 28, 2017

Ms. Kavita Kale
Executive Secretary
Michigan Public Service Commission
7109 West Saginaw Highway
Post Office Box 30221
Lansing, MI 48909

Re: Case No. U-18124 – In the matter of the application of CONSUMERS ENERGY COMPANY for authority to increase its rates for the distribution of natural gas and for other relief.

Dear Ms. Kale:

Enclosed for electronic filing in the above-captioned case, please find Consumers Energy Company’s Gas Enhanced Infrastructure Replacement Program 2018 Planning Report. This is a paperless filing and is therefore being filed only in a PDF format. The Excel attachments will be provided electronically to the MPSC Staff. Additionally, I have enclosed a Proof of Service showing electronic service upon the parties.

Sincerely,

Anne M. Uitvlugt

cc: Hon. Suzanne D. Sonneborn, Administrative Law Judge
    Brian Ballinger
    David Chislea
    Cynthia Creisher
    Parties per Attachment 1 to Proof of Service
Background

The Gas Enhanced Infrastructure Replacement Program (“EIRP”) [formerly called Main Replacement Program (“MRP”)] was put in place to accelerate the removal of higher risk pipe from the transmission and distribution system and increase the ability to perform in-line pipeline integrity inspection on the transmission system through the addition of launchers and receivers and the elimination of un-piggable sections.

The EIRP was originally approved by the Michigan Public Service Commission (“MPSC” or the “Commission”) in Case No. U-16855. See MPSC Case No. U-16855, June 7, 2012 Order Approving Settlement Agreement. In that docket, Consumers Energy Company (“Consumers Energy” or the “Company”) agreed to fund a MRP in the amount of $56 million. Subsequently, in MPSC Case No. U-17643, the parties entered into a Settlement Agreement that amended the EIRP with the following terms:

“Consumers Energy agrees that it will fund an Enhanced Infrastructure Replacement Program (‘EIRP’). The EIRP is a twenty-five year incremental investment program intended to upgrade natural gas infrastructure, which includes approximately 540 miles of cast iron pipe. The EIRP is based on transmission and distribution integrity management principles intended to eliminate cast iron pipe and other high-risk components as identified through existing Federal and State code requirements. EIRP is currently projected at $75 million per year. The
EIRP will conform to the requirements set forth in Attachment 3 to this Settlement Agreement. An illustration of the methodology for calculating of the EIRP refund amount, if any, is included as Attachment 4 to this Settlement Agreement.”

These terms have been substantially continued pursuant to the Settlement Agreements in MPSC Case No. U-17882 and the Commission’s July 31, 2017 Order in MPSC Case No. U-18124.

Associated with the EIRP are certain reporting metrics. Consistent with the Gas Transmission and Distribution EIRP Reporting Metrics set forth in Exhibit A-28 (SHB-16) (MPSC Case No. U-18124), the Company has compiled a planning report to demonstrate the planned investment projects. Additionally, a reconciliation report will be compiled to determine if $75 million was spent on the EIRP for each calendar year.

The EIRP Planning Report requires the following information be provided:

**New EIRP Planning Report Requirements**

1. Filed by December 31st of the preceding year.

2. Proposed projects including:
   
   (i) A project number for each job;  
   (ii) The headquarters; 
   (iii) The project location; 
   (iv) The type of proposed pipe replaced; and 
   (v) The length of proposed pipe replaced.

   With regards to Distribution projects:
   
   (vi) Number of proposed service lines renewed or retired for each project; 
   (vii) Modeled Relative Risk Ranking for all projects in a separate column; and 
   (viii) Reason for inclusion of projects that are not part of relative risk ranked projects.

3. Excel files of tables and charts included in plan to be provided to the MPSC Staff after plan filing.

   The attached report complies with the EIRP Planning Report requirements. The report contains the 2018 planned EIRP projects, including all data points. The report also contains the
highest risk ranked projects. Upon the filing of the EIRP Planning Report, Consumers Energy will provide the MPSC Staff with the excel files of tables and charts included with the report.

Respectfully submitted,

Dated: December 28, 2017

CONSUMERS ENERGY COMPANY
## 2018 Gas Enhanced Infrastructure Replacement (EIRP) - Annual Planning Report

### Capital Expenditure Summary

<table>
<thead>
<tr>
<th></th>
<th>Estimated Total 2018 Costs</th>
<th>Planned Footage</th>
<th>Est. Leaks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Est. Distribution Main Replacement</td>
<td>$72,445,598</td>
<td>357,344</td>
<td>18</td>
</tr>
<tr>
<td>Est. 2017 Carryover Costs</td>
<td>$1,200,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Est. 2019 Survey, Material, Prepatory Costs</td>
<td>$633,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Est. Distribution Subtotal</strong></td>
<td><strong>$74,278,598</strong></td>
<td>357,344</td>
<td>18</td>
</tr>
<tr>
<td>Est. Transmission and Storage Pre-1970 LFERW Pipe Rpl</td>
<td>$2,288,000</td>
<td>7,386</td>
<td>1</td>
</tr>
<tr>
<td>Est. 2017 Carryover Costs</td>
<td>$22,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Est. 2019 Survey, Material, Prepatory Costs</td>
<td>$100,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Est. Transmission and Storage Subtotal</strong></td>
<td><strong>$2,410,000</strong></td>
<td>7,386</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Est. EIRP Capital Expenditure</strong></td>
<td><strong>$76,688,598</strong></td>
<td>364,730</td>
<td>19</td>
</tr>
</tbody>
</table>

### O&M Expenditure Summary

<table>
<thead>
<tr>
<th></th>
<th>Estimated Total 2018 Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total EIRP O&amp;M Expenditure</strong></td>
<td><strong>$3,329,000</strong></td>
</tr>
</tbody>
</table>

### Grand Total EIRP Program Expenditures

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grand Total EIRP Program Expenditures</strong></td>
<td><strong>$80,017,598</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:

1. This report has been prepared using estimated figures. Actual results will vary. Estimated cost figures do not include cost of removal (COR).
## 2018 Gas Enhanced Infrastructure Replacement (EIRP) - Annual Planning Report

### Distributive Main Replacements

<table>
<thead>
<tr>
<th>Project ID</th>
<th>Project Name</th>
<th>Total Est Cost</th>
<th>Cast Iron</th>
<th>Welded Steel</th>
<th>Threaded &amp; Coupled</th>
<th>Wrought Iron</th>
<th>Bricks</th>
<th>Caper</th>
<th>Plastic</th>
<th>Total</th>
<th>Code</th>
<th>Construction Crew</th>
</tr>
</thead>
<tbody>
<tr>
<td>0926</td>
<td>Bellevue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ce</td>
</tr>
</tbody>
</table>

### Notes:

1. This report has been prepared using estimated figures. Actual results will vary. Estimated cost figures do not include Cost of Removal (COR).
2. Code 3 is an identification for a category of pipe and not an actual type of pipe. Code 3 pipe footage is included within the following pipe types: Coated & Wrapped, Bare Steel, Threaded & Coupled and Wrought Iron.
# 2018 Gas Enhanced Infrastructure Replacement (EIRP) - Annual Planning Report

Transmission & Storage Projects (T&S)

## Pre-1970 LFERW Pipe Replacements

<table>
<thead>
<tr>
<th>Project WBS</th>
<th>Headquarters</th>
<th>Project Location</th>
<th>Project Name</th>
<th>Total Est Cost</th>
<th>Type of Pipe Replaced</th>
<th>Length of Pipe Replaced</th>
<th>Construction Crew</th>
<th>Leaks 2, 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>GL-01321</td>
<td>Marion</td>
<td>Marion</td>
<td>MAR-Winterfield Lat 57N</td>
<td>$1,115,000</td>
<td>Pre-1970 LFERW Steel</td>
<td>3,000</td>
<td>TBD</td>
<td>0</td>
</tr>
<tr>
<td>GL-01320</td>
<td>Marion</td>
<td>Marion</td>
<td>MAR-Winterfield Lat 57S</td>
<td>$1,173,000</td>
<td>Pre-1970 LFERW Steel</td>
<td>4,386</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$2,288,000</strong></td>
<td></td>
<td><strong>7,386</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## 2017 Carryover Cost

| Est 2017 Project Carryover Cost | $22,000 |

## Survey/Engineering 2019

| Est. Survey, Material, Prepatory Costs | $100,000 |

| **Subtotal** | **$2,410,000** |

## Notes:

1. This report has been prepared using estimated figures. Actual results will vary. Estimated cost figures do not include COR.
2. Leaks remediated are defined as open or temporarily repaired leaks on retired pipe that were eliminated by this pipe replacement. It does not include historical, permanently repaired leaks.
3. Transmission pipe will not have open, deferred or temporarily repaired leaks because it operates above 20% SMYS. Any leaks would require immediate repair.
4. These storage lateral replacement projects represent the highest average lineal foot risk value based on threats identified in the CE Transmission Integrity Management Plan (TIMP) at the time of project selection.
## 2018 Gas Enhanced Infrastructure Replacement (EIRP) - Annual Planning Report

### Estimated Staffing and Overall % of Time

<table>
<thead>
<tr>
<th>Field Technicians:</th>
<th>Est. Number of Staff</th>
<th>EIRP</th>
<th>Vintage Services</th>
<th>Asset Relocation</th>
<th>Compliance Based</th>
<th>Augment</th>
<th>Non-modeled</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>575</td>
<td>40%</td>
<td>30%</td>
<td>14%</td>
<td>6%</td>
<td>4%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Field Leaders</td>
<td>65</td>
<td>40%</td>
<td>30%</td>
<td>14%</td>
<td>6%</td>
<td>4%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Sr Field Leaders</td>
<td>14</td>
<td>40%</td>
<td>30%</td>
<td>14%</td>
<td>6%</td>
<td>4%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Support Staff:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Managers</td>
<td>3</td>
<td>40%</td>
<td>30%</td>
<td>14%</td>
<td>6%</td>
<td>4%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Administrative Support</td>
<td>16</td>
<td>40%</td>
<td>30%</td>
<td>14%</td>
<td>6%</td>
<td>4%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Schedulers</td>
<td>4</td>
<td>40%</td>
<td>30%</td>
<td>14%</td>
<td>6%</td>
<td>4%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Technical Analyst</td>
<td>4</td>
<td>40%</td>
<td>30%</td>
<td>14%</td>
<td>6%</td>
<td>4%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Planner</td>
<td>1</td>
<td>40%</td>
<td>30%</td>
<td>14%</td>
<td>6%</td>
<td>4%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Program Manager</td>
<td>1</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Program Cost Analyst</td>
<td>1</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Program Manager Assistant</td>
<td>2</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

### Notes:

1. This report has been prepared using estimated figures. Actual results will vary.
2. These positions are full time employees. The majority of EIRP staff is a seasonal workforce.
## 2018 Gas Enhanced Infrastructure Replacement (EIRP) - Annual Planning Report

### Estimated Annual O&M AND LAUF Savings

<table>
<thead>
<tr>
<th></th>
<th>Est. Annual O&amp;M Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leak Survey:</strong></td>
<td>$200</td>
</tr>
<tr>
<td>Main</td>
<td>$0</td>
</tr>
<tr>
<td>Services</td>
<td>$200</td>
</tr>
<tr>
<td><strong>Leak Repair:</strong></td>
<td><strong>$59,000</strong></td>
</tr>
<tr>
<td>Main</td>
<td>$35,000</td>
</tr>
<tr>
<td>Services</td>
<td>$24,000</td>
</tr>
<tr>
<td><strong>Cathodic Protection:</strong></td>
<td><strong>$10,000</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$69,200</strong></td>
</tr>
</tbody>
</table>

| Lost & Unaccounted for Gas (LAUF) | $15,000 |

### Notes:

1. This report has been prepared using estimated figures. Actual results will vary.
2. Leak repair O&M savings is a one time savings from replacement of existing pipe and not recurring.
3. Cathodic protections savings will vary based on the projects completed in a given year.
4. Gas pipe leak rate estimated based on EPA's Gas STAR Program emission factors for leak rate conversion.
5. Estimate based on a gas cost of $3.213 per Mcf.
STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of
CONSUMERS ENERGY COMPANY
for authority to increase its rates for the
distribution of natural gas and for other relief
Case No. U-18124

PROOF OF SERVICE

STATE OF MICHIGAN )
) SS
COUNTY OF JACKSON )

Melissa K. Harris, being first duly sworn, deposes and says that she is employed in the Legal Department of Consumers Energy Company; that on December 28, 2017 she served an electronic copy of the Consumers Energy Company’s Gas Enhanced Infrastructure Replacement Program 2018 Planning Report upon the persons listed in Attachment 1 hereto, at the e-mail addresses listed therein. She further states that she also served a hard copy of the same document to the Hon. Suzanne D. Sonneborn, Administrative Law Judge, at the address listed in Attachment 1 by depositing the same in the United States mail in the City of Jackson, Michigan, with first-class postage thereon fully paid.

Digitally signed by
Melissa K. Harris
Date: 2017.12.28
12:47:36 -05'00'

Melissa K. Harris

Subscribed and sworn to before me this 28th day of December, 2017.

Digitally signed by
Tara L. Hilliard
Date: 2017.12.28
12:47:57 -05'00'

Tara L. Hilliard, Notary Public
State of Michigan, County of Jackson
My Commission Expires: 09/12/20
Acting in the County of Jackson
ATTACHMENT 1 TO CASE NO. U-18124

Administrative Law Judge
Hon. Suzanne D. Sonneborn, ALJ
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