



# The Commonwealth of Massachusetts

## DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 17-GSEP-05

April 30, 2018

Petition of Bay State Gas Company d/b/a Columbia Gas of Massachusetts for Approval of its 2018 Gas System Enhancement Plan, pursuant to G.L. c. 164, § 145, for rates effective May 1, 2018.

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APPEARANCES: Shaela McNulty Collins, Esq.  
NiSource Corporate Services Company  
4 Technology Drive, Suite 250  
Westborough, Massachusetts 01581  
-and-  
Danielle C. Winter, Esq.  
Brendan Vaughn, Esq.  
Keegan Werlin LLP  
99 High Street, Suite 2900  
Boston, Massachusetts 02110  
FOR: BAY STATE GAS COMPANY  
Petitioner

Maura Healey, Attorney General  
Commonwealth of Massachusetts  
By: Joseph Dorfler  
Ashley Gagnon  
William H. Stevens, Jr.  
Assistant Attorneys General  
Office of Ratepayer Advocacy  
One Ashburton Place  
Boston, Massachusetts 02108  
Intervenor

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## I. INTRODUCTION

On October 31, 2017, Bay State Gas Company d/b/a Columbia Gas of Massachusetts (“Bay State” or “Company”), pursuant to G.L. c. 164, § 145 (“Section 145”), submitted to the Department of Public Utilities (“Department”) its 2018 gas system enhancement plan (“GSEP”) to replace aging or leaking natural gas pipeline infrastructure. In its initial filing, Bay State requested approval to collect \$26,839,882 through the gas system enhancement adjustment factors (“GSEAF”), for effect on May 1, 2018, to recover the cost to replace eligible leak-prone infrastructure through the end of calendar year 2018 (Exhs. CMA/RDG-1, at 8-9; CMA/RDG-2, Sch. 1). Bay State stated that its 2018 revenue requirement exceeded the 1.5 percent revenue cap set forth in Section 145 by \$3,079,967, but proposed an alternative calculation of the revenue cap that would enable the Company to recover the full revenue requirement without exceeding the cap (Exhs. CMA/RDG-1, at 27; CMA/RDG-2, Sch. 8). In the alternative, the Company sought a waiver of the 1.5 percent cap (Exh. CMA/RDG-1, at 27).

During the proceeding, the Company recalculated its revenue requirement to reflect the reduction of the corporate income tax rate from 35 percent to 21 percent on certain aspects of its filing, as provided in the Tax Cuts and Jobs Act of 2017 (“Tax Act”), and arrived at a revenue requirement of \$24,233,524, reflecting a decrease of \$2,606,358 related to the Tax Act (Exh. AG 2-1, Att., Sch. 1).<sup>1</sup> Without applying the Company’s proposed

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<sup>1</sup> On December 22, 2017, the Tax Act was signed into law. Pub. L. No. 115-97, 131 Stat. 2054: An Act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018.

alternative cap calculation, the revised revenue requirement would still exceed the 1.5 percent revenue cap by \$969,659 (see Exhs. DPU 1-7, Att.; AG 2-1, Att., Sch. 1). Based on the Company's revised proposed revenue requirement of \$24,233,524, and using the Company's alternative calculation method, Bay State proposes to implement the following GSEAF rates for each customer class (in dollars per therm): residential, \$0.0566; commercial and industrial ("C&I") – low annual use, \$0.0589; C&I – medium annual use, \$0.0376; C&I – high annual use, \$0.0329; C&I – extra high annual use, \$0.0241 (Exh. AG 2-1, Att., Sch. 1, at 32).

The general terms of the Company's GSEP and the formula for calculating its GSEAF are set forth in its local distribution adjustment clause ("LDAC") tariff, currently M.D.P.U. No. 284. The Department has docketed this matter as D.P.U. 17-GSEP-05.

On December 1, 2017, the Attorney General of the Commonwealth of Massachusetts ("Attorney General") filed a notice of intervention pursuant to G.L. c. 12, § 11E(a). On December 6, 2017, pursuant to notice duly issued, the Department held a public hearing and procedural conference. In support of its GSEP filing, the Company sponsored the testimony of: David E. Mueller, Bay State's manager of field engineering; and Ronald D. Gibbons, manager of regulatory strategy and support for NiSource Corporate Services Company, a Bay State affiliate. The Department held an evidentiary hearing on March 6, 2018. On March 23, 2018, the Attorney General and the Company submitted initial briefs. On

March 30, 2018, the Company submitted a reply brief.<sup>2</sup> The record consists of 64 exhibits and four responses to record requests.

## II. STATUTORY REQUIREMENTS

Section 145 permits gas distribution companies, in the interest of public safety and to reduce lost and unaccounted for natural gas, to submit to the Department an annual plan to repair or replace aging or leaking natural gas infrastructure.<sup>3</sup> Any plan filed with the Department shall include, but not be limited to: (i) eligible infrastructure replacement of mains, services, meter sets, and other ancillary facilities composed of non-cathodically protected steel,<sup>4</sup> cast iron,<sup>5</sup> and wrought iron,<sup>6</sup> prioritized to implement the federal gas

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<sup>2</sup> The Attorney General did not submit a reply brief.

<sup>3</sup> Section 145(a) defines eligible infrastructure replacement as: “a replacement or an improvement of existing infrastructure of a gas company that: (i) is made on or after January 1, 2015; (ii) is designed to improve public safety or infrastructure reliability; (iii) does not increase the revenue of a gas company by connecting an improvement for a principal purpose of serving new customers; (iv) reduces, or has the potential to reduce, lost and unaccounted for natural gas through a reduction in natural gas system leaks; and (v) is not included in the current rate base of the gas company as determined in the gas company’s most recent rate proceeding.”

<sup>4</sup> Cathodic protection is a technique to control the corrosion of a metal surface by making the structure work as a cathode of an electrochemical cell. NACE International Standard Practice, SP0169-2007.

<sup>5</sup> This category applies to gray cast iron that is a cast ferrous material in which a major part of the carbon content occurs as free carbon in the form of flakes interspersed through the metal. Because the carbon flakes do not bond with the ferrous material on the molecular level, the metal is brittle and susceptible to stress cracking under pressure situations. American Gas Association, Gas Piping Technology Committee.

<sup>6</sup> Together with cast iron, wrought iron pipelines are among the oldest energy pipeline constructed in the United States. The degrading nature of iron alloys, the age of the

distribution pipeline integrity management plan annually submitted to the Department, and consistent with 49 C.F.R. §§ 192.1001 through 192.1015; (ii) an anticipated timeline for the completion of each project; (iii) the estimated cost of each project; (iv) rate change requests; (v) a description of customer costs and benefits under the plan; and (vi) any other information the Department considers necessary to evaluate the plan. Section 145(c).

Annual changes in the revenue requirement eligible for recovery pursuant to the plan shall not exceed (i) 1.5 percent of the gas company's most recent calendar year total firm revenues, including gas revenues attributable to sales and transportation customers, or (ii) an amount determined by the Department that is greater than 1.5 percent of the gas company's most recent calendar year total firm revenues, including gas revenues attributable to sales and transportation customers. Section 145(f).<sup>7</sup>

The Department may modify a plan prior to approval at the request of a gas company, or make other modifications to a plan as a condition of approval. Section 145(d).<sup>8</sup> The Department is required to consider the costs and benefits of the plan including, but not limited to, impacts on ratepayers, reductions of lost and unaccounted for natural gas through

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pipeline, and pipe joints design have greatly increased the risk involved with continued use of such pipelines. [https://opsweb.phmsa.dot.gov/pipeline\\_replacement/](https://opsweb.phmsa.dot.gov/pipeline_replacement/)

<sup>7</sup> The GSEP revenue requirement includes depreciation expense, property taxes, and a return on investments associated with the plan. Section 145(e). Any revenue requirement approved by the Department in excess of such cap may be deferred for recovery in the following year. Section 145(f).

<sup>8</sup> If a gas company files a plan on or before October 31 for the subsequent construction year, the Department must review the plan within six months. Section 145(d). The plan is effective as of the date of filing, pending Department review. Section 145(d).

a reduction in natural gas system leaks, and improvements to public safety. Section 145(d).

The Department also is required to give priority to plans narrowly tailored to addressing leak-prone infrastructure most immediately in need of replacement. Section 145(d).

If a plan complies with Section 145, and the Department determines that it reasonably accelerates eligible infrastructure replacement and provides benefits to customers, the Department must preliminarily accept the plan either in whole or in part. Section 145(e). The gas distribution company may begin recovering the estimated GSEP revenue requirement beginning on May 1 of the year following submission of the plan. Section 145(e). Subsequently, on or before May 1 of each year, the gas distribution company must file final project documentation for construction completed the previous calendar year to demonstrate substantial compliance with the plan and to demonstrate that the costs were reasonably and prudently incurred. Section 145(f).

### III. GAS SYSTEM ENHANCEMENT PLAN

#### A. Introduction

Bay State distributes natural gas to approximately 314,000 customers in the Brockton, Springfield, and Lawrence operating areas (Exh. CMA/DEM-2, at 7). The Company owns and operates approximately 4,971 miles of distribution mains and 268,547 services (Exh. CMA/DEM-2, at 8, Table II-1). The Company states that as of December 31, 2016, approximately 5.2 percent (260 miles) of Bay State's distribution system mains are composed of non-cathodically protected steel, and approximately 10.1 percent (501 miles) are composed of cast iron or wrought iron, which means that slightly less than one-sixth (15.3 percent) of

the distribution mains are composed of relatively higher risk materials (Exh. CMA/DEM-2, at 8, Table II-1). In addition, approximately 14.8 percent of the services existing on the Company's distribution system are composed of non-cathodically protected steel (Exh. CAM/DEM-2, at 8, Table II-1).

Bay State's GSEP established a program to replace eligible aging infrastructure over a 20-year period, with an anticipated average annual replacement rate of 50.89 miles per year over the years 2015 through 2033. Bay State Gas Company, D.P.U. 14-134, at 10, 33 (2015). During 2017, Bay State proposed to replace approximately 52 miles of leak-prone mains and 3,895 leak-prone services (Exh. AG 1-6, Att.). The Company states that at the time of its GSEP filing, the 2017 construction season was not yet complete, but that Bay State was on track to meet this goal (Exh. CMA/DEM-2, at 5). In 2018, Bay State anticipates replacing approximately 55 to 59 miles of leak-prone mains and 4,180 leak-prone services (Exh. CMA/DEM-1, at 4).

The Attorney General raised issues regarding flow back of excess deferred income taxes, costs associated with the repair of environmentally significant Grade 3 ("G3SEI") leaks, the Company's alternative calculation of the 1.5 percent cap, and certain of the Company's proposed tariff revisions. We turn now to address the Attorney General's issues.

## B. Revenue Requirement Calculation

### 1. Introduction

In its initial filing, Bay State presented its 2018 estimated GSEP revenue requirement and its proposed GSEAFs. The Company proposed a 2018 estimated GSEP revenue



requirement of \$26,839,882 (Exh. CMA/RDG-2, Sch. 1). During the proceeding, Bay State reduced its proposal based on the reduction in the federal corporate income tax rate relating to the Tax Act. Under its revised proposal, the Company proposes a 2018 estimated GSEP revenue requirement of \$24,233,524 (Exh. AG 2-1, Att., Sch. 1). As outlined below, the Attorney General raises concerns regarding the Company's revenue requirement calculation as it relates to the newly enacted Tax Act.

2. Positions of the Parties

a. Attorney General

The Attorney General maintains that Bay State's 2018 estimated GSEP revenue requirement fails to consider all of the reductions associated with the Tax Act (Attorney General Brief at 2). The Attorney General recognizes that the Company proposes to decrease its revenue requirement to reflect the effects of the lower federal corporate income tax rate on the level of current normalized income taxes (Attorney General Brief at 2, citing Exh. AG 2-1; Tr. at 8). Nonetheless, the Attorney General asserts that the Company's proposal fails to reflect the required flow back of the balances of excess deferred federal income taxes that were created by the Tax Act (Attorney General Brief at 3, citing Exhs. AG 2-1; AG 2-4). The Attorney General calculates that the Company's revenue requirement should be reduced by \$470,445 (Attorney General Brief at 3, citing Exh. AG 2-4). The Attorney General maintains that there is no harm in requiring the Company to reduce its revenue requirement based on the estimated amount because the GSEP

revenue requirement and its various components are themselves estimates (Attorney General Brief at 3-4).

b. Company

The Company states that it has incorporated the lower federal income tax rate into its revenue requirement, but maintains that the Department should not require any further adjustment to the Company's proposed revenue requirement based on the Tax Act (Company Brief at 13 n.7, citing Exh. AG 2-1, Att.; Tr. 1, at 8; Company Reply Brief at 4 & n.3). The Company argues that the Department has previously rejected a similar argument that the Attorney General made in another proceeding, based in part on the recognition that the Tax Act makes significant revisions to the Internal Revenue Code affecting corporate taxes, and that the calculation of the excess deferred income tax is a complex and time-consuming effort (Company Reply Brief at 4, citing NSTAR Electric Company/Western Massachusetts Electric Company, D.P.U. 17-05-C, at 5-7, 13-14 (2018)). According to the Company, the Department opened Investigation into Effect of Reduction in Federal Income Tax Rates, D.P.U. 18-15 to facilitate thorough investigation into the impact of the Tax Act, including the effect of the income tax rate decrease on reconciling mechanisms (Company Reply Brief at 4-5, citing D.P.U. 18-15, at 5, 6). Moreover, the Company notes that it will also be addressing the impact of the Tax Act, including the flowback of excess deferred income tax, in its currently pending base rate proceeding before the Department (Company Reply Brief at 5, citing RR-AG-1). Thus, the Company argues that the Department should reject the Attorney General's recommendation (Company Reply Brief at 6).

### 3. Analysis and Findings

Effective January 1, 2018, the Tax Act reduced the federal corporate income tax rate from 35 percent to 21 percent. D.P.U. 18-15, at 1. Because the federal corporate income tax rate is implicated in numerous factors that comprise regulated companies' costs of service and revenues, the Department determined that the reduction in the federal corporate income tax rate has implications for the investor-owned electric distribution, natural gas distribution, and water companies under the Department's jurisdiction. D.P.U. 18-15, at 1, 4-6. To ensure that ratepayers receive the benefits from the decrease in the federal corporate income tax rate, the Department opened an investigation into the effect of the decrease in the federal corporate income tax rate on the rates charged by the Department's regulated utilities. D.P.U. 18-15, Order Opening Investigation (February 2, 2018).

In this proceeding, Bay State has proposed to reduce its revenue requirement based on a straight calculation of the change to the corporate income tax rate from 35 percent to 21 percent (Exh. AG 2-1, Att.). The Department has reviewed the Company's calculations and supporting documentation with respect to the revised normalized level of federal corporate income taxes, and we find that Bay State's proposed adjustment is appropriate (Exh. AG 2-1, Att.). With respect to the Attorney General's request to require the Company to implement further adjustments related to excess deferred income tax, we find that it is premature for the Company to make such changes in the GSEP at this time. To the extent feasible, the Department intends to resolve all remaining issues related to the Tax Act in D.P.U. 18-15. See D.P.U. 18-15, at 4-7. While the reduction of the federal corporate

income tax rate from 35 percent to 21 percent is a straightforward calculation, the excess deferred income tax requires more complex calculations. Additionally, the Tax Act itself is lengthy and complex.<sup>9</sup> The Department must strike an appropriate balance between allowing a reasonable amount of time to review the Tax Act and implementing any changes imposed by the Tax Act. Thus, for any remaining issues relating to the Tax Act, we will rely on the ongoing proceeding in D.P.U. 18-15 (as well as the Company's pending base rate proceeding) where the Department will determine the impact of the Tax Act on various aspects of a company's revenue requirement. On conclusion of D.P.U. 18-15, the Department will reconcile any impact of the Tax Act in the following GSEP or GSEP reconciliation ("GREC") proceeding. To ensure that there is no harm to ratepayers, the Department expects that any impact of the Tax Act will be retroactive to January 1, 2018, i.e., the effective date of the Tax Act.

C. Remediation of G3SEI Leaks

1. Introduction

The Company estimates that it will repair 150 G3SEI leaks under its 2018 GSEP, and has developed a budget of \$496,050 associated with the repair of these leaks (Exhs. CMA/DEM-1, at 7; CMA/RDG-2, Schedule-1; Tr. at 57). Bay State states that this estimate represents the number of G3SEI leak repairs that the Company expected to make in 2017 (as of the 2018 GSEP filing) at the average repair cost of \$3,307 per leak

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<sup>9</sup> The Tax Act makes significant revisions to the Internal Revenue Code affecting individual, estate, and corporate taxes. Together with the Joint Explanatory Statement of the Committee of Conference, the Tax Act is 1,097 pages.

(Exh. CMA/DEM-1, at 7-8). The Company notes that the local distribution companies (“LDCs”) have been actively involved in the Department’s current rulemaking, Gas Leak Regulations, D.P.U. 16-31-B,<sup>10</sup> which includes proposed regulations regarding the identification and repair of G3SEI leaks, but that there is a need to begin addressing the G3SEI leaks in the GSEPs pending final resolution of the rulemaking (Exh. CMA/DEM-1, at 7). The Company also proposes an addition to the GSEP provisions of the LDAC tariff to allow for the recovery of G3SEI leaks (Exhs. CMA/RDG-1, at 38-39; CMA/RDG-5, § 8.8, App. A). The Company states that once the final regulations have been promulgated, it will survey its Grade 3 leak inventory to determine which leaks should be classified as G3SEI leaks, and will thereafter refine its estimate (Exh. CMA/DEM-1, at 8).

## 2. Positions of the Parties

### a. Attorney General

The Attorney General argues that the Department has not yet issued an order in D.P.U. 16-31 outlining the parameters of the G3SEI leak identification/repair program and how it will be executed (Attorney General Brief at 9). The Attorney General contends that it is premature for the Company to seek and recover money for a program that has not yet been approved (Attorney General Brief at 9). While the Attorney General supports the

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<sup>10</sup> Pursuant to St. 2014, c. 149, § 2, An Act Relative to Natural Gas Leaks, the Department commenced the D.P.U. 16-31 rulemaking to promulgate regulations necessary to implement uniform natural gas leak classifications and to oversee and monitor gas companies’ response and reporting. Subsequently, the Department added proposed regulations to address the identification and repair of G3SEI leaks, pursuant to St. 2016, c. 188, § 13, An Act to Promote Energy Diversity.

implementation of a program to address G3SEI leaks, she asserts that the Department should not approve the expenditure of funds for work that is undefined and uncertain until regulations are in place (Attorney General Brief at 9).

The Attorney General further states that Bay State's proposed changes to the tariff to allow for the recovery of G3SEI leaks are also premature (Attorney General Brief at 10). The Attorney General asserts that if the Department approves the changes to the tariff, the Department should modify the language regarding G3SEI leak remediation to ensure that the Company recovers only its incremental G3SEI remediation costs pursuant to appropriate ratemaking treatment (Attorney General Brief at 10). In addition, the Attorney General proposes that the tariff be modified to require the Company to: (1) incorporate specific G3SEI leak identification procedures into the Company's operation and maintenance ("O&M") procedural manuals; and (2) incorporate the data derived from the G3SEI identification procedures into the Company's Distribution Integrity Management Plan ("DIMP") (Attorney General Brief at 11-13).

b. Company

Bay State contends that the Department should disregard the Attorney General's arguments to exclude the estimated G3SEI leak repair costs from the 2018 GSEP (Company Reply Brief at 15). The Company asserts that the Attorney General's argument frustrates the intent of the Energy Diversity Act, St. 2016, c. 188, which is to accelerate the elimination of emissions (Company Reply Brief at 15-16). Moreover, according to the Company, the Attorney General's claim that the regulatory treatment of G3SEI leaks is too uncertain to

include in the 2018 GSEP is incorrect (Company Reply Brief at 16). The Company argues that although the regulations regarding the remediation of G3SEI leaks are not yet final, a certain subset of the Company's Grade 3 leaks will ultimately be classified as environmentally significant and subject to accelerated repair (Company Reply Brief at 16). Thus, the Company states, it has included a very conservative estimate of the number of G3SEI leaks that will be classified pursuant to the final regulations, and following issuance of the final regulations, it will refine its estimate (Company Reply Brief at 16, citing Exh. CMA/DEM-1, at 8). The Company asserts that a failure to authorize the inclusion of G3SEI leaks in the 2018 GSEP will result in additional delays in repairing and eliminating the emissions from these leaks (Company Reply Brief at 16). Moreover, the Company maintains that the Department will analyze and address the actual costs to repair G3SEI leaks in the 2018 GSEP reconciliations ("GRECs"), to be filed May 1, 2019 (Company Reply Brief at 16, 17).

Further, Bay State asserts that a careful review of the proposed Appendix A to the tariff (regarding G3SEI leak repair) shows that it clearly sets out the manner of cost recovery associated with the remediation of G3SEI leaks, consistent with the provisions of the Energy Diversity Act, and ensures that any costs related to the remediation of G3SEI leaks are incremental (Company Reply Brief at 17-18, citing Exh. CMA/RDG-5, at 12). The Company asserts that, along with other LDCs, it has drafted tariff language regarding the evidentiary documentation required: (1) to demonstrate that G3SEI leak repair costs are reasonably and prudently incurred; (b) to identify whether the costs associated with each

reported G3SEI leak are related to repair or replacement of Existing Infrastructure, as defined in § 8.2(6) of M.D.P.U. No. 284; and (c) to identify whether the capital cost is included in the GSEP revenue requirement subject to the revenue cap or included in eligible G3SEI O&M costs recoverable outside of the revenue cap (Company Reply Brief at 18, citing Exh. CMA/RDG-5, at 12-13).

The Company further states that it has already committed to incorporating G3SEI leak identification and remediation procedure into its O&M manual and, if appropriate, into its DIMP, once the final regulations in D.P.U. 16-31 are promulgated (Company Reply Brief at 19-20, citing Exh. AG-1-33; Tr. at 18-25; D.P.U. 16-31-B, Attachment 4, at 6-7 (September 14, 2017)).

### 3. Analysis and Findings

As noted above, Bay State estimates that it will repair 150 G3SEI leaks under its 2018 GSEP and has developed a budget of \$496,050 associated with the repairs of these leaks (Exh. CMA/DEM-1, at 7). Nevertheless, where the Department has not yet issued final regulations in the D.P.U. 16-31 rulemaking regarding the methods for identifying and remediating G3SEI leaks, it is premature for the Company to seek recovery for the costs of repairing G3SEI leaks. For the same reason, it is premature for the Department to approve any changes to the Company's tariff regarding the G3SEI leaks or to require the Company to amend its O&M manual or its DIMP pending the approval of final regulations in D.P.U. 16-31. Accordingly, the Department disallows the Company's request to include the estimated revenue requirement related to G3SEI leaks of \$496,050 in the Company's GSEP



revenue requirement, and disallows the proposed revisions to the LDAF tariff related to G3SEI leak repair.<sup>11</sup> After the regulations are finalized in D.P.U. 16-31, the Department will then address the proper ratemaking treatment and other tariff modifications related to G3SEI leaks.

D. GSEP Revenue Cap

1. Introduction

Section 145(f) provides, in part, that “[a]nnual changes in the revenue requirement eligible for recovery shall not exceed (i) 1.5 percent of the gas company’s most recent calendar year total firm revenues, including gas revenues attributable to sales and transportation customers.”<sup>12</sup> Bay State’s total firm revenues for calendar year 2016 were \$406,460,119, yielding a cap of \$6,096,902 on the incremental GSEP revenue requirement eligible for recovery (Exh. DPU 1-7, Att.). Bay State’s revised 2018 estimated GSEP revenue requirement of \$23,737,474 (after removing the costs related to G3SEI leaks), less the 2017 GSEP revenue requirement of \$17,166,963, represents an incremental revenue requirement increase of \$6,570,511 (Exh. AG 2-1, Att. at 2). Consequently, Bay State’s proposed 2018 GSEP revenue requirement exceeds its calculated revenue cap by \$473,609 (Exhs. DPU 1-7; AG 2-1, Att., Sch. 1).<sup>13</sup>

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<sup>11</sup> For the purpose of calculating the GSEAFs approved in this Order, the Department has excluded the estimated costs related to the repair of G3SEI leaks.

<sup>12</sup> Sales customers receive gas supply and delivery services from an LDC. Transportation customers receive only delivery services from an LDC.

<sup>13</sup> \$6,570,511 - \$6,096,902 = \$473,609

Instead of requesting a waiver of the cap, Bay State proposes to use an alternative method for calculating the calendar year revenues which involves normalizing sales to eliminate the effect of weather and using the weighted average cost of gas from 2014, which is the year that the GSEP legislation took effect (Exh. CMA/RDG-1, at 28). Applying this alternative calculation method, Bay State's total firm revenues for calendar year 2016 would be \$714,172,026, yielding a cap of \$10,712,580 on the incremental GSEP revenue requirement eligible for recovery (Exhs. CMA/RDG-2, Sch. 1; AG 2-1, at 2). Thus, under the alternative calculation method, the Company's total incremental revenue requirement would be \$6,570,511, which does not exceed the \$10,712,580 cap (Exh. AG 2-1, Att. at 2). In the alternative, if the Department does not approve the Company's alternative calculation method, the Company requests that the Department grant a waiver of the revenue cap to allow Bay State to include the full proposed 2018 estimated GSEP revenue requirement of \$23,737,474 in its GSEAFs effective May 1, 2018 (Exh. CMA/RDG-1, at 27, 32).

2. Positions of the Parties

a. Attorney General

The Attorney General opposes the Company's alternative calculation method and argues that the Department should deny Bay State's request to waive the 1.5 percent cap (Attorney General Brief at 5-9). The Attorney General first asserts that the Company's alternative calculation method violates the express language of Section 145(f), which requires that annual changes in the GSEP revenue requirement not exceed 1.5 percent of the gas company's most recent calendar year total firm revenues (Attorney General Brief at 6). She

states that the Legislature made the fundamental policy decision to establish the cap that shall not exceed 1.5 percent, and expressly related the cap to a company's most recent calendar year total firm revenues (Attorney General Brief at 6, citing Section 145(f); Kain v. Department of Environmental Protection, 474 Mass. 292 (2016)). The Attorney General contends that the Company cannot request the Department to second-guess the Legislature's clearly articulated decision because an agency has no inherent authority beyond its enabling act and, therefore, may do nothing that contradicts such legislation (Attorney General Brief at 6, citing Kain, 474 Mass. at 293; Wakefield Teachers Ass'n v. School Comm. of Wakefield, 431 Mass. 792, 802 (2000); ENGIE Gas and LNG LLC v. Department of Public Utilities, 475 Mass 191, 205 (2016)). The Attorney General argues that because the Company's proposal is inconsistent with a clear and unambiguous directive from Section 145, the Department should reject it (Attorney General Brief at 7). According to the Attorney General, the Company's alternative calculation method is not based on most recent calendar year total firm revenues as set forth in Section 145 but, rather, on revenues that occurred during the year of the enactment of Section 145 (Attorney General Brief at 7, citing Exhs. CMA/RDG-1, at 28–29; CMA/RDG-2, Sch. 1). Accordingly, the Attorney General asserts that the Department should not adopt the Company's alternative method for calculating the 1.5 percent cap (Attorney General Brief at 7).

Next, the Attorney General argues that the Department should deny Bay State's alternative request to waive the 1.5 percent cap (Attorney General Brief at 9). The Attorney General asserts that the Company could keep its annual increase in the GSEP charge to a

level under the cap by replacing GSEP-eligible infrastructure at a rate of about 42 miles of main and 2,200 services per annum, while still meeting the 20-year timeline (Attorney General Brief at 4).

In the alternative, the Attorney General notes the Legislature's intent in creating Section 145 and argues that a cap is necessary to reach a balance between capital funding and ratepayer protection (Attorney General Brief at 7-8). She adds that the cap does not impose any limit on the level of capital investment that the Company can undertake in any given year (Attorney General Brief at 8, citing D.P.U. 14-134, at 103; New England Gas Company, D.P.U. 10-114, at 66 (2011)). In addition, the Attorney General notes that the Legislature authorized the Department to defer any revenue requirement above the cap, as well as to extend the 20-year GSEP timeline should the Company exceed the cap (Attorney General Brief at 8). Accordingly, the Attorney General requests that the Department deny Bay State's request for a waiver of the 1.5 percent cap and instead either defer the excess or direct the Company to file a new timeline (Attorney General Brief at 9).

b. Company

Bay State disagrees with the Attorney General's arguments regarding its alternative calculation method, and suggests that the language of Section 145 is less prescriptive, and more amenable to interpretation by the Department, than the Attorney General's argument would imply (Company Reply Brief at 9). The Company states the 1.5 percent cap is clearly not limited to revenues "received" by the Company during a given calendar year, but instead, Section 145(f) expressly includes "gas revenues attributable to . . . transportation

customers” without defining those gas revenues (Company Reply Brief at 10). Bay State asserts that because transportation customers purchase their gas supplies directly from third-party suppliers, the costs of those supplies is not necessarily disclosed to the Company or the Department, and thus, the Department had to interpret the language of Section 145 to determine how the LDCs should make the necessary calculation (Company Reply Brief at 10). The Company states that the Department ultimately decided that each LDC’s gas adjustment factor (“GAF”) should be imputed to transportation customers to calculate the gas revenues attributable to them, even though transportation customers do not actually pay the GAF (Company Reply Brief at 10, citing D.P.U. 14-134, at 102-103).

Similarly, Bay State contends that Section 145 does not define an LDC’s “most recent year total firm revenues,” which affords the Department some degree of discretion in interpreting and applying the language (Company Reply Brief at 10). The Company asserts that the intent of the Legislature in enacting Section 145 was to facilitate the accelerated replacement of leak-prone pipeline infrastructure, and that the Company’s alternative calculation method furthers that objective and simply makes common sense (Company Reply Brief at 10). Bay State contends that its alternative calculation method, using the 2014 average gas cost rate to address the volatility inherent in gas revenues, is consistent with Section 145(f) because it enables the Company to remain under the 1.5 percent cap without impinging on Bay State’s ability to accelerate the replacement of leak-prone infrastructure (Company Reply Brief at 11, citing Exh. CMA/RDG-1, at 27-31). In the alternative, should the Department decline the alternative calculation method, the Company

requests that the Department approve a cap greater than 1.5 percent pursuant to Section 145(f)(ii), or allow the Company's request for a waiver of the cap (Company Brief at 26; Company Reply Brief at 11, 13-15).

Bay State also claims that there are multiple flaws in the Attorney General's assertion that the Company should manage its rate of replacement to avoid going over the cap (Company Reply Brief at 6-8). Specifically, Bay State contends that the Attorney General's suggestion is contrary to the mandates of Section 145 regarding the acceleration of the removal of leak-prone pipe (Company Reply Brief at 6, 7-9). Further, Bay State argues that decelerating GSEP replacement activities will prevent the Company from complying with Massachusetts Department of Environmental Protection ("MADEP") regulations designed to reduce methane emissions (Company Reply Brief at 8). Bay State claims that the emissions limits developed in conjunction with MADEP are based on figures presented in Bay State Gas Company, D.P.U. 16-GSEP-05 (2017), and decelerating replacement activities could result in administrative penalties (Company Reply Brief at 8-9, citing 310 CMR 7.73).

### 3. Analysis and Findings

Section 145(f) sets a 1.5 percent cap on the annual change in the revenue requirement eligible for recovery. Section 145(f) also provides that the Department may determine an annual change in the revenue requirement eligible for recovery greater than the 1.5 percent cap. In the instant proceeding, Bay State proposes an alternative cap calculation method, pricing gas costs at the 2014 rate, the year that Section 145 was enacted, so that the Company's annual change in the revenue requirement does not exceed the cap

(Exhs. CMA/RDG-1, at 28-29; CMA/RDG-2, Sch. 1). The express language of Section 145(f) states that annual changes in the GSEP revenue requirement shall not exceed 1.5 percent of the gas company's "most recent calendar year total firm revenues." The Company's proposal is inconsistent with the Legislative directives because it is based not on the most recent calendar year total firm revenues, but rather on sales of the most recent calendar year priced at the weighted average cost of gas from 2014. Accordingly, the Department rejects the Company's proposed cap calculation method.

In the alternative, the Company requests that the Department waive the 1.5 percent cap and allow Bay State to recover \$473,609 above its allowed incremental revenue requirement increase of \$6,096,902 (Exhs. CMA/RDG-1, at 27; DPU 1-7, Att.). Although the purpose of Section 145 is to accelerate the replacement of leak-prone infrastructure as well as accelerate the recovery of associated costs for gas distribution companies, the 1.5 percent cap acts as a balance on potential bill impacts upon ratepayers. Therefore, to the extent exogenous constraints allow, the Department expects the Companies to manage their accelerated replacement in a manner that results in a revenue requirement under the 1.5 percent cap and completes replacement within established timelines. The Department acknowledges that Bay State has now submitted four years of GSEP cost estimates. The Department notes, however, that the GSEP process is still relatively new and revenue requirement estimates have not fully established a reliable history. The Company's 2018 GSEP revenue requirements represent estimated costs that will not be finalized until the Companies' GREC proceeding beginning May 1, 2019. Accordingly, the Department

remains concerned about the limited data available to support the correlation between a particular year's estimated GSEP revenue requirement and the corresponding actual GSEP revenue requirement. The Department will continue to monitor this relationship as more data continues to accumulate, and may revisit this issue in future filings if facts and circumstances so warrant.

Further, the Department has opened a general proceeding into the potential effect of the Tax Act on the Company's rates. D.P.U. 18-15. As determined in Section III.B.3, above, the Department allows the Company's proposed adjustment based on certain changes in the Tax Act. Nonetheless, the Tax Act could have an additional impact on Bay State's CY 2018 revenue requirement. The Department concludes that additional Tax Act adjustments, such as those related to excess deferred income taxes, may bring the Company below its estimates by the time of reconciliation. Therefore, the Department is not convinced that current projections accurately represent a need for a cap waiver.

Finally, the Department notes that next year marks the first five-year review of the Company's GSEP program, at which time the Company will file a summary of its completed work and an updated summary of work to be completed in the next five years. At the time of that filing, the Company will have had four years of experience in refining estimated costs. Additionally, we anticipate that any further adjustments that stem from the Tax Act will likely be resolved. The Department recognizes that this juncture may be an appropriate time to evaluate the performance of the GSEP so far, identify any persistent exogenous



constraints the Company expect to face going forward, and address how best to manage issues regarding the revenue requirement cap and overall replacement timeline.

For the reasons stated above, the Department denies the Company's request for a waiver from the 1.5 percent revenue cap. Therefore, the Department directs Bay State to limit incremental GSEP revenue requirement increases to 1.5 percent of its most recent calendar year total firm revenues, including gas revenues attributable to sales and transportation customers, using the traditional cap calculation method.

E. Conclusion on 2018 GSEP

Based on the Department's review of the record in this proceeding, and to the extent not otherwise addressed above, we find that the Company's 2018 GSEP complies with the requirements set forth in Section 145. Accordingly, the Department approves, except as noted above, Bay State's 2018 GSEP, for effect May 1, 2018. Based on the foregoing, the Department allows Bay State a revenue requirement of \$23,263,865, which comprises the Company's proposed revenue requirement of \$24,233,524 less the estimated G3SEI leak costs of \$496,050 and the cap overage of \$473,609. Based on the allowed revenue requirement of \$23,263,865, the allowed GSEAFs rates for each customer class (in dollars per therm) would be as follows: residential, \$0.0543; C&I – low annual use, \$0.0565; C&I – medium annual use, \$0.0361; C&I – high annual use, \$0.0316; C&I – extra high annual use, \$0.0232.

F. Proposed Tariff Changes

1. Introduction

The Company proposes several edits to the GSEP provisions of its LDAC tariff (Exh. CMA/RGD-5).<sup>14</sup> First, Bay State proposes to revise the definition of GSEP-eligible existing infrastructure to include the replacement of sections of plastic and cathodically protected steel main, known as incidental pipe (Exh. CMA/RDG-5, § 8.2(6)). Bay State Gas Company, D.P.U. 17-GREC-05, at 14-15 (2017). Second, the Company proposes a revision to allow for the replacement of copper services as a part of its GSEP (Exh. CMA/RDG-5, §§ 8.2(6), 8.7(1)). Third, Bay State proposes alterations to its calculations of the GSEP revenue requirement, rate base, depreciation, gross plant, and accumulated deferred income taxes so that these amounts are estimated by month rather than by year (Exh. CMA/RDG-5, §§ 8.2(15), 8.3). Fourth, Bay State proposes edits to separate the GREC filing from the Company's local distribution adjustment factor ("LDAF") filing to recognize that the GREC filing is due annually on or before May 1<sup>st</sup>, while the LDAF filing is due annually 90 days prior to November 1<sup>st</sup> (Exh. CMA/RDG-5, §§ 8.2(10), 8.7(3)). Fifth, the Company proposes a revision to the overhead and burden adjustment (Exh. CMA/RDG-5, § 8.5). Finally, Bay State proposes a revision to the calculation of the GSEP revenue cap (Exh. CMA/RDG-5, § 8.4).

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<sup>14</sup> As noted in Section III.C.3, above, the Department has disallowed revisions to the Company's tariff relating to the G3SEI leak remediation.

2. Positions of the Parties

a. Attorney General

The Attorney General argues that this proceeding is not the appropriate forum in which to establish the Company's proposed tariff change regarding the classification and cost recovery of "incidental pipe" (Attorney General Brief at 13). Rather, the Attorney General argues that the Department should reject the proposed revision because it would circumvent the Department's directive to the Company to propose a strategy related to incidental pipe in its May 1, 2018 GREC filing (Attorney General Brief at 14, 15). The Attorney General asserts that although the Department has recognized that the replacement of "incidental pipe" may be necessary for cost-effectiveness reasons, the Department has found that incidental pipe is not GSEP-eligible infrastructure (Attorney General Brief at 14, citing Liberty Utilities (New England Natural Gas Company), D.P.U. 17-GREC-04, at 10 (2017)).

Additionally, if the Department considers the proposed change to the definition of "Existing Infrastructure" in the instant proceeding, the Attorney General contends that the Department should reject it because it is incorrect and contrary to Section 145 (Attorney General Brief at 14-15). According to the Attorney General, the Company's proposed definition of "Existing Infrastructure" would constitute an improper expansion of Section 145 (Attorney General Brief at 15, citing ENGIE Gas & LNG LLC v. Department of Public Utilities, 475 Mass. 191, 205 (2016)). The Attorney General did not address the other proposed tariff revisions on brief.

b. Company

The Company first argues that the Department views the GSEP as the proper forum in which to address proposed changes to the tariff (Company Reply Brief at 22, citing Bay State Gas Company, D.P.U. 16-GREC-05, at 25 n.21 (2016); D.P.U. 17-GREC-05, at 32-33).

The Company further claims that the Department has recognized that “incidental pipe” replacement or retirement may be a necessary component of a GSEP project, to render it operational or more cost-effective, and thus the Department sought more information on how the Company determines whether to replace or retire incidental pipe (Company Reply Brief at 23, 24, citing D.P.U. 17-GREC-05, at 13-15). Further, the Company argues that the proposed revisions are not contrary to the Department’s findings in D.P.U. 17-GREC-05 or to Section 145, nor do they enable the Company to include the replacement or retirement of plastic or cathodically protected steel under the GSEP as leak-prone infrastructure or excuse the Company from providing the necessary documentation to justify its decisions (Company Reply Brief at 22-24). Thus, the Company contends that the Attorney General’s arguments on this point are without merit, and that the Department should approve the proposed tariff changes as consistent with the Department’s directives and Section 145 (Company Reply Brief at 25).

The Company maintains that its remaining tariff changes were made to incorporate operational realities associated with GSEP projects into the GSEP construction (Company Brief at 18). Bay State asserts that it appropriately revised its tariff to include copper as leak-prone material (Company Brief at 18). The Company states that while copper is not as

susceptible to corrosion as steel, copper services typically contain steel valves and pipe segments that act as sacrificial anodes protecting the copper from corroding (Company Brief at 18, citing Exh. CMA/RDG-5, at 2, 11). The Company argues that, as a consequence, these steel valves and pipe segments experience accelerated rates of corrosion and, therefore, leaks (Company Brief at 18). Accordingly, the Company argues that copper should be considered leak-prone material eligible for inclusion in the GSEP (Company Brief at 18-19).

Bay State also asserts that its proposed tariff revisions relating to the use of a monthly average rate base and the overhead and burdens test are appropriate and consistent with tariff language used by the other LDCs, as well as the Department's directives in D.P.U. 16-GSEP-05 (Company Brief at 22-23). Based on the foregoing, the Company asserts that the Department should allow its requested revisions to the tariff (Company Brief at 2, 18-23).

### 3. Analysis and Findings

In D.P.U. 17-GREC-05, at 15, the Department directed the Company to propose a strategy for the treatment of incidental pipe in its May 1, 2018 GREC filing. Rather than proposing a specific procedure for including and, where applicable, excluding costs associated with incidental pipe in its May 1, 2018 GREC filing, the Company has proposed in this proceeding to change the definition of "Existing Infrastructure" to allow recovery of costs associated with the replacement of incidental pipe (Exh. CMA/RDG-5, § 8.2(6)). At this time, in the absence of a specific proposal for the treatment of incidental pipe, the Department finds that approval of the Company's proposed tariff change is premature.

Therefore, the Department denies the Company's proposed revision to the definition of "Existing Infrastructure" in its tariff. Moreover, where the Company's proposed definition would depart from the statutory definition of eligible infrastructure contained in Section 145, the Department would be disinclined to accept the proposed change. Rather, following consideration of a specific procedure for the treatment of incidental pipe, the Department would expect a more targeted proposal to incorporate approved procedures and cost recovery associated with incidental pipe in the Company's tariff.

As previously indicated, the Department expects the Company to propose a specific procedure for including and, when applicable, excluding costs associated with retiring and replacing existing infrastructure in the GSEP mechanism, including policies established to ensure that substantial plastic and cathodically protected steel main replacements are not included for recovery in the GSEP mechanism. D.P.U. 17-GREC-05, at 15. Nevertheless, the Department has previously stated that any tariff change is best handled in the GSEP proceedings. The Berkshire Gas Company, D.P.U. 17-GREC-02, at 27 n.17; NSTAR Gas Company, D.P.U. 16-GREC-06, at 28 n.16 (2016). Therefore, only after the Company proposes the specific procedures previously directed by the Department as part of its May 1, 2018 GREC filing should the Company include proposed tariff changes related to the inclusion and, where applicable, exclusion of "incidental pipe" in its GSEP tariff.

Bay State also proposed tariff revisions to include the replacement of copper services as part of its GSEP plan (Exh. CMA/RDG-5, §§ 8.2(6), 8.7(1)). The Department has previously disallowed costs related to the replacement of copper services where an LDC's

tariff did not include copper as an eligible infrastructure. D.P.U. 16-GREC-06, at 11-12; see also NSTAR Gas Company, D.P.U. 17-GREC-06, at 16 & n.15 (2017). The Department directed NSTAR Gas Company to propose a revision to its tariff if it sought to include costs related to the replacement of copper services in the GSEP, which it has done. NSTAR Gas Company, D.P.U. 17-GSEP-06, at 21 (April 30, 2018); D.P.U. 17-GREC-06, at 16 n.15; D.P.U. 16-GREC-06, at 11-12. The Company also provided testimony as to why copper services should be considered leak-prone pipe and therefore included in the tariff (Exh. CMA/DEM-1, at 5). After review of the Company's proposal, and an examination of other LDC's GSEP practices, we find that the tariff revisions regarding the inclusion of copper services as GSEP-eligible infrastructure are reasonable.

Regarding the changes to its revenue requirement calculation, the Department had previously accepted the Company's proposal to work with other GSEP-eligible LDCs to propose amended tariffs to estimate the GSEP revenue requirement using monthly averages, rather than using beginning- and end-of-year plant balances. D.P.U. 16-GSEP-05, at 15-16. Accordingly, the Department finds that proposed revisions to the Company's LDAC tariff regarding the calculation method of the GSEP revenue requirement are reasonable.

The Company also proposed tariff changes to recognize that the difference in timing of the GREC filing and the LDAF filing does not allow both filings to be submitted simultaneously (Exh. CMA/RDG-5, §§ 8.2(10), 8.7.3)). After the Department's review, we find this revision to the tariff to be reasonable.

The Company also proposed changes relating to the overhead and burdens test, consistent with those made by other LDCs in response to Department directives (Exh. CMA/RDG-5, § 8.5). See D.P.U. 17-GREC-06, at 40-41. Based on our review, we find that the revisions to the overhead and burdens test are appropriate for the efficient operation of the GSEP.

Finally, the Company proposes revisions to the calculation of the GSEP revenue cap (Exh. CMA/RDG-5, § 8.4). The Department has previously determined it may be appropriate to revise an LDC's tariff language to clarify that the recovery of the annual gas system enhancement reconciliation adjustment factor that may be billed in any year beginning in November 1 will be limited by the difference between the GSEP cap and the annual change in the GSEP recovery. D.P.U. 17-GREC-06, at 38 n.20. We find that, here, Bay State has appropriately revised its tariff language to be consistent with Department precedent.

Based on the foregoing, the Department rejects the Company's proposal to revise its tariff relating to incidental pipe and finds that Bay State's proposed tariff revisions relating to copper services, the calculation of its revenue requirement using monthly averages for plant balances, the timing and treatment of the GREC filing in coordination with the LDAF filing, the overhead and burdens test, and the calculation of the GSEP revenue cap are allowed. The Department directs the Company to submit a compliance tariff that incorporates the approved revisions to its LDAC tariff within five business days of the issuance of this Order.



IV. ORDER

Accordingly, after notice, hearing, and due consideration, it is

ORDERED: That the petition of Bay State Gas Company for approval of its 2018 gas system enhancement plan, as modified, is APPROVED; and it is

FURTHER ORDERED: That the gas system enhancement adjustment factors of Bay State Gas Company in the amounts of \$0.0566 per therm, \$0.0589 per therm, \$0.0376 per therm, \$0.0329 per therm, and \$0.0241 per therm for the residential, commercial and industrial – low annual use, commercial and industrial – medium annual use, commercial and industrial – high annual use, and commercial and industrial – extra high annual use customers, respectively, to take effect May 1, 2018, are DENIED; and it is

FURTHER ORDERED: That the gas system enhancement adjustment factors of Bay State Gas Company in the amounts of \$0.0543 per therm, \$0.0565 per therm, \$0.0361 per therm, \$0.0316 per therm, and \$0.0232 per therm for the residential, commercial and industrial – low annual use, commercial and industrial – medium annual use, commercial and industrial – high annual use, and commercial and industrial – extra high annual use customers, respectively, to take effect May 1, 2018, are APPROVED, subject to further review and investigation; and it is

FURTHER ORDERED: That Bay State Gas Company shall comply with all directives in this Order.

By Order of the Department,

/s/

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Angela M. O'Connor, Chairman

/s/

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Robert E. Hayden, Commissioner

/s/

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Cecile M. Fraser, Commissioner

An appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part. Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of the twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. G.L. c. 25, § 5.