

COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF PUBLIC UTILITIES

RESPONSE OF COLUMBIA GAS OF MASSACHUSETTS TO THE  
FIRST SET OF INFORMATION REQUESTS FROM THE D.P.U.  
PIPELINE ENGINEERING AND SAFETY DIVISION

D.P.U. 19-PL-07 – Merrimack Valley Incident (9/13/18)

Date: September 25, 2019

Responsible: Kathy Silver, Manager Operations Compliance

IR-PL-1-8: Please provide the following information regarding the South Union Street project:

- a) Scope of work performed;
- b) Timeline of the work including pipe installation, tie-ins, and abandonments;
- c) Documentation of information provided to crews regarding regulator station sensing lines and projected plans to relocate the lines;
- d) Detailed explanation of the meetings where CMA discussed the relocation of the sensing lines with the crews working on the project, including dates and personnel involved in the discussions;
- e) Names and titles of M&R personnel involved in discussion regarding the South Union Street Regulator Station sensing lines in 2016;
- f) Names and titles of M&R personnel involved in discussion regarding the South Union Street Regulator Station sensing lines in 2018;
- g) Detailed explanation of discussion with M&R about the regulator station and sensing lines;
- h) The recommendation that the M&R personnel had regarding the relocation of the South Union Street Regulator Station sensing lines, including the recommended relocation timeline;
- i) Detailed explanation of the installation of the new pipeline to the regulator station and the status of the existing main at the completion of the new installation. In your response, provide a sketch of the installation at the regulator station, including outlet piping;
- j) Sketch of the regulator station including sensing lines at the end of the 2016 project. Explain if this is the same sketch that was available to personnel at the beginning of the 2018 South Union Street project;
- k) Provide the entire work packet given to the crews during the 2016 project;
- l) Names, titles, employing company, and responsibilities for all personnel involved in the South Union Street project, including the following:
  - (i) Engineers;
  - (ii) Inspectors;
  - (iii) Contracting crew;
  - (iv) Any other personnel involved; and
- m) Operator qualification records for all personnel referred to in IR-PL 1-8(l).

Response:

**a) Scope of work performed;**

**Response (a):** A description of the scope of the South Union Street Project is available at Columbia Gas's Response to IR-PL-1-6(a).

**b) Timeline of the work including pipe installation, tie-ins, and abandonments;**

**Response (b):** A timeline of the work performed on the South Union Street Project to replace the cast-iron, low-pressure main on South Union Street is available at Columbia Gas's Response to IR-PL-1-6(b).

**c) Documentation of information provided to crews regarding regulator station sensing lines and projected plans to relocate the lines;**

**d) Detailed explanation of the meetings where CMA discussed the relocation of the sensing lines with the crews working on the project, including dates and personnel involved in the discussions;**

**Response (c)-(d):** Throughout the duration of the South Union Street Project, sensing line location information for the South Union @ Winthrop regulator station was readily available through multiple documentary and departmental resources in CMA's Lawrence Operations Center, including to the project Inspectors who supervised the work of the construction crews and other Construction personnel. The 2016 Inspector used this readily available documentation to determine the location of the South Union @ Winthrop regulator station sensing lines. The same resources were readily available in 2018, including to Construction personnel.

The 2016 Inspector notified the construction crew and foreman that the South Union @ Winthrop regulator station sensing lines were attached to the South Union cast-iron main, and they saw the sensing lines for themselves when they laid the new plastic main underneath them. During the 2016 construction phase, the construction crew, Construction Foreman, Construction Leader, Inspector, and Systems Operations Supervisor all knew that the sensing lines needed to be relocated from the cast-iron, low-pressure main before it was abandoned, and planned to do so. In addition to the 2016 Inspector's notification to the crew and foreman, the Inspector and Construction Leader discussed the need to relocate the sensing lines. In October 2016, the Construction Leader notified M&R that work in the area of the South Union @ Winthrop regulator station had started. At the same time, he notified M&R that the sensing lines would need to be relocated.

Additionally, there was regular interaction among Construction personnel, both formal and informal, about planned and ongoing capital projects. For example, during the relevant time period for the South Union Street Project, the Construction Leader had ongoing communications with Inspectors and conducted weekly job site visits. The Construction Leader also held weekly staff meetings with Inspectors to review the status of projects and to discuss them.

- e) **Names and titles of M&R personnel involved in discussion regarding the South Union Street Regulator Station sensing lines in 2016;**
- f) **Names and titles of M&R personnel involved in discussion regarding the South Union Street Regulator Station sensing lines in 2018;**
- g) **Detailed explanation of discussion with M&R about the regulator station and sensing lines;**
- h) **The recommendation that the M&R personnel had regarding the relocation of the South Union Street Regulator Station sensing lines, including the recommended relocation timeline;**

**Response (e)-(h):** Information regarding M&R's involvement in the South Union Street Project is available at Columbia Gas's Response to IR-PL-1-4. Information regarding the proposed relocation of the South Union @ Winthrop regulator station sensing lines will be provided in Columbia Gas's Response to IR-PL-1-9(c).

- i) **Detailed explanation of the installation of the new pipeline to the regulator station and the status of the existing main at the completion of the new installation. In your response, provide a sketch of the installation at the regulator station, including outlet piping;**

**Response (i):** The new plastic main on South Union Street was tied-in to the South Union @ Winthrop regulator station in October 2016. The executed tie-in plan for this work is attached at Attachment IR-PL-1-6(a) Pages 254-255. The existing cast-iron main remained tied-in to the South Union @ Winthrop regulator station. A GIS map showing the new plastic main and existing cast iron main tied into the regulator station as of the completion of that tie-in is attached at Attachment IR-PL-1-6(c) Page 4.

- j) **Sketch of the regulator station including sensing lines at the end of the 2016 project. Explain if this is the same sketch that was available to personnel at the beginning of the 2018 South Union Street project;**

**Response (j):** Drawings of the South Union @ Winthrop regulator station showing sensing line locations as of 2016 are attached at Attachment IR-PL-1-9(d) at Pages 3, 7. These drawings were readily available in 2018, including to Construction personnel.

- k) **Provide the entire work packet given to the crews during the 2016 project;**

**Response (k):** The work order packet for Job Order #15-0845564-00, Job Order #15-0845564-01, and Job Order #15-0845565-00, which corresponds to the 2016 work on South Union Street Project, is attached at Attachment IR-PL-1-6(a) Pages 37-774.

- l) Names, titles, employing company, and responsibilities for all personnel involved in the South Union Street project, including the following: (i) Engineers; (ii) Inspectors; (iii) Contracting crew; (iv) Any other personnel involved;**

**Response (l):** The personnel primarily involved in the South Union Street Project includes:

<b>Name</b>	<b>Title</b>	<b>Employing Company</b>	<b>Responsibilities</b>
	Field Engineer	Columbia Gas of Massachusetts	Attachment IR-PL-1-8(a); Attachment IR-PL-1-8(b)
	Leader of Field Engineering	Columbia Gas of Massachusetts	Attachment IR-PL-1-8(c)
	Construction Leader (2016-2018)	Columbia Gas of Massachusetts	Attachment IR-PL-1-8(d)
	Construction Leader (2018)	Columbia Gas of Massachusetts	Attachment IR-PL-1-8(d)
	Inspector (2016)	Premier Utility	Attachment IR-PL-1-8(e) <sup>1</sup>
	Inspector (2016)	Sargis Associates	Attachment IR-PL-1-8(e)
	Inspector (2018)	Columbia Gas of Massachusetts	Attachment IR-PL-1-8(e)
	Construction Foreman (2016)	Feeney Brothers	Attachment IR-PL-1-8(f)
	Construction Foreman (2018)	Feeney Brothers	Attachment IR-PL-1-8(f)

- m) Operator qualification records for all personnel referred to in IR-PL 1-8(l).**

**Response (m):** Operator qualification records for the personnel referred to in IR-PL-1-8(l) who are required to have operation qualifications are attached at Attachments IR-PL-1-8(g)-(m).

<sup>1</sup> Since this description was published, “Notifies governmental agencies, other utilities and customers of construction schedule” has ceased to be a part of the job description.