The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 13-75 February 28, 2014

Investigation by the Department of Public Utilities on its own motion as to the propriety of the rates and charges by Bay State Gas Company d/b/a Columbia Gas of Massachusetts set forth in Tariffs M.D.P.U. Nos. 140 through 173, and approval of an increase in base distribution rates for gas service pursuant to G.L. c. 164, § 94 and 220 C.M.R. § 5.00 et seq., filed with the Department on April 16, 2013, to be effective May 1, 2013.

APPEARANCES:

Robert J. Keegan, Esq.
Kevin F. Penders, Esq.
Danielle C. Winter, Esq.
Keegan Werlin LLP
265 Franklin Street
Boston, Massachusetts 02110
FOR: BAY STATE GAS COMPANY, d/b/a COLUMBIA GAS OF MASSACHUSETTS
Petitioner

Martha Coakley, Attorney General
Commonwealth of Massachusetts
By: Joseph W. Rogers
Ronald J. Ritchie
John J. Geary
Erik Bennett
Anna E. Grace
Assistant Attorneys General
Office of Ratepayer Advocacy
One Ashburton Place
Boston, Massachusetts 02108
Intervenor

Rachel Graham Evans, Esq.
Deputy General Counsel
100 Cambridge Street, Suite 1020
Boston, Massachusetts 02114
FOR: MASSACHUSETTS DEPARTMENT OF ENERGY RESOURCES
Intervenor

Shanna M. Cleveland, Esq.
Conservation Law Foundation
62 Summer Street
Boston, MA 02110
FOR: CONSERVATION LAW FOUNDATION
Intervenor

Alexandra E. Blackmore, Esq.
National Grid
40 Sylvan Road
Waltham, MA 02451
FOR: BOSTON GAS COMPANY AND COLONIAL GAS COMPANY, d/b/a NATIONAL GRID
Limited Participant

Gary Epler, Esq.
Chief Regulatory Counsel
Unitil Service Corp
6 Liberty Lane West
Hampton, NH 03842
FOR: FITCHBURG GAS AND ELECTRIC LIGHT COMPANY, d/b/a UNITIL
Limited Participant

Jon N. Bonsall, Esq.
Keegan Werlin LLP
265 Franklin Street
6th Floor
Boston, MA 02110
FOR: NEW ENGLAND GAS COMPANY
Limited Participant

James M. Avery, Esq.
Brown Rudnick, LLP
One Financial Center
Boston, Massachusetts 02111
FOR: THE BERKSHIRE GAS COMPANY
Limited Participant

TABLE OF CONTENTS

I. INTRODUCTION

On April 16, 2013, Bay State Gas Company, d/b/a Columbia Gas of Massachusetts ("Bay State" or "Company"), filed a petition with the Department of Public Utilities ("Department") for an increase in gas distribution rates. Bay State's last general increase in distribution rates was approved on November 1, 2012. Bay State Gas Company, D.P.U. 12-25 (2012).

In the instant filing, the Company seeks to increase its annual revenues by $29,911,284, which represents an approximate 16.9 percent increase in base distribution revenues, or an increase of 7.45 percent in current annual operating revenues.[1] As part of the filing, the Company seeks ratemaking treatment associated with the sale of its Energy Products & Services ("EP&S") business and certain upgrades of its information system in the areas of finance, human resources, and supply chain. Further, the Company seeks several modifications associated with its current targeted infrastructure reinvestment program ("TIRF"). Finally, Bay State sets forth a proposal related to the updating of certain post-test year expenses and rate base additions. The cost of service component of the Company's filing is based on a test year of January 1, 2012, through December 31, 2012.[2] The Department docketed this matter as D.P.U. 13-75, and

[1] In its original filing, the Company requested an increase to its annual revenues of $30,071,320, a portion of which includes production and storage costs (Exh. CMA/JTG-2, Schs. JTG-2; JTG-25, at 1; CMA/MPB-2, Sch. MPB-2-1, at 4). After several revisions of its revenue requirement schedules, the Company now seeks an increase of $29,911,284 (Exh. CMA/JTG-2, Schs. JTG-2 (Rev. 5); JTG-26, at 1 (Rev. 5)).

[2] For purposes of this Order, Bay State's rate year will be March 1, 2014 through February 28, 2015.

suspended the effective date of the proposed rate increase until March 1, 2014, to investigate the propriety of the Company's petition.[3]

Bay State currently provides retail natural gas distribution service to approximately 304,000 residential, commercial and industrial customers in three divisions geographically centered in Springfield, Brockton, and Lawrence, Massachusetts (Exh. CMA/SHB-1, at 3).[4] The Company currently operates as a subsidiary of NiSource, Inc., and does business as Columbia Gas of Massachusetts, one of several Columbia gas distribution companies that are part of the NiSource, Inc. organization (see Exh. CMA/SHB-1, at 3).[5]

II. PROCEDURAL HISTORY

On April 18, 2013, the Attorney General of the Commonwealth of Massachusetts ("Attorney General") filed a notice of intervention pursuant to G.L. c. 12, § 11E(a). On May 7, 2013, the Department granted intervenor status to the Department of Energy Resources ("DOER") and limited participant status to Fitchburg Gas and Electric Light Company,

---

3 As a result of legislation signed into law by Governor Patrick on August 3, 2012, the Department is authorized to suspend for a period of up to ten months an electric or gas utility's proposed changes to its rates, prices and charges. See, Chapter 209, § 4 of the Acts of 2012, An Act Relative to Competitively Priced Electricity in the Commonwealth; G.L. c. 164, § 94. The new legislation extends the former six-month statutory suspension period by an additional four months.

4 Bay State was incorporated in Massachusetts as a gas company in 1974, with its operations arising through the merger of local gas works, such as Springfield Gas Light Company, the Brockton-Taunton Gas Company and Lawrence Gas Company (Exh. CMA/SHB-1, at 2-3).

5 NiSource, with headquarters in Merrillville, Indiana, is an energy holding company whose subsidiaries are engaged in the transmission, storage, and distribution of natural gas in a corridor stretching from the Gulf Coast through the Midwest to New England, and the generation, transmission, and distribution of electricity in Indiana. NiSource is a holding company under the Public Utility Holding Company Act of 2005.

d/b/a Unitil. On May 9, 2013, the Department granted limited participant status to The Berkshire Gas Company. On May 15, 2013, the Department granted intervenor status to the Conservation Law Foundation ("CLF") and limited participant status to New England Gas Company,[6] and to Boston Gas Company and Colonial Gas Company, d/b/a National Grid. Finally, on May 17, 2013, pursuant to G.L. c. 12, § 11E(b), the Department approved the Attorney General's retention of experts and consultants. Bay State Gas Company, d/b/a Columbia Gas of Massachusetts, D.P.U. 13-75, Order on Attorney General's Notice of Retention of Experts and Consultants (May 17, 2013).

Pursuant to notice duly issued, the Department held public hearings in the following locations within the Company's service territory: (1) Lawrence on May 20, 2013; (2) Brockton on May 21, 2013; and (3) Springfield on May 22, 2013. The Department also received written comments from public officials and a number of Bay State ratepayers.

The Department held twelve days of evidentiary hearings between October 2, 2013, and October 25, 2013. In support of the Company's filing, the following witnesses provided testimony: (1) Stephen H. Bryant, president, Bay State; (2) David E. Mueller, engineering manager, Bay State; (3) Richard A. Fontaine, vice president of financial transformation, NiSource Corporate Services Company ("NCSC");[7] (4) Jeffery T. Gore, regulatory accounting

---

6 On December 13, 2013, the Department approved the sale of the assets of New England Gas Company by Southern Union Company to Plaza Massachusetts Acquisition, Inc., with ultimate ownership and control of the assets vested in Liberty Utilities Co. See New England Gas Company, D.P.U. 13-07, at 131 (2013). New England Gas Company now operates as Liberty Utilities (New England Natural Gas Company) Corp. d/b/a Liberty Utilities.

7 NCSC provides professional and technical services for the Company including accounting, payroll, auditing, budgeting, business promotion, electronic communications,

manager, NCSC; (5) Vincent A. Rea, assistant treasurer, Bay State and NCSC; (6) Kimberly K. Cartella, total rewards manager, NCSC; (7) Brian E. Elliot, regulatory accounting manager, NCSC; (8) Mark. P. Balmert, director of rate and regulatory services, NCSC; (9) Bruce M. Sedlock, vice president, tax services, NCSC; (10) Douglas Casey, Bay State; (11) Susan M. Taylor, controller, NCSC; and (11) Joseph A. Ferro, manager regulatory policy, Bay State.

The Attorney General sponsored the testimony of the following witnesses: (1) David E. Dismukes, Ph.D, consulting economist, Acadian Consulting Group; (2) J. Randall Woolridge, Ph.D., professor of finance, Goldman, Sachs & Co. and Frank P. Smeal Endowed University Fellow in business administration at the University Park Campus of the Pennsylvania State University; (3) Rebecca Bachelder, president, Blueflame Consulting, LLC; (4) Donna Ramas, principal, Ramas Regulatory Consulting; (5) David J. Effron, consultant; and (6) Allen R. Neale, consultant, La Capra Associates, Inc.

The Attorney General and DOER submitted initial briefs on November 15, 2013. Bay State submitted its initial brief on December 2, 2013. The Attorney General submitted a reply

---

employee services, engineering and research, gas dispatching, planning, risk management, tax, legal, operations support and planning, environmental, financial, data processing, telecommunications and general advisory services (Exh. CMA/JTG-1, at 45-46). These services are provided at cost to all NiSource's affiliates on a system-wide basis pursuant to executed service agreements with each affiliate that designate the type of services to be performed and the method of calculating the charges for these services (Exhs. CMA/JTG-1, at 46; AG-1-26, Att.).

brief on December 9, 2013. The Company submitted its reply brief on December 16, 2013. The evidentiary record consists of approximately 2,600 exhibits and responses to 47 record requests.[8]

III. BAY STATE'S GAS-SYSTEM MODERNIZATION PLAN

A. Introduction

Bay State's gas-system modernization plan, which began in April 2012, is a long-range engineering plan that will guide the Company's expansion and future infrastructure replacement efforts (Exhs. CMA/DEM-1, at 3; AG-3-1). The Company's "end vision" is a distribution system that operates at a high level of safety, reliability, and efficiency, with reduced costs, and that will serve customer load for the next 75 to 100 years (Exhs. CMA/DEM-1, at 9-14; AG-3-1; AG-7-12 AG-21-10, at 3-6; Tr. 2, at 252).[9]

Bay State will achieve its gas-system modernization plan, in part, through infrastructure replacements that are completed under the Company's TIRF program (Exhs. CMA/DEM-1, at 3; AG-3-1). In this regard, Bay State reports that, at the end of 2012, it had 1,064 miles of leak-prone pipe in its distribution system, the removal of which is a critical component of the

---

8 The exhibits in this proceeding include prefiled direct testimony of witnesses; prefiled rebuttal testimony of witnesses; attachments, schedules, workpapers and/or exhibits to the foregoing prefiled testimony; responses to information requests and any attachments; confidential responses to information requests and any attachments; revised or supplemental versions of the foregoing exhibits; and documents offered at the evidentiary hearings.

9 The Company maintains that its distribution system must be engineered to move gas from market entry points over a wide system footprint to customer delivery points (Exh. CMA/DEM-1, at 10). According to Bay State, there are only a very few market entry points on the Company's system, and the current distribution system configuration tying those points to customer delivery points is highly segmented because it has been constructed over 80 years on a piece by piece basis as customer load materialized (Exh. CMA/DEM-1, at 10).

Company's overall gas-system modernization plan(see Exh. CMA/DEM-1, at 7-9).[10] Bay State also notes that in conjunction with the removal of leak prone pipe, the Company will work to replace approximately 52,578 leak-prone services (Exh. CMA/DEM-1, at 8).[11] Through its TIRF program, the Company intends to replace its inventory of non-cathodically protected steel mains and associated services over the next ten to 15 years and to eliminate the remaining cast- and wrought-iron mains and associated services over the next 20 to 25 years (Exhs. CMA/DEM-1, at 8; AG-21-10, at 5-6; AG-31-4, at 2; Tr. 2, at 238). In addition, Bay State's capital plan covers other system requirements and expansion projects that are not TIRF-related, but that it asserts are vital in preparing for long-term system integrity and growth (Exh. CMA/DEM-1, at 9, 18).[12]

Further, the Company explains that in order to achieve its long-term goals, it has identified certain operational targets to guide all main replacement decisions and prioritizations (Exh. CMA/DEM-1, at 10). In particular, Bay State states that it will: (i) work toward the elimination of all pipeline configurations on the Company's distribution system with a maximum

---

10 The Company's inventory of leak-prone mains, as of the end of the test year, was comprised of 741 miles of cast- and wrought-iron mains and 323 miles of non-cathodically protected bare steel main (Exh. CMA/DEM-1, at 7, 8). Regarding the cast-and wrought-iron main, 17 miles represent large diameter main in excess of twelve inches in diameter, which are excluded from the definition of "eligible facilities" under the TIRF tariff (Exh. CMA/DEM-1, at 7).

11 The Company also intends to complete 25,763 tie-overs, which are connections of services that are already built to current day standards to new replacement mains (Exh. CMA/DEM-1, at 8).

12 The Company cites the following examples: (i) the replacement of the Springfield "beltline" system, which consists of large diameter (16-24 inches in diameter) cast-iron main; (ii) the installation of 28,000 feet of 16-inch high-pressure pipeline from a citygate station on the interstate pipeline in Andover; and (iii) the installation of a new high-pressure pipeline to link coastline communities in the Brockton operating area to market delivery points (Exh. CMA/DEM-1, at 18).

allowable operating pressure ("MAOP") of less than 60 pounds per square inch gauge ("psig");[13] (ii) work toward the elimination of all high-pressure cast-iron mains; and (iii) configure the system to align with "organic" load growth, which is growth associated with on-system conversions, customer-use upgrades and on-system customer additions (Exh. CMA/DEM-1, at 11-14).

Finally, Bay State submits that its gas-system modernization plan will meet the current distribution integrity management program ("DIMP") requirements established by the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration ("PHMSA") (Exh. CMA/DEM-1, at 3, 22).[14] According to Bay State, DIMP requires the Company to improve the safety and reliability of the system through the process of identifying existing and potential threats that affect the integrity of the system, and taking appropriate actions to mitigate those risks (Exh. CMA/DEM-1, at 23). According to Bay State, its administration of DIMP requires the Company to ramp up the replacement for leak-prone mains and services, and to increase the focus on third-party damage prevention, improved quality in records and maps, transmission line MAOP documentation, tracking of open leaks and other actions (Exh. CMA/DEM-1, at 23). Thus, the Company states that the long-term gas-system modernization plan is integrally related to DIMP compliance (Exh. CMA/DEM-1, at 23). As discussed below, the Attorney General raises several issues with respect to the Company's

---

13 The elimination of this pipeline configuration also will include the elimination of regulator stations. The valve systems at regulator stations operate on a low-pressure system to reduce a high-pressure gas supply to a level that is compatible with the system to ensure the safe delivery of gas to customers (see Tr. 2, at 275-276).

14 See 49 C.F.R. § 192.1000 et seq.

gas-system modernization plan, and she recommends specific Department action to address her concerns.

B. Positions of the Parties

1. Attorney General

a. Least-Cost Planning and DIMP

The Attorney General rejects any notion that PHMSA regulations mandate any particular level of capital investment under the DIMP or any changes to long-term capital plans (Attorney General Brief at 14; Attorney General Reply Brief at 13-14). Further, the Attorney General argues that any accelerated capital expenditures made by the Company should be supported by a cost/benefit analysis (Attorney General Brief at 14; Attorney General Reply Brief at 14-15, 16). In this regard, the Attorney General contends that the Company has no quantifiable analysis to support its stated pace of infrastructure replacement (Attorney General Brief at 14-15, citing Tr. 2, at 274-275). Moreover, the Attorney General claims that most of the data used by Bay State in developing its DIMP is current only through 2011 and, therefore, to the extent the Company intends to rely on the DIMP to justify ramped-up capital spending, it must provide the Department with an updated DIMP that, at least, includes data for the 2012 test year (Attorney General Brief at 14-15).

In addition, the Attorney General argues that there is no connection between the levels of acceleration of bare steel and cast-iron replacement spending under the TIRF and the specific goals that the Company intends to meet with its capital plan (Attorney General Brief at 15). In this regard, the Attorney General contends that the Company conceded that the analytical process that went into determining the ramped-up pace of TIRF-related infrastructure replacement was "fluid" and subject to many factors that could cause the level of work to fluctuate (Attorney General Brief at 15, citing Tr. 2, at 274-275). Thus, according to the Attorney General, the Company "pulled the pace of replacement out of thin air," but yet relies on this pace as the main cost driver for accelerated replacements under the TIRF (Attorney General Brief at 15). The Attorney General asserts that the Company's approach is inconsistent with the purpose of the DIMP, which she maintains was designed for a utility to examine its own system and make nuanced decisions based on the existing state of its facilities (Attorney General Brief at 15). Further, the Attorney General contends that PHMSA did not impose a universal requirement of accelerated leak-prone pipe replacement as the natural result of a utility's DIMP (Attorney General Brief at 15-16). Thus, she claims that because the Company fails to link the proposed level of accelerated spending on TIRF-related investments with an analysis of the DIMP itself, the Company will be spending significant dollars with potentially uncertain results (Attorney General Brief at 16; Attorney General Reply Brief at 16). According to the Attorney General, such a proposal is unlikely to result in a least cost solution for system integrity management (Attorney General Brief at 16).[15]

Based on these considerations, the Attorney General asserts that although the Department would be justified to deny recovery of ramped-up TIRF-related replacement costs, the

15 The Attorney General argues that utilities have an incentive to select sub-optimal capital investments over O&M solutions because the utility can earn a return on the capital investment (Attorney General Brief at 16). As such, the Attorney General asserts that the Department should closely scrutinize substantial investment programs, like accelerated main replacements, particularly when there are significant gaps in analytical justification (Attorney General Brief at 16). In this regard, the Attorney General notes that if the result of the Company's DIMP is to require ramped-up investment, then the Company has demonstrated imprudent management of the safety of its distribution system and placed the public at risk (Attorney General Brief at 16).

Department instead should require the Company to file (i) a cost/benefit analysis in support of its next TIRF filing, or (ii) for Department approval, a capital plan that links the desired system safety benefits with a range of least cost alternative solutions for accomplishing those goals (Attorney General Brief at 17; Attorney General Reply Brief at 16-17).

b. Excess System Capacity

The Attorney General argues that Bay State did not provide appropriate network analysis[16] to enable the Department to determine the resulting system capacity of the Company's infrastructure replacement activities (Attorney General Brief at 20).[17] In this regard, the Attorney General asserts that Bay State's system has more distribution capacity than needed to serve the Springfield service area, and that this should raise a red flag for two reasons (Attorney General Brief at 21, citing Exh. AG/ARN-3, at 21; AG-21-10 (a); RR-AG-3).

First, the Attorney General argues that the Company provided inconsistent evidence regarding the design of its distribution system with respect to excess capacity (Attorney General Brief at 22). The Attorney General notes that Bay State claims in this case that it designed its system for a three percent growth in capacity, but the Company reported in its recent long-term

---

16 According to the Attorney General, network analysis tools allow a system planner to optimize the length and diameter of the pipe that needs to be installed to remedy the peak day low-pressure issues (Exh. AG/ARN-1, at 9). Thus, the Attorney General contends that network analysis is a useful tool for examining the effects on a distribution system's ability to deliver gas when system components are replaced or expanded (Attorney General Brief at 17, citing Exh. AG/ARN-1, at 9).

17 The Attorney General also argues that Bay State's failure to use network analysis also adversely affects the Company's ability to demonstrate that its test year capital additions are prudent, used, and useful in the service to customers (see Attorney General Brief at 19; Attorney General Reply Brief at 24 n.10). The Company's capital additions are discussed below in Section VI.B.

forecast and supply plan filing[18] a growth capacity assumption of 1.2 percent (Attorney General Brief at 22, citing Tr. 2, at 254-255; RR-DPU-4; Attorney General Reply Brief at 21-23). The Attorney General claims that the Company fails to support its three percent load growth assumption, and provides no evidence to justify building its system to 250 percent (i.e., the purported increase from 1.2 to three percent) in excess of capacity growth needs (Attorney General Brief at 22-23, 25, citing Exh. AG-27-1). Further, the Attorney General contends that while the Department in Bay State's last rate case noted it was appropriate for the Company to consider future needs at the time of infrastructure replacement, the Department did not pre-approve "unending growth" (Attorney General Reply Brief at 18, citing D.P.U. 12-25, at 80).

Second, the Attorney General raises an inter-generational equity argument and contends that the Company's current customers should not be forced to pay for an "open-ended" amount of excess capacity in the hopes that new customers will eventually materialize and be served by the system (Attorney General Brief at 24; Attorney General Reply Brief at 24). In this regard, the Attorney General claims that allocating to current customers all of the future costs associated with extra capacity fails to satisfy the Department's "used and useful" standard because the future extra capacity is not in service, and providing benefits to customers at the end of the test year (Attorney General Brief at 25, citing Western Massachusetts Electric Company, D.P.U. 85-270, at 60-107 (1986)). Accordingly, the Attorney General asserts that the Department must exclude excess capacity from rate base, either through a subsequent investigation to examine the amount of excess capacity that should be deducted from rate base or

---

18 See Bay State Gas Company, D.P.U. 13-161, which is pending with the Department.

as a new variable added to the TIRF mechanism to reduce excess capacity from rate base in annual filings (Attorney General Brief at 26; Attorney General Reply Brief at 24).

c. Gas-System Modernization Credit

The Attorney General argues that although Bay State proposes to pass along to customers the costs of replacing its low-pressure pipeline configuration (i.e., those with a MAOP of less than 60 psig), the Company does not propose to pass along the operations and maintenance ("O&M") savings associated with the elimination of regulator stations, which will be eliminated along with the low-pressure pipelines (Attorney General Brief at 50; see also n.13 above). Thus, according to the Attorney General, the Company's shareholders receive all of the O&M savings, while customers incur, through the TIRF, all of the costs to achieve those savings (Attorney General Brief at 50). The Attorney General asserts that this allocation of savings and costs is unjust and, therefore, she recommends that the Department adopt a gas-system modernization credit that would pass along to customers the O&M savings based on the proportion of regulator stations reduced from test year amounts (Attorney General Brief at 50-51).[19]

2. Company

a. Least-Cost Planning and DIMP

Bay State argues that it is an "internally inconsistent request" to use a cost/benefit analysis to justify TIRF-related investments in conjunction with DIMP (Company Brief at 23-24). According to Bay State, under DIMP there is no consideration of cost, as DIMP

19 Specifically, the Attorney General proposes a credit calculated in a manner similar to the O&M credit applicable to the replacement of non-cathodically protected steel mains (Attorney General Brief at 50-51).

operates on the concept of risk reduction (Company Brief at 24). The Company asserts that a cost/benefit analysis is not applicable under circumstances in which infrastructure replacements are conducted for risk-reduction purposes rather than cost-reduction purposes, and that the Department has long recognized this premise (Company Brief at 24 & n.8, citing Boston Gas Company, D.T.E. 03-40, at 67-69 (2003); Company Reply Brief at 10-11). Further, Bay State argues that its TIRF program is consistent with DIMP regulations, which require the Company to implement risk mitigation measures based on the Company's evaluation of its system (Company Reply Brief at 9-10, citing 49 C.F.R. § 192.1007(d)). Bay State also rejects the Attorney General’s assertion that the Company arbitrarily selected the pace of leak-prone main replacement, as the Company notes that it tried to maintain flexibility in the level of replacement but was directed by the Department, at the Attorney General’s urging, in D.P.U. 12-25 to replace at least 38 miles of leak-prone main per year (Company Brief at 24, citing D.P.U. 12-25, at 34).

b. Excess System Capacity

Bay State raises several arguments in response to the Attorney General’s position. As an initial matter, Bay State argues that the Department already has found that it would be imprudent if the Company did not consider the capacity needs of the distribution system at the time of replacement (Company Brief at 25, citing D.P.U. 12-25, at 80). Further, Bay State rejects the Attorney General’s arguments concerning the use of network analysis, and the Company contends that its use of the SynerGEE model[20] provides sufficient information to evaluate the

[20] The Company’s SynerGEE model is used to assist in analyzing the performance of the system in order to evaluate the availability of adequate delivery pressure to individual customers throughout the system under peak demand conditions (Exh. AG-21-10 (a)).

Company's infrastructure replacement decisions (Company Brief at 30-31, citing Exhs. AG-21-10; AG-21-11; AG-21-12; Company Reply Brief at 12).

In addition, the Company contends that in arguing that there is excess system capacity in Springfield, the Attorney General confuses concepts relating to the Company's long-range resource and requirements plan for upstream capacity and supply with concepts relating to planning for on-system distribution capacity (Company Brief at 25-26). In this regard, Bay State explains that although it does not plan for transportation-only customers in relation to upstream capacity, the Company must have sufficient distribution capacity to maintain deliverability of supplies to these customers (Company Brief at 26). The Company asserts that this capacity dynamic is particularly relevant in Springfield because of the MASSPOWER facility,[21] which operates with its own, dedicated upstream capacity but represents an extraordinarily large volume in terms of distribution system deliverability in the Springfield division (Company Brief at 26).

Further, Bay State rejects the Attorney General's argument that the Company has 250 percent excess capacity on its system (Company Brief at 27). The Company argues that the Attorney General used incorrect terminology when inquiring at the evidentiary hearings as to system growth, and that the Company subsequently clarified the record (Company Brief at 28-29, citing Tr. 2, at 253-254). Specifically, the Company contends that (i) the growth rate of

[21] MASSPOWER owns and operates a 240 megawatt net combined-cycle gas-fired facility in Springfield. See Bay State Gas Company, D.P.U. 09-30, at 167-168 (2009). As a natural gas-fired generator, MASSPOWER requires gas supply and transportation service from both the upstream interstate pipeline grid and from Bay State in order to fulfill power sales contract commitments to the former Boston Edison Company, Western Massachusetts Electric Company and Massachusetts Municipal Wholesale Electric Company. D.P.U. 09-30, at 168. Thus, MASSPOWER and Bay State have entered into a series of natural gas transportation agreements. See D.P.U. 09-30, at 168-169.

three percent was used to prioritize competing projects to account for growth in portions of the system that also have known reliability issues or are nearing operating levels where reliability issues are likely to exist over a five-year planning horizon; and (ii) the growth rate of 1.2 percent is correct but only in the context of design day planning for upstream capacity resources (Company Brief at 29, citing RR-AG-4). Thus, the Company asserts that it appropriately considers growth on the system over a forecast horizon of five years and, as such, there is inter-generational equity in the development of the Company's system (Company Brief at 31; Company Reply Brief at 12).

c. Gas-System Modernization Credit

The Company argues that the Attorney General's recommendation of a gas-system modernization credit should be rejected because it is speculative and unnecessary (Company Brief at 52). According to the Company, there is no evidence that each regulator station has an identical cost and, in fact, the cost of operating regulator stations differs from one station to another (Company Brief at 52). Further, the Company notes that any reductions in O&M costs take time to materialize; therefore, there is no evidence of material reductions to the cost of service in the short term (Company Reply Brief at 21). Further, the Company contends that there is no evidence that the need for a reduction in the number of regulator stations can be directly tied to replacement miles in a single given year (Company Brief at 52). Finally, the Company notes that any reduction in O&M costs caused by a reduced number of regulator stations will be passed onto customers in future rate cases (Company Brief at 52; Company Reply Brief at 21-22).

C. Analysis and Findings

1. Least-Cost Planning and DIMP

The Attorney General argues that Bay State's DIMP does not justify the ramp-up of TIRF-related infrastructure replacements, and that the level of accelerated replacement is not cost-effective in the absence of a cost/benefit analysis (Attorney General Brief at 14; Attorney General Reply Brief at 13-14). As a result, the Attorney General urges the Department to require the Company to file (i) a cost/benefit analysis in support of its next TIRF filing, or (ii) for Department approval, a capital plan that links the desired system safety benefits with a range of least-cost alternative solutions for accomplishing those goals (Attorney General Brief at 17; Attorney General Reply Brief at 16-17).

The DIMP regulations require the Company to evaluate its distribution system, assess risks to the system, and develop methods to reduce such risk. See 49 C.F.R. § 192.1007. Bay State's gas-system modernization plan and, in particular, the Company's efforts to accelerate the replacement of leak-prone pipe are consistent with the DIMP requirements, as the safety and reliability concerns posed by this infrastructure require an aggressive strategy for remediation. Moreover, irrespective of the relationship to DIMP, the aggressive replacement of infrastructure under the Company's TIRF program is appropriate and desirable from a public policy perspective given the potential benefits to public safety, service reliability, and the environment. See Bay State Gas Company, D.P.U. 09-30, at 133 (2009). As such, the accelerated pace of replacement of TIRF-eligible infrastructure is a key consideration in the Department's determination to approve a TIRF. See New England Gas Company, D.P.U. 10-114, at 34, 77 (2011); Boston Gas Company/Essex Gas Company/Colonial Gas

Company, D.P.U. 10-55, at 121-122 (2010); D.P.U. 09-30, at 119, 133-135; see also Fitchburg Gas and Electric Light Company, D.P.U. 11-01/D.P.U. 11-02, at 140 (2011) (rejecting a TIRF because it did not include an adequate plan for accelerated infrastructure replacement). Thus, in designing a long-term gas-system modernization plan, we would expect that the Company's long-term objectives will continue to include the sustained, aggressive replacement of its leak-prone pipe and services under the TIRF program.

In this regard, the Company's long-term objectives include the replacement of its inventory of non-cathodically protected steel mains over the next ten to 15 years and the elimination of the remaining cast- and wrought-iron over the next 20 to 25 years (Exh. CMA/DEM-1 at 8; Tr. 2, at 238). The Attorney General argues that because the rate of replacement might fluctuate from year to year, the replacement rate is arbitrary (Attorney General Brief at 15). However, in order for Bay State to recover costs under the TIRF, the Company is required to replace at least 38 miles of TIRF-eligible mains per year. D.P.U. 12-25, at 54. Thus, although the pace might vary from year to year, the minimum level of replacement is set at a rate that we determined would achieve the objectives of the TIRF program, which are the sustained, aggressive, and accelerated rate of replacement of leak-prone infrastructure for the benefit of public safety, service reliability, and the environment. See D.P.U. 12-25, at 54; D.P.U. 10-114, at 56; D.P.U. 10-55, at 122; D.P.U. 09-30, at 133.

Regarding the cost-effectiveness of the Company's infrastructure replacement activities, the DIMP-related regulations are silent regarding the appropriate level of infrastructure-related spending. However, it is clear that the TIRF does not allow the Company to invest capital dollars irresponsibly. D.P.U. 09-30, at 134. In particular, the rate cap imposed by the

Company's TIRF stabilizes cost recovery at a level that the Department has found to be acceptable. See D.P.U. 09-30, at 134. Further, the disciplinary effect of regulatory lag requires the Company to invest capital dollars responsibly. See D.P.U. 12-25, at 22-23. Finally, because Bay State must demonstrate prudency in all areas of its capital investment spending, it is expected that the Company will make responsible, cost-effective replacement decisions or risk disallowance of the costs associated with the replacements. Therefore, at this time, we see no reason to impose additional cost-control requirements upon Bay State related to the Company's infrastructure investment decisions. Further, in light of our findings, we need not address the Attorney General's arguments concerning the nature of the information provided in the Company's DIMP and whether updated information is necessary. Accordingly, we decline to adopt the Attorney General's recommendations.

2. Excess System Capacity

The Attorney General also argues that there are excess capacity concerns on Bay State's system, and that the Department should (i) investigate these concerns as part of a new proceeding, (ii) modify the TIRF tariff through a subsequent investigation to examine the amount of excess capacity investment that should be deducted from rate base, or (iii) add a variable component to the TIRF mechanism to reduce excess capacity investment from rate base in annual filings (Attorney General Brief at 26; Attorney General Reply Brief at 24). We disagree. As an initial matter, we are not persuaded that there is excess capacity in Springfield, particularly in light of the demands placed on the system by MASSPOWER, as well as the remaining transportation-only customers (see Exh. AG-1-99, Att. C; RR-AG-3).

Further, the Company provided ample evidence to explain its operational objectives under the gas-system modernization plan and the number of factors that it must consider as it moves forward (see, e.g., Exhs. CMA/DEM-1, at 10-14; AG-3-1; AG-7-12; AG-21-10; AG-21-11; AG-21-22; AG-31-5). Given these objectives, it is reasonable to expect that the Company would consider future capacity needs of the distribution system at the time of infrastructure replacement. See D.P.U. 12-25, at 80. We find nothing suspect about the Company's growth rate assumptions with respect to its design day requirements and its distribution system requirements (see RR-AG-4). As such, we are not convinced that Bay State intends to build excess capacity on the system, but rather the evidence shows that the Company is focused on a more efficient way to deliver gas to customers (Tr. 2, at 258). Finally, as stated above, the Company's capital improvements are subject to review and approval by the Department. Thus, as the Company progresses with its long-term gas-system modernization plan, the Department will have the opportunity to monitor the replacement activities and determine whether any modifications are necessary. Accordingly, the Department declines to adopt the Attorney General's recommendations.

3. Gas-System Modernization Credit

In conjunction with its effort to eliminate the low-pressure pipeline configurations, the Company expects, over time, to reduce from 215 to 60 the number of regulator stations necessary to maintain pressure across the system (see Exh. CMA/DEM-1, at 13, 14-17; Tr. 2, at 279). In the test year, the Company incurred $819,530 in O&M costs related to regulator stations (RR-AG-5 & Att.). The Attorney General argues that based on the test year O&M expenses associated with regulator stations, "it would be reasonable to expect savings in the range of $327,812 in reduced regulator O&M costs on an annual basis. Assuming the same number of regulator stations in the test year, the Company spends on average approximately $3,881 per station." (Attorney General Brief at 50).[22]

The Department has reviewed the Attorney General's proposed gas-system modernization credit. As an initial matter, we note that not every action undertaken by a utility to mitigate O&M expenses triggers a corresponding credit to ratepayers for avoided O&M costs. If a utility were directed to provide a credit each time it sought to mitigate costs, such an outcome might have a chilling effect on the utility's pursuit of cost-mitigation initiatives. This, in turn, would be detrimental to ratepayers. Further, reductions to O&M costs take time to materialize and, over time, we expect that such reductions will be passed on to ratepayers in future base rate cases.

Moreover, in this instance, we find that the record supporting the Attorney General's proposal is insufficient to warrant approval of the requested credit. Although the record contains information on the total O&M costs incurred in the test year associated with regulator stations, and the number of stations in use across the Company's service territory (see Exh. CMA/DEM-1, at 14-17; Tr. 2, at 279; RR-DPU-5), we find that more specific information regarding the costs associated with the use and removal of each regulator station is required to properly evaluate the Attorney General's proposal. Accordingly, we decline to approve the proposed gas-system modernization credit.

---

22 The Attorney General provides no support for her calculations. It appears that she calculated the average cost per regulator station by dividing the annual O&M cost of $819,530 by the number of stations, 215. This calculation, however, produces an average cost of $3,812, not $3,881.

IV. TIRF MODIFICATION PROPOSALS

A. Introduction

In D.P.U. 09-30, at 129-135, the Department approved Bay State's TIRF, which allows the Company to recover the revenue requirement (including depreciation, return on investment and property taxes) on investments made to replace bare steel mains and their associated services, tie-ins and meter move-outs. The approved TIRF includes a rate cap that limits the annual change in revenue requirement associated with the TIRF to one percent of the Company's total revenues of the prior calendar year (hereinafter referred to as the "one-percent cap"). D.P.U. 09-30, at 131. In D.P.U. 12-25, at 49, 54, the Department continued the Company's TIRF with two modifications to cost recovery: (1) the inclusion in the definition of eligible facilities of cast-iron and wrought-iron mains up to twelve inches in diameter; and (2) the establishment of a threshold level of annual main replacement of 38 miles per year.

In the instant case, the Company proposes three substantive changes to its TIRF mechanism: (1) a modification of the one-percent cap for TIRF-eligible projects; (2) a modification of the Company's current TIRF tariff to include a provision to seek a waiver of the 38-mile replacement requirement; and (3) a modification of the definition of "Eligible TIRF Costs" in the TIRF tariff to allow for recovery of "deferred in-service costs" ("DISC") (Exhs. CMA/SHB-1, at 31; CMA/DEM-1, at 29). As set forth below, DOER endorses two of the three proposals, while the Attorney General opposes all three proposed modifications.

In addition to opposing the Company's proposed modifications to its TIRF, the Attorney General proposes three different modifications of her own, namely that the Department should: (1) not allow the TIRF to continue without setting enforceable leak reduction targets to benchmark the Company's ongoing performance; (2) update the O&M credit applicable to the replacement of each mile of non-cathodically protected bare steel main ; and (3) require the Company to add a depreciation net-out test to TIRF expenditures (Exh. AG/DED-1, at 79-80). The Company opposes all three of the Attorney General's proposals, while DOER takes no position. Each of the Company's and Attorney General's proposals is discussed in detail below.

B. Company's Proposed TIRF Modifications

1. One-Percent Cap

a. Company Proposal

The Company states that at the time the Department approved the one-percent cap, it was sufficient to allow predictable operation of the TIRF program (Exhs. CMA/SHB-1, at 32; CMA/DEM-1, at 30). However, the Company notes that since that time several changes have occurred that necessitate a modification of the cap (Exhs. CMA/SHB-1, at 32; CMA/DEM-1, at 30). First, the Company notes that it added to its definition of TIRF-eligible facilities certain cast- and wrought-iron mains, thus increasing total investments (Exhs. CMA/SHB-1, at 32; CMA/DEM-1, at 30). Second, the Company states that the Department mandated the annual replacement of 38 miles of main and, in doing so, the Department did not address how this replacement threshold might affect the Company's ability to stay within the one-percent cap, while also including cast- and wrought-iron facilities in the TIRF program (Exhs. CMA/SHB-1, at 32; CMA/DEM-1, at 30). Third, the Company states that gas revenues have declined substantially, thus decreasing the amount of revenues under the one-percent cap (Exh. CMA/SHB-1, at 33). According to the Company, this decline in gas revenues, in combination with the annual 38-mile main replacement threshold, has reduced the revenues under the cap to an unworkable level in the context of replacing infrastructure under the TIRF program (Exhs. CMA/SHB-1, at 33; CMA/DEM-1, at 31). Further, the Company states that the fluctuations in gas revenues create a high level of unpredictability within the TIRF program relative to the level of investment that will be recoverable in any given year (Exh. CMA/SHB-1, at 34).

As a result of these factors, the Company proposes to modify the one-percent cap to a cap that limits the annual change in revenue requirement associated with the TIRF to 3.75 percent of base distribution revenues (hereinafter referred to as "3.75 percent cap") (Exhs. CMA/SHB-1, at 33-34; CMA/DEM-1, at 31; CMA/JAF-3, at 15-17 & Sch. JAF-3-1-PR at 123). The Company states that based on its proposed test year base distribution revenue in the instant proceeding of approximately $177 million, the proposed cap modification is similar in amount to the one-percent cap on total revenues established by the Department in D.P.U. 09-30, (i.e., $176.85 million x 3.75 percent = $6.63 million) (Exhs. CMA/DEM-1, at 31; CMA/JAF-3, at 15-17).[23] Therefore, according to Bay State, the modified cap preserves the customer protection on bill impacts determined by the Department in D.P.U. 09-30 (Exh. CMA/DEM-1, at 31).

b. Positions of the Parties

i. Attorney General

The Attorney General argues that the Company has failed to demonstrate the need for a change in the one-percent cap (Attorney General Brief at 33; Attorney General Reply Brief

[23] The Company states that the one-percent cap approved in D.P.U. 09-30 was based on total test year revenues at that time of $662,952,270, which thereby yielded a cap of $6,629,523 (Exh. CMA/JAF-3, at 16).

at 24-25). First, the Attorney General dismisses any notion that slow revenue growth is inhibiting the Company's ability to make infrastructure investments under the TIRF's one-percent rate cap (Attorney General Brief at 34). According to the Attorney General, the Company has a cost-containment problem, not a revenue problem, as evidenced by a dramatic increase in replacement-per-mile costs, without a corresponding decrease in overall revenues (Attorney General Brief at 34-35, citing Exhs. AG/DED-1, at 24-26; AG/DED-1, Schs. DED-10, DED-11, DED-12).

Second, the Attorney General argues that if the inclusion in the Company's TIRF of small diameter cast-iron and wrought-iron mains necessitates a modification of the one-percent cap, then the Company should have sought the cap modification in D.P.U. 12-25 since it was there that the Department was "adequately positioned" to weigh the benefits of accelerated replacement of these facilities against the reduced ratepayer protections of a modified cap (Attorney General Brief at 37; Attorney General Reply Brief at 24). Third, the Attorney General contends that the annual 38-mile main replacement requirement is not a mandate by the Department, but rather it is a threshold that was established to address the Company's poor pipeline replacement performance in previous years (Attorney General Brief at 37; Attorney General Reply Brief at 26). In this regard, the Attorney General argues that the annual 38-mile main replacement threshold is far below the 53 to 70 mile annual replacement rate that Bay State would need to achieve in order to replace its entire leak-prone infrastructure in the Company's time-frame of 15 to 20 years (Attorney General Brief at 38, citing Tr. 1, at 105-107; Attorney General Reply Brief at 26). Thus, according to the Attorney General, there is no need to modify the one-percent cap to address the annual replacement threshold (Attorney General Reply Brief at 26).

Fourth, the Attorney General argues that the Company's contention of volatility in gas prices since the approval of the Company's TIRF in 2009 ignores the fact that the Company's proposals to modify elements of the TIRF in D.P.U. 12-25 were argued four years after natural gas commodity prices had fallen from their all-time highs (Attorney General Reply Brief at 26, citing Exh. AG/DED-1, at 27). Thus, according to the Attorney General, the appropriate time to have sought a modification of the one-percent cap, on the basis of volatility in gas prices, was in D.P.U. 12-25 (Attorney General Reply Brief at 26-27).

Fifth, the Attorney General contends that any notion that the proposed change to the one-percent cap is needed to create a predictable level of recovery through the TIRF ignores the flexibility already inherent in the current cap (Attorney General Reply Brief at 27). In particular, the Attorney General contends that historically the Company has averaged annual investments equal to 56.9 percent of that allowable under the existing cap (Attorney General Brief at 33, citing Exhs. AG/DED-1, at 19-20; AG/DED-1, Sch. DED-3; Attorney General Reply Brief at 27-28). Further, the Attorney General claims that going forward, the current one-percent cap is not likely to pose an investment constraint for Bay State because (i) the Company's base distribution revenues and total revenues have been growing over the past three years and are expected to continue to grow over the next three years; and (ii) gas prices are projected to increase by an inflation-adjusted annual average of nearly two percent through 2028, which should yield expected increases in gas revenues for the Company (Attorney General Brief at 33-34, citing Exhs. AG/DED-1, at 20-21, 22-23; AG/DED-1, Schs. DED-4; DED-7;

Attorney General Reply Brief at 28). Thus, according to the Attorney General, there will be "considerable headroom" over the next eight years between anticipated TIRF investments and the maximum allowable investments under the existing one-percent cap (Attorney General Brief at 33, citing Exhs. AG/DED-1, at 23; AG/DED-1, Sch. DED-8; Attorney General Reply Brief at 28, citing Exhs. AG/DED-1, Schs. DED-9, DED-11).

Sixth, according to the Attorney General the proposed modification to the cap will undermine its effectiveness in limiting bill impacts (Attorney General Brief at 38; Attorney General Reply Brief at 30). She notes that the modification will increase the monetary value of the cap (Attorney General Brief at 38). According to the Attorney General, the Company's proposal moves the cap away from protecting customers from increases in utility bills due to the TIRF and directs the cap toward protecting customers only from substantial increases to distribution rates (Attorney General Reply Brief at 29). In this regard, the Attorney General contends that Company's proposed modification to the one-percent cap would have allowed larger rate impacts to customers from 2010 to 2012 (Attorney General Reply Brief at 29, citing Exh. AG/DED-1, Schs. DED-3, DED-9). In particular, the Attorney General notes that in 2012, a modified cap would have permitted the Company to increase its TIRF-related revenue requirement by over $1.5 million dollars (or more than 30 percent) (Attorney General Reply Brief at 29, citing Exh. AG/DED-1, Schs. DED-3, DED-9).

Finally, the Attorney General rejects DOER's arguments in favor of the Company's proposal for reasons similar to those set forth above (see Attorney General Reply Brief at 30-32). For all of these reasons, the Attorney General asserts that the Department should reject the Company's proposal to modify the one-percent cap (Attorney General Brief at 34).

ii. DOER

Citing the "current and projected level of gas prices," DOER supports approval of the Company's proposed change to the one-percent cap, as the proposed cap provides stability, enables the Company to maximize its cost efficiency, and mitigates bill impacts (DOER Brief at 3-6). More specifically, DOER argues that calculating a cap based on base distribution revenues best meets the principal purpose of mitigating bill impacts and supports the goal of rate continuity (DOER Brief at 4). DOER contends that when total customer bills decline, as they did in Bay State's test year, it is optimal to maintain TIRF-related capital improvements rather than reduce them (DOER Brief at 4, citing Exh. CMA/DEM-1, at 31). As an example, DOER notes that if the Company had used its proposed 3.75 percent cap in 2012, then TIRF costs could have been $1.56 million higher, but total bill impacts would have been offset by a reduction in gas costs of over $150 million (DOER Brief at 4). DOER claims that, conversely, a cap that includes gas revenues tends to exacerbate rate increases as gas costs rise, since the cap on TIRF-related capital spending also rises along with the cost of gas (DOER Brief at 4-5). According to DOER, this dynamic will incent higher TIRF-related spending when bills are on the rise and lower TIRF-related spending when bills are declining, the exact opposite effect of what is intended with a rate cap (DOER Brief at 5).

Next, DOER argues that calculating a cap based on base distribution revenue best promotes the goals of efficiency and reasonable cost (DOER Brief at 5). DOER contends that the Company's decoupling mechanism results in relatively stable base distribution revenues (DOER Brief at 5). As such, according to DOER, a cap based on distribution revenues is predictable and would allow the Company to appropriately plan a level of TIRF-replacement activity and spending that is most cost efficient and more closely matches the actual cap (DOER Brief at 5).

Finally, DOER argues that the annual 38-mile main replacement threshold places additional uncertainty on the success of the Company's TIRF program, while the expansion of the TIRF program to include the replacement of certain cast-and wrought-iron facilities places additional burdens on the cost per mile of replaced mains (DOER Brief at 6). Thus, according to DOER, it is reasonable to provide a predictable cap that will enable the Company to more accurately plan its construction projects and achieve a higher level of cost efficiency (DOER Brief at 6).

iii. Company

The Company argues that the expansion of the TIRF program to include the replacement of certain cast- and wrought-iron mains, the establishment of the annual 38-mile main replacement threshold, and the substantial decline in gas revenues necessitate a modification of the one-percent cap (Company Brief at 33, citing Exhs. CMA/SHB-1, at 32-33; CMA/DEM-1, at 30-31). Bay State contends that the last factor – the decline in gas revenues – is particularly significant because the decline in the Company's revenues adversely impacts the level of TIRF-related investments.[24]

[24] In this regard, Bay State notes that in D.P.U. 09-30, the Company's total test year revenues produced a one percent TIRF cap of approximately $6.63 million (Company Brief at 33, citing Exhs. CMA/SHB-1, at 33; Exh. CMA/DEM-1, at 31; CMA/JAF-3, at 16). However, the Company states that one percent of its 2012 test year total revenue is approximately $5 million (Company Brief at 33, citing Exhs. CMA/JAF-3, at 16; DPU-6-2). According to Bay State, the difference of $1.63 million equates to capital investment in the range of $10 million, which is a significant reduction in spending for the Company's TIRF program given that the

Moreover, Bay State argues that because of the scope of the TIRF program, the Company needs to develop its construction plans, resource allocations and contracting arrangements well in advance of the point when the actual total revenues from the prior year are confirmed and, therefore, that fluctuations in revenues create a high level of unpredictability as to the level of investment that will be recoverable through the TIRF in any given year (Company Brief at 33-34, citing Exh. CMA/SHB-1, at 33-34; Company Reply Brief at 13). Bay State argues that to address these concerns, a replacement of the one-percent cap with the proposed 3.75 percent cap is necessary (Company Brief at 34). Bay State contends that a 3.75 percent cap on 2012 test year distribution revenue would be approximately equivalent to the cap established in D.P.U. 09-30, or $6.63 million (Company Brief at 34, citing Exhs. CMA/SHB-1, at 33; CMA/DEM-1, at 31; CMA/JAF-3, at 16; Company Reply Brief at 14).

Further, according to the Company the proposed cap, because it is based on distribution revenues, provides more stability in terms of the level of TIRF investment, results in a predictable level of recovery through the TIRF, and limits bill impacts to customer (Company Brief at 34-35, citing Exhs. CMA/SHB-1, at 34; CMA/JAF-3, at 17; DPU-6-4). On this last point, Bay State contends that the current one-percent cap may provide less protection to customers than a rate cap based only on distribution revenues, and that the Attorney General recognizes such possibility (Company Brief at 43, citing Tr. 12, at 1177-1178; Company Reply Brief at 13-14).

Company anticipates required investment in the range of $40 million annually on the TIRF program (Company Brief at 33 n.12, citing Exh. AG-6-8 (corrected)).

c. Analysis and Findings

As noted above, the Company seeks to replace the current one-percent cap based on total revenues with a 3.75 percent cap based on distribution revenues (Exhs. CMA/SHB-1, at 33-34; CMA/DEM-1, at 31; CMA/JAF-3, at 15-17). The purpose of the one-percent cap is to provide protection for ratepayers by limiting the annual rate increase resulting from the TIRF and by addressing rate continuity concerns. D.P.U. 12-25, at 45-46; D.P.U. 10-114, at 66; D.P.U. 10-55, at 133; D.P.U. 09-30, at 134.

The parties presented a number of arguments regarding several issues, such as the timing of the Company's proposal; whether the current cap poses a financial constraint on the Company; and whether the current cap is compatible with the TIRF program in light of the need to appropriately plan TIRF investments, the inclusion of cast-and wrought-iron mains in the TIRF program, and the 38-mile main replacement threshold (see e.g., Attorney General Brief at 30-35, 37, 38; Attorney General Reply Brief at 24, 26-28; DOER Brief at 5-6; Company Brief at 33-35; Company Reply Brief at 13). We have reviewed these arguments and have given careful consideration to the parties' positions. However, our focus remains on the establishment of a reasonable cap that provides sufficient protection for ratepayers.

In this regard, the Attorney General argues that the proposed 3.75 percent cap does not mitigate bill impacts and, as an example, she notes that in 2012 a modified cap would have permitted the Company to increase its TIRF-related revenue requirement by over $1.5 million dollars (Attorney General Reply Brief at 29, citing Exh. AG/DED-1, Schs. DED-3, DED-9). However, we find that additional TIRF spending is not necessarily inconsistent with the objectives of a revenue cap so long as the cap is maintained at a reasonable level. In this regard, the proposed 3.75 percent cap would restore the cap to the same level as it was in 2009 when the Department approved the TIRF (Exhs. CMA/JAF-3, at 16; DPU-6-2). Further, the proposed 3.75 percent cap will work in conjunction with the Company's decoupling mechanism, which keeps distribution revenues relatively stable. Therefore, the Company's level of TIRF spending under the proposed 3.75 percent cap should remain relatively consistent from year to year. In contrast, as gas prices fluctuate, so too does the current one-percent cap. This scenario is more likely to weaken the value of the cap than basing the cap on relatively stable distribution revenues. Based on these considerations, we find that the Company's proposal will not undermine the ratepayer protections inherent in the cap and, therefore, that the proposal is reasonable and appropriate. Therefore, we approve the Company's proposal and direct the Company to revise the applicable TIRF provisions accordingly.

2. Waiver Provision

a. Company Proposal

Bay State proposes to include a waiver provision in the TIRF tariff to provide the Company with the opportunity to seek the Department's approval of an annual work plan that does not involve the replacement of 38 miles of leak-prone main (Exhs. CMA/SHB-1, at 8, 31; CMA/DEM-1, at 29; CMA/JAF-3, Sch. JAF-3-1-PR at 124). According to Bay State, there might be circumstances in a TIRF year where the Company is not able to meet the annual 38-mile main replacement threshold because resources must be devoted elsewhere (Exhs. CMA/SHB-1, at 34-35; CMA/DEM-1, at 32; Tr. 1, at 118-121Tr. 2, at 290-291).[25]

[25] For example, the Company states that it might need to devote resources to replace: (i) a "priority main" in a two-block radius in Lawrence, Massachusetts; or (ii) the "beltline" in Springfield, which encompasses ten miles of cast-iron main located in difficult

Bay State explains that the proposed waiver provision would ensure that (i) the Company can meet infrastructure requirements existing in a given year without jeopardizing the operation of the TIRF program between rate cases; and (2) the Department can review the Company's decision to vary its work plan from the mandated work (Exh. CMA/SHB-1, at 35). Under Bay State's proposal, the Company would file a waiver request in the third or fourth quarter of the year preceding the TIRF investment year for which the waiver is being requested, unless exigent circumstances require the Company to seek the waiver during the TIRF year (Exh. DPU-6-8). Bay State's proposed waiver language in its TIRF tariff would require the Company to show "good cause" for the waiver, and the waiver would be deemed allowed unless the Department denied the request within 60 days of the filing (Exhs. CMA/JAF-3, Sch. JAF-3-1-PR at 124; AG-6-9).

b. Positions of the Parties

i. Attorney General

The Attorney General argues that the Company's request for the establishment of a waiver provision in its TIRF tariff should be rejected (Attorney General Brief at 39-41; Attorney General Reply Brief at 37-39). First, the Attorney General argues that Bay State does not define any limitations on the duration of a waiver, and she notes that the Company states that the requests could be for "one or more construction seasons." (Attorney General Brief at 39, citing Exhs. AG/DED-1, at 47; CMA/DEM-1, at 32).

Second, as noted above, the Attorney General contends that the annual 38-mile main replacement requirement is not a mandate by the Department, but rather it is a threshold that was

---

construction conditions; or (iii) inside meters and services that operate at high pressure and pose a risk to public safety and reliability (Exh. CMA/DEM-1, at 32-33).

established to address the Company's poor pipeline replacement performance in previous years (Attorney General Brief at 39-40). According to the Attorney General, the "performance standard" adopted by the Department was clearly set to be consistent with historic replacement trends and designed in a fashion to incent the Company to replace mains at a rate consistent with at least minimum expectations (Attorney General Brief at 40, citing D.P.U. 12-25, at 53-54; Attorney General Reply Brief at 38). Further, the Attorney General notes that Bay State, in proposing to allow a waiver provision, fails to appreciate or even acknowledge that its poor performance in prior years necessitated the 38-mile main replacement threshold as a safeguard to ensure that public benefits of the TIRF program are realized (Attorney General Brief at 40, citing D.P.U. 12-25, at 47-48; Attorney General Reply Brief at 37-38).

Third, the Attorney General claims that Bay State's belief that it may have difficulties in the future meeting the 38-mile main replacement threshold ignores the Company's internal schedule for replacement activities (Attorney General Brief at 40; Attorney General Reply Brief at 38). Specifically, the Attorney General asserts that Company's current time frame for replacing its leak-prone infrastructure would require the Company to average approximately 54 to 72 miles of replacement per year, which is 42 to 89 percent greater than the annual 38-mile main replacement threshold (Attorney General Brief at 40-41, citing Exhs. CMA/SHB-1, at 5; AG/DED-1, Sch. DED-11; Tr. 1, at 105-106; Attorney General Reply Brief at 38). Therefore, the Attorney General asserts that, given Bay State's anticipated rate of replacement, the Company should have little difficulty meeting this expectation through its accelerated pipeline replacement efforts funded by the TIRF (Attorney General Reply Brief at 39).

Finally, the Attorney General expresses concern that a waiver provision would allow Bay State, in future proceedings, to argue that a granted waiver was "a pre-determination of prudence" as to the replacement activities that were undertaken in conjunction with the waiver (Attorney General Brief at 41, citing Exh. AG/DED-1, at 53), Thus, the Attorney General asserts that if the Department approves such future waiver requests, it should specifically indicate that a granted waiver shall not impact any future prudence review of related infrastructure replacement activities (Attorney General Brief at 41; Attorney General Reply Brief at 39).

ii. DOER

DOER argues that the Company's proposal for a waiver provision in its TIRF tariff is unpersuasive (DOER Brief at 2-3). DOER contends that the examples cited by the Company to justify a waiver are not emergencies that disrupt the planned construction schedule but are the types of projects that should be part of the planned construction schedule (DOER Brief at 2). Further, DOER notes that such future infrastructure replacement projects would affect the internal resources needed to manage the crews, but not the number of crews available to the Company to complete the scheduled work (DOER Brief at 2-3, citing Exh. CMA/DEM-1, at 33-34). According to DOER, the evidence suggests that the Company should be adequately staffed for all planned construction projects, whether TIRF-related or otherwise (DOER Brief at 3, citing Exh. AG-7-4(a)). Moreover, DOER argues that because gas distribution operations are fairly similar across jurisdictions, the Company has the option to draw on the staffing resources of NiSource's seven other distribution companies (DOER Brief at 3).

Finally, DOER argues that the Company does not need the Department's prior approval to request a waiver of the 38-mile requirement (DOER Brief at 3). According to DOER, should circumstances arise that prevent Bay State from meeting the 38-mile replacement threshold, the Company is free to petition the Department and seek appropriate relief (DOER Brief at 3).

iii. Company

As noted above, Bay State argues that there might be instances where the Company will not be able to meet the 38-mile main replacement threshold because internal resources are reasonably and prudently devoted to specific, larger-scale projects (Company Brief at 37-38, citing Exhs. CMA/SHB-1, at 34-35; CMA/DEM-1, at 32-34; Tr. 1, at 119-121; Company Reply Brief at 17). Bay State contends that under such circumstances, there would be a valid basis for varying the work plan design for a given construction season to accomplish specific replacement targets (Company Brief at 38, citing Exh. CMA/SHB-1, at 35; Tr. 2, at 291). Thus, Bay State claims that when these circumstances are present, the Company should have the flexibility to structure its work plan to address those considerations without the consequence of a penalty for failing to meet the 38-mile main replacement threshold (Company Brief at 38, citing Exhs. CMA/SHB-1, at 35; CMA/DEM-1, at 34).

Bay State argues that there is no reason to limit the Company's ability to seek a waiver (Company Brief at 48, citing Exhs. CMA/SHB-1, at 34-35; CMA/DEM-1, at 32-33). In this regard, Bay State does not dispute that it has the ability to petition the Department for relief should the Company encounter obstacles in meeting the 38-mile main replacement threshold, but the Company seeks a specific tariff provision in order to establish "some guidelines" applicable to the waiver process (Company Brief at 48; Company Reply Brief at 16). Further, the Company denies that its request for a waiver provision is an attempt to ignore the need to replace leak-prone infrastructure (Company Brief at 48). Rather, Bay State argues that the waiver provision is merely an attempt by the Company to be realistic and to address situations that might require shifting the focus away from achieving a mileage replacement threshold and toward completing infrastructure replacements that are essential to preserving the safety and reliability of the system (Company Brief at 48, citing Exhs. CMA/SHB-1, at 35; CMA/DEM-1, at 34; Tr. 2, at 291).

Finally, Bay State rejects the Attorney General's "pre-determination of prudence" argument and notes that even if the Department approved a waiver provision for the 38-mile main replacement threshold under TIRF, the Company's capital expenditures would still be subject to the Department's traditional prudence review (Company Brief at 48-49).
For all of these reasons, Bay State asserts that the Department should approve the Company's waiver provision proposal (Attorney General Brief at 38).

c. Analysis and Findings

In establishing the threshold level of annual main replacement in the Company's last base rate case, we found that between 2007 and 2011 the Company averaged 38.2 miles of TIRF-eligible main replacement per year. D.P.U. 12-25, at 54. In the instant case, the Company reports that it replaced 43 miles of TIRF-eligible mains in test year 2012 (Exhs. CMA/DEM-1, at 24; AG-12-11, at 1-2; Tr. 2, at 294; RR-AG-6 (Supp.)). Moreover, Bay State concedes that it intends to exceed the 38-mile main replacement threshold in order to meet the goals of the Company's system modernization plan (Exhs. CMA/SHB-1, at 34; DPU-6-17). Given these considerations, we are not persuaded by Bay State's speculation that some future events might adversely impact the Company's ability to maintain the 38-mile main replacement threshold for which the Department should establish a formal waiver request process (Exhs. CMA/SHB-1, at 34-35; CMA/DEM-1, at 32; Tr. 1, at 118-121Tr. 2, at 290-291). Therefore, we find no compelling reason at this time to carve out a waiver process.

Further, in the Company's last base rate case, we established the annual 38-mile main replacement threshold because we concluded that this minimum level of main replacement would ensure a sustained, aggressive, and accelerated rate of replacement of aging, leak-prone infrastructure for the benefit of public safety, service reliability, and the environment, and thereby achieve a central objective of the TIRF mechanism. See D.P.U. 12-25, at 54, citing D.P.U. 10-114, at 56; D.P.U. 10-55, at 122; D.P.U. 09-30, at 133. Thus, the 38-mile main replacement requirement requires the Company to maintain the focus of its construction season decision-making on the replacement of TIRF-eligible mains (see Exh. DPU-6-17). The introduction of a formal waiver provision raises a concern that the Company might shift its decision-making focus away from TIRF-related projects, which would adversely impact the pace of replacement of leak-prone facilities. We do not intend to substitute our judgment for that of the Company in determining the appropriate work plan for an upcoming construction season, nor do we suggest that the Company should refrain from undertaking important construction endeavors that do not contribute to the 38-mile main replacement threshold. However, we find that it is prudent to maintain the incentives necessary for the Company to continue aggressive replacement of its leak-prone infrastructure. Therefore, we decline to include a formal waiver provision in the Company's TIRF tariff.

Finally, we note that in establishing the annual main replacement threshold in Bay State's last base rate case we did not restrict the Company's ability to file a petition with the Department to seek relief from the threshold should circumstances arise that the Company believes would require Department intervention. We do not intend to implement any such restrictions in this Order. Therefore, Bay State retains the flexibility and discretion to make main replacement decisions consistent with the objectives of the TIRF program.

3. DISC

a. Company Proposal

The Company proposes to modify the definition of "Eligible TIRF Costs" in its tariff to include project costs incurred from the time that a project goes into service to the time that rate recovery commences through the TIRF (Exhs. CMA/SHB-1, at 36; CMA/DEM-1, at 34; CMA/JTG-1, at 63). The project costs sought for recovery are comprised of financing costs, depreciation expense, and property taxes, all of which, for this period, are not included in the revenue requirement under current ratemaking principles (Exhs. CMA/SHB-1, at 36; CMA/DEM-1, at 34; CMA/JTG-1, at 63). The Company proposes to calculate these costs and defer them for base rate recovery in the Company's next base rate case (Exhs. CMA/SHB-1, at 36; CMA/DEM-1, at 34; CMA/JTG-1, at 64-65). The Company proposes that the financing costs would be based on the Company's cost of long-term debt as approved in this case (Exh. CMA/JTG-1, at 63-64).

The Company states that the DISC is comparable to an Allowance for Funds Used During Construction ("AFUDC"), which is designed to compensate a utility for the cost of funding capital projects during the construction period (Exhs. CMA/SHB-1, at 37; CMA/DEM-1, at 34-35). The Company's proposal seeks similar treatment (Exhs. CMA/SHB-1, at 37; CMA/DEM-1, at 35). In addition to including the cost of funding the capital projects, the Company would include the associated depreciation and property taxes for the period between the in-service date and the date the TIRF becomes effective (i.e., November 1 of each year for prior year investments) (Exhs. CMA/SHB-1, at 37; CMA/DEM-1, at 35). According to the Company, the DISC proposal is necessary in order to properly align rates with the costs associated with TIRF-related investments (Exh. CMA/SHB-1, at 36-37).

b. Positions of the Parties

i. Attorney General

The Attorney General opposes the Company's DISC proposal for several reasons. First, the Attorney General argues that the DISC proposal represents a transparent attempt to recover carrying costs[26] despite the fact that the Department (i) approved the Company's TIRF, in part, because there was not a carrying cost component to it, and (ii) previously has denied the recovery of carrying charges associated with infrastructure replacement trackers because of the clear detrimental effect such inclusion of these charges would have on regulatory lag (Attorney General Brief at 42-43, citing D.P.U. 10-55, at 134-135; D.P.U. 09-30, at 129-130; Bay State Gas Company, D.P.U. 07-89 (2008); Bay State Gas Company, D.T.E. 05-27 (2005); Attorney General Reply Brief at 33-35). The Attorney General contends that the Company has failed to articulate any reason why the Department now should embrace a carrying charge component in context of a TIRF mechanism (Attorney General Reply Brief at 34-35).

In this regard, the Attorney General contends that the Company is entitled only to the opportunity to earn a fair return on investment, not a guarantee that it will earn its allowed return on investment (Attorney General Reply Brief at 35). Further, the Attorney General notes that

[26] The Attorney General and DOER make numerous references to carrying costs or carrying charges in the context of the Company's DISC proposal. We understand these references to mean the financing costs that the Company seeks to recover under its DISC proposal.

special ratemaking mechanisms such as the TIRF are "not intended to provide an all-out financial support for a specifically established term and program of mains replacement nor supplant or eliminate the disciplining role of regulatory lag inherent in traditional ratemaking principles" (Attorney General Reply Brief at 35, quoting D.P.U. 10-55, at 132-133).

Second, the Attorney General argues that Bay State's proposal to start effectively charging costs on the date that the plant goes into service will mean that the Company and the Department will have to attempt to verify and track each vintage of plant, by the date it actually went into service, so that the calculation of any associated carrying costs might be correctly calculated (Attorney General Brief at 44). According to the Attorney General, this ratemaking device would require the Department to conduct an adjudicatory process as to each proposed capital addition (Attorney General Brief at 44). Further, the Attorney General claims that the carrying charges aspect of the DISC proposal gives the Company an incentive to improperly account for investment as "in service" at the earliest date, even though it might not actually be in service, in order to start accruing carrying charges at the earliest possible date (Attorney General Brief at 44).

Third, the Attorney General argues that Company improperly seeks to use the cost of long-term debt as the carrying cost rate, even though this is not the Company's actual cost rate (Attorney General Brief at 44). The Attorney General contends that until the Company receives approval from the Department to issue new securities after meeting the net plant test, the only carrying cost rate that the Department can recognize is the Company's short-term debt interest rate (Attorney General Brief at 44-45).

Fourth, the Attorney General argues that Bay State proposes to include property taxes in the DISC mechanism, even though the Company will not have to pay those taxes for as much as a year and a half after the plant goes into service (Attorney General Brief at 45, citing Tr. 1, at 688-689). Fifth, the Attorney General contends that the Company has not demonstrated a need for the DISC proposal (Attorney General Brief at 46). In this regard, the Attorney General rejects any notion that the failure of the current regulatory structure within the Commonwealth prevents the Company from sufficiently recovering all of its costs (Attorney General Brief at 46, citing Tr. 1, at 13). Instead, the Attorney General claims that Bay State has one of the most favorable regulatory environments of any NiSource subsidiary, and that NiSource recognizes this to be the case (Attorney General Brief at 46, citing Exh. AG-1-10, Att. A; Tr. 1, at 37-38). The Attorney General attributes the Company's purported earnings problems to a lack of appropriate cost containment (Attorney General Brief at 46-47, citing Exh. AG/DED-1, at 80-93).

Finally, the Attorney General dismisses DOER's arguments in support of the Company's proposal (Attorney General Reply Brief at 36-37). The Attorney General argues that the reasons cited by DOER in support of the DISC proposal are not changed circumstances from what was known when the Company's TIRF was approved in D.P.U. 09-30 and, therefore, the Department should reject DOER's assertion that the Company's DISC proposal is reasonable (Attorney General Reply Brief at 36-37).

ii. DOER

DOER argues that although the Company's TIRF was approved without a carrying cost component, it is reasonable to review the actual experience of the program over several years and make appropriate adjustments to improve its effectiveness to better achieve the intended results

(DOER Brief at 8). In this regard, DOER notes that carrying costs have increased substantially from the initial years of the Company's TIRF (DOER Brief at 8-9, citing Exh. AG-6-19).[27] According to DOER, the level of unrecovered costs associated with TIRF-related investments represents a significant portion of the Company's 2012 total net operating income (DOER Brief at 9, citing Exh. AG-1-2 (6) (2012) at 7).

Further, DOER contends that the inclusion of cast- and wrought-iron mains in the Company's TIRF program, along with the annual 38-mile main replacement threshold, will likely cause a significant level of carrying costs to continue (DOER Brief at 10, citing Exh. AG-6-19, at 4-6). DOER notes that the costs sought for recovery – interest charges, depreciation expenses and property taxes – are typical costs associated with all capital investment (DOER Brief at 10). Moreover, DOER claims that even under the Company's proposal, there will remain unrecovered carrying costs associated with the TIRF investments (DOER Brief at 10). For all of these reasons, DOER recommends approval of the Company's DISC proposal (DOER Brief at 10).

iii. Company

Bay State argues that the DISC proposal is of the "highest significance" for the Company in this case (Company Brief at 36). Further, Bay State argues that there is nothing that prohibits the Company from making a proposal to the Department that has been made in the past (Company Brief at 44). In this regard, the Company contends that the DISC is similar to other proposals that would allow for recovery of a greater portion of the costs that are actually incurred

27 Specifically, DOER argues that for the first two years of the TIRF, carrying costs ranged between $1.0 and $1.4 million, but for 2012, the costs increased almost two-fold to over $2.2 million and for 2013 carrying costs are approaching $4 million (DOER Brief at 8-9, citing Exh. AG-6-19).

to conduct the TIRF program (Company Brief at 45). Further, according to the Company, the mere fact that the Department has denied recovery of a particular cost in the past is not proof that it should be denied in the future (Company Brief at 45).

In addition, Bay State argues that the Department is obliged to set rates at a level that will allow the Company the opportunity to earn a fair return on its investment, and that this responsibility takes precedence over regulatory lag concerns (Company Brief at 45; Company Reply Brief at 15-16, citing New England Telephone & Telegraph Co. v. Department of Public Utilities, 371 Mass., 67, 73 (1976)). However, in any event, the Company claims that the DISC proposal will not eliminate regulatory lag because it will only account for a portion of the gap between cost incurrence and cost recovery that currently exists (Company Brief at 45, citing Exh. AG-6-11; see also Company Reply Brief at 15, 16). Moreover, the Company asserts that the Massachusetts Supreme Judicial Court ("SJC") has recognized that the "deleterious effects of regulatory lag" hinders the ability of a company to achieve its authorized rate of return, especially when that company is "engaged in an extensive but necessary program of capital improvements" (Company Brief at 45, quoting Southbridge Water Supply Company v. Department of Public Utilities, 368 Mass. 300, 303, 306 (1975); Company Reply Brief at 15-16). Thus, Bay State submits that although the concept of regulatory lag is a consideration that the Department may take into account in its broad discretion in setting rates, it is not a ratemaking methodology that can be wholly relied on to disallow reasonably and prudently incurred costs, as the Attorney General suggests (Company Brief at 45).

Bay State also argues that the Attorney General does not: (i) dispute the fact that the costs that would be recovered through the DISC are, in fact, costs that are actually incurred by the Company; or (ii) argue that the costs are already accounted for under existing ratemaking procedures, which the Company has demonstrated is not the case; or (iii) offer any evidence to dispute the Company's showing that, because the level of infrastructure expenditure is significant as compared to the Company's overall cost structure, it is the cause for a significant portion of the deficiency in the Company's earnings and its inability to achieve its authorized return (Company Brief at 46, citing Exhs. CMA/SHB-1, at 36; AG-6-11, Att.; Tr. 1, at 13, 98, 101; see also Company Reply Brief at 14).

Next, the Company rejects any notion that the DISC will make it difficult for the Department to determine when an investment was placed into service (Company Brief at 46). According to the Company, if the Department has been able to properly review AFUDC, it should be able to properly review DISC as the same in-service date would apply to both computations (Company Brief at 46). Further, the Company disagrees with the Attorney General that carrying costs, if allowed, should be at the short-term debt rate (Company Brief at 47, citing Attorney General Brief at 44). The Company contends that it proposes using the cost of long-term debt because it is an incremental and conservative approach that will help the Company come closer to achieving its authorized rate of return (Company Brief at 47, citing Tr. 1, at 13, 18, 115).

Finally, the Company dismisses the Attorney General's argument that the inclusion of property taxes in DISC is not appropriate, and claims that the Attorney General "confuses the issue" (Company Brief at 47). According to Bay State, there is no question that the Company incurs property tax expense related to TIRF facilities (Company Brief at 47, citing Exh. AG-6-20; Tr. 6, at 680). Bay State notes, however, that under the DISC recovery of property taxes will be deferred until the next rate case, at which time the Department can review these deferred costs to ensure that only property taxes actually incurred are included in rate base (Company Brief at 47, citing Tr. 6, at 680-681).

Based on all of these arguments, Bay State asserts that the DISC proposal is reasonable and necessary, and should be approved in order to provide the Company with an opportunity to approach its authorized rate of return (Company Brief at 36, 37, 46; Company Reply Brief at 16). The Company notes that the DISC should be approved "even if only on a temporary basis until the Company gets through the next few years of infrastructure investment" (Company Reply Brief at 14-15, citing Tr. 1, at 100).

c. Analysis and Findings

Under traditional ratemaking, a company makes capital investments in plant and equipment and, at the time of the company's next base rate case if those investments are found to be prudently incurred and used and useful, the financing costs, depreciation, and property taxes associated with the investments are added to a company's base rates. See, e.g., D.P.U. 85-270, at 20 (for costs to be included in rate base, the expenditures must be prudently incurred and the resulting plant must be used and useful to ratepayers). However, during the period between the time that the project is placed into service and the time that the investment is recovered through base rates, the company absorbs these investment-related costs. The Company's TIRF mechanism is not intended to supplant traditional ratemaking. D.P.U. 12-25, at 45; D.P.U. 10-114, at 56; D.P.U. 10-55, at 122. In the instant case, we find that the Company's DISC proposal represents a significant change to the traditional ratemaking treatment associated with investments made under the Company's TIRF program.

The Department gives careful consideration to any new regulatory mechanism proposal. D.P.U. 12-25, at 17; D.P.U. 10-55, at 66 n.43; D.T.E. 05-27, at 183-186. The Department has shown that it is willing to depart from traditional ratemaking when a company demonstrates sufficient need. See, e.g., Massachusetts Electric Company/Nantucket Electric Company, D.P.U. 09-39, at 205-209 (2009) (approval to collect revenue through base rates to fund a storm contingency account); NSTAR Pension, D.T.E. 03-47-A at 16 (2003); D.T.E. 03-40, at 306-308. However, the Department also has rejected proposals when a company has failed to demonstrate a sufficient reason to deviate from traditional ratemaking principles. See, e.g., D.P.U. 12-25, at 16-26 (rejecting rate year rate base proposal); D.P.U. 11-01/D.P.U. 11-02, at 139-143 (rejecting TIRF proposal). Moreover, the Department has previously found that special ratemaking treatment is neither intended to provide an all-out financial support for a specifically established term and program of mains replacement, nor to supplant or eliminate the disciplining role of regulatory lag inherent in traditional ratemaking. See D.P.U. 10-55, at 133; D.P.U. 10-114, at 65; D.P.U. 09-39 at 80-81.[28]

The approval of the TIRF already has reduced regulatory lag associated with the recovery of related investments. Under Bay State's DISC proposal, the Company essentially would recover all of its costs on a dollar for dollar basis. Given such a result, we are concerned that the Company's proposal would diminish regulatory lag further and to such a degree that it would provide little if any incentive for the Company to invest efficiently. Further, we reject the notion that the regulatory lag associated with the recovery of financing costs, depreciation, and property

[28] Under the Department's ratemaking principles, which include the recognition of AFUDC, regulatory lag for a company's capital expenditures is the delay between the company's placing the asset in service and the implementation of rates that recover these costs.

taxes will have a detrimental effect on the opportunity for the Company to earn its allowed return. First, the Company has not sufficiently demonstrated that other opportunities, such as reducing operating costs, have been effectively pursued. Second, as noted above, we are not convinced that the Company's purported inability to earn its allowed return is directly related to some deficiency in the TIRF mechanism. Moreover, we find nothing on the record to establish that the current regulatory environment prevents the Company from having an opportunity to earn its allowed rate of return.[29]

Finally, we note that Bay State undertook an analysis that it contends identifies the contributing factors associated with a claimed earnings deficiency that the Company has experienced following the change in rates approved in D.P.U. 12-25 (Exhs. AG-6-11 & Att.). The analysis compares the revenue requirement approved in D.P.U. 12-25 to a forecasted ROE calculation based on the Company's 2013 financial plan (Exhs. AG-6-11 & Att.). The Company's analysis purports to show a $6,337,000 revenue deficiency for calendar year 2013, the year following the issuance of the Department's Order in D.P.U. 12-25 (Exhs. AG-6-11 & Att.). The Company's analysis attributes 69.8 percent of the shortfall to its unrecovered revenue requirement (see Exhs. AG-6-11 & Att.). The results of the Company's analysis also purport to show an ROE of 7.2 percent, 2.25 percentage points below the allowed 9.45 percent ROE (Exh. AG-6-11, Att. at 1).

Bay State's analysis rests on a forecasted ROE calculated on the basis of the Company's 2013 financial plan (Exh. AG-6-11). The analysis was not updated during the proceedings, and

29 We note that NiSource, Bay State's parent, acknowledges that the Company has one of the most favorable regulatory environments of all of NiSource's subsidiaries (Tr. 1, at 37-38, citing Exh. AG-1-10-A at 67).

it is unclear what variables were used to complete the analysis. We find that the analysis is of limited, if any, probative value. Evaluating the Company's revenue deficiency claims in the context of the DISC proposal, we find no convincing link to demonstrate that approval of the DISC is necessary for the Company to have an opportunity to earn its allowed ROE. Accordingly, we need not reach the other arguments raised by the parties, and we decline to approve the Company's proposal.

C. Attorney General's Proposed TIRF Modifications

1. Leak Reduction Metric

a. Attorney General Proposal

The Attorney General proposes that the Department eliminate the 38-mile main replacement threshold and replace it with an enforcement mechanism based on the Company's annual leak reduction performance (Exh. AG/DED-1, at 5, 40, 71, 79, 91; Tr. 12, at 1221-1222). In particular, the Attorney General recommends that the Department require the Company to reduce its annual corrosion-related leaks by five percent per year for its mains and by seven percent per year for its services (Exh. AG/DED-1, at 71). The Attorney General bases these targets on the Company's five-year pre-TIRF average leak reduction rates (Exh. AG/DED-1, at 71).

Further, the Attorney General proposes that the Company's allowed rate of return under the TIRF be reduced proportionally to any percentage deficiency in the Company's leak reduction performance as measured by the year-end leak inventory (Exh. AG/DED-1, at 5, 71-72, 79, 91-92).[30] In this regard, the Attorney General recommends a 25 basis point cap on the TIRF ROE for increases or decreases to ensure some degree of stability in the overall returns (Exh. AG/DED-1, at 5, 72, 79, 92).[31] The Attorney General made a similar leak reduction proposal in Bay State's last base rate case. D.P.U. 12-25, at 34-35. Alternatively, the Attorney General proposes to establish a leak reduction metric that would base the Company's performance on the elimination of newly occurring leaks, similar to a metric in place for gas utilities in New Jersey (Tr. 12, at 1222-1224; RR-DPU-25).

b. Positions of the Parties

i. Attorney General

In support of her leak reduction metric, the Attorney General argues that the approval of Bay State's TIRF in D.P.U. 09-30 was clearly predicated on the mechanism attaining certain benefits that the Department found to be in the public interest, including the reduction of leaks from leak-prone facilities and the replacement of bare and unprotected steel infrastructure (Attorney General Brief at 47, citing D.P.U. 09-30, at 133). However, according to the Attorney General, the Company has failed to perform in a fashion consistent with Department expectations and, therefore, if the TIRF is continued, some form of performance metric should be included in the TIRF mechanism (Attorney General Brief at 47).

---

30 For example, if the Company misses its leak reduction target by one percent, its allowed rate of return under the TIRF also should be reduced by one percent (Exh. AG/DED-1, at 72).

31 Thus, for example, if the Company's allowed return on common equity, as determined by the Department, is ten percent, then the allowed return on common equity used to determine the return on investment in the TIRF mechanism would be bounded by 9.75 percent and 10.25 percent (Exh. AG/DED-1, at 72 n. 119).

In particular, the Attorney General claims that from 2008, the year immediately prior to the adoption of the TIRF, to 2012, active leaks on Bay State's system have increased approximately five-fold (Attorney General Brief at 47-48, citing Exh. AG/DED-1, Sch. DED-18; Attorney General Reply Brief at 41). Further, the Attorney General contends that in the last two years, the number of leaks on the Company's system has "skyrocketed" (Attorney General Reply Brief at 42-43, citing Exh. AG/DED-1, at 35). According to the Attorney General, the increase in leaks creates harmful economic, safety, and reliability effects for ratepayers, as well as potentially adding greenhouse gas emission ("GHG") emissions from the system (Attorney General Brief at 48). Thus, the Attorney General asserts that the Department should take every action to ensure that the TIRF mechanism in the future produces the public benefits upon which the original mechanism's approval was predicated and should adopt the Attorney General's leak reduction proposal (Attorney General Brief at 48, citing Exh. AG/DED-1, at 71-72).

The Attorney General contends that setting strict leak-rate based performance targets with corresponding adjustments to Bay State's TIRF-related ROE would link the TIRF to the achievement of meaningful public benefits that result from reduced natural gas leaks, and will eliminate existing concerns of program continuity (Attorney General Reply Brief at 40-41). Further, the Attorney General claims that her proposed performance leak reduction benchmarks are not designed in any way to be punitive to the Company, but are generally designed to return the Company's service performance to leak reduction rates seen prior to the adoption of the TIRF (Attorney General Brief at 48).

Moreover, the Attorney General rejects any notion that the Company has no control over leak rates, and she asserts that if the accelerated pace of pipe replacement cannot be expected to reduce the amount of leaks on the Company's system, then the Department should reconsider the merits of allowing a TIRF mechanism in any form (Attorney General Reply Brief at 42). Finally, the Attorney General notes that her proposal is consistent with one she made in Bay State's prior case (Attorney General Brief at 48, citing D.P.U. 12-25, at 34-35). In this regard, she asserts that if the Department, as it did in D.P.U. 12-25, is inclined to find that her proposal is unworkable because the Company's leak-rate fluctuates year to year independent of factors within the Company's control, then the Department should establish a leak reduction metric that would link the Company's TIRF-related rate of return with reductions in active system leaks, as is done with gas utilities in New Jersey (Attorney General Reply Brief at 43, citing Tr. 12, at 1222-1224; RR-DPU-25).

ii. Company

Bay State argues that it is unclear whether the Attorney General proposes a performance metric based on leak rates or on a reduction in the number of active leaks, since she refers to both in her filings (Company Reply Brief at 19, citing Attorney General Brief at 40-4). Regarding leak rates (i.e., the number of leaks per mile), Bay State contends that it has no control over the number of leaks occurring on leak-prone mains or services remaining in the ground, and that the Attorney General recognizes that there are factors beyond the Company's control that affect the leak rate on leak-prone main, such as fluctuating weather conditions (Company Brief at 50, citing Tr. 12, at 1220-1221; Company Reply Brief at 19). Further, Bay State notes that the Department rejected the Attorney General's leak-rate reduction proposal in the Company's last base rate case because of this control issue, and that nothing has changed since then to warrant the adoption of the Attorney General's proposal (Company Brief at 50-51, citing D.P.U. 12-25, at 52; Company Reply Brief at 19-20). According to the Company, it eliminates actual and potential leaks with the replacement of leak-prone main, and if the mains and services remain in service, the leak rate on those facilities is in no way under the control of the Company (Company Brief at 50-51). Thus, the Company asserts that the Attorney General's proposal would arbitrarily penalize the Company for actions not under its control (Company Brief at 51).

Regarding active leaks on the Company's system, Bay State argues that the Attorney General has not properly calculated the Company's active leak inventory (Company Reply Brief at 20). Specifically, Bay State contends that the Attorney General includes in her inventory of active leaks Grade 2 and Grade 3 leaks,[32] which the Company is only required to monitor in accordance with state and federal pipeline safety regulations (Company Brief at 49, citing Exh. AG-3-2; Tr. 12, at 1218; Company Reply Brief at 20, citing Exhs. AG-3-2; AG-3-18). According to the Company, such inventory does not provide any indication of the annual leak rate on leak-prone main (Company Brief at 49-50; Company Reply Brief at 20). Further, Bay State notes that its current cost of service does not capture costs associated with the reduction of leaks for which only monitoring is required (Company Reply Brief at 20). Thus,

---

[32] Natural gas pipeline leaks are classified according to probable hazard and the need for repair: Grade 1 – probable hazard to persons or property; requires immediate repair or continuous action; Grade 2 – non-hazardous; requires scheduled repair; and Grade 3 – non-hazardous; requires periodic re-evaluation. See ANSI GPTC Z380.1 "Guide for Gas Transmission and Distribution Piping Systems," Guide Material App. G-192-11, 2012 Edition. Available at http://www.aga.org/searchcenter/pages/results.aspx?k=classification%20of%20leaks The Gas Piping Technology Committee ("GPTC") has been accredited by the American National Standards Institute ("ANSI").

Bay State asserts that if the Department is inclined to adopt a performance metric based on the active leaks reductions, and include Grade 2 and Grade 3 leaks, the Department should approve the aforementioned DISC proposal; otherwise repairing these leaks would be costly and would impair the Company's ability to conduct the TIRF program at the level required by the Department (Company Reply Brief at 20).

c. Analysis and Findings

In the Company's last base rate case, the Department declined to accept the Attorney General's proposal to establish a leak-rate reduction metric of five percent per year for leak-prone mains and seven percent per year for leak-prone services. D.P.U. 12-25, at 52. In particular, we found persuasive Bay State's argument that distribution system leak rates fluctuate year to year independent of factors within the Company's control. D.P.U. 12-25, at 52. The Attorney General raises the same proposal in the instant case as she did in the Company's last base rate case. In support of her proposal, she claims that the Company's leak rates have "skyrocketed" in the past two years (Attorney General Brief at 42-43, citing Exh. AG/DED-1, at 35). However, as the Company points out, the evidence cited by the Attorney General is based on the aggregate number of leaks on the Company's system and does not distinguish between leaks that the Company is required to address immediately (Grade 1 leaks) and those that require monitoring or less oversight (Grades 2 and Grade 3 leaks) (see Exh. AG/DED-1, Sch. DED-18; Tr. 12, at 1218).

The record shows that total main leaks have decreased since 2009 and have remained relatively steady over the past three years (see Exh. AG-3-18, Att. B). However, the record does not segregate these leaks by grade. We find that it is inappropriate to establish a leak reduction metric without a complete understanding of the nature of the leaks at issue. Further, we continue to give credence to our finding in the Company's last base rate case that distribution system leak-rates fluctuate from year to year independent of factors within the Company's control. D.P.U. 12-25, at 52.[33] Finally, we are not persuaded by the Attorney General's recommendation that we adopt leak reduction metrics similar to those in place in New Jersey. The limited evidence presented by the Attorney General in support of her recommendation does not provide us with a sufficient basis upon which to consider the applicability of the New Jersey metrics to Bay State's TIRF program.

For all of the above reasons, we decline to adopt the Attorney General's proposals to establish a leak reduction performance metric. However, we will continue to require that the Company document leak reductions and total avoided natural gas emissions associated with leak reductions in its annual TIRF filings. See D.P.U. 12-25, at 52. The Company shall include in these filings a detailed explanation of its leak reduction activities for that TIRF year, as well as detailed explanation of the reasons for any variance in leak reduction rates from the previous year.

2. O&M Credit Update

a. Introduction

In D.P.U. 09-30, at 120, 134, the Department adopted an O&M credit of $2,077 per mile of replaced non-cathodically protected steel mains to reflect the avoided O&M repair costs associated with the replacement of these facilities. This amount represented the average leak repair cost per mile for non-cathodically protected steel mains during 2004 to 2008.

---

33 Such factors include increasing rate of corrosion or an unusually cold winter causing frost heaves and cast-iron breakage. D.P.U. 12-25, at 52 n.27.

D.P.U. 09-30, at 120. In Bay State's last base rate case, the Department accepted the Company's proposed update of the credit to $2,542 per mile of replaced non-cathodically protected steel mains. D.P.U. 12-25, at 61. This amount represented the average leak repair cost per mile for these facilities during 2009 to 2011. D.P.U. 12-25, at 59, 61. The Department also accepted the Company's proposal to calculate a separate O&M credit of $767 applicable to cast- and wrought-iron mains based on the same three-year cost average. D.P.U. 12-25, at 60-61.

In the instant case, the Company proposes to update the O&M credit to $2,668, by using the average leak repair cost per mile for non-cathodically protected steel mains during 2010 to 2012 (Exhs. CMA/JAF-3, at 14-15 & Sch. JAF-3-4; AG-3-29, Att. B; CMA/JAF-3, Sch. JAF-3-1-PR at 121). The Company also proposes to update the O&M credit applicable to the replacement of cast- and wrought-iron mains to $634 based on the average repair cost per mile of these facilities for 2010 to 2012 (Exhs. CMA/JAF-3, at 14-15 & Schs. JAF-3-1-PR at 121, JAF-3-4).

b. Attorney General Proposal

The Attorney General proposes that the Department further update the O&M credit applicable to the replacement of non-cathodically protected steel mains to either (i) $2,949 based on an updated three-year average of leak repair costs per mile,[34] or (ii) $2,771 based on an updated four-year average of leak repair costs per mile (Exhs. AG/DED-1, at 5-6, 73, 79, 92;

[34] The Attorney General's three-year cost average is $281 higher than that proposed by the Company, as the Attorney General's cost information for 2012 differs from that reported by the Company (see Exhs. CMA/JAF-3, Sch. JAF-3-4; AG-3-29, Att. B; AG/DED-1, Sch. DED-32). The Attorney General provides no explanation for this difference.

AG/DED-1, Sch. DED-32).[35] The Attorney General's primary recommendation is to update the O&M credit based on the four-year average of leak repair costs per mile (Exh. AG/DED-1, 73, 79-80, 92).

c. <u>Positions of the Parties</u>

i. <u>Attorney General</u>

The Attorney General argues that her proposal is not intended to simply change the basis of the calculation of the O&M credit from a three-year average to a four-year average, but rather that it is also intended to update the amount of the credit approved in Bay State's last base rate case (Attorney General Reply Brief at 43-44). Further, the Attorney General asserts that although her primary recommendation is an updated O&M credit based on an updated four-year average of leak repair costs per mile, the overall credit is lower than the amount associated with an updated three-year average (Attorney General Reply Brief at 44). The Attorney General also notes that no party has contested the calculation of the proposed updated O&M credit amounts (Attorney General Reply Brief at 44). Based on these considerations, the Attorney General asserts that the Department should adopt a new O&M credit of $2,771 per mile of replaced leak-prone pipe or, if the Department is inclined not to change its method of updating the O&M credit, that it should adopt a new O&M credit of $2,949 based on an updated three-year cost average (Attorney General Brief at 49; Attorney General Reply Brief at 44).

ii. <u>Company</u>

Bay State argues that the Attorney General's proposal to use a four-year average of leak repair costs to determine the O&M credit should be rejected (Company Brief at 52; Company

---

35 The Attorney General does not seek to modify the credit applicable to cast- and wrought-iron mains.

Reply Brief at 21). The Company claims that it has provided a clear, well supported calculation of the O&M offset using a three-year cost average, as directed by Department precedent (Company Reply Brief at 20, citing Exhs. CMA/JAF-3, at 14-15 & Sch. JAF 3-4; D.P.U. 12-25, at 60). The Company asserts that there is no reason to change the method of calculating the O&M credit other than to include another year in the calculation so as to increase the amount of the credit (Company Brief at 52; Company Reply Brief at 21). Bay State notes that the Department already rejected this approach in the Company's last base rate case (Company Brief at 52, citing D.P.U. 12-25, at 60).

d. Analysis and Findings

In the Company's last base rate case, the Department accepted as a reasonable O&M credit the rolling three-year average of repair costs per mile of non-cathodically protected steel mains. D.P.U. 12-25, at 60. The Department declined to adopt the Attorney General's recommendation of a four-year cost average. D.P.U. 12-25, at 59, 61. The Department also has approved the use of a rolling three-year average to determine the O&M credit applicable to other gas companies. See D.P.U. 10-114, at 72; D.P.U. 10-55, at 138-141. In the instant case, the Attorney General has failed to provide any compelling reason why the Department should depart from using a rolling three-year cost average. Based on these considerations, we reject the Attorney General's proposal to use a four-year cost average in deriving the O&M credit applicable to the replacement of non-cathodically protected steel mains.

After review of the evidence, we accept the Company's calculation of its three-year cost average of $2,668 applicable to the replacement of non-cathodically protected steel mains (Exhs. CMA/JAF-3, at 14-15 & Sch. JAF-3-4; AG-3-29, Att. B). We find that the Attorney

General has failed to provide sufficient evidence to support the derivation of her calculation of the three-year cost average of $2,949 (see n.34 above). Further, we accept the Company's updated O&M credit of $634 applicable to the replacement of cast- and wrought-iron mains. Consistent with our finding in D.P.U. 12-25, we direct the Company to update these O&M credits with the most recent three-year cost averages in its local distribution adjustment clause ("LDAC") tariff with each subsequent TIRF filing. See D.P.U. 12-25, at 61.

3. Depreciation Net-Out Test

a. Introduction

In Bay State's last base rate case, the Department approved a two-step process by which the Company is required to demonstrate that TIRF O&M labor overhead and clearing account burden costs are incremental to the O&M labor overhead and clearing account burden costs being recovered in base rates and in the pension and post-retirement benefits other than pensions ("PBOP") expense factor ("PEF"). D.P.U. 12-25, at 56-57, citing D.P.U. 10-114, at 73-74; D.P.U. 10-55, at 141-142. First, the Company is required to compare actual labor overheads and clearing account burdens charged to O&M each year of the TIRF to the amount of O&M labor overheads and clearing account burdens included in the most recent base rate proceeding. D.P.U. 12-25, at 56, citing D.P.U. 10-114, at 45; D.P.U. 10-55, at 74-75. If actual O&M labor overheads and clearing account burdens charged to the TIRF are less than the amounts included in base rates and in the PEF, then the Company reduces the total capitalized labor overheads and clearing account burdens in a given year of its TIRF filing by the difference. D.P.U. 12-25, at 56, citing D.P.U. 10-114, at 46; D.P.U. 10-55, at 74. If the TIRF actual labor overheads and clearing account burdens charged to O&M expense exceed the level set in base rates and in the

PEF, then no such adjustment would be made. D.P.U. 12-25, at 56-57, citing D.P.U. 10-114, at 46; D.P.U. 10-55, at 75. Second, the Company must demonstrate that the overall level of the actual capitalized labor overheads and clearing account burdens, as adjusted in the first step, are allocated equally to all capital projects in any given year, including TIRF projects. D.P.U. 12-25, at 57, citing D.P.U. 10-55, at 75.

b. Attorney General Proposal

In the instant case, the Attorney General proposes a third step, referred to as a "depreciation net-out," which limits the annual level of TIRF-eligible investments to the lesser of (1) the total non-growth capital expenditures in that year less the depreciation expense allowance included in base rates, and (2) the actual TIRF capital expenditures for that year (Exh. AG/DED-1, at 6, 75-76, 80, 92-93). The Attorney General made the same proposal in Bay State's last base rate case. D.P.U. 12-25, at 36, 57-58.

c. Positions of the Parties

i. Attorney General

The Attorney General argues that Bay State's two-part incremental cost test is inconsistent with the test used by other gas utilities, namely Boston Gas Company and Colonial Gas Company (the "National Grid gas companies"), because these utilities include the depreciation net-out test in their analysis of incremental TIRF investment (Attorney General Brief at 51). The Attorney General asserts that Bay State should be required to perform the depreciation net-out test, as this requirement would subject the Company's annual TIRF expenditures to the same three-part test required for the National Grid gas companies and, therefore, will assure (1) uniformity and consistency in the way gas utility TIRF mechanisms are governed; and (2) that only those investments that are truly incremental are included in TIRF surcharges (Attorney General Brief at 52).

ii. Company

Bay State argues that there is no evidence that the current two-step process for determining incremental TIRF investments is deficient (Company Brief at 51). Rather, the Company contends that the Attorney General's position is premised upon the fact that because other distribution companies perform the depreciation net-out test, so too should Bay State (Company Brief at 51). Bay State asserts that the Attorney General's argument in this regard was rejected in the Company's last base rate case, and should be rejected again in the instant case (Company Brief at 51, citing D.P.U. 12-25, 58-59). Further, the Company notes that its total depreciation expense recovers depreciation associated with investments other than TIRF-related investments and, therefore, that a comparison of TIRF-related investment to total depreciation is not appropriate (Company Brief at 51).

d. Analysis and Findings

In D.P.U. 09-30, the Department did not approve a depreciation net-out for Bay State's TIRF, and the issue of deducting depreciation from total non-revenue producing investments was not raised in that proceeding. In Bay State's first annual TIRF filing, the Attorney General proposed that the Company should be subject to the depreciation net-out test. See Bay State Gas Company, D.P.U. 10-52, at 33-34 (2012). As part of her argument in that case, the Attorney General cited the fact that the depreciation net-out test was applicable to another utility in the

Commonwealth . D.P.U. 10-52, at 33.[36] The Department rejected the Attorney General's proposal and found that:

> In response to the Attorney General's contention that the Department approved a capital expense mechanism with depreciation deducted from total non-revenue producing investment for another utility, the Department explicitly stated that it would consider "company-specific" proposals for capital investment programs . . . Bay State did not propose to recover its capital expenditures net of its depreciation expense set in its last base distribution rate case … Circumstances in other Massachusetts utility companies may result in different but appropriate mechanisms to recover capital expenditures. Therefore, the Department finds that the Company is not required to net out its depreciation and amortization expense to calculate its TIRF revenue requirement.

D.P.U. 10-52, at 35-36 (internal citations omitted).

In Bay State's last base rate case, the Attorney General proposed the same depreciation net-out test in her brief. See D.P.U. 12-25, at 58. The Department rejected that argument for the same reasons noted above in D.P.U. 10-52. See D.P.U. 12-25, at 58. In the instant case, the Attorney General again proposes that the Department require the Company to perform the depreciation net-out test as part of its demonstration of incremental TIRF investments (Exh. AG/DED-1, at 6, 75-76, 80, 92-93).

Our prior rejections of the Attorney General's proposals were based primarily on the fact that the depreciation net-out test was not part of the Company's approved TIRF. See D.P.U. 12-25, at 58; 10-52, at 35-36. However, since that time we have approved modifications to the TIRF in response to the Company's requests. Specifically, in its last base rate case, we approved Bay State's inclusion in the TIRF program of certain cast- and wrought-iron facilities. D.P.U. 12-25, at 48-50. Further, we have modified the TIRF program in

---

36 In 2009, the Department approved a capital investment adjustment mechanism for Massachusetts Electric Company and Nantucket Electric Company. See D.P.U. 09-39, at 78-84.

response to the Attorney General's recommendation to include a performance metric based on the annual replacement of a minimum amount of miles of leak-prone main. D.P.U. 12-25, at 51-56. In addition, in the instant case, we approve the Company's proposal to replace the one-percent cap with a 3.75 percent cap (see Section IV.B.1.c above). Therefore, there is no reason to reject the depreciation net-out test simply because it was not part of the Company's original TIRF proposal.

Since the Department's approval of the depreciation net-out test for another utility,[37] we have been able to gauge its usefulness, and we find that it works well to add another layer of ratepayer protection to ensure that there is no recovery of costs through the TIRF that already are being recovered through base rates. Accordingly, we approve the Attorney General's proposal and we direct the Company in its subsequent TIRF filings to include a depreciation net-out test to compare: (1) the total non-growth capital expenditures in that year less the depreciation expense allowance included in base rates, with (2) the actual TIRF capital expenditures for that year.

V. SALE OF BAY STATE'S EP&S BUSINESS

A. Introduction

The Energy Products and Services ("EP&S") business is a residential retail services business that Bay State had operated for many years involving the: (1) sale and installation of domestic water and home-heating equipment;[38] (2) inspection and repair of customer-owned

---

37 See D.P.U. 10-55, at 142.

38 The first category of activities of the EP&S business has historically been treated as "below-the-line" for ratemaking purposes and no costs or revenues associated with these services were included in the cost of service in D.P.U. 12-25 (Exh. CMA/SHB-1, at 15, n.1).

domestic water and home-heating equipment, including the Company's Guardian Care program;[39] and (3) leasing of domestic water heaters and conversion burners (Exh. CMA/SHB-1, at 14-15).

On January 31, 2013, the Company's EP&S business was sold to AGL Resources, Inc. ("AGL") along with two other NiSource retail services operations, NiSource Retail Services ("NRS") and the NIPSCO Gas business unit ("NIPSCO Gas"), to which Bay State has no connection, for a total price of $120 million (Exhs. CMA/SHB-1, at 6-7, 19; CMA/JTG-1, at 12).[40] Of the total sale price of $120 million, $39,450,683 was allocated to Bay State's EP&S business (Exhs. CMA/SHB-1, at 19-20; CMA/JTG-1, at 12-13; DPU-22-1; DPU-22-1, Att. E at 1). The book value of the EP&S business as of January 31, 2013 was $20,043,300 (Exhs. CMA/SHB-1, at 19-20; CMA/JTG-1, at 12-13; DPU-22-7, Att.). Bay State was allocated $1,404,270 in customary transaction costs, closing costs and other expenses (Exh. DPU-22-7, Att.). Thus, the Company received a net gain from the sale in the amount of $18,003,113 (Exhs. CMA/SHB-1, at 20; CMA/JTG-1, at 13; DPU-22-6, Att.).[41]

---

[39] The Guardian Care program is a fee-based plan that offers customers warranty protection for repairs of furnaces, boilers, inside gas lines and water heaters, including a limited range of air conditioning repairs and services (Exh. DPU-22-12).

[40] The Company noted that the EP&S business is a non-core business and the services it provided are available to customers from numerous other providers in the competitive marketplace (Exh. CMA/SHB-1, at 16). The Company stated that in the light of changing market conditions, most natural gas local distribution companies have exited this type of business over the past ten to 15 years (Exhs. CMA/SHB-1, at 16, 25; DPU-22-5).

[41] $39,450,683 (sale price) - $20,043,300 (book value) - $1,404,270 (costs).

As part of this transaction, AGL paid Bay State a one-time fee of $200,000 for billing system set-up (Exhs. CMA/SHB-1, at 20; CMA/JTG-1, at 13; DPU-22-1; DPU-22-3, Att. at 3).[42] In addition, AGL will pay the Company an annual fee of approximately $133,000 to administer the billing system (Exhs. CMA/SHB-1, at 20; CMA/JTG-1, at 13; DPU-22-3 & Att. at 3; DPU-22-4).[43]

B. EP&S Employees

The Company's EP&S business did not have its own employees, and instead was supported by the Company's distribution service employees (Exh. CMA/SHB-Rebuttal-1, at 14). During the test year, a total of 48 Company employees worked on EP&S-related business activities on a part-time basis (Exhs. CMA/SHB-Rebuttal-1, at 15; CMA/SHB-Rebuttal-3; RR-DPU-22, Att. at 1). Of that amount, 13 employees devoted less than 20 percent of their total annual work hours to the EP&S activities, while only one employee devoted more than 50 percent of his/her time to the EP&S business (specifically, 55.4 percent) (Exhs. CMA/SHB-Rebuttal-1, at 15: CMA/SHB-Rebuttal-3; RR-DPU-22, Att. at 1).[44] Each of the 48 employees who worked on EP&S-related business during the test year also devoted time

---

42 The $200,000 one-time fee represents the Company's development and operational costs to implement a new billing system for use by AGL (Exh. DPU-22-3 & Att. at 3).

43 AGL is contractually obligated for a ten-year period starting January 31, 2013, to take service and pay the Company approximately $133,000 annually, comprised of $100,000 billing fee and $0.05 per bill (currently estimated to be $33,000 annually) for billed customers (Exhs. DPU-22-4; DPU-22-3 & Att. at 3).

44 With respect to the remaining 34 employees, 15 employees devoted between 20 and 30 percent to the EP&S business; ten employees devoted between 30 and 40 percent to EP&S work; and nine employees devoted between 40 and 50 percent to EP&S activities (Exhs. CMA/SHB-Rebuttal-1, at 15: CMA/SHB-Rebuttal-3; RR-DPU-22, Att. at 1).

to working in distribution operations (see Exhs. CMA/SHB-Rebuttal-1, at 15; CMA/SHB-Rebuttal-3; RR-DPU-22, Att. at 1). The number of hours worked by these 48 employees on EP&S business during the test year translates into an annual average of 16.5 full-time equivalent ("FTE") employees working on the EP&S business (Exhs. CMA/SHB-Rebuttal-1, at 15; DPU-22-17, Att.; RR-DPU-21, Att.).[45]

Bay State states that the work performed by half of the 16.5 FTE employees (or 8.25 FTE employees) on EP&S activities will now be dedicated to the Company's capital programs (Exh. DPU-22-13, at 1). The Company states that the work performed by the remaining half of the 16.5 FTE employees (or 8.25 FTE employees) who formerly worked on EP&S activities will be dedicated to distribution operations (Exh. DPU-22-13, at 1). Bay State notes that these employees will be retrained as necessary[46] and will continue to work in the Company's distribution operations on a full-time basis (Exh. DPU-22-13, at 1).[47] The Company

45 The number of FTE employees ranged from 30.8 in January 2012 to 5.5 in November 2012, or an annual average of 16.5 FTEs (Exh. DPU-22-17, Att.; RR-DPU-21, Att.). One FTE is equal to 2,080 hours, which is equal to working 40 hours per week for 52 weeks (Exh. DPU-22-17, Att.; RR-DPU-21, Att.).

46 The Company stated that it is in the process of making the necessary adjustments to redeploy employees who formerly supported the EP&S business, including training employees for new tasks and shifting work previously performed by contractors to Company employees (Exh. DPU-22-13, at 2).

47 Because customer service employees perform EP&S-related activities as well as traditional gas delivery service related activities in the normal course of their workload, these employees charge their time based on the specific job type performed (Exh. DPU-22-22). Accordingly, the Company categorized "non-revenue producing customer service labor" to reflect labor charges for activities related to traditional gas delivery services and "revenue producing labor" to reflect labor charges assigned to the EP&S business (Exhs. DPU-22-22; AG-2-8(d)). The amount of labor costs indicated in the Company's filing refers to revenue producing labor charges for EP&S related activities (Exh. DPU-22-22).

states that the labor cost associated with the employees that worked on EP&S activities in the test year and that will be dedicated to distribution operations going forward is fully offset by the annual amortization of the gain on the sale of the EP&S business (Exh. DPU-22-13, at 1). As discussed in further detail below, the Company proposes certain ratemaking treatment of the costs associated with the 16.5 FTE employees.

C. Ratemaking Implications of the Sale

1. Introduction

The Company stated that because the costs, revenues, and rate base assets associated with the EP&S business are included in the rates set in its last base rate case, D.P.U. 12-25, several ratemaking issues are implicated by the sale of the EP&S business (Exhs. CMA/SHB-1, at 7; CMA/JTG-1, at 13). First, the costs and revenues from the EP&S business are included in the Company's existing cost of service, but, after the sale, the Company will cease to receive the revenue stream from participating customers (Exhs. CMA/JTG-1, at 13; CMA/SHB-1, at 20-21, citing D.P.U. 12-25, at 136; D.T.E. 05-27, at 60-62). Second, while the Company's rate base as of December 31, 2012 includes $18,527,502 in EP&S investments, the EP&S net plant and materials and supplies were transferred to AGL at the sale, and are no longer assets of the Company (Exhs. CMA/SHB-1, at 21; CMA/JTG-1, at 14; CMA/JTG-2, Sch. JTG-13 (Rev. 5)).

Third, because the EP&S business generated a return in excess of the rate of return authorized by the Department in D.P.U. 12-25, the revenue requirement approved in that case includes a credit to gas distribution service customers in the amount represented by the excess return from the EP&S business (Exhs. CMA/JTG-1, at 14; CMA/SHB-1, at 21, citing D.P.U. 12-25, at 136).

2. Cost of Service Impact of the Sale of EP&S Business

As a result of the sale of the EP&S business, the Company eliminated the annual EP&S test year revenues of $15,550,523 in calculating its revenue requirement (Exhs. CMA/JTG-1, at 17; CMA/JTG-4, at 1 (Rev. 2)). The total EP&S test year expense was $9,811,243, which consisted of: (i) $7,227,483 in total operating expenses net of pension/other post-employment benefits ("OPEB") costs; and (ii) $2,583,760 in depreciation expense (Exhs. CMA/JTG-4, at 1 (Rev. 2); DPU-22-8). In addition, the EP&S business was allocated $529,223 in pension/OPEB costs (Exhs. CMA/JTG-4, at 1 (Rev. 2); DPU-22-9).[48] Thus, the total net operating income of the EP&S business was $5,210,057[49] (Exh. CMA/JTG-4, at 1 (Rev. 2)).

As a result of the sale of the EP&S business, the Company proposes to remove from the cost of service in this case the amount of EP&S related depreciation expense of $2,583,760 (Exh. CMA/JTG-4, at 1 (Rev. 2)). Further, the Company proposes to remove from the cost of service $3,288,310[50] in O&M expenses that were eliminated as soon as the EP&S business was transferred to AGL (Exhs. CMA/JTG-1, at 17-18; CMA/JTG-4, at 1 (Rev. 2)).

---

48 The Company's pension and OPEB costs are not recovered in base rates, but rather through the Company's pension expense factor, which is found in the Company's LDAC tariff (see Exh. DPU-22-9).

49 This amount of $5,210,057 is equal to $15,550,523 - $9,811,243 - $529,223 (Exh. CMA/JTG-4, at 1 (Rev. 2)).

50 This amount consists of cost of parts ($1,326,839), advertising ($203,008), corporate service ($1,446,958), and bad debt ($311,505) (Exhs. CMA/SHB-1, at 22; CMA/JTG-4, at 1 (Rev. 2)). In addition, the amount of $59,923, representing NCSC pension/OPEB costs, was identified but this cost does not require an adjustment to the Company's cost of service operating expenses since this cost is recovered through the pension expense factor, which is part of the Company's LDAC (Exh. CMA/JTG-4, at 1 (Rev. 2)).

The remaining EP&S costs include $2,971,354 in expenses related to direct labor, non-productive labor and training, vehicles, and stores (Exh. CMA/JTG-4, at 1 (Rev. 2); DPU-22-13). Consistent with the assignment of the 16.5 FTE employees discussed above, Bay State proposes to remove half of these expenses, or $1,485,677, from the cost of service and shift the costs associated with these employees to the Company's infrastructure replacement program (Exh. CMA/JTG-4, at 1, 3 (Rev. 2); DPU-22-13).[51] The Company proposes to recover the remaining half of these expenses, or $1,485,677, in the base distribution rates approved in this proceeding (Exh. CMA/JTG-4, at 1, 3 (Rev. 2); DPU-22-13).

The Company states that pension/OPEB benefits associated with the direct labor, non-productive labor and training, fleet, and stores costs total $348,436 (Exh. CMA/JTG 4, at 1 (Rev. 2); RR-DPU-20, Att.).[52] The Company also identifies $967,819 in remaining EP&S O&M expenses related to call center, dispatch, supervision, outside services and miscellaneous costs (Exh. CMA/JTG-4, at 1, 3 (Rev. 2)). The Company proposes to recover these expenses in the base distribution rates approved in this proceeding (Exhs. CMA/JTG-4, at 1, 3 (Rev. 2); DPU-22-13).[53]

---

[51] The Company intends to include these capitalized labor costs in future rates to the extent that the costs are included in project costs accepted into rate base in future TIRF proceedings or base rate cases (Exh. CMA/JTG-4, at 1, 3 (Rev. 2); DPU-22-13, at 1).

[52] Similar to cost assignment above, Bay State proposes to allocate half of the total pension/OPEB benefits, or $174,218, to the Company's infrastructure replacement program and to shift the remaining half of the total pension/OBEP expenses to its cost of service (Exh. CMA/JTG 4, at 1, 3 (Rev. 2); DPU-22-13). Although half of the pension/OBEP costs will remain in the cost of service, the actual recovery of these costs will occur through the Company's pension expense factor (see n.48 above).

[53] The Company also seeks to collect through the PEF associated pension/OPEB benefits in the amount of $120,863 (Exh. CMA/JTG-4, at 1, 3 (Rev. 2); RR-DPU-20, Att.).

As a result of the Company's proposed ratemaking treatment of costs, the total amount proposed to be retained in the Company's cost of service is $2,748,578, which consists of: (i) $2,453,496 in expenses to be recovered through base distribution rates; and (ii) 295,081 in pension/OBEP costs to be recovered through the Company's PEF (Exhs. CMA/JTG-4, at 1, 3 (Rev. 2); RR-DPU-20, Att.).[54]

As indicated above, the EP&S-related test year operating income was $5,210,057 Exh. CMA/JTG-4, at 3 (Rev. 2)).[55] The Company deducts from this amount the required return on EP&S related rate base of $2,058,410, based on a pre-tax rate of return of 11.11 percent approved in D.P.U. 12-25, to yield $3,151,647, which represents the additional revenue requirement needed by the Company to offset the revenue loss as a result of the sale of the EP&S business (Exh. CMA/JTG-4, at 2, 3 (Rev. 2)). More specifically, the Company adds the annual revenue requirement of $3,151,647 to the aforementioned retained costs of $2,748,578, and then

---

54 The total amount of $2,748,578 is broken down further as: (i) $1,485,677 in labor, training, fleet, and stores costs, and $174,218 in associated pension/OPEB benefits; and (ii) $967,819 in call center dispatch, supervision, outside services and miscellaneous costs, and $120,863 in associated pension/OPEB benefits (Exh. CMA/JTG-4, at 1, 3 (Rev. 2)). The sum of these individual amounts equals $2,748,577. The $1 difference is due to rounding.

55 Bay State maintains that the sale of its EP&S business has a zero net income tax impact on the Company (Exh. AG-2-4). The Company explained that although Bay State owed approximately $9.1 million in income taxes based on the tax effect of the sale price less book value, including deferred income taxes on the property, the gain on the transaction was recorded as a regulatory liability and not recorded as income (Exh. AG-2-4). The Company added that, as this regulatory liability is amortized and passed through to customers, the Company will reverse the gain previously recognized for tax income purposes (Exh. AG-2-4). The deferred tax asset will be reduced, offset by income tax expense, and the Company will have a reduced income tax liability of $9.1 million and accordingly a zero net income tax expense (Exh. AG-2-4).

reduces this total by $133,000[56] (Exhs. CMA/SHB-1, at 25; CMA/JTG-1, at 13; CMA/JTG-4, at 3 (Rev. 2); DPU-22-3, Att. at 3). The Company calculates a total net impact that increases the revenue requirement by $5,767,225 (Exh. CMA/JTG-4, at 3 (Rev. 2)). As set forth further below, the Company proposes an adjustment in this amount to reflect the pass-through to customers of the approximately $18 million gain on the sale of the EP&S business over 3.12 years (Exhs. CMA/JTG-4 (Rev. 2); CMA/JTG-2, Sch. JTG-4 (Rev. 5); DPU-22-13). Thus, the Company states that there is no impact to rates resulting from the sale of the EP&S business (Exhs. CMA/SHB-1, at 24-25; CMA/JTG-4, at 3 (Rev. 2); DPU-22-13).

3. Treatment of the Gain

As noted above, the Company proposes an adjustment of $5,767,225 in its revenue requirement to reflect the annual pass-through to customers of the approximately $18 million gain from the sale of the EP&S business (Exh. CMA/JTG-2, Schs. JTG-4 (Rev. 5), JTG-25, at 9 (Rev. 5)). The Company explains that such an annual amortization level would exhaust the gain from the sale of the EP&S business in just over three years, or sometime in 2016 (Exh. CMA/SHB-1, at 26).[57] As a result, the Company concludes that the aforementioned retention of employees who performed work for the EP&S business (and the associated costs) has no ratemaking impact associated with the sale (Exh. DPU-22-13, at 1).

The Company states that within the approximately three-year period during which the gain from the sale of the EP&S business is amortized, Bay State is confident that it will eliminate

[56] The reduction of the $133,000 recognizes the incremental revenues that the Company will receive from AGL to administer the billing system, as noted above (Exh. CMA/SHB-1, at 20).

[57] $18,003,113 / $5,767,225 = 3.12 years.

the remaining EP&S-related O&M costs proposed to be retained in its cost of service (Exh. CMA/SHB-1, at 26). The Company notes that if it files its next base rate case in 2016 or beyond, it will bear the risk of returning more than the amortization since the amortization will be included in rates set in this proceeding and will not be eliminated from rates without a subsequent rate proceeding (Exh. CMA/SHB-1, at 26). Bay State also maintains that if it files its next rate case prior to 2016, then the Department will have a full opportunity to review the Company's progress in eliminating the remaining EP&S related O&M costs before setting new rates (Exh. CMA/SHB-1, at 26). The Company submits that in either event, the interests of customers are protected (Exh. CMA/SHB-1, at 26).

D. Positions of the Parties

1. Attorney General

a. Introduction

The Attorney General raises two arguments with respect to the Company's proposed ratemaking treatment relating to the sale of its EP&S business. First, the Attorney General challenges the Company's proposed retention in its cost of service of certain expenses associated with employees who used to perform EP&S-related work (Attorney General Brief at 64-65; Attorney General Reply Brief at 46-47). Second, the Attorney General argues that the amount credited to ratepayers as a result of the sale of the EP&S business should include a return component on the unamortized balance plus the amortization necessary to hold ratepayers harmless from the sale (Attorney General Brief at 61, 65-66, citing Exh. AG-DJE-1, at 11, 14). These arguments are discussed in further detail below.

b. EP&S-Related Expenses

The Attorney General's first argument concerns the Company's proposed retention in its cost of service of $2,748,578 in EP&S expenses (Attorney General Brief at 61; Attorney General Reply Brief at 46). According to the Attorney General, because the Company seeks to recover those EP&S expenses, the necessary amortization of the gain to hold customers harmless should be increased accordingly (Attorney General Brief at 61). Further, the Attorney General states that of the amount proposed recovery, $1,389,330, represents direct labor, non-productive labor, and related fringe benefits (Attorney General Brief at 64, citing Exh. CMA/JTG-1, at 18; RR-DPU-24). The Attorney General claims that the Company has not adequately demonstrated how its employees who had been providing service to the EP&S business are now being productively employed in providing distribution service (Attorney General Brief at 64, citing Exh. CMA/SHB-Rebuttal-1, at 13-18; Attorney General Reply Brief at 46-47). The Attorney General contends that although Bay State described what the retained employees did in 2012 and showed that their time is being charged to Bay State in 2013, the Company did not describe any increase in the Company's distribution work requirements that came into existence at the time when the EP&S business was sold (Attorney General Brief at 64-65, citing Exh. CMA/SHB-Rebuttal 1, at 13-18).[58]

[58] In particular, the Attorney General claims that Bay State did not present any evidence that would justify the inclusion in the gas distribution cost of service of the salaries and fringe benefits for the relevant employees in the amount of $173,666 per FTE employee (Attorney General Reply Brief at 47, citing RR-DPU-24). The Attorney General calculated this amount by dividing the total salaries and fringe benefits of retained EP&S employees in the amount of $1,389,330 by eight retained FTE employees (RR-DPU-24, Att.).

Similarly, the Attorney General argues that the Company did not attempt to defend the recovery of non-directly assigned labor costs, such as fleet, stores, outside services, and allocated call center, dispatch, and supervision costs, totaling $1,359,248 ($2,748,578 - $1,389,330) (Attorney General Brief at 65; Attorney General Reply Brief at 47, citing RR-DPU-24). Specifically, the Attorney General contends that the Company offered no evidence to support its claim that these costs are correlated with the labor now redeployed to distribution operations and that they are proper for inclusion in the cost of service (Attorney General Brief at 65, citing Exh. CMA/SHB-Rebuttal-1, at 18).

In summary, the Attorney General argues that the Company did not establish any sudden increase in work requirements on February 1, 2013, the day after the sale of the EP&S business, that necessitate the recovery of an additional $2.7 million in distribution operating expenses (Attorney General Brief at 65). As such, the Attorney General asserts that the expenses that had been charged to EP&S prior to that date should not be included in the Bay State cost of service in this case (Attorney General Brief at 65).

c. Carrying Charges

The Attorney General argues that until the gain associated with the sale of the EP&S business is amortized through to ratepayers, the Company retains the present value of that gain (Attorney General Brief at 61). According to the Attorney General, the benefit of the cash retained by the Company until the pass-through to customers should be recognized by means of a return calculated on the unamortized net-of-tax balance of the gain (Attorney General Brief at 61). Thus, the Attorney General asserts that the amount credited to ratepayers should then be deemed to consist of the return on that unamortized balance plus the amortization necessary to hold ratepayers harmless from the EP&S sale (Attorney General Brief at 61, citing Exh. AG-DJE-1, at 11).

The Attorney General argues that application of carrying charges on the unamortized balance is not inconsistent with Department precedent. In support of her position, she cites to various electric restructuring cases where carrying charges were recognized on the unamortized proceeds from the divestiture of generating assets and credited to ratepayers by means of a residual value credit ("RVC") (Attorney General Brief at 62, citing Western Massachusetts Electric Company, D.T.E. 97-120 (1999); Fitchburg Gas and Electric Light Company, D.T.E. 97-115/98-120 (1999); Massachusetts Electric Company and Nantucket Electric Company, D.P.U./D.T.E 97-94 (1998); Massachusetts Electric Company and Nantucket Electric Company, D.T.E. 96-25 (1997)). The Attorney General contends that Bay State does not dispute the financial and economic principles requiring the recognition of carrying charges on the unamortized gain on the sale of EP&S but, rather, argues that the Company offers a "grossly distorted" rendition of the supposed Department precedent on this matter (Attorney General Reply Brief at 47-50).

The Attorney General concedes that electric utilities' divestiture of their generating assets is not identical in all respects to Bay State's sale of the EP&S business (Attorney General Brief at 62). However, according to the Attorney General, the transactions are similar in that, as with the electric utilities' divesture of the electric generating assets, the Company's sale of the EP&S business entails the sale of a business unit that had been treated as a component of regulated utility operations prior to the sale (Attorney General Brief at 62). Thus, the Attorney General asserts that both scenarios share the same relevant principle – that is, when the proceeds from the disposition of assets are being amortized to ratepayers, the total credit to ratepayers should include a return on the unamortized gain until it is fully amortized (Attorney General Brief at 62-63). The Attorney General agrees with the Company that the return component would decline over time as the gain is amortized (Attorney General Brief at 63, citing Tr. 10, at 1077-78).

Based on this argument, the Attorney General applies the pre-tax rate of return of 11.11 percent approved in the Company's last rate case, D.P.U. 12-25, on an after-tax gain of $9,000,000, which results in a return of $999,900 on the unamortized balance of the net-of-tax gain (Attorney General Brief at 63, citing Exh. AG-DJE-Surrebuttal-2, at 5).[59] The Attorney General then adjusts this amount to reflect: (1) the annual contribution to the Company's revenue requirement foregone from February 1, 2013 to March 1, 2014; and (2) the annual return on the gain retained by shareholders for the same period (Attorney General Brief at 63, citing RR-DPU-23; Tr. 10, at 1079-1084). The Attorney General states that these adjustments result in a customer credit of $845,030 (Attorney General Brief at 63-64, citing RR-DPU-23).

d. Conclusion

The Attorney General argues that her recommendations to recognize carrying charges on the unamortized balance of the gain and to eliminate recovery of the retained EP&S expenses do not affect the base rate revenue requirement in the present case (Attorney General Brief at 65). In addition, the Attorney General contends that these modifications will reduce the amortization

---

59 The Attorney General's calculations are as follows: $18,100,000 gain on sale (rounded) less $9,100,000 cash taxes paid equals $9,000,000 (Exhs. AG-2-4; AG-DJE-Rebuttal-2, Sch. DJE-2-Supp.). The resulting $9,000,000, multiplied by 11.11 percent return rate approved in D.P.U. 12-25, results in $999,900 (Exh. AG-DJE-Rebuttal-2, Sch. DJE-2-Supp.).

necessary to hold customers harmless and will increase the balance available for amortization, thereby protecting ratepayers prospectively (Attorney General Brief at 65-66, citing Exh. AG-DJE-1, at 14). As such, the Attorney General asserts that the Department should accept her recommendations (Attorney General Brief at 66).

2. Company

a. Introduction

Bay State argues that because the Company's costs, revenues and rate base assets associated with the EP&S business are included in the Company's rates set in D.P.U. 12-25, adjustments to the test year revenues, costs and rate base are necessary to reflect the sale (Company Brief at 123). Further, the Company contends that amortization of the gain obtained for the sale of EP&S assets holds constant the ratemaking impact for a period of approximately three years (Company Brief at 123, citing Exh. CMA/JTG-1, at 20). Bay State argues that the Department should reject the Attorney General's recommendations regarding the Company's proposal to recover certain EP&S expenses and the application of carrying charges on the unamortized gain (Company Brief at 126; Company Reply Brief at 34). The Company's arguments are set forth below.

b. EP&S-Related Expenses

Bay State argues that it has submitted detailed information showing that the EP&S-related employees, whose costs are now charged to O&M, are working on distribution tasks that are needed to provide safe and reliable service to customers (Company Brief at 126-127, citing Exhs. CMA/SHB-Rebuttal; DPU-22-17; RR-DPU-22; Company Reply Brief at 34, 35, citing Exhs. CMA/SHB-Rebuttal-1, at 14-18; CMA/SHB-Rebuttal-3;

CMA/SHB-Rebuttal-4; DPU-5-4; DPU-22-17; AG-2-16; RR-DPU-22). The Company contends that the Attorney General has neither rebutted any of this evidence nor provided any reasoned basis as to why the evidence of the work records of employees should not be accepted by the Department (Company Reply Brief at 35). In fact, Bay State notes that the Attorney General concedes that these redeployed employees charged time to distribution activities in 2013, and that the Company described activities that would plausibly entail additional work requirements over time (Company Brief at 126, citing Attorney General Brief at 64-65).

Further, Bay State dismisses the Attorney General's contention that the Company failed to establish an immediate increase in its work requirements to coincide with the sale of the EP&S business (Company Brief at 126, citing Attorney General Brief at 65). According to Bay State, one of the factors driving the decision to sell the EP&S business was the labor deficiency that already existed in the Company as a result of increased work requirements related to distribution integrity management program compliance, and that labor devoted to the EP&S business was needed to meet those pre-existing work requirements (Company Brief at 126, citing Tr. 1, at 157-158, 160; Company Reply Brief at 35).

In addition, Bay State argues that the employees who worked on EP&S activities were trained, qualified, experienced gas service technicians who worked no more than one half of their time for the EP&S business, and in most cases, far less than one half of their time (Company Brief at 126, citing Exhs. CMA/SHB-Rebuttal; DPU-22-17; RR-DPU-22). As such, the Company asserts that the record contradicts the Attorney General's premise that increased work requirements had to appear at the time of the sale in order to justify use of these employees on distribution operations activities (Company Brief at 127).

Regarding the $967,819 in EP&S indirect costs necessary to supporting the labor redeployed to distribution operations work, the Company similarly argues that the Attorney General has failed to rebut the inclusion of this amount in the Company's cost of service (Company Reply Brief at 35). Thus, the Company asserts that there is no evidence in the record that would allow for an adjustment to these expenses in relation to the computation of the EP&S amortization (Company Reply Brief at 35).

c. Carrying Charges

The Company argues that Department ratemaking precedent is inconsistent with the imposition of carrying charges associated with the sale of the EP&S business, and the cases cited by the Attorney General are inapplicable in the instant case (Company Brief at 127). According to the Company, in the restructuring cases cited by the Attorney General, the proceeds from the divestiture of electric generating assets were credited to ratepayers by means of the RVC (Company Brief at 127). Further, the Company claims that in each case cited by the Attorney General, the mitigation dollars in the RVC represent dollars received from the sale of a generating asset and that those dollars are used as a credit or offset to reduce the "unrecovered net book value of generation related investments" on which customers were providing a return at the company's cost of equity (Company Brief at 128). However, Bay State asserts that there were no carrying charges calculated on the mitigation dollars collected in the sale of generating assets and no carrying charge amounts included in the RVC (Company Brief at 128-129, citing D.T.E. 97-115/98-120, at 71; D.P.U./D.T.E. 97-94, at 11 (1998); Company Reply Brief at 35-36). Further, the Company notes that the regulations governing restructuring make no mention of carrying costs (Company Brief at 129, citing 220 C.M.R. §§ 11.00 et seq.; Electric Industry Restructuring Rules, D.P.U./D.T.E. 96-100 (1998)).

Bay State argues that, unlike the treatment of the RVC in the calculation of transition charges, there is explicit precedent on how the Department treats gains collected in relation to sales of utility property and whether it is appropriate to include carrying charges on those gains (Company Brief at 129-130). In this regard, the Company contends that the Department previously has rejected the Attorney General's recommendation to "inflate" the gain being refunded by including a carrying charge at the pre-tax weighted cost of capital (Company Brief at 130, citing Fitchburg Gas and Electric Light Company, D.P.U. 07-71, at 66 (2008); D.T.E. 05-27, at 146-152; Boston Gas Company, D.P.U. 96-50 (Phase I) at 111 (1996); Barnstable Water Company, D.P.U. 93-223-B at 12-14 (1994); Commonwealth Electric Company, D.P.U. 88-135/151, at 90-95 (1989); Boston Gas Company, D.P.U. 88-67 (Phase I) at 78-81 (1988)). The Company asserts that similarly, in this case, there is no basis or justification for inflating the gain earned on the sale of the Company's EP&S business by including a carrying charge calculation (Company Brief at 130; Company Reply Brief at 36). According to the Company, to do so would further erode the Company's ability to earn its Department authorized rate of return on the capital the Company has invested in rate base to serve customers (Company Brief at 130; Company Reply Brief at 36).

Alternatively, the Company argues that while Department precedent regarding the treatment of gains earned on the sale of real property is the closest analogous precedent to the Company's sale of its EP&S business, it is also distinguishable from this situation (Company Brief at 130). According to the Company, the gain earned on the sale of the EP&S

business did not result from the appreciation in value of a physical asset like land or the EP&S rental water heaters that have been included in rate base, but rather the gain represents the value of goodwill resulting from the efforts of Company management in guiding the EP&S business operation over time (Company Brief at 130-131). Bay State contends that the Department does not recognize goodwill and excludes that value from both rate base and the calculation of a Company's capitalization (Company Brief at 131). As such, Bay State asserts that it would be appropriate to allow the Company to retain the goodwill gain earned on the sale of the EP&S business for use in the Company's infrastructure replacement program (Company Brief at 131). Bay State contends, nevertheless, that while there is no directly applicable precedent on the treatment of the gain earned on the sale of a business unit, the Company has proposed to provide that gain to customers as mitigation of certain costs the Company will continue to incur and the loss of the margin previously earned on the EP&S operations (Company Brief at 131).

d. Conclusion

Bay State concludes that the Attorney General is not disputing any aspect of the Company's amortization of the gain on the sale of the EP&S business other than with respect to (i) the costs associated with employees who were properly and reasonably deployed for O&M work on the Company's system, and (ii) the application of carrying costs to the unamortized gain (Company Reply Brief at 36-37). As such, the Company asserts that the Department should reject the Attorney General's arguments and adopt the Company's recommendations, which it maintains will benefit customers (Company Brief at 126; Company Reply Brief at 37).

E. Analysis and Findings

1. Introduction

The record shows that the Company's sale of its EP&S business to AGL was driven by a number of factors including the changes in the competitive marketplace on this non-core line of business activities (Exhs. CMA/SHB-1, at 16-18; DPU-22-5). No party challenged or objected to the Company's basis for its sale of its EP&S business, the total sale price paid by AGL and the allocation of the sale proceeds, the amount of gain from the sale, or the other financial components of the sale transaction.[60] We have reviewed these considerations and we find that the Company's sale of the EP&S business was reasonable, and that the allocation of the sales price and calculation of the gain on the sale are acceptable and require no further adjustment or inquiry (see, e.g., Exhs. CMA/SHB-1, at 16-20; CMA/SHB-Rebuttal-1, at 2-13; AG-DJE-1, at 6-11; AG-DJE-Rebuttal-2, at 2-3; DPU-22-1; DPU-22-3; DPU-22-6 & Att.; DPU-22-7 & Att.; DPU-22-4; DPU-22-5; DPU-22-6 & Att.; DPU-22-7, Att.; AG-2-1; AG-2-3; AG-2-5; AG-8-1; AG-8-2 & Att.; AG-8-3 & Att.; AG-8-6 & Atts.; AG-8-7 & Atts.; AG-8-8 & Atts.; RR-DPU-21, Att.).

Thus, the issues for our determination are whether: (1) the Company should be permitted to recover $2,453,496 in EP&S-related O&M expenses and $295,081 in associated pension/OBEP benefits; and (2) the ratemaking treatment of the $18,003,113 gain on the sale of the EP&S business. We address each of these issues separately below.

---

60 During the early stages of this proceeding, the Attorney General raised issues regarding the sale price, allocation of the proceeds of the sale, and amount of the gain realized by Bay State, and she proposed modifications to the allocation of proceeds and the calculation of the gain (see Exh. AG-DJE-1, at 6-11). The Attorney General subsequently retracted her positions on these issues (see Exh. AG-DJE-Rebuttal-2, at 2-3).

2. EP&S-Related Expenses

As noted above, the Company's EP&S business did not have its own employees, and instead was supported by the Company's distribution service employees (Exh. CMA/SHB-Rebuttal-1, at 14). The Company notes that all of the 48 employees who performed work for the EP&S business during the test year are qualified and "needed on the distribution system at this point because the work activities to comply with state and federal pipeline safety regulations are increasing dramatically in response to concerns regarding overall system safety with aging infrastructure" (Exh. CMA/SHB-Rebuttal-1, at 15, 17).[61] Further, according to Bay State, the need to redeploy these qualified individuals to meet the requirements of distribution system pipeline safety compliance was a main driver of the EP&S business sale transaction, and if these employees were not available to attend to distribution system activities, the Company would have had to hire new, incremental employees at additional cost for training and initiation (Exh. CMA/SHB-Rebuttal-1, at 13-18). Specifically, Bay State maintains that had it not sold the EP&S business, the Company would have hired the equivalent of eight FTE employees because of the increasing distribution-related work (Tr. 1, at 157-158). Thus, the Company seeks to include in its cost of service $2,748,578 in expenses related to the shifting of employees from the EP&S business to distribution operations (Exhs. CMA/SHB-1,

61 The Company provides that "[a]s an example . . . on June 17, 2013, the Commissioners of the Massachusetts Department of Public Utilities conducted a session with the Massachusetts natural gas local distribution companies ("LDCs") to express their intention to actively enforce pipeline safety regulations and to hold the LDCs to a standard of operating excellence" (Exh. CMA/SHB-Rebuttal-1, at 17).

at 23-24; CMA/JTG-4, at 1, 3 (Rev. 2)).[62] The Attorney General contends that all of these costs should be removed from the Company's cost of service (Attorney General Brief at 65).

It is a well-established Department precedent that base rates are established based on an historic test year, adjusted for known and measurable changes. See Eastern Edison Company, D.P.U. 1580, at 13-17, 19 (1984); Massachusetts Electric Company, D.P.U. 136, at 3 (1980); Chatham Water Company, D.P.U. 19992, at 2 (1980); Massachusetts Electric Company, D.P.U. 18204, at 4 (1975); New England Telephone and Telegraph Company, D.P.U. 18210, at 2-3 (1975); Boston Gas Company, D.P.U. 18264, at 2-4 (1975). In establishing rates pursuant to G.L. c. 164, § 94, the Department examines a test year that usually represents the most recent twelve-month period for which complete financial information exists. The basis for this ratemaking principle is that the revenue, expense, and rate base figures during that period, adjusted for known and measurable changes, provide the most reasonable representation of a distribution company's present financial situation and fairly represent its cost to provide service. The selection of the test year is largely a matter of a distribution company's choice, subject to Department review and approval. See Revenue Decoupling, D.P.U. 07-50-A at 51 (2008).

The EP&S business was largely a "peak period" business with the greatest amount of work required in the winter heating season (Exh. CMA/SHB-Rebuttal-1, at 14). The most frequent type of activity required of the Company's field resources were "no heat" calls from customers participating in the Guardian Care program (Exh. CMA/SHB-Rebuttal-1, at 14). Rather than build a core of EP&S employees whose services effectively would be required only

---

62 As noted above, these costs represent the expenses associated with approximately eight FTE employees, other indirect EP&S O&M expenses, and the associated pension/OPEB benefits (Exhs. CMA/SHB-1, at 24; CMA/JTG-4, at 1, 3 (Rev. 2); DPU-22-17, Att.; RR-DPU-21, Att.).

during peak periods to service those calls, the Company utilized distribution personnel qualified to respond to "no heat" calls to meet peak requirements (Exh. CMA/SHB-Rebuttal-1, at 14). Thus, during the test year, Bay State's distribution service employees responded to "no heat" calls from customers and performed other functions for the EP&S business. The test year hours expended by the eight FTE employees on EP&S-related work do not represent test year gas distribution-related costs. Therefore, we find that including the costs associated with these employees in the cost of service distorts the Company's test year gas distribution-related expenses.

Further, we are not convinced that a driving factor in the decision to sell the EP&S business was Bay State's purported distribution-related labor deficiency that resulted from an increase in pre-existing work requirements (see Company Brief at 126, citing Tr. 1, at 157-158, 160; Company Reply Brief at 35). The sale of Bay State's EP&S business was part of a much larger NiSource sales transaction, and the sale was based on a number of factors that led the Company to conclude that a decline in this business segment was inevitable; therefore, a strategic decision was made to exit the business and focus on the core gas distribution business (see Exhs. CMA/SHB-1, at 6-7, 16-18, 19; DPU-22-5; Tr. 1, at 36, 136-137). In addition, although there is some evidence that distribution-related work has increased post-test year,[63] the record does not support the inclusion of the level of costs that the Company seeks to include in

[63] For example, for the five of the 48 employees who devoted the highest percentages of their total work hours during the test year to the EP&S business, the corresponding percentages of hours devoted to gas distribution services increased through June 30, 2013, from: 45 percent to 88 percent (employee no. 471093); 52 percent to 96 percent (employee no. 121796); 54 percent to 94 percent (employee no. 474094); 55 percent to 91 percent (employee no. 122059); 55 percent to 84 percent (employee no. 470384) (RR-DPU-22, Att. at 2-6). As noted above, the Company's EP&S business was sold to AGL on January 31, 2013 (Exhs. CMA/SHB-1, at 19-20; CMA/JTG-1, at 12).

this case. In particular, we are not convinced that the costs related to the call center, dispatch, supervision, and miscellaneous categories will continue at the stated level now that the EP&S business is no longer in operation (see Exh. CMA/JTG-4, at 1 (Rev. 2)).

Moreover, at the end of the test year, Bay State had 571 employees (Exh. AG-1-2 (6) (2012) at 44). Thus, we find that an adjustment to reflect the costs associated with eight FTE employees could readily be lost in the normal ebb and flow of employee levels. See D.P.U. 09-30, at 192 (addition of five employees to the Company's payroll in the last month of the test year could readily be lost in the normal ebb and flow of employee levels); D.P.U. 88-161/88-168, at 66 (adjustment to reflect salaries associated with four individual employees could readily be lost in the normal ebb and flow of employee levels). An adjustment to the test year level of employees is more appropriate in the case of smaller companies where the impact of the adjustment is more significant and the investigation of offsetting adjustments is less onerous. See American Water Company, D.P.U. 88-172, at 11-12 (1989) (allowing adjustment for a water company after change in operations reduced personnel from 18 to 14 employees); D.P.U. 09-30, at 192; Nantucket Electric Company, D.P.U. 88-161/88-168, at 66 (1989).

Based on these considerations, the Department rejects the Company's proposal to collect through its base distribution rates approved in this proceeding the expenses associated with the approximately eight FTE employees. Accordingly, the Department reduces the Company's proposed cost of service by $2,453,496.

3. Treatment of the Gain

The Department's long-standing policy with respect to gains on the sale of utility property has been to require the pass through to ratepayers of the entire gain associated with the sale if those assets were recorded above-the-line and supported by ratepayers. D.P.U. 07-71, at 65, citing D.P.U. 96-50 (Phase I) at 111; D.P.U. 93-223-B at 12; D.P.U. 88-135/151, at 92. Therefore, if such property is sold by the utility, it is necessary to include an adjustment that recognizes the appreciation on assets that ratepayers have supported in rates through a return of and on investment. D.P.U. 88-135/151, at 91-92. Further, the Department does not require companies to include carrying charges on the proceeds of sales of utility assets at the pre-tax weighted cost of capital, as the Attorney General recommends, nor has the Department approved other forms of carrying costs. See D.P.U. 07-71, at 66; D.T.E. 05-27, at 146-152; D.P.U. 96-50 (Phase I) at 111; D.P.U. 93-223-B at 12-14; D.P.U. 88-67 (Phase I) at 78-80; D.P.U. 88-135/151, at 90-95.[64]

The assets and costs of the EP&S business were recorded above-the-line and supported by ratepayers through recovery of those costs by Bay State in rates (see Exhs. CMA/SHB-1, at 20-21, 26; CMA/JTG-1, at 13). As noted above, the Company reported a gain on the sale of the EP&S business of $18,003,113, which we have accepted (see Exhs. CMA/SHB-1, at 20; CMA/JTG-1, at 13; DPU-22-7, Att.). In evaluating the appropriate amortization period applicable to a gain on the sale of a utility asset, the Department balances the interests of the utility and ratepayers and has generally found amortization periods in the range of three to

[64] In this regard, we note that in rejecting carrying charges in D.P.U. 07-71, at 66, the Department noted that the record in that case was insufficient to establish the propriety of such a proposed adjustment.

six years to be appropriate. See, e.g., D.P.U. 10-55, at 226-227; New England Gas Company, D.P.U. 08-35, at 139-140 (2009); D.P.U. 88-67 (Phase I) at 78-80; Boston Edison Company, D.P.U. 85-266-A/271-A at 33-34 (1986). The Department has considered such factors as the amount under consideration for amortization, the value of the amount to ratepayers based on certain amortization periods, and the impact of the adjustment on the Company's finances and income. D.P.U. 10-55, at 226-227; D.P.U. 93-223-B at 14; Fitchburg Gas and Electric Light Company, D.P.U. 84-145-A at 54 (1985). Based on these considerations and the record in this case, we find five years to be an appropriate amortization period. A five-year amortization period, applied to the $18,003,113 gain on the sale of the EP&S business, produces an annual amortization amount of $3,600,623. Accordingly, Bay State's cost of service will be reduced by $3,600,623. We now turn to the issue of carrying charges.

In support of her contention that carrying charges should apply to the Company's sale of its EP&S business, the Attorney General relies on various electric restructuring cases in which she claims carrying charges were recognized on the unamortized proceeds from the divestiture of generating assets and credited to ratepayers by means of a RVC (Attorney General Brief at 62, citing D.T.E. 97-120; D.T.E. 97-115/98-120; D.P.U./D.T.E 97-94; D.T.E. 96-25). We find such reliance to be misplaced. The new legislative scheme and the Department's investigation into the restructuring of the electric industry required each electric distribution company to file with the Department a restructuring plan for divesting electric generation facilities and developing a transition cost charge to recover stranded costs.[65] The transition charge was composed of,

[65] In Electric Industry Restructuring, D.P.U. 95-30, at 47 (1995), the Department required each Massachusetts electric company to submit a restructuring proposal that includes, among other things, a plan (including any negotiated resolution) for moving from the

among other items, the unrecovered net book value of generation-related investments with a return on the unrecovered net book value at the company's cost of equity offset by any mitigation dollars collected by the company. In divesting its generating assets, an electric distribution company used the proceeds of the sales to reduce or mitigate the amount of transition costs and in turn to reduce the transition charge by way of the RVC and through a reconciliation account. See, e.g., D.T.E. 97-120, at 15, 134-135; D.T.E. 97-115/98-120, at 71; D.P.U./D.T.E. 97-94, at 11-14; Boston Edison Company, D.P.U./D.T.E. 96-23, at 41 (1998).

In contrast to the restructuring scenario and the divesting of generating assets, the instant case involves a business decision by a local gas distribution company to sell a portion of its non-core operations based on a determination that the business would inevitably decline (Exhs. CMA/SHB-1, at 16-18; DPU-22-5). The circumstances of this case are significantly different from those facing electric companies during industry restructuring. Moreover, the Department has established a line of precedent that addresses gains associated with the sale of utility property by a company in the normal course of business and, as noted above, we have not required companies to include carrying charges on the gains of such sales. See, e.g., D.P.U. 07-71, at 66; D.T.E. 05-27, at 146-152; D.P.U. 96-50 (Phase I) at 111; D.P.U. 93-223-B at 12-14; D.P.U. 88-67 (Phase I) at 78-80; D.P.U. 88-135/151, at 90-95; D.P.U. 85-266-A/271-A at 33-34. We see no reason to depart from this precedent. Moreover, we find that in the context of a gain on the sale of utility property, the imposition of carrying

current regulated industry structure to a competitive generation market to increase customer choice. The Electric Restructuring Act required electric companies to file plans with the Department that implement a restructured electric generation market and offer retail access to customers by March 1, 1998. St. 1997, c. 164 § 193 (codified as G.L. c. 164, § 1G).

charges could act as a disincentive for the utility in selling its asset to maximize the amount of gain through the sale.

In addition, we note that the Department does not require the application of carrying charges on the recovery of such costs over a normalized period of recovery. We find that it is reasonable and appropriate to apply a consistent ratemaking treatment with respect to the amortization of the gain on the Company's sale of the EP&S business. Therefore, imposing a carrying charge on the unamortized balance of the gain from the sale of the EP&S business would be inconsistent with the Department's ratemaking treatment of normalized costs.[66] Based on these considerations, we reject the Attorney General's recommendation to include carrying charges on the unamortized balance of the gain on the sale of the Company's EP&S business.

VI. RATE BASE

A. Introduction

Bay State proposes a rate base of $476,523,686 (Exh. CMA/JTG-2, Sch. JTG-13 (Rev. 5)). The Company's proposed rate base consists of $1,104,659,144 in gross plant, plus $1,992,602 in heel gas[67] and $11,378,661 in cash working capital, less $641,506,722 in offsets such as accumulated depreciation and amortizations, deferred income taxes, contributions in aid of construction, and customer deposits (Exh. CMA/JTG-2, Sch. JTG-13 (Rev. 5)).

---

66 A long amortization period associated with an extraordinary loss, however, may warrant the addition of carrying charges. Boston Edison Company, D.P.U. 906, at 243-244 (1982).

67 Heel gas represents the cost of the minimum quantity of liquefied natural gas needed to be retained in a gas company's storage tanks and other facilities over time for purposes of temperature control and/or pressure maintenance. D.P.U. 12-25, at 116.

The Company seeks to include in rate base capital investments made in the test year, as well as non-revenue producing infrastructure investments and information systems capital investments placed in service from January 1, 2013 through June 30, 2013. The post-test year infrastructure investments relate to main replacements and other capital additions, primarily consisting of services, meter installations, and communications equipment (see Exhs. CMA/JTG-1, at 30; CMA/DEM-1, at 35-36; CMA/DEM-1, at 1-4 (Rev. 1); CMA/DEM-1, at 1-3 (Rev. 2); CMA/DEM-6 (Revs. 1-3); CMA/DEM-8 (Revs. 1-3)). The information systems capital investments include investments related to: (i) the NiFit project, which is discussed below in Sections VI.B.4.d and VIII.L; (ii) the Geographic Information System ("GIS") transition software project, which provides the Company with internal mapping and reporting data on the utility's infrastructure; (iii) the Financial Reporting Data Warehouse project, which consists of new financial systems software that is to be placed in service simultaneously with the NiFit project; and (iv) the CMA 3.0 Warehousing Project, which is an initiative related to the move to outsourcer-provided materials and supplies warehousing (see Exhs. CMA/JTG-1, at 30; CMA/DEM-1, at 19; CMA/DEM-1, at 1-4 (Rev. 1); CMA/DEM-1, at 1-3 (Rev. 2); CMA/DEM-6 (Revs. 1-3); CMA/DEM-8 (Revs. 1-3); CMA/DEM-9 (Revs. 1, 2); AG-13-14, Att. 2).

B. Plant Additions Through June 30, 2013

1. Introduction

From January 1, 2012 through December 31, 2012, Bay State made $76,217,026[68] in plant additions, and retired $4,827,205 in plant, resulting in a net increase in utility plant of $71,389,821 (Exhs. AG-1-2(6) (2012) at 20; RR-DPU-4, Att. at 1). During the six months ending June 30, 2013, the Company placed into service $31,308,760 in plant additions, which was partially offset by $3,684,621 in retirements, $10,871,800 in depreciation accruals, $807,207 in amortization accruals, and $1,324,490 in deferred income taxes, for a net increase in rate base of $14,620,642 (Exhs. CMA/JTG-2, Schs. JTG-13 (Rev. 5), JTG-21 (Rev.5), JTG-22 (Rev.5)).[69]

In Bay State's initial filing, the Company identified 583 capital projects[70] placed into service between January 1, 2012 and December 31, 2012 at a total cost of $73,713,600[71]

68 This total consists of $80,893,551 in additions booked to various plant accounts, less $4,676,525 representing a net reduction in completed construction not classified as of December 31, 2012 (Exh. AG-1-2(6) (2012) at 20; RR-DPU-4, Att. at 1).

69 During the course of the proceedings, the Company updated the revenue requirement calculation for post-test year rate base items identified during discovery and to substitute actual data for estimated data. The Department allowed these updates when setting the procedural schedule in this case, but noted that the filing of the updates "does not constitute a ruling on the propriety of allowing the updated information in the record." D.P.U. 13-75, Hearing Officer Procedural Order at 2 n.2 (May 17, 2013).

70 Some of these projects represent a collection of small projects that are approved under blanket budgets. Blanket budgets are used to plan for and track expenditures involving numerous, relatively small capital projects that are of a routine and recurring nature (Exh. CMA/DEM-1, at 37). For example, service line replacements are documented under project list number 8.160 (Exh. CMA-DEM-8, at 3 (Rev. 3)).

71 The difference between the Company's initial filing amount of $73,713,600 and the $76,217,026 referenced above consists of $2,503,548 in plant booked to Account 386,

(Exhs. CMA/DEM-1, at 35-36; CMA/DEM-6; CMA/DEM-7; CMA/DEM-8; CMA/DEM-9). At that same time, the Company identified an additional $32,379,589 in capital projects, net of retirements, that were expected to be placed into service between January 1, 2013 and June 30, 2013, based on project estimates that were to be updated during the proceedings (Exhs. CMA/JTG-1, at 28; CMA/JTG-2, Schs. JTG-13, JTG-21, at 1, JTG-22, at 1).

During the course of the proceedings, the Company submitted supplemental filings updating the original post-test year estimate to $31,308,760 in non-revenue producing plant additions and $3,684,621 in plant retirements made between January 1, 2013, and June 30, 2013, representing a net increase in utility plant of $27,624,139 (Exh. CMA/JTG-2, Schs. JTG-13 (Rev. 5), JTG-21, at 1 (Rev. 5); JTG-22, at 1 (Rev. 5)). The supplemental filings included both additional costs incurred in 2013 associated with projects that had been placed into service during 2012, as well as new, non-revenue producing, capital projects placed into service between January 1, 2013 and June 30, 2013 (Exhs. CMA/DEM-6 (Revs. 1-3); CMA/DEM-8 (Revs. 1-3); CMA/DEM-9 (Revs. 1, 2)).[72] Combined, the Company's initial and supplemental filings represent 741 capital projects and a net increase in plant of $104,021,390 (Exhs. CMA/DEM-6 (Revs. 1-3); CMA/DEM-7; CMA/DEM-8 (Rev. 1-3); CMA/DEM-9 (Rev. 1, 2); CMA/DEM-6 WP; CMA/DEM-7 WP; CMA/DEM-8 WP; CMA/DEM-9 WP).

Other Property on Customer Premises, less $122 in plant invoices that had not been recorded when the Company was preparing its 2012 annual return (see Exh. AG-1-2(6) (2012) at 20; RR-DPU-4, Att. at 1).

[72] Bay State also provided NiFit project expenditures through mid-August 2013 (Exhs. CMA/RAF-1, at 1 (Rev. 2); CMA/RAF-9, Sch. CMA/RAF-1 (Rev. 2).

2. Project Documentation

The Company classifies projects by four categories: (1) revenue producing capital projects; (2) non-revenue producing capital projects; (3) non-discretionary, non-main capital projects; and (4) miscellaneous intangible plant capital projects (Exh. CMA/DEM-1, at 35-36). Revenue producing plant additions accounted for 137 projects (Exhs. CMA/DEM-1, at 37; CMA/DEM-7). Non-revenue producing plant additions accounted for 404 of the projects (Exh. CMA/DEM-6 (Revs. 1-3)). Non-discretionary, non-main plant additions accounted for 182 of the projects (Exh. CMA/DEM-8 (Revs. 1-3)). Miscellaneous intangible plant additions accounted for 18 of the projects (Exh. CMA/DEM-9 (Revs. 1, 2)).

In support of the 741 projects proposed for inclusion in rate base, the Company provided project documentation including construction authorization forms, cost reports, and variance forms (Exhs. CMA/DEM-1, at 35-36; CMA/DEM-6 (Revs. 1-3); CMA/DEM-7; CMA/DEM-8 (Revs. 1-3); CMA/DEM-9 (Revs. 1, 2); CMA/DEM-6, WP; CMA/DEM-7, WP; CMA/DEM-8, WP; CMA/DEM-9, WP). For each project, the Company identified the project list number, project identification number, street address and town, pre-construction authorization estimate, life-to-date project summary reports,[73] project dollar and percent variance, and actual costs proposed for inclusion in rate base (Exhs. CMA/DEM-6 (Revs. 1-3); CMA/DEM-7; CMA/DEM-8 (Revs. 1-3); CMA/DEM-9 (Revs. 1, 2); CMA/DEM-6, WP; CMA/DEM-7, WP; CMA/DEM-8, WP; CMA/DEM-9, WP). In addition, the Company provided pre-construction

[73] Life-to-date project summary reports represent all main replacement and tie-in project costs charged to Account 101, Gas Plant in Service, over the entire "life" of the work order, and are used to assist in performing a budget variance analysis (Exh. DPU-16-2).

internal rate of returns ("IRRs") and post-construction IRRs for projects classified as "revenue producing growth" (Exh. CMA/DEM-7, at 1-4).

For each planned capital project involving the installation or retirement of distribution facilities, the Company develops a capital work order with a unique reference number and design documentation (Exh. CMA/DEM-1, at 38). A work order includes a budget estimate for the total work to be performed (Exh. CMA/DEM-1, at 38). The approval of a work order, therefore, represents an implicit management approval of the associated costs included in this estimate (Exh. CMA/DEM-1, at 38). Project approval is required at the NiSource level, depending on whether: (1) the project meets a threshold value that, depending upon the expenditure category, ranges between $1 million and $20 million; (2) the project is a NiSource or Bay State project; and (3) the project is already included in the annual capital program, or represents incremental expenditures, or represents a shift of capital dollars (Exh. CMA/DEM-1, at 38-39). All projects greater than $25 million require approval from NiSource's Board of Directors (Exh. CMA/DEM-1, at 39).

Project managers are required to submit an explanation form for any project in which the actual costs are above or below the estimated cost by ten percent, or by $5,000, whichever is greater (Exh. CMA/DEM-1, at 39). Of the 741 capital projects sought for inclusion in rate base, 395 had a variance greater than ten percent, of which the Company provided variance forms or variance explanations for 362 projects (Exhs. CMA/DEM-6 WP; CMA/DEM-7 WP; CMA/DEM-8 WP; DPU-18-1, Atts. B, C (Rev.); DPU-22-26, Att. (B); DPU-24-10). The remaining projects had variances of less than $5,000 and, therefore, did not require variance analyses. In addition, the Company requires additional approval of budgets for any project in which actual costs exceed estimated costs by 20 percent of project budget, or by $50,000, whichever is greater (Exh. CMA/DEM-1, at 40). The record demonstrates that 37 projects fell into this variance category (Exhs. CMA/DEM-6 (Revs. 1-3); CMA/DEM-7; CMA/DEM-8 (Revs. 1-3); CMA/DEM-6 WP; CMA/DEM-7 WP; CMA/DEM-8 (WP); DPU-22-26, Att. B). The Company provided re-approval documentation for 36 of these projects (Exhs. CMA/DEM-6 (Revs. 1-3); CMA/DEM-7; CMA/DEM-8 (Revs. 1-3); CMA/DEM-6 WP; CMA/DEM-7 WP; CMA/DEM-8 WP; DPU-22-26, Att. B). Bay State provided explanations for the budget variances; for example: (1) the presence of ledge and boulders that required the use of special removal equipment and backfilling with gravel and sand; (2) additional construction costs resulting from factors such as municipal requirements; (3) road reconfigurations; (4) changes in scope of work required that could not be identified during the estimation process; and (5) additional police details, as well as prepositioning emergency response units in areas where construction resulted in restricted road access (Exh. CMA/DEM-6 WP at 9, 14, 17, 22, 236, 289; 1112).

3. Positions of the Parties

a. Attorney General

The Attorney General argues that the Company did not provide the necessary network analysis associated with the test year main replacements that it seeks to include in rate base (Attorney General Brief at 19, citing Exhs. AG 21-8; AG 21-9). Thus, according to the Attorney General, the Department does not have substantial evidence to conclude that the investments are prudent, used, and useful in the service to customers (Attorney General Brief at 19).

Accordingly, the Attorney General asserts that the Department should exclude from rate base all of the Company's proposed test year main replacements (Attorney General Brief at 19-20).

Regarding post-test year capital additions, the Attorney General argues that the Department should disallow these investments because they have not been subject to a full ten-month investigation prescribed by G.L. c. 164, § 94 (Attorney General Brief at 10). In this regard, the Attorney General contends that by restoring rate case suspension periods to ten months,[74] the General Court reintroduced regulatory lag as an important consumer protection measure intended to reduce waste and inefficiency (Attorney General Brief at 11, citing D.P.U. 12-25, at 22; NYNEX Price Cap, D.P.U. 94-50, at 110 n.71 (1995)). She claims that the Department should reject the Company's attempt to circumvent the actions taken by the General Court (Attorney General Brief at 12).

The Attorney General also rejects any notion that disallowance of the post-test year rate base additions will result in deficient base rates for the Company, even though the Company was engaged in post-test year investments like the TIRF program (Attorney General Brief at 10-11). The Attorney General acknowledges that, all else being equal, if rate base grows disproportionately to revenues after the test year, the Company may fail to earn its allowed return

---

74 From 1939 through the end of 1976, the maximum suspension period applicable to base rate cases was ten months (see St. 1939, c. 178, § 1). In 1976, the General Court enacted an amendment to G.L. c. 25, § 18 as part of other legislation reinstituting the practice of assessing utilities to fund the Department's operations. The amendment stated that, notwithstanding the provisions of G.L. c. 164, § 94, which provides for a ten-month suspension period, the Department could not suspend a tariff filing made by any company that paid as assessment to the Department (electric, gas, and telephone companies) after January 1, 1977, for longer than six months. Thus, electric and gas companies became subject to a six-month suspension period. The six-month suspension period was extended back to ten months with the passage of St. 2012, c. 209, An Act Relative to Competitively Priced Electricity in the Commonwealth, which repealed the provisions of G.L. c. 25, § 18 related to the six-month suspension period.

(Attorney General Brief at 10). However, she asserts that Bay State's revenues and expenses inevitably change, and that with efficient and economical management, the Company can actually profit from these changes, as demonstrated by utilities such as NSTAR and The Berkshire Gas Company, which have not sought rate increases for many years (Attorney General Brief at 11).

Further, the Attorney General argues that including non-revenue producing plant in rate base while excluding revenue producing plant and its attendant revenues would be asymmetrical (Attorney General Brief at 56-57, citing Exh. AG/DJE-1, at 26-27). In this respect, she contends that additional revenues in excess of the costs of the investment would mitigate the cost of the non-revenue producing plant (Attorney General Brief at 57, citing Exh. AG/DJE-1, at 26). In addition, the Attorney General claims that the Company's proposal to include post-test year capital additions is inconsistent with the Department's reliance on an historic test year for setting rates, and constitutes a future test year, which the Department previously has rejected (Attorney General Brief at 57-58, citing D.P.U. 12-25, at 18; Western Massachusetts Electric Company, D.P.U. 10-70, at 184-185; D.P.U. 07-50-A at 51; D.P.U. 1580, at 13-17, 19; D.P.U. 136, at 3; D.P.U. 19992, at 2; D.P.U. 18204, at 4; D.P.U. 18210, at 2-3; D.P.U. 18264, at 2-4; Attorney General Reply Brief at 8).

Finally, the Attorney General argues that the proposed post-test year dollar amounts to be added to rate base have not been audited by any independent outside auditor (Attorney General Brief at 58, citing RR-AG-12. Thus, according to the Attorney General, there is no evidence that any of the Company's post-test year capital additions exist, or that they are providing service to customers (Attorney General Brief at 59). As a result, the Attorney General asserts that there is no way to authenticate the dollar amounts sought for recovery in rate base (Attorney General Brief at 59).

b. Company

Bay State argues that it provided detailed information to support the inclusion in rate base of its test year: (i) revenue producing investments; (ii) non-revenue producing investments; (iii) non-discretionary, non-mains investments; and (iv) miscellaneous intangible plant investments (Company Brief at 58-61, citing Exhs. CMA/DEM-1, at 36, 40-42; CMA/DEM-6 (Rev. 3); CMA/DEM-7; CMA/DEM-8 (Rev. 3); CMA/DEM-9; DPU-18-1 (Rev.) & Att. A, B, C (Rev.); Tr. 2, at 319). Further, the Company contends that its rate base should include known and measurable changes to year-end rate base to reflect non-revenue producing capital additions completed by June 30, 2013, including capital investments for the NIFIT system (Company Brief at 61, citing Exhs. CMA/JTG-1, at 29-30; CMA/JTG-2, Sch. JTG-13 (Rev. 5)). The Company contends that while the limitation of the six-month suspension period generally provided insufficient time to generate the supporting data that would be needed to review post-test year plant additions, the ten-month suspension period now provides both the Department and Attorney General with ample opportunity to review post-test year rate base adjustments (Company Brief at 62).

Thus, the Company argues that the post-test year capital additions should be allowed because: (1) the changes are known and measurable; (2) the updates were submitted in accordance with the procedural schedule, with sufficient time for parties to review and investigate; and (3) exclusion would result in a revenue requirement that is unrepresentative of the Company's actual costs (Company Brief at 18, 22; Company Reply Brief at 5). The

Company contends that the only difference between the post-test year additions to non-revenue producing plant and costs that are allowed is the actual timing of the plant additions, and that there is "no valid reason" for their exclusion on that basis (Company Brief at 18). Further, the Company argues that the Attorney General has not contested the inclusion of post-test year, non-revenue producing plant on procedural or substantive grounds (Company Reply Brief at 5-6). Further, Bay State contends that the exclusion from rate base of post-test year non-revenue producing capital additions completed by June 30, 2013 will prevent the Company from obtaining rates that reflect current costs, and will impair its ability to achieve the allowed rate of return (Company Brief at 22, 61, citing Exh. CMA/SHB-1, at 40; Tr. 1, at 98-99).

Bay State further argues that the extension of the suspension period applicable to rate cases to ten months requires a change in ratemaking policy by the Department in order to maintain the adequacy of rate recovery (Company Brief at 22). The Company contends that the Attorney General provided no evidence that the Legislature intended to extend regulatory lag when extending the suspension and review period from six months to ten months (Company Brief at 18). In this regard, Bay State asserts that while the Department can consider regulatory lag in its exercise of ratemaking authority, regulatory lag is not in itself a valid ratemaking method (Company Brief at 20).

The Company argues that the objective of ratemaking is to establish future rates based on the most recent historical data available in order that a company has the opportunity to earn a fair rate of return on its investments (Company Brief at 20). It notes that during the 1970s, rate cases were conducted with a ten-month suspension period and that rate base was established on the basis of the average net investment during the test year, and notes that the SJC found this approach to be confiscatory (Company Brief at 21, citing New England Telephone & Telegraph Co. v. Department of Public Utilities, 371 Mass. 67, 72, 74 (1976)). The Company states that the SJC directed the Department to recognize the effects of attrition in the ratemaking process, which the Company claims was achieved by the Department's adoption of a year-end rate base standard (Company Brief at 21, citing Boston Edison v. Department of Public Utilities, 375 Mass. 1, at 30 (1978); Boston Edison Company, Policy Statement of the Commission Concerning the Adoption of Year-End Rate Base, D.P.U. 160 (1980)).

Moreover, Bay State contends that the Department routinely permitted companies to update their cost of service during the ten-month suspension period in use prior to 1977, and that this practice had been accepted by the SJC (Company Brief at 19, citing Boston Edison v. Department of Public Utilities, 375 Mass. 1 (1978); New England Telephone and Telegraph Company v. Department of Public Utilities, 371 Mass. 67 (1976); Boston Gas Company v. Department of Public Utilities, 368 Mass. 51 (1975)). Specifically, the Company notes that the Department had allowed New England Telephone and Telegraph Company to update costs from September 30, 1974, the end of the test year used in New England Telephone and Telegraph Company, D.P.U. 18210 (1975) to the twelve months ending June 30, 1975, and that the SJC upheld the practice (Company Brief at 19, citing New England Telephone and Telegraph Company v. Department of Public Utilities, 371 Mass. 67, 71-72 (1976)). Bay State argues that its proposal in this proceeding is nearly identical to that applied by the Department in D.P.U. 18210, and that inclusion of the updates to plant made by the Company during the proceedings in the instant case do not "circumvent" the ten-month suspension period (Company Brief at 19).

In addition, the Company argues that the Department's historic aversion to a future test year is based on the necessary reliance on estimates of future financial results (Company Reply Brief at 3, citing D.P.U 12-25, at 18; D.P.U. 10-70, at 51; D.P.U. 09-39, at 84). Bay State notes, however, that in the instant case, the Company has provided actual plant investment costs with supporting documentation rather than estimates, and, therefore, that the Attorney General's argument is baseless (Company Reply Brief at 3-4). The Company further notes that the Department has previously allowed the inclusion of post-test year additions to rate base under certain circumstances (Company Brief at 21, citing D.P.U. 85-270, at 62-63, 140-141; Company Reply Brief at 4, citing Boston Edison Company, D.P.U. 906, at 8 (1982)). In addition, the Company points out that the Department routinely allows for known and measurable changes to test year O&M expenses (Company Reply Brief at 4, citing New England Telephone and Telegraph Company v. Department of Public Utilities, 371 Mass. 67, 74 (1976)).

Further, the Company argues that the Attorney General fails to take into consideration that the proposed post-test year additions do not include revenue producing plant investment when she notes the asymmetry of excluding "incremental revenue from new business" (Company Reply Brief at 4). Bay State contends that by excluding revenue producing plant, ratepayers are not harmed because the revenue stream associated with those additions will offset the revenue requirements associated with such investments over their useful lives (Company Reply Brief at 4, citing Exh. CMA/SHB-Rebuttal-1, at 21). In addition, the Company notes that the revenues associated with capital investment are rarely offset by revenues in the first few years, and, therefore, including the revenue requirement for revenue producing plant would not mitigate the revenue requirement for non-revenue producing plant (Company Reply Brief at 4, citing Exh. CMA/SHB-Rebuttal-1, at 21).

4. Analysis and Findings

a. Standard of Review

i. Prudent Used and Useful Standard

For costs to be included in rate base the expenditures must be prudently incurred and the resulting plant must be used and useful to ratepayers. Western Massachusetts Electric Company, D.P.U. 85-270, at 20 (1986). The prudence test determines whether cost recovery is allowed at all, while the used and useful analysis determines the portion of prudently incurred costs on which the utility is entitled to a return. D.P.U. 85-270, at 25-27.

A prudence review involves a determination of whether the utility's actions, based on all that the utility knew or reasonably should have known at that time, were reasonable and prudent in light of the extant circumstances. Such a determination may not properly be made on the basis of hindsight judgments, nor is it appropriate for the Department merely to substitute its own judgment for the judgments made by the management of the utility. Attorney General v. Department of Public Utilities, 390 Mass. 208, 229-230 (1983). A prudence review must be based on how a reasonable company would have responded to the particular circumstances and whether the company's actions were in fact prudent in light of all circumstances that were known, or reasonably should have been known, at the time a decision was made. Boston Gas Company, D.P.U. 93-60, at 24-25 (1993); D.P.U. 85-270, at 22-23; D.P.U. 906, at 165. A review of the prudence of a company's actions is not dependent upon whether budget estimates later proved to be accurate but rather upon whether the assumptions made were reasonable, given the facts that were known or that reasonably should have been known at the time. Massachusetts-American Water Company, D.P.U. 95-118, at 39-40 (1996); D.P.U. 93-60, at 35; D.P.U. 84-145-A at 26.

The Department has cautioned utility companies that, as they bear the burden of demonstrating the propriety of additions to rate base, failure to provide clear and cohesive reviewable evidence on rate base additions increases the risk to the utility that the Department will disallow these expenditures. Massachusetts Electric Company, D.P.U. 95-40, at 7 (1995); D.P.U. 93-60, at 26; The Berkshire Gas Company, D.P.U. 92-210, at 24 (1993); see also Massachusetts Electric Company v. Department of Public Utilities, 376 Mass. 294, 304 (1978); Metropolitan District Commission v. Department of Public Utilities, 352 Mass. 18, 24 (1967).[75] In addition, the Department has stated that:

> In reviewing the investments in main extensions that were made without a cost-benefit analysis, the [c]ompany has the burden of demonstrating the prudence of each investment proposed for inclusion in rate base. The Department cannot rely on the unsupported testimony that each project was beneficial at the time the decision was made. The [c]ompany must provide reviewable documentation for investments it seeks to include in rate base.

D.P.U. 92-210, at 24.

ii. Post-Test Year Standard

The Department does not recognize post-test year additions or retirements to rate base, unless the utility demonstrates that the addition or retirement represents a significant investment

---

[75] The burden of proof is the duty imposed on a proponent of a fact whose case requires proof of that fact to persuade the fact finder that the fact exists, or where a demonstration of non-existence is required, to persuade the fact finder of the non-existence of that fact. D.T.E. 03-40, at 52 n.31, citing The Berkshire Gas Company, D.T.E. 01-56-A at 16 (2002); Fitchburg Gas and Electric Light Company, D.T.E. 99-118, at 7 (2001).

that has a substantial effect on its rate base. Boston Gas Company, D.P.U. 96-50-C at 16-18, 20-21 (1997); D.P.U. 96-50 (Phase I) at 15-16; D.P.U. 95-118, at 56, 86; D.P.U. 85-270, at 141 n.21; Massachusetts-American Water Company, D.P.U. 1700, at 5-6 (1984). See also Southbridge Water Supply Company v. Department of Public Utilities, 368 Mass. 300 (1975). As a threshold requirement, a post-test year addition to plant must be known and measurable, as well as in service. Dedham Water Company, D.P.U. 84-32, at 17 (1984); D.P.U. 906, at 7-11.

The Department has historically judged the significance of an investment by comparing the size of the addition in relation to rate base, and not based on the particular nature of the addition, which determines whether or not inclusion as a post-test year addition is warranted. Western Massachusetts Electric Company, D.P.U. 1300, at 14-15 (1983); cf. D.P.U. 906, at 7-11 (nature of additions a factor in determining whether addition satisfied post-test year standard).

b. Test Year Plant Additions

Between January 1, 2012 and December 31, 2012, the Company completed construction on 137 revenue producing main projects and 273 non-revenue producing main projects (Exhs. CMA/DEM-6; CMA/DEM-7). The Company provided documentation for these projects including the capital authorization and closed work-order reports, cost-benefit analysis for each project, applicable project approvals, IRRs for revenue producing projects and, for projects with significant costs overruns, cost variance reports and, in some cases, budget re-approval forms (Exhs. CMA/DEM-6, WP; CMA/DEM-7, WP; DPU-18-1 (Rev.) & Att. B (Rev.); AG-21-8; AG-21-9). In addition, the Company completed 160 non-discretionary, non-main projects and 13 intangible projects (Exhs. CMA/DEM-8; CMA/DEM-9). The Company provided capital authorizations, budget variances, and, where appropriate, analysis of alternative solutions and risk mitigation considerations for these projects in addition to contracts and other miscellaneous project-specific supporting documentation (Exhs. CMA/DEM-6 WP; CMA/DEM-7 WP; CMA/DEM-8, WP; CMA/DEM-9, WP; DPU-17-9; DPU-17-10; DPU-17-12; DPU-17-16, DPU-17-19; DPU-17-21; DPU-17-22; DPU-17-24; DPU-17-27; DPU-24-13; DPU-24-15).

The Department has reviewed the documentation provided by the Company for the test year projects, and we find that the Company has presented sufficient documentation to allow us to evaluate the prudency of each of the capital projects, and to make a determination that each project was placed in service during the test year and is used and useful. In this regard, we are not persuaded by the Attorney General's argument that the Company's purported lack of network analysis warrants the exclusion from rate base of certain capital additions. It is reasonable to expect that the Company would consider future capacity needs of the distribution system at the time of infrastructure replacement. See D.P.U. 12-25, at 80. Further, as noted above in Section III.C.2, the record does not support a finding that the Company intends to build excess capacity on the system. Based on these considerations, we find that the Company's proposed test year capital additions were prudently incurred and that they are used and useful. Accordingly, we allow the undepreciated cost of these projects to be included in rate base.

c. Post-Test Year Plant Additions

The basis for the Company's proposal to include post-test year additions in rate base consists of two arguments. First, the Company argues that its ability to earn its approved ROE will be impaired if it is not permitted to include these additions in rate base (Exh. CMA/SHB-1, at 40; Tr. 1, at 98-99). The Company maintains that the inclusion of identified non-revenue producing capital additions will help reduce the deficiency in Bay State's earnings that currently prevent the Company from earning its allowed return on equity (Tr. 1, at 98). Second, the Company's request goes beyond a one-time proposal for specific post-test year additions by asking the Department to reconsider the use of the historic twelve-month test year (Tr. 1, at 99). Bay State argues that the extension of the suspension period from six to ten months increases the Company's earnings deficiency (Tr. 1, at 98-99). In particular, the Company states that its infrastructure spending is significantly higher as a result of indications that the Department desires an accelerated rate of infrastructure replacement (Tr. 1, at 100). We are not persuaded by the Company's arguments.

Changes in ratemaking procedures and standards have important implications for the process, as well as the result, of the Department's statutory functions. While the Department must be cognizant of the necessity to change its ratemaking standards to make rates more reflective of a utility's actual cost of service, it must also recognize that not all such changes to ratemaking standards are appropriate. D.P.U. 1580, at 18. The ratemaking process is intended to develop a representative level of revenue requirement to be collected from customers and, absent exigent circumstances, it is not intended to track and recover costs on a dollar for dollar basis. D.P.U. 10-70, at 174; D.P.U. 07-50-A at 51. The normal ebb and flow of customers, plant investment, and expenses make it impossible to capture every element of cost and revenue that could in theory be included in rates. For example, post-test year customer growth and post-test year plant additions are not normally included in rates, unless they represent a significant increase to year-end revenues or rate base. D.P.U. 10-70, at 174; D.T.E. 96-50-C at 15-17; D.P.U. 85-270, at 141 n.21 (1986); Bay State Gas Company, D.P.U. 1122, at 46-49 (1982).

Therefore, despite the extension of the statutory suspension period to ten months, we are not convinced that a comprehensive change in the Department's ratemaking process with respect to post-test year capital additions is warranted.

Further, the Attorney General argues that an asymmetry exists where the Company proposes to include non-revenue producing plant but not the revenue producing plant and associated revenues (Attorney General Brief at 56-57). In this instance, we agree. To update one element of the Company's cost of service independently, in this case non-revenue producing plant in service, would disrupt the balance achieved between costs and revenue requirement by using an historical test year.

In addition, Bay State's argument that, because it is involved in a substantial post-test year construction program, a revenue requirement established on an historic twelve-month test year end will prove inadequate to provide the Company with an opportunity to achieve its allowed rate of return, is not new to the Department. See D.P.U. 1580, at 20-22. In this respect, we find that there are compensating changes with Bay State revenues and expenses that can forestall the earnings attrition deemed by the Company to be inevitable. D.P.U. 1580, at 21. Moreover, as noted in Section IV.B.3.c, we are not convinced that the Company has sufficiently demonstrated that all cost-reduction opportunities have been effectively pursued.

The Department also finds that the Company's proposal would further diminish the important disciplinary effect of regulatory lag, and we disagree with the Company's disregard of regulatory lag as a valid ratemaking tool (Company Brief at 20). Regulatory lag can be a useful to deter utility waste and cost inefficiency. D.P.U. 12-25, at 22. As a general rule, rational utility management would exert minimal effort in controlling costs if cost containment has no effect on profits. D.P.U. 12-25, at 22, citing Ken Costello, How Should Regulators View Cost Trackers, National Regulatory Institute, at 5, No. 09-13, September 2009 ("NRRI Cost Trackers"). Regulatory lag provides an incentive for a utility to control its costs; when a utility incurs costs, the longer it takes for cost recovery, the lower the utility's earnings are in the interim. D.P.U. 12-25, at 22. The utility, consequently, has an incentive to exercise efficient management and minimize additional costs. D.P.U. 12-25, at 22.

Based on all of the foregoing considerations, the Department finds that Bay State has not provided sufficient justification to warrant the adoption of its proposal to include in rate base all non-revenue producing plant additions made through June 30, 2013. Accordingly, we deny Bay State's proposal. However, we will evaluate the Company's post-test year plant additions to determine whether any are eligible for inclusion because of the significance of the investment.

As noted above, the Department does not recognize post-test year additions or retirements to rate base unless the utility demonstrates that the additions or retirements represent a significant investment that has a substantial effect on rate base. See, e.g., D.P.U. 96-50-C at 16-18, 20-21; D.P.U. 95-118, at 56, 86; D.P.U. 85-270, at 141 n.21. The Department has historically judged the significance of an investment by comparing the size of the addition in relation to rate base, and not based on the particular nature of the addition, which determines whether or not inclusion as a post-test year addition is warranted. Western Massachusetts Electric Company, D.P.U. 1300, at 14-15 (1983); cf. D.P.U. 906, at 7-11 (nature of additions a factor in determining whether addition satisfied post-test year standard).

The Department has examined the closing reports and other supporting data provided by the Company in support of its proposed post-test year non-revenue producing plant additions

(Exhs. CMA/DEM-6 (Revs. 1-3); CMA/DEM-8 (Revs. 1-3); CMA/DEM-9 (Revs. 1, 2)). We find that only one post-test year project was of significant size to warrant further review.

Bay State's total NiFit project expenditures through mid-August 2013 were $8,370,662 (Exhs. CMA/RAF-1, at 2-3 (Revs. 1, 2); CMA/RAF-8, Sch. CMA/RAF-1 (Rev. 1); CMA/RAF-9, Sch. CMA/RAF-1 (Rev. 2); CMA/DEM-9 (Rev. 2); CMA/JTG-2, Sch. JTG-24, at 1 (Rev. 5)). The Company's rate base as of December 31, 2012 was $474,764,225 (Exh. CMA/JTG-2, Sch. JTG-13 (Rev. 5)). This rate base balance does not include any NiFit project expenditures. Given these considerations, we find that the NiFit project represents a significant post-test year addition that warrants further review. See Aquarion Water Company of Massachusetts, D.P.U. 11-43, at 46-47 (2012); Aquarion Water Company of Massachusetts, D.P.U. 08-27, at 34-35 (2009); Massachusetts Electric Company, D.P.U. 19376, at 34 (1978).[76]

d. NIFIT Project

i. Introduction

The NiSource Financial Transformation Program ("FTP") is a transformational information systems initiative launched by NiSource in late 2011 that is designed to move NiSource's financial processes and systems to a unified platform, while addressing what Bay State describes as operating risks and challenges associated with the use of the legacy software systems then in use by NiSource's affiliates (Exhs. CMA/SHB-1, at 27; CMA/RAF-1, at 3-4). A core component of the FTP program is referred to as NiFiT, an integrated financial software

76 In light of our findings, we need not address the Attorney General's argument that the post-test year capital investments were not audited by an independent, external auditor, except as it applies to the NiFit project (Attorney General Brief 58-59, citing RR-AG-12) (see n.78 below).

platform that will replace the current four general ledger software packages now in use by various NiSource companies, including Bay State (Exhs. CMA/SHB-1, at 27; CMA/RAF-1, at 3-4; DPU-2-7, Att.). According to the Company, the implementation of NiFiT will allow NiSource and its affiliates to transition to current technology platforms on a cost-effective basis, while standardizing processes across the corporation (Exhs. CMA/SHB-1, at 27; CMA/RAF-1, at 3-5; CMA/JTG-Rebuttal-1, at 12-13). The Company also represents that the NiFiT investment will ensure that the NiSource companies, including Bay State, will be able to continue to provide strong internal and external financial reporting that serve the needs of all of its stakeholders, including employees, vendors, financial rating agencies, and regulators (Exh. CMA/RAF-1, at 3-4).

The NiFiT project will be implemented across the entire NiSource organization in phases between 2013 through 2016, starting with Bay State in June of 2013 (Exhs. CMA/RAF-1, at 8; CMA/RAF-Rebuttal-1, at 4; CMA/JTG-Rebuttal-1, at 11; AG-11-7; Tr. 2, at 227). The total capital costs associated with the NIFIT project have been budgeted at $115 million to $125 million; of this amount, the Company anticipates that its total allocated capital costs will be in the range of $13 million to $14 million (Exh. CMA/SHB-1, at 29; CMA/RAF-1, at 10).[77] NIFIT-related costs that are incurred solely for the benefit of a specific company are billed 100 percent to that company (Exh. DPU-2-4). NiSource allocates its NiFit common costs among its affiliates using a hybrid allocation method that places equal weight on two factors: (1) a weighting of 50 percent gross fixed assets and 50 percent operating expenses; and (2) employee

[77] In its last rate case, Bay State expected these costs to be in the range of $10 million. See D.P.U. 12-25, at 334-335.

counts (Exhs. DPU-2-4; DPU-2-4, Att.; DPU-2-10; DPU-2-10, Att.; Tr. 9, at 904-905; RR-DPU-17; RR-DPU-17, Att.). Thus, Bay State is billed for 6.43 percent of the NiFit common costs, plus a portion of NCSC's own allocated percentage of 14.34 percent (RR-DPU-17, Att.). Based on anticipated NiFit project expenditures through 2015, the Company estimates that it will incur 11.2 percent of overall NiFit capital and expense costs (Exhs. CMA/RAF-1, at 38; DPU-2-10, Att.).

In its initial filing, the Company reported that its total allocated share of the NiFit project costs as of February of 2013 was $6.2 million (Exh. CMA/RAF-1, at 37). The Company initially proposed to include $8,730,000 of NiFit project expenditures in rate base, representing the level of NiFit investment expected to be in service by June 30, 2013 (Exhs. CMA/RAF-1, at 37; CMA/JTG-2, Sch. JTG-24, at 1; DPU-2-14). However, the Company subsequently reported that, through mid-August 2013, the actual allocated share of the NiFit project investment was $8,370,662 (Exhs. CMA/RAF-1, at 2-3 (Revs. 1, 2); CMA/RAF-8, Sch. CMA/RAF-1 (Rev. 1); CMA/RAF-9, Sch. CMA/RAF-1 (Rev. 2); CMA/DEM-9 (Rev. 2); CMA/JTG-2, Sch. JTG-24, at 1 (Rev. 5); DPU-2-12).

ii. Positions of the Parties

(A) Attorney General

As noted above, the Attorney General opposes the Company's proposed inclusion of post-test year plant additions in rate base. She also disagrees with the amortization method proposed for the NiFit project, as discussed below (see Section VIII.L). Despite these objections, however, she acknowledges that the NiFit project has been placed into service (Attorney General Reply Brief at 46).

(B) Company

Bay State maintains that its non-revenue capital additions proposed for inclusion in rate base, such as the NiFit project, are in service, known and measurable, and are fully supported by complete documentation of the underlying costs (Company Brief at 61-62, 65-67; Company Reply Brief at 3-6). Thus, the Company concludes that the NiFit project should be included in rate base.

iii. Analysis and Findings

In the prior section of this Order, we found that the NiFit project, despite being a post-test year capital addition, represents a significant investment that warrants consideration for inclusion in rate base. We now determine whether the costs associated with the project are known and measurable and were prudently incurred, and whether the project is in service and used and useful.

Bay State has provided sufficient evidence to document the reported cost of the NiFit project of $8,370,662 (Exhs. CMA/RAF-1, at 1-3 (Revs. 1, 2); CMA/RAF-8, Sch. CMA/RAF-1 (Rev. 1); CMA/RAF-9, Sch. CMA/RAF-1 (Rev. 2); CMA/DEM-9 (Rev. 2); CMA/JTG-2, Sch. JTG-24, at 1 (Rev. 5); DPU-2-12). As such, we find that the costs are known and measurable.[78] Further, we find that the NiFit system was placed into service in June of 2013 (Exhs. CMA/RAF-1, at 8; CMA/RAF-Rebuttal-1, at 4; CMA/JTG-Rebuttal-1, at 11; AG-11-7; Tr. 2, at 227). Thus, the Department finds that Bay State has met the threshold requirement for

[78] We note that, contrary to the Attorney General's assertions, the costs associated with NiFit have been audited by independent, external auditors (Exh. CMA/RAF-1, at 26, 35).

inclusion of $8,370,662 in NiFit project expenditures in rate base, i.e., the associated plant investment is known and measurable, and in service.

Next, the Department considers whether the NiFit investment was prudently incurred. In evaluating non-revenue producing projects such as NiFit, the Department has recognized that such projects can be fairly characterized as either discretionary or non-discretionary in nature. D.T.E. 03-40, at 67. Regardless of whether the non-revenue producing project is considered discretionary or non-discretionary, prudent utility management and common business practice would dictate the need for a project-appropriate cost analysis to determine the cost of the project prior to commencement. D.T.E. 03-40, at 67-68; D.P.U. 93-60, at 27. The scope of the pre-construction analysis is dependent upon the nature of the project at issue. For example, the replacement of a cast-iron main installed in 1890 would in all likelihood not warrant a full-scale cost-benefit analysis, but instead would consist of a reliable engineering estimate of project costs and a prioritization of the project in light of the company's other capital needs. On the other hand, a major capital project, such as NiFit, would warrant a more thorough analysis of the Company's options, the criteria upon which a decision would be based, and support for the decision reached. D.T.E. 03-40, at 68; D.P.U. 95-118, at 43-45; D.P.U. 93-60, at 27. Systematic, contemporaneous documentation of well-analyzed investment decision-making is the best, although not necessarily the only evidence, to sustain such a proof. Bay State Gas Company, D.T.E. 05-27-A at 39-40 (2007); D.T.E. 05-27, at 89.

Once the project has commenced, a company is expected to apply management tools, such as variance reports and related cost control measures, in order to monitor project costs and allow management to take corrective action as appropriate in event of a cost overrun.

D.T.E. 03-40, at 68; D.P.U. 93-60, at 35. If the company can demonstrate that it has taken appropriate cost-containment measures in a non-revenue producing project, and adequately justifies the reasons for any cost overrun, the Department will consider the costs of the project eligible for inclusion in rate base. If, however, the company is unable to justify the reasons for a cost overrun, the Department will exclude the excess costs to the extent that they have been found to have been imprudently incurred. D.T.E. 03-40, at 68; D.P.U. 95-118, at 49-55.

The legacy software system ("Lawson system") previously used by Bay State had been in service for over 20 years, was dependent upon obsolete hardware, and no longer had vendor support (Exhs. CMA/RAF-1, at 3, 5-10; CMA/RAF-Rebuttal-1, at 3-4; CMA/JTG-Rebuttal-1, at 11). While the benefits of NiFit may not be quantifiable in monetary terms, even a partial failure of the Lawson system would have indisputably serious consequences to the Company's operations, and thus to its customers (Exh. CMA/RAF-Rebuttal-1, at 3). The Department takes a number of factors into account in determining if the NiFit system was a prudent investment including: (1) the age of the Lawson system; (2) the lack of vendor support for Lawson hardware and software; (3) the impact that a possible Lawson failure could have on the Company's ability to handle vendor business transactions; (4) the impact that a possible Lawson failure could have on the Company's relationship with investors in the capital markets; and (5) the cost of the existing Lawson system (Exhs. CMA/RAF-1, at 3, 5-10; DPU-2-1; DPU-2-1, Att.; DPU-2-2; DPU-2-9; DPU-9-4 & Atts. (a)-(f); AG-11-1; AG-11-5; AG-11-7; AG-11-8).

Prior to the design phase of NiFit, NiSource instituted an internal study ("Roadmap Study") designed to evaluate risks associated with the different existing platforms of its various affiliates (Exhs. CMA/RAF-1, at 10; CMA-RAF-2; CMA/RAF-5; AG-11-12). The

Roadmap Study also sought to develop ways by which NiSource could mitigate the risks associated with its aging computer infrastructure (Exhs. CMA/RAF-1, at 10; CMA-RAF-2; CMA/RAF-5; AG-11-12).

In addition to the Roadmap Study, NiSource also conducted an request for proposals process to solicit vendors for the overall NIFIT project (Exhs. CMA/RAF-1, at 15; CMA/RAF-3; AG-11-6 & Atts. A-D). NiSource evaluated the six eligible vendors using seven weighted criteria, including: (1) financial project management experience; (2) project approach, tools and accelerators; (3) resumes; (4) application outsourcing; (5) pricing; 6) customer references; and (7) fit/partnering (Exhs. CMA/RAF-4; AG-11-10 & Att.; AG-11-11 & Att.).

NiSource also instituted a variety of tracking mechanisms and cost controls designed to ensure that the NIFIT project accomplished the goal of overhauling the financial, reporting, general ledger, and accounting platforms (Exhs. CMA/RAF-1, at 4; AG-15-15). These procedures included: (1) using dedicated staffing from Accounting, Operations, Supply Chain, and IT divisions, along with new employees hired specifically to handle NIFIT design and implementation; (2) retaining a former executive with experience in a project similar to the scope of NIFIT;[79] (3) engaging in price-comparison analysis for certain third-party vendor costs; (4) developing a time and cost budget associated with each design phase; (5) developing charge codes[80] to track hours worked for both generally accepted accounting principals ("GAAP") reporting purposes as well as for direct charges to Bay State or costs to be allocated across

---

79 The former executive is a retired senior vice president from Duke Energy serving as a consultant to NiSource (Exh. DPU-2-8).

80 The NIFIT costs were charged to accounts 692370, Sub-Account 3044, and 692002, Sub-Account 3044; Work Management System costs were charged to Account 692300, Activity 041622, in the Company's Lawson General Ledger Code Block (Exh. AG-15-5).

NiSource and its affiliates; (6) applying management oversight; (7) using monthly budget true-ups; (8) using budget estimation models from Accenture; (9) tracking of hours worked in a Microsoft tool that are trued-up against budgeted hours and invoiced hours; (10) assigning an internal NIFIT auditor who reports to management; and (11) employing an external audit to evaluate the project's goals, processes, and schedule (Exh. CMA/RAF-1, at 12-13; 22-23; 25-27; 29-37; DPU-2-7 & Att.; AG-11-9 & Att.; AG-15-5). Based on the measures taken by NiSource to identify its options and the measures undertaken to manage the NiFit project, we find NiSource's approach to the NIFIT program is reasonable and well-designed in tracking and controlling costs. Based on the foregoing, we find that Bay State's expenditures for the NiFit project were prudently incurred.

Finally, we turn our attention to NiSource's proposed allocation of NiFiT-related project costs to Bay State. Regardless of the particular allocation method ultimately selected, the allocation method must be driven by cost causation principles. D.P.U. 10-114, at 187; AT&T Communications of New England, Inc., D.P.U. 85-137, at 51-52 (1985). NiFit project components that are used only by a single NiSource affiliate are directly assigned to that affiliate (Exh. DPU-2-4). In the case of NiFit project components that are common among NiSource's affiliates, NiSource relies on an allocation based on an equal weighing of two factors: (1) 50 percent gross fixed assets and 50 percent operating expenses; and (2) employee counts (Exhs. DPU-2-4 & Att.; DPU-2-10 & Att.; Tr. 9, at 904-905; RR-DPU-17 & Att.). Because the NIFIT program seeks to mitigate information technology infrastructure-related risks across NiSource and all its affiliates, it would be appropriate to apportion NiFit capital costs among all NiSource affiliates. The Department finds that the selected allocation method appropriately recognizes the underlying cost drivers of the NiFit project, and recognizes that certain NiFit project costs are more appropriate to assign directly to specific NiSource affiliates based on their own requirements. Therefore, we accept the Company's proposed allocation method.

Based on the foregoing analysis and findings regarding the Company's NiFit project, the Department will include the NiFit expenditures of $8,370,662 in the Company's rate base, along with a deduction for associated accrued amortization related to the investment, as set forth below.

e. Conclusion

As noted above, having found that the Company's test year capital additions were incurred prudently and are used and useful, we allow the undepreciated cost of these projects to be included in rate base. We note that the test year capital additions include those investments made pursuant to the Company's TIRF program, which are currently under review in Bay State Gas Company, D.P.U. 13-79. However, a separate issue is whether the costs of these investments are properly recoverable under the Company's TIRF. See D.P.U. 12-25, at 81. This inquiry involves an analysis of whether the proposed investments meet the requirements for TIRF eligibility set forth in the TIRF tariff applicable at the time of the investments. We find that it is appropriate for this analysis to be conducted in D.P.U. 13-79. Therefore, while we include in the Company's rate base the undepreciated cost of the non-revenue producing capital additions at issue in D.P.U. 13-79, we make no finding herein as to whether the costs for these projects may be recovered under the TIRF.

Further, consistent with this decision, we must adjust Bay State's test year to remove the following post-test year rate base components in order to set rates based on an historic calendar year 2012 test year. The Company proposed to include post-test year net plant additions of $27,624,139 (Exh. CMA/JTG-2, Sch. JTG-13 (Rev. 5)). Of this amount, $8,370,662 represents the Company's NiFit investment through mid-August 2013 (Exhs. CMA/RAF-1, at 1-3 (Rev. 2); CMA/RAF-9 (Rev. 2); CMA/JTG-2, Sch. JTG-24, at 1 (Rev. 5); CMA/DEM-9 (Revs. 1, 2)). Accordingly, we will remove from the Company's proposed rate base a net total of $19,253,477 ($27,624,139 - $8,370,662) related to the disallowed adjustments for plant in service.

The Company also proposed the following post-test year deductions to rate base: (i) $10,871,800 in depreciation reserves; (ii) $807,207 in amortization reserves; and (iii) $1,324,490 in deferred income taxes reserves (Exh. CMA/JTG-2, Schs. JTG-13 (Rev. 5)). Consistent with the above adjustments, a corresponding adjustment to the Company's amortization reserve in the amount of $69,756 is warranted to account for the NiFit project (Exh. CMA/JTG-2, Sch. JTG-24 (Rev. 5)). Further, a corresponding adjustment to the Company's deferred income tax reserve also is warranted. D.P.U. 12-25, at 84; D.P.U. 10-55, at 194; D.T.E. 01-56, at 42. The Company proposed an increase of $1,324,490 in accumulated deferred income taxes associated with post-test year plant additions (Exh. CMA/JTG-2 (Rev. 5), Sch. JTG-13). In view of the complexities associated with deferred income tax calculations, as well as the fact that the Department has addressed the NiFit project separately, the Department will derive a representative level of accumulated income taxes associated with non-NiFit investment by removing those deferred income taxes associated with NiFit. D.P.U. 12-25, at 84; D.P.U. 10-55, at 194. To determine this representative level, the Department first divides Bay State's NiFit gross NiFit plant investment of $8,370,662 by total gross plant additions of $31,308,760 as described above (Exh. CMA/JTG-2 (Rev. 5), Schs. JTG-21, JTG-22, JTG-24).

This produces a factor of 26.74 percent, which, when multiplied by Bay State's increase in accumulated deferred income taxes during the month of June 2013 of $112,965, produces a deferred income tax balance of $30,206 associated with the NiFit project[81] (see Exh. CMA/JTG-2 (Rev. 5), Sch. JTG-23). The Department finds that the remaining difference of $1,294,284 is a representative level of accumulated deferred income taxes associated with the Company's post-test year non-NiFit plant additions. Accordingly, the Department will remove from the Company's proposed rate base $12,903,535 ($10,871,800 + $737,451 + $1,294,284) representing the depreciation reserves, amortization of intangible plant reserves, and deferred income tax reserves associated with the disallowed adjustments.[82]

C. Cash Working Capital Allowance

1. Introduction

a. Overview

In their day-to-day operations, utilities require funds to pay for expenses incurred in the course of business, including O&M expenses. These funds are either generated internally by a company or through short-term borrowing. D.P.U. 96-50 (Phase I) at 26. Department policy

81 Because the NiFit project was placed into service in August of 2013, use of the Company's total accumulated deferred income tax balance as the basis for determining the deferred income taxes associated with NiFit would produce a distorted level of deferred income taxes.

82 In D.P.U. 12-25, at 82-83, the Department excluded from the Company's rate base $209,059 in apparent cost overruns associated with five capital projects. The Company wrote off those excluded plant costs on its books, and is considering a similar writeoff of the Palmer Mount Dumpling project (Exh. CMA/JTG-2, at 27; Tr. 5, at 595). Such writeoffs are in contravention of Instruction 2C of the Uniform System of Accounts for Gas Companies, unless otherwise specifically directed by the Department. 220 C.M.R. § 50.00, Gas Plant Instructions. The Company is directed to restore the excluded plant costs on its books, and to refrain from writing off the Palmer Mount Dumpling project.

permits a company to be reimbursed for costs associated with the use of its funds or for the interest expense incurred on borrowing. D.P.U. 96-50 (Phase 1) at 26, citing Western Massachusetts Electric Company, D.P.U. 87-260, at 22-23 (1988). This reimbursement is accomplished by including a working capital component in the rate base computation.

Cash working capital needs have been determined through the use of either a lead-lag study or a 45-day O&M expense allowance. D.T.E. 03-40, at 92. In the absence of a lead-lag study, the Department has generally relied on the 45-day convention as reasonably representative of O&M working capital requirements. D.T.E. 05-27, at 98; D.P.U. 88-67 (Phase 1) at 35. The Department, however, has expressed concern that the 45-day convention first developed in the early part of the 20th century no longer provides a reliable measure of a utility's working capital requirements. D.T.E. 03-40, at 92; Fitchburg Gas and Electric Light Company, D.T.E. 98-51, at 15 (1998). Therefore, the Department currently requires all gas and electric companies serving more than 10,000 customers to conduct a fully developed and reliable O&M lead-lag study. D.P.U. 11-01/D.P.U. 11-02, at 164.[83]

Bay State relied on the lead-lag study prepared in its previous rate case to determine the net lag days associated with purchased gas working capital collected through the cost of gas adjustment clause ("CGAC") and to establish the net lag days to be used for other O&M expense

83 The Department recognizes that for companies that do not use a monthly billing cycle, a lead-lag study is likely to produce a higher cash working capital allowance than the 45-day convention. Massachusetts-American Water Company, D.P.U. 19900, at 10 (1979). Therefore, the 45-day convention remains in use by water companies. D.P.U. 08-27, at 39 n.22; Pinehills Water Company, D.T.E. 01-42, at 7, 38 (2001); Assabet Water Company, D.P.U. 95-92, at 11 (1996).

working capital that will be included in base rates (Exhs. CMA/BEE-1, at 3; CMA/BEE-2). The Company made one modification to the lead-lag study, as described below.

b. Purchased Gas Working Capital

Regarding the purchased gas working capital, the Company first calculated a revenue lag that is based on a "service lag," a "collection lag," and a "billing lag" (Exh. CMA/BEE-1, at 4-5). The service lag was obtained by dividing the number of billing days in the 2011 test year used in D.P.U. 12-25, the Company's last rate case, by twelve and then in half to arrive at the midpoint of the monthly service periods (Exhs. CMA/BEE-1, at 5; CMA/BEE-3, WC-2, at 3). This calculation produces a service lag of 15.22 days (Exhs. CMA/BEE-1, at 3; CMA/BEE-3, WC-2, at 3).

According to Bay State, the collection lag represents the time delay between the mailing of customers' bills and the receipt of the billed revenues from customers using the accounts receivable turnover method (Exh. CMA/BEE-1, at 5). The Company determined the 33.92 days collection lag using a combination of daily balances and end of month balances (Exhs. CMA/BEE-1, at 5; CMA/BEE-2, at 8; CMA/BEE-3, WC-2, at 2). Bay State's collection lag is adopted from its last rate case, D.P.U. 12-25, and, therefore, is based on 2011 data (Exh. CMA/BEE-1, at 6). The Company states that it used adjusted 2011 data to more closely reflect the collection lag that would be experienced by the Company under normal heating season conditions (Exh. CMA/BEE-1, at 8). In this regard, Bay State explains that its service territories experienced a historically warmer-than-normal winter heating season particularly in the first few months of 2012, which, when adjusted for the sale of the EP&S business, produces what the Company considers to be an abnormally low collection lag of 27.17 days

(Exh. CMA/BEE-1, at 6-7, 8; RR-DPU-7). Although Bay State used 2011 data in its calculation of the collection lag, the Company adjusted the components of the calculation to fully remove the revenue, accounts receivable, and uncollectible accrual associated with EP&S business activity, as the EP&S business had been sold in early 2013 (Exh. CMA/BEE-1, at 6).

Finally, with respect to the billing lag, Bay State notes that most customers are billed the evening after the meters are read, so that the billing lag is one day (Exh. CMA/BEE-1, at 8). However, according to the Company, certain large customers require additional time to process the billing data, thereby resulting in an increase in the billing lag from one day to 1.2 days (Exh. CMA/BEE-1, at 9). Bay State's calculation of a service lag of 15.22 days, a collection lag of 33.92 days and a billing lag of 1.2 days produces a total gas revenue lag of 50.34 days (Exhs. CMA/BEE-1, at 9; CMA/BEE-2, at 8).

Bay State also calculated the payment lead for purchased gas cash working capital, which provides cash working capital for expenses paid by the Company to gas suppliers, pipeline transportation providers and supplemental gas providers (Exh. CMA/BEE-1, at 9). The Company calculated the number of days for each supplier invoice from the midpoint of the service period to the date that the Company paid the invoice (Exh. CMA/BEE-1, at 11). Then a weighted average of the number of days for each supplier invoice was calculated as 39.50 days, weighted on the bill amount for each invoice (Exhs. CMA/BEE-1, at 11; CMA/BEE-2, at 10-17). The Company then subtracted the expense lead of 39.50 days from the total revenue lag of 50.34 days to produce the total purchased gas lag of 10.84 days (Exhs. CMA/BEE-1, at 11;

CMA/BEE-2, at 2).[84] Bay State states that the purchased gas cash working capital component is removed from the cost of service and will be recovered in accordance with the Company's CGAC tariff (Exhs. CMA/BEE-1, at 9, 16).

c. Other O&M Expense Working Capital

Regarding other O&M and tax expense working capital, the Company calculated a total revenue lag of 32.74 days by subtracting the lead in payment for the cost of goods and services purchased of 17.60 days from the lag in receipt of customer revenue of 50.34 days (Exhs. CMA/BEE-1, at 16; CMA/BEE-2, at 2). To calculate the O&M expense lead period, the Company disaggregated its non-gas O&M expense into 15 major cost categories (Exhs. CMA/BBE-1, at 13; CMA/BEE-2, at 18).[85] The Company reviewed payments and calculated the lead days for each category based on either all payments or a sampling of payments, depending upon the number of transactions associated with the cost category (Exh. CMA/BEE-1, at 13). Once the lead days for each category were determined, a weighted average of lead days was calculated as 17.60 days, weighted on the total cost for each category (Exhs. CMA/BBE-1, at 13; CMA/BEE-2, at 18).

A cash working capital factor of 8.945 percent was derived by dividing the 32.74 net lag days by 366 days (Exhs. CMA/BEE-1, at 4, 16; CMA/BEE-2, at 2). This factor, multiplied by Bay State's original pro-forma O&M expense of $126,951,029, produces a cash working capital

[84] The weighted net lag days of 10.84 days divided by 366 days produces a purchased gas working capital component of 2.962 percent (Exhs. CMA/BEE-1, at 8-9; CMA/BEE-2, at 2).

[85] The categories are net payroll, corporate insurance, pension/PBOP, other benefits, system management, uncollectibles, rents and leases, outside services, materials and supplies, utilities, other O&M, property taxes, Social Security and Medicare tax, federal unemployment tax, and state unemployment tax (Exh. CMA/BEE-2, at 18).

expense of $11,355,770 (Exhs. CMA/BEE-1, at 16-17; CMA/JTG-2, Sch. JTG-15). The Company's final revenue requirement adjustments produce a total O&M expense of $126,683,502 (Exh. CMA/JTG-2, Sch. JTG-15 (Rev. 5)). As such, the final proposed cash working capital expense is $11,331,839 (Exh. CMA/JTG-2, Sch. JTG-15 (Rev. 5)). According to the Company, the lead/lag study produces lower results than the Department's 45-day convention and, therefore, ensures savings for customers (Exh. CMA/BEE-1, at 17).

2. Positions of the Parties

a. Attorney General

The Attorney General challenges Bay State's use of 2011 data in calculating the collection lag, as she claims that the use of such data caused the collection lag and the resulting revenue lag used in the cash working capital calculation to be 6.75 days longer than if the Company had used test year data (Attorney General Brief at 66-67, citing Tr. 5, at 481-492).

The Attorney General argues that the Company's reliance on 2011 data because the weather was warmer in 2012 is misplaced and ignores factors other than weather, such as improvements in economic conditions, which might impact the collection lag (Attorney General Brief at 67, citing Tr. 5, at 477). Further, the Attorney General rejects the notion that deviations from normal weather specifically impacted budget payment plan customers in 2012, thereby having a significant impact on the collection lag (Attorney General Brief at 67). The Attorney General notes that 83 percent of Bay State's customers do not participate in the budget payment plan (Attorney General Brief at 67, citing Exh. DPU-3-6; Tr. 5, at 478-480). Finally, the Attorney General contends that the Department's recent acceptance of non-test year data in the collection lag calculation for a different utility is inapplicable in the instant case, because in the instant case Bay State simply substituted 2011 data for test year data and did not consider the need for sufficient collection lag data for years prior to 2011 (Attorney General Reply Brief at 51-52, citing D.P.U. 10-55, at 204).

Based on the above, the Attorney General argues that it would be inappropriate to permit Bay State to selectively change the test year period for a single component of the lead-lag study simply because the Company does not like the results using test year data (Attorney General Brief at 67-68). As such, the Attorney General asserts that the Company's cash working capital requirement should be recalculated to include the collection lag based on 2012 test year data (Attorney General Brief at 67-68; Attorney General Reply Brief at 50-51). According to the Attorney General, using the 2012 collection lag would result in a 6.75-day reduction to both the collection lag and the overall revenue lag, which then would result in a revenue lag of 43.59 days (Attorney General Brief at 68). Further, the Attorney General notes that the weighted average net lag days for O&M cash working capital would decline from the 32.74 days (8.945 percent of total O&M expense) to 25.99 days (or 7.101 percent) (Attorney General Brief at 68). The Attorney General asserts that these revised lag days should be used in deriving the Company's cash working capital allowance (Attorney General Brief at 68-69).

b. Company

Bay State argues that during the 2012 test year, the Company's service territories, along with most of the United States, experienced a historically warmer-than-normal winter heating season, and that this impacted the Company's accounts receivable balances for customers on the budget payment plan (Company Brief at 64, citing Exhs. CMA/BEE-1, at 6-7; DPU-3-1; Tr. 5, at 477). According to the Company, under normal weather conditions, a budget payment plan customer's accounts receivable balance is expected to build a credit balance during the non-heating months, which then is depleted over the course of the winter heating season (Company Brief at 64). The Company contends, however, that in the event of warmer-than-normal weather, the actual bills of budget payment plan customers are less than what would have been billed under normal weather conditions (Company Brief at 64, citing Exh. CMA/BEE-1, at 7). The Company claims that due to this weather effect, budget plan customers incur larger credit balances than would have otherwise been experienced during normal weather, which in turn results in a lower number of collection lag days (Company Brief at 64, citing Exhs. CMA/BEE-1, at 7; DPU-3-1; Tr. 5, at 477). Bay State dismisses as speculative the Attorney General's contentions that (i) factors other than weather could account for the unusually high collection lag based on 2012 data, and (ii) budget payment plan customers do not have an appreciable effect on the collection lag (Company Brief at 67-68).

Bay State asserts that the use of the 2011 data for developing the collection lag is consistent with Department precedent when the test year collection lag "'is an anomaly and not representative of both past and present time delay between the issuance of customers' bills and the receipt of billed revenues'" (Company Brief at 64, 68, citing D.P.U. 10-55, at 204). Specifically, Bay State contends that given that the Department previously recognized as an anomaly a collection lag difference of five days from one year to the next, then the collection lag difference in this case of six days (i.e., 33.92 days for 2011 compared to 27.17 days for 2012), should be considered an anomaly as well (Company Reply Brief at 23-24, citing D.P.U. 10-55, at 203). As such, Bay State asserts that the Department should adopt the Company's lead/lag results and its proposed cash working capital allowance, as the approach to calculating the lead/lag study is consistent with Department precedent (Company Brief at 64, 68; Company Reply Brief at 24).

3. Analysis and Findings

The purpose of conducting a cash working capital lead-lag study is to determine a company's "cash in-cash out" level of liquidity in order to provide the company an appropriate allowance for the use of its funds. Such funds are either generated internally or through short-term borrowing. See D.P.U. 96-50 (Phase I) at 26. Department policy permits a company to be reimbursed for costs associated with the use of its funds and for the interest expense incurred on borrowing. D.P.U. 96 50 (Phase I) at 26; D.P.U. 87-260, at 22. The Department currently requires all gas and electric companies serving more than 10,000 customers to conduct a fully developed and reliable O&M lead-lag study. D.P.U. 11-01/D.P.U. 11-02, at 164. In the event that the lead-lag factor is not below 45 days, companies will bear a heavy burden to justify the reliability of such study and the reasonableness of the steps the company has taken to minimize all factors affecting cash working capital requirements within its control, such as the collections lag. D.P.U. 11 01/D.P.U. 11-02, at 164.

The Department has reviewed the results of the Company's lead-lag study. We find that the study produces an acceptable value of 1.2 days for the billing lag (Exhs. CMA/BEE-1, at 8-9; DPU-3-2). The Company relied on 2011 data to calculate the service lag and the collection lag. Regarding the service lag component, while it is preferable that the Company use test year meter reading days, we recognize that for companies using a monthly billing cycle, the year-to-year variation in service lags is negligible because the year will consist of only 365 or 366 days. Thus, we conclude that the use of 2011 meter reading days is not likely to have a measurable impact on the overall net revenue lag. Therefore, in this instance, we accept the Company's service lag calculation of 15.22 days.

Regarding the collection lag, Bay State's test year collection lag of 27.17 days is unusually low when compared to the adjusted 2011 collection lag of 33.92 days.[86] Bay State attributes the lower collection lag to a historically warmer-than-normal winter heating season, which impacted the Company's accounts receivable balances for customers on the budget payment plan (Exhs. CMA/BEE-1, at 6-7; DPU-3-1; Tr. 5, at 477). The Company states that it does not have any way of measuring the impact on the collection lag of improved economic conditions or of any factors other than the weather (Tr. 5, at 477).

In this circumstance, we consider that 27.17 days is not a representative collection lag. Therefore, we find that it is reasonable and appropriate to adjust the test year collection lag to reflect a more representative period. The collection lag ultimately will affect the total cash working capital approved for Bay State and, as such, it is essential that the Company collect an amount of cash working capital that meets its actual needs. See D.P.U. 10-55, at 204. However, Bay State's reliance on our decision in D.P.U. 10-55 in support of the Company's proposal to simply swap the 2012 and adjusted 2011 collection lags is misplaced. In D.P.U. 10-55, the Department determined that Boston Gas's test year collection lag was unusually high and not evident in prior years or beyond the test year. D.P.U. 10-55, at 204. But, as a remedy we did not substitute the test year with another year; rather, we determined that the average of the collection lags from the previous two years more closely resembled Boston Gas's past collection lags and

[86] The 2012 collection lag also is unusually low when compared to the actual 2011 collection lag of 34.31 days, which was approved in the Company's last rate case. See D.P.U. 12-25, at 93. As noted above, the Company uses an adjusted 2011 collection lag to account for the sale of the EP&S business.

was consistent with the collection lags that had been reported to the Department in recent filings. D.P.U. 10-55, at 204.

In the instant case, the average of the adjusted 2011 collection lag and the 2012 collection lag is 30.55 days.[87] This lag more closely resembles Bay State's collection lag approved in its last rate case (34.31 days), as well as the adjusted collection lag proposed by the Company in the instant case (33.92 days). Based on these considerations, the Department finds that the average of the adjusted 2011 collection lag and the 2012 collection lag is a fair representative collection lag for Bay State, and will serve as the basis for future collection lag costs.

Finally, the Department has reviewed the Company's calculation of the lead in payment for the cost of goods and services purchased (Exhs. CMA/BEE-1, at 13-16; CMA/BEE-2, at 2, 18). The Department finds that the Company's lead/lag study produces an acceptable value of 17.60 days.

As a result of the revision to Bay State's collection lag, it is necessary to revise other aspects of the cash working capital calculation. First, the application of a collection lag of 30.55 days produces a revised total gas revenue lag of 46.97 days.[88] Second, the revenue lag associated with the Company's other O&M and tax expense working capital is revised to 29.37 days.[89] This lag produces a lower allowance requirement than the Department's 45-day

---

[87] 33.92 days (adjusted 2011 collection lag) + 27.17 days (2012 collection lag) = 61.09 days/2 = 30.55 collection lag days.

[88] 15.22 days (service lag) + 30.55 days (collection lag) + 1.2 days (billing lag) = 46.97 total lag days.

[89] 46.97 days (total gas revenue lag) - 17.60 lead days (lead in payment for the cost of goods and services purchased) = 29.37 net lag days.

convention and, therefore, the Department finds that the Company's decision to perform a lead-lag study with in-house personnel was a cost-effective means to determine its working capital requirement. Third, a corresponding cash working capital factor of 8.026 percent is derived by dividing the revised revenue lag associated with the Company's other O&M and tax expense working capital by 366 days.[90] Finally, application of the cash working capital factor of 8.026 percent, when applied to the level of O&M and tax expense allowed by this Order ($123,613,675), produces a cash working capital allowance of $9,921,234 for the Company. The derivation of this cash working capital allowance is provided in Schedule 6 of this Order.[91]

D. Materials and Supplies

1. Introduction

As of the end of the test year, Bay State reported a material and supply balance of $4,974,556 (Exh. CMA/JTG-2, Sch. JTG-13 (Rev. 5)). After adding $607,727 to derive a 13-month average balance customarily used by the Department to determine material and supply balances for ratemaking purposes, and eliminating $830,116 related to its now-discontinued EP&S operation, the Company reported a material and supply balance of $4,752,167 (Exh. CMA/JTG-2, Schs. JTG-13, JTG-16 (Rev. 5)).

The Company has embarked on a strategic initiative called CMA Vision 3.0 (Exh. AG-13-14, Att. at 2). As part of this initiative, the Company has implemented new

---

90 29.37 net lag days/366 days in 2012 = 8.026 percent.

91 In view of the Department's method of computing cash working capital, we find it unnecessary to compute a separate cash working capital component of $46,822 related to uncollectibles on the proposed revenue increase (Exh. CMA/JTG-2, Sch. JTG-13 (Rev. 5)). Therefore, the Department has eliminated this item from Schedule 4 of this Order.

inventory control processes and tracking in a partnership with the McJunkin Redman Corporation ("MRC") (Exh . AG-13-14, Att. at 2). Bay State has entered into an outsourcing agreement with MRC, under which all of the Company's warehousing operations will be met by the "MRC bin-stock model" currently in use by other NiSource distribution affiliates (Exh. AG-13-14, Att. at 2). Under the bin-stock model, inventory is owned by MRC, but remains available at Bay State locations in bins that will be stocked by MRC and remain accessible to the Company's employees (Exh. AG-13-14, Att. at 2). Upon completion of the sale of inventory to MRC, the Company will no longer carry the cost of inventory of pipe, valves, fittings, miscellaneous hand tools and safety equipment, and thus carry no material and supply inventory on its own books (Exh. AG-13-18).

The Company maintains that its sale of the materials and supplies inventory represents a known and measurable change to test year rate base in the amount of $4,752,167 (Company Brief at 62, citing Exh. CMA/JTG-2, Sch. JTG-13 (Rev. 4)). Therefore, the Company concludes that the elimination of materials and supplies should be excluded from the Company's rate base (Company Brief at 62). No other party addressed this issue.

2. Analysis and Findings

The Department's long-standing practice has been to include a representative level of a company's materials and supplies balance in rate base. Boston Edison Company, D.P.U. 19991, at 16 (1979). The Department allows this adjustment to compensate a utility for the carrying cost associated with its inventory. Because of the month-to-month fluctuations in this account, a 13-month average balance is used. See Housatonic Water Works Company, D.P.U. 86-235, at 3-4 (1987); High Wood Water Company, D.P.U. 1360, at 7-8 (1983); D.P.U. 1300, at 29.

Bay State's decision to outsource its inventory needs was based on an evaluation of its operations in light of its conversion to the NiFit project (Exhs. AG-13-14; AG-13-14, Att. at 3). The Company evaluated various implementation alternatives and concluded that such outsourcing as used by other NiSource affiliates would improve its operations in a cost-efficient manner (Exhs. AG-13-14, Att. at 3). As a result of this structural change in Company operations, Bay State has eliminated the need to carry a material and supplies balance on its books, thus rendering the use of a 13-month average balance meaningless. The Department finds that the Company has appropriately excluded material and supply balances from its rate base computation. Therefore, the Department accepts the Company's proposed adjustment, and will eliminate materials and supplies from Bay State's rate base.

E. Income Tax Refunds

1. Introduction

As of the end of the test year, the Company reported a federal income tax refund balance of $3,583,039 relating to a change in the method of accounting for repairs expense, as well as $4,658,236 in income tax refunds associated with a change in the method of accounting for mixed service costs (Exhs. CMA/JTG-1, at 28-29; CMA/JTG-2, Sch. JTG-13 (Rev. 5)). According to the Company, it had filed a carryback refund claim in 2008 related to a change in method of accounting for repairs expense, and it received a refund of approximately 75 percent of the claim in late 2009 that was booked to accumulated deferred taxes, pending the completion of an Internal Revenue Service ("IRS") audit (Exh. CMA/JTG-1, at 28-29). The IRS completed the audit in November of 2012, and the Congressional Joint Committee on Taxation ("Joint Committee") approved the audit in March of 2013 (Exh. CMA/JTG-1, at 29). Similarly, the Company filed a carryback refund claim in 2009 relating to a change in method of accounting for mixed service costs. Disbursement of the refund was delayed by the IRS pending completion of an audit of the 2009 tax year, which was also completed in November of 2012 and approved by the Joint Committee in March of 2013 (Exh. CMA/JTG-1, at 29).

The Company received both refunds in April of 2013 (Exh. AG-2-17). Therefore, the Company proposes to eliminate these two federal income tax receivable balances from the Company's rate base (Exh. CMA/JTG-2, Sch. JTG-13 (Rev. 5)).

The Company maintains that the receipt of these two post-test year refunds represents a known and measurable change to test year rate base (Company Brief at 62, citing Exh. CMA/JTG-1, at 28-29). The Company therefore concludes that the test year-end balance of these income tax refund receivables should be excluded from the Company's rate base (Company Brief at 62). No other party addressed this issue.

2. Analysis and Findings

Because deferred income taxes represent a cost-free source of funds to the utility, they are typically treated as an offset to rate base. Essex County Gas Company, D.P.U. 87-59, at 27 (1987); D.P.U. 85-137, at 31; Boston Edison Company, D.P.U. 1350, at 42-43 (1983); Western Massachusetts Electric Company, D.P.U. 18252, at 5-6 (1975). The Department, however, also has a general policy of matching recovery of tax benefits and losses to the recovery of the underlying expense with which the tax effects are associated. Commonwealth Electric Company, D.P.U. 89-114/90-331/91-80 (Phase I) at 29 (1991), citing Massachusetts Electric Company, D.P.U. 89-194/195, at 66 (1990). Consequently, the

Department has recognized adjustments to year-end deferred income tax balances associated with a variety of items. D.P.U. 10-70, at 84-85.

In this proceeding, the Company excluded a total of $8,241,275 in deferred income tax balances that were the subject of income tax refund claims requiring IRS and Joint Committee review (Exhs. CMA/JTG-1, at 28-29; CMA/JTG-2, Sch. JTG-13 (Rev. 5); AG-2-17). The April 2013 refunds reversed the associated income tax liabilities, and also affected any associated deferred income taxes. Because ratepayers are no longer liable for the associated income tax liabilities, the Department finds it appropriate to eliminate the associated deferred income taxes from Bay State's rate base computation. See D.P.U. 10-70, at 86-87; Boston Edison Company, D.P.U. 160, at 11 (1980). Therefore, the Department accepts the Company's proposed adjustment to rate base.

VII. REVENUES

A. Weather Normalization and Annualization Adjustments

1. Introduction

Bay State proposes a weather normalization adjustment to its test year sales volumes and revenues to adjust them to what they likely would be under the weather conditions that typically occur during the year (Exh. CMA/JAF-1, at 14). Because the weather was warmer than normal in the test year, the Company proposes to increase test year distribution revenues for the weather normalization adjustment by $10,268,130, which represents the difference between the actual test year sales volumes and weather normalized sales volumes applied to the current base rates (Exh. CMA/JAF-1, at 14, 16). In determining the weather normalization adjustment, the Company identifies its temperature sensitive ("TS") rate classes as the residential heating and the commercial and industrial ("C&I") high-use peak period classes (Exh. CMA/JAF-1, at 18).[92] For these rate classes, the Company determines the TS portion of their sales volumes and calculates the difference in the monthly sales volumes between actual sales volumes and the sales volumes that would have occurred if temperatures had been normal during the test year (Exh. CMA/JAF-1, at 18).

Further, the Company proposes an annualization adjustment to its test year revenues to account for the sales volume and revenue impact caused by: (1) the difference between the amount of gas Bay State delivered to customers during the test year and the amount of gas it billed to customers during the same period;[93] and (2) the difference between the number of billing days in a normal year (365.25 days) and the number of billing days in the test year (366.00 days) (Exh. CMA/JAF-1, at 9-10, 23). Specifically, monthly billing volumes extracted from Bay State's customer information system ("CIS") for the test year were first revised for adjustments to customers' bills that were made during the test year, resulting in an increase of 740,715 therms, or a 0.14 percent increase to the monthly billing volumes for the test year (Exh. CMA/JAF-1, at 8).[94]

---

92 The residential heating classes include R-3 and R-4. The C&I high-use peak period rate classes include: G/T-40, 41, 42, and 43 (Exh. CMA/JAF-1, at 18).

93 The Company's delivery and billing cycles are not symmetrical because a customer may receive delivery of gas during a certain calendar month, yet be billed for it in a subsequent month (see Exh. CMA/JAF-1, at 10-11).

94 The Company's automated meter reading system limits the need to make these adjustments (Exh. DPU-11-3). Bay State explains, however, that some adjustment is necessary to correct for billing issues caused by malfunctioning meters or delays in the billing of an account, which cause a multiple month bill or a revision to the applicable rate schedule used for past billing (Exh. DPU-11-3).

Next, the Company converted the sales volumes collected and stored in the CIS on a billing-cycle basis to a calendar-month basis by first aggregating the sales volumes into six customer groups (Exh. CMA/JAF-1, at 7, 9).[95] Bay State then subtracted the portion of gas use in each monthly billing cycle that occurred for days prior to the calendar month from the calendar month using each group's base load use and use per effective degree day ("EDD") factors (Exh. CMA/JAF-1, at 11).[96] Further, the Company added to the gas use in a calendar month the portion of gas use from each billing cycle subsequent to the calendar month that occurred for days in the calendar month, using each group's base load use and use per EDD factors (Exh. CMA/JAF-1, at 11).

Finally, the Company accounted for the difference between the number of days in a normal year and the number of days in the test year by adjusting the sales volume for February by three-fourths of a day's usage (Exh. CMA/JAF-1, at 13).[97] In total, the Company proposes an annualization adjustment that increases test year revenues by $11,355,899 (Exh. CMA/JAF-1,

---

95 The six customer groups are: (1) residential heating (R-3, R-4); (2) residential non-heating (R-1, R-2); (3) C&I with high use during the peak period, and low and medium annual use (G/T-40, G/T-41); (4) C&I with low use during the peak period, and low and medium annual use (G/T-50, G/T-51); (5) C&I with high use during the peak period, and high annual use (G/T-42, G/T-43; and (6) C&I with low use during the peak period, and high annual use (G/T-52, G/T-53) (Exhs. CMA/JAF-1, at 7; DPU-11-1).

96 Effective degree days is a means of expressing the correlation between various weather conditions and heating requirements by adjusting heating degree days to factor in wind speed (Exh. CMA/JAF-1, at 20).

97 The Company explains that the 2012 test year contains 366 days of calendar month billing use (Exh. CMA/JAF-1, at 23). Further, on average, the Company will bill its customers for 365.25 days a year; for every four-year period, three years will contain 365 days and one year will have 366 days to account for the leap year (Exh. CMA/JAF-1, at 23). Thus, the purpose of the Company's billing adjustment is to adjust the test year's 366 days of gas use to 365.25 days (Exh. CMA/JAF-1, at 23).

Sch. JAF-1-1, at 1). No other party addressed Bay State's adjustments to test year sales revenues to account for weather and differences in booked sales revenues and annual revenues.

2. Analysis and Findings

The Department's standard for weather normalization of test year revenues is well established. See D.T.E. 03-40, at 22; D.P.U. 96-50 (Phase I) at 36-39; D.P.U. 93-60, at 75-80. We find that Bay State's method to weather normalize test year revenues, as described above, is consistent with Department precedent. Therefore, we approve the Company's proposed adjustment to increase test year revenues by $10,268,130 to account for warmer than normal weather in the test year.

The Department has consistently allowed for billing day adjustments to test year sales volumes and revenues to reflect the fact that a normal year consists of 365.25 days. See D.T.E. 03-40, at 9. Further, the Department has historically permitted adjustments for unbilled revenues, which account for discrepancies between sales volumes based on billing cycles and sales volumes based on calendar months. D.T.E. 03-40, at 12. The Department finds that the Company's adjustments to test year sales volumes to account for billing adjustments and the discrepancy between billing cycles and calendar months, all as described above, are consistent with Department precedent. Therefore, we approve Bay State's computation of annualized sales and its adjustment to increase test year revenues by $11,355,899.

B. Special Contracts

1. Introduction

The Company currently serves six customers under special contract rate agreements that have been approved by the Department (Exhs. CMA/JAF-2, at 37; AG-1-99 & Atts. B-G).[98] Bay State collected $2,974,403 in test year revenue billed to its special contract customers, and the Company proposes to credit this amount to its revenue requirement (see Exhs. CMA/JAF-2, at 38 & Sch. JAF-2-1, at 4; CMA/MPB-2, Sch. MPB-2-1, at 3). During the course of this proceeding, Bay State noted that it understated test year revenues of four special contract customers by $95,193 (Exhs. DPU-10-7; DPU-10-7, Att. (Rev.)). The Company proposes to incorporate an additional revenue adjustment of $95,193 to account for the understated test year revenues from these four customers (Exh. CMA-JTG-2, Schs. CMA/JTG-4 (Rev. 5), CMA/JTG-25, at 9 (Rev. 5)). Therefore, the Company proposes a total credit to the cost of service of $3,069,596 to account for test year special contract revenues (Exhs. CMA/JTG-2, Schs. CMA/JTG-4 (Rev. 5), CMA/JTG-25, at 9 (Rev. 5); DPU-10-7; DPU-10-7, Att. (Rev.)).

Further, Bay State proposes an additional credit of $17,285 to its revenue requirement based on a post-test year rate increase for one of its other special contract customers, (Exhs. CMA/JAF-2, at 7, 38-39 & Sch. JAF-2-1, at 8; CMA/MPB-2, Sch. MPB-2-1, at 3; DPU-10-5). The contract price terms for this customer provide for increases to contractual rates

[98] On July 23, 2013, the Company provided written notice to one of its special contract customers, MASSPOWER, that Bay State was terminating the agreement, effective July 31, 2014 (Exh. AG-1-99 (Supp.) & Att.). As part of the written notice, Bay State indicated that it was willing to renegotiate an agreement effective August 1, 2014 (Exh. AG-1-99 (Supp.) & Att. at 2). The Company did not propose a revenue adjustment for this special contract customer (see Exhs. AG-1-99 (Supp.) & Att. (Supp.)).

and charges at a percentage equivalent to the percentage of the Company's overall increase to its distribution (or base) revenues as a result of a rate case (Exh. CMA/JAF-2, at 38). This contract rate change will take effect on March 1, 2014, and the increase is calculated by multiplying the Company's proposed base revenue increase of 16.71 percent by the test year revenues generated from the pricing under this special contract (Exhs. CMA/JAF-2, at 38; DPU-10-6). No other party addressed the Company's proposed special contract adjustments.

2. Analysis and Findings

As an initial matter, the Department finds that the Company's accounting for test year special contact revenue in the calculation of its revenue requirement, i.e., as a credit to cost of service, is appropriate. See D.T.E. 05-27, at 60. As for the amount of test year special contract revenue that is to be credited, the Department has reviewed the record, and we accept the Company's reported test year special contract revenues of $2,974,403, as well as its proposed adjustment of $95,193 to account for understated test year revenues (Exhs. CMA/JTG-2 & Schs. CMA/JTG-4 (Rev. 5), CMA/JTG-25, at 9 (Rev. 5); DPU-10-7; DPU-10-7, Att. (Rev.)). Therefore, we find that the proper amount of test year special contract revenues is $3,069,596.

We next examine the post-test year adjustments for special contract revenues. The Department recognizes post-test year increases in special contract revenues that result from an increase in the rate charged under a specific contract.[99] See, e.g., D.P.U. 10-55, at 233-234; D.P.U. 09-30, at 159-167 & n.90; D.T.E. 05-27, at 59-60. The Department considers these contract rate changes to be known and measurable. See D.P.U. 10-55, at 233-234. The

99 This revenue adjustment policy is distinct from the Department's post-test year revenue adjustment policy related to changes in customer count or changes in customer consumption. See, e.g., D.T.E. 03-40, at 28.

Department has found that a post-test year adjustment is permissible for special contact revenue that will accrue from a contract rate change that will take effect by the midpoint of the rate year. D.P.U. 12-25, at 133. Thus, if the record demonstrates that known and measurable changes to special contract rates will take effect before the midpoint of the rate year, then a company's cost of service should be appropriately adjusted to reflect these revenues. See D.P.U. 12-25, at 134.

Bay State has proposed a post-test year adjustment of $17,285 for a special contract customer with a contract price change that is based on the percentage of the Company's overall increase to its base distribution revenues as a result of this rate case (Exh. CMA/JAF-2, at 38). We find that the Company correctly states the contract price terms applicable to that special contract customer (Exh. AG-1-99, Att. F). As such, we must revise the special contract adjustment based on the overall base revenue increase in this case. This calculation produces a revised post-test year adjustment of $11,213 based on the special contract customer's test year revenue of $103,440 and the 10.84 percent percent increase to test year distribution revenues granted in this proceeding (see Exhs. CMA/JAF-2, at 39; DPU-10-7, Att. (Rev.); Schedule 1, below). Thus, the amount of $11,213 in post-test year special contract revenue shall be credited to the cost of service.[100]

Finally, although not part of the Company's initial proposals regarding special contracts, we note that two of the remaining five special contracts will have a rate change take effect prior to the midpoint of the rate year (i.e., September 1, 2014) (Exh. DPU-10-7). The first customer's rate change is an inflation escalation based on the consumer price index ("CPI") at the end of April 2014 (Exhs. DPU-10-7; AG-1-99, Att. B at 8-9). The Company calculates the inflation

---

100 The Company accomplishes this by reducing the revenue requirement for all other delivery service customers (see Exhs. CMA/MPB-2, Sch. MPB-2-1, at 3, 6; DPU-10-5).

escalator and the new rate for this special contract customer in April 2014, when the CPI data are published, for effect on May 1, 2014 (Tr. 6, at 637-638). While the special contract rate change will take effect before the midpoint of the rate year and it is known, the new rate is not measurable. Accordingly, the Department finds that it is not appropriate to adjust the revenues associated with this special contract.

Regarding the second customer, MASSPOWER, the Company explains that it is terminating an agreement to provide natural gas service to the customer effective July 31, 2014 (Exh. AG-1-99, Att. at 2 (Supp.)). Bay State expressed willingness to renegotiate the terms and conditions of a new agreement with MASSPOWER to commence on August 1, 2014 (Exh. AG-1-99, Att. at 2 (Supp.)). Thus, while the rate change associated with the MASSPOWER special contract will take effect before the midpoint of the rate year and is known, the new rate is not measurable. Accordingly, the Department finds that it is not appropriate to adjust the revenues associated with this special contract.

VIII. OPERATIONS AND MAINTENANCE EXPENSES

A. Employee Compensation and Benefits

1. Introduction

When determining the reasonableness of a company's compensation expense, the Department reviews the company's overall employee compensation expense to ensure that its compensation decisions result in a minimization of unit-labor costs. D.P.U. 96-50 (Phase I) at 47; Cambridge Electric Light Company, D.P.U. 92-250, at 55 (1993). This approach ensures and recognizes that the different components of compensation (e.g., wages and benefits) are, to some extent, substitutes for each other, and that different combinations of these components may be used to attract and retain employees. D.P.U. 92-250, at 55. In addition, the Department requires companies to demonstrate that their total unit-labor cost is minimized in a manner supported by their overall business strategies. D.P.U. 92-250, at 55. The individual components of a company's employment compensation package, however, are left to the discretion of a company's management. D.P.U. 92-250, at 55-56.

A company is required to provide a comparative analysis of its compensation expenses to enable the Department to determine the reasonableness of a company's total employee compensation expense. D.P.U. 96-50 (Phase I) at 47. The Department examines employee compensation levels, both current and proposed, relative to utilities in the region and to companies in the utility's service territory that compete for similarly skilled employees. D.P.U. 96-50 (Phase I) at 47; D.P.U. 92-250, at 56; Bay State Gas Company, D.P.U. 92-111, at 103 (1992); Massachusetts Electric Company, D.P.U. 92-78, at 25-26 (1992).

Bay State's employee compensation program encompasses market driven base pay and incentive compensation, and fringe benefits including health care coverage, dental insurance, vision care, term life insurance, disability insurance, retirement savings plans, and paid vacation, holiday and sick time (Exh. CMA/KKC-1, at 5-6, 29-30). The Company states that it utilizes a "total rewards" compensation philosophy (Exh. CMA/KKC-1, at 3).[101]

---

[101] The Company's "total rewards" compensation philosophy is designed to compensate employees competitively compared to the utility industry and the general industry (Exh. CMA/KKC-1, at 3). It considers the following components: (1) market-driven base pay; (2) career development and incentive compensation; (3) merit increases; and (4) other benefits, including retirement savings and health coverage (Exh. CMA/KKC-1, at 5).

2. Union Wage Increases

a. Introduction

Bay State booked $34,229,925 in payroll expenses for union employees, including base wages and overtime pay, during the test year (Exh. CMA/JTG-2, Sch. JTG-6, at 7 (Rev. 5)). The Company proposes to increase its test year union payroll expenses by $1,318,098 based on the annualization of wage increases that occurred in 2012 and wage increases scheduled to occur in 2013 and 2014 prior to the midpoint of the rate year, i.e., prior to September 1, 2014 (Exhs. CMA/JTG-1, at 43; CMA/JTG-2, Sch. JTG-6, at 7 (Rev. 5)). The proposed increase to the cost of service of $1,318,098 comprises: (1) an increase of $320,623 to reflect annualization of union payroll adjustments made in 2012; (2) an increase of $446,267 for union payroll increases to take effect in 2013; and (3) an increase of $551,208 for union payroll increases to take effect in 2014 (Exhs. CMA/JTG-2, Sch. JTG-6 (Rev. 5) at 7; CMA/JTG-7, WP JTG-2, at 1-2, 4-10 (Rev. 2)).

Bay State asserts that the Department should approve the Company's proposed adjustments to union payroll expenses (Company Brief at 73). Bay State contends that a comparison of hourly rates and incentives to a group of utility peers demonstrates that the increases are reasonable (Company Brief at 73, citing Exhs. CMA/KKC-1, at 23; CMA/KKC-2). No other party addressed this issue.

b. Analysis and Findings

The Department's standard for union payroll adjustments requires that three conditions be met: (1) the proposed increase must take effect before the midpoint of the first twelve months after the rate increase (i.e., the midpoint of the rate year); (2) the proposed increase must be known and measureable (i.e., based on signed contracts between the union and the company); and (3) the company must demonstrate that the proposed increase is reasonable. D.P.U. 96-50 (Phase I) at 43; D.P.U. 95-40, at 20; D.P.U. 92-250, at 35; Western Massachusetts Electric Company, D.P.U. 86-280-A at 73-74 (1987).

Bay State has six separate collective bargaining agreements ("CBAs") or memoranda of understanding ("MOUs") covering its union employees with four different unions (Exhs. CMA/KKC-1, at 8; AG-1-42 & Atts. A-I). Pursuant to these CBAs and MOUs, the proposed increases take effect prior to September 1, 2014, i.e., before the midpoint of the first twelve months after the rate increase (Exhs. CMA/KKC-1, at 10-11; CMA/KKC-3; AG-1-42 & Atts. A-I; DPU-23-3 & Att.). In addition, because Bay State proposes union payroll increases based on signed CBAs or MOUs, the increases are known and measurable (Exhs. AG-1-42, Atts. A-I; DPU-23-3, Att.; Tr. 8, at 711-792). Finally, Bay State participates in annual salary surveys and uses the resulting data to assess the competitiveness of base salary and total compensation levels (Exhs. CMA/KKC-1, at 22-23; CMA/KKC-4 at n.2; Tr. 8, at 773). These surveys include competitive salary information from the American Gas Association ("AGA") and Towers Watson ("TW") by region for jobs in the utility industry and general industry (Exhs. CMA/KKC-1, at 24; DPU-4-7). The Company relied on salary information from the AGA and TW compensation survey and submitted a comparison of nine of its union average hourly rates to those of employers in the Northeast region against whom the Company competes for skilled employees (Exhs. CMA/KKC-1, at 9, 22; CMA/KKC-2; DPU-4-7 & Atts.). Bay State's average union hourly pay rate is approximately three percent above the industry median, and the Company's average union hourly pay including incentive compensation is approximately 5.2 percent above the industry median (Exh. CMA/KKC-2). This differential does not create a material discrepancy in union compensation paid by the Company versus that paid by other companies. Thus, the comparison demonstrates that the Company's union hourly wages, including the scheduled increases, are reasonable in relation to other utilities in the Northeast (Exhs. CMA/KKC-1, at 9; CMA/KKC-2).

Having found that the Company's proposed union wage increases: (1) take effect before the midpoint of the first twelve months after the rate increase; (2) are known and measurable; and (3) are reasonable, we allow the Company's proposed adjustment to union wages. Accordingly, the Department accepts Bay State's proposed increase to its test year cost of service of $1,318,098.

3. Non-Union Wage Increases

a. Introduction

During the test year, Bay State booked $10,015,746 in payroll expenses, including base wages and overtime pay, for non-union personnel (Exh. CMA/JTG-2, Sch. JTG-6, at 7 (Rev. 5)). The Company proposes to increase its test year non-union payroll expenses by $558,477 based on increases in non-union payroll that will occur prior to the midpoint of the rate year, i.e., prior to September 1, 2014 (Exhs. CMA/JTG-1, at 43; CMA/JTG-2, Sch. JTG-6, at 7 (Rev. 5)). The proposed increase to the cost of service of $558,477 comprises: (1) an increase of $166,080 to reflect the annualization of non-union payroll adjustments made in 2012; (2) an increase of $188,700 for non-union payroll increases that took effect on June 1, 2013 ; and (3) an increase of $203,697 for non-union merit pay increases to take effect in 2014 (Exhs. CMA/JTG-2, Sch. JTG-6, at 7 (Rev. 5); CMA/JTG-7, WP JTG-2, at 1, 3, 11 (Rev. 2)).

With respect to the proposed 2014 merit increase, in its original filing and during the investigatory phases of this case, the Company conceded that it had not provided an express commitment to grant the increase and was not certain that the increase would take effect, as the cost of the increase would be significant and management had yet to make a decision regarding salaries for 2014 (see Exhs. CMA/KKC-1, at 26-27; CMA/SHB-Rebuttal-1, at 19-20; DPU-23-2; Tr. 1, at 69-71). The Company offered to provide a letter to the Department in February 2014, prior to the issuance of this Order, confirming the particulars of any increase (see Exhs. CMA/KKC-1, at 27; DPU-23-2, at 2; Tr. 1, at 71). Alternatively, the Company proposes that the Department approve the requested cost of service adjustment, but if subsequently the 2014 merit increase is not granted, the Company would return the increase amount, reduce its rates and return any funds collected from customers (Exh. CMA/SHB-Rebuttal-1, at 20; Tr. 1, at 71-72).

On January 27, 2014, the Department received written correspondence from the Company indicating that NiSource had finalized its decision to grant a 2014 merit increase for exempt and non-exempt non-union NiSource employees and its subsidiaries, including Bay State (Exh. CMA-1).[102] The correspondence provides that these employees will receive a three percent payroll increase on June 1, 2014 (Exh. CMA-1). The senior vice president of human resources and the executive vice president and group chief executive officer of NiSource Distribution Operations signed the correspondence (Exh. CMA-1).

---

[102] Pursuant to 220 C.M.R. § 1.11 (7), (8), the Department accepts the written correspondence dated January 23, 2014, and moves it into the evidentiary record. The document shall be identified as Exhibit CMA-1.

b. Positions of the Parties

i. Attorney General

The Attorney General argues that there is no evidence of "an express commitment" by Company management to grant to non-union personnel a 2014 merit payroll increase (Attorney General Brief at 70, citing Exhs. CMA/KKC-1, at 14-15; CMA/SHB-Rebuttal-1, at 19). Further, the Attorney General takes issue with the Company's proposal to furnish to the Department in February 2014 a letter confirming a wage increase (Attorney General Reply Brief at 59-60). According to the Attorney General, the letter will be filed after the close of the record and, in effect, the Company is asking the Department to pre-approve the letter (Attorney General Reply Brief at 60). The Attorney General argues that because the Company has not documented the 2014 non-union wage increase, it does not meet the Department's standards[103] for such an increase, and the Department should not include it in Bay State's proposed cost of service (Attorney General Brief at 69; Attorney General Reply Brief at 60).

As such, the Attorney General asserts that the proposed 2014 non-union payroll increase of $203,697, as well as $14,177 in associated payroll taxes, should be deducted from the Company's cost of service (Attorney General Brief at 70-71, citing Exhs. AG-DJE-1, at 17; CMA/JTG-2, Sch. JTG-9, at 6-7 (Rev. 5)).

---

103 The Attorney General argues that Bay State must demonstrate that the 2014 post-test year non-union wage increase is "known and measurable and also reasonable" (Attorney General Brief at 69, citing D.P.U. 08-35, at 81-82, 87; D.P.U. 92-250, at 35; D.P.U. 1270/1414, at 14. She asserts that for an increase in non-union wages that occurs post-Order, a company must demonstrate that: (1) there is an express commitment by management to grant the increase; (2) there is an historical correlation between union and non-union raises; and (3) the non-union increase is reasonable (Attorney General Brief at 69, citing D.P.U. 96-50 (Phase I), at 42; D.P.U. 95-40, at 21; D.P.U. 1270/1414, at 14).

ii. Company

The Company states that it measures non-union employees' salaries against base pay for similar positions at other utilities and establishes a range around the market median for individual positions (Company Brief at 73-74). According to Bay State, the comparisons demonstrate that the Company's non-union average base salary and total cash compensation are comparable to other utilities and other employers in the Northeast (Company Brief at 74, citing Exhs. CMA/KKC-1, at 24; CMA/KKC-4). Further, Bay State claims that its granted merit increases that took place in 2012 and 2013 are projected to be in line with market increases at utilities and other companies in the Northeast (Company Brief at 75, citing Exh. CMA/KKC-1, at 28; Tr. 8, at 819). Therefore, the Company argues that its non-union compensation costs are reasonable (Company Brief at 75).

Bay State maintains that at the time of the initial filing in this case, the Company was unable to commit to a 2014 merit increase because management had not yet rendered a final decision on the payroll increase (Company Brief at 75-76, citing Tr. 1, at 69-71). However, the Company contends that the commitment letter it offers to provide in February 2014 will be signed by a company representative with appropriate authority, and it will specify the amount and date of the non-union payroll increase (Company Brief at 76-77; Company Reply Brief at 28). Bay State rejects as a mischaracterization the Attorney General's claim that the Company seeks a pre-approval of the merit increase costs, and the Company counters that it only seeks recovery of the cost if it provides the letter confirming the increase (Company Reply Brief at 28).

The Company also argues that its proposed inclusion of the cost of the 2014 merit increase is within the midpoint of the rate year and, therefore, consistent with Department precedent (Company Brief at 75). Finally, Bay State contends that the costs are large enough to warrant the Department's consideration "given the contribution that this cost will make in driving the need for the next rate case, if not included" in the cost of service in this case (Company Brief at 75, citing Exh. CMA/SHB-Rebuttal-1, at 20).

c. Analysis and Findings

To recognize an adjustment for an increase in non-union wages that takes place prior to the issuance of an Order, a company must demonstrate that such increases are known and measurable, and also are reasonable. See D.P.U. 08-35, at 81-82, 87; D.P.U. 92-250, at 35; Fitchburg Gas and Electric Light Company, D.P.U. 1270/1414, at 14 (1983). To recognize an adjustment for an increase in non-union wages that occurs post-Order, a company must additionally demonstrate that: (1) there is an express commitment by management to grant the increase; (2) there is an historical correlation between union and non-union raises; and (3) the non-union increase is reasonable. D.P.U. 96-50 (Phase I) at 42; D.P.U. 95-40, at 21; D.P.U. 1270/1414, at 14. In addition, only non-union salary increases that are scheduled to become effective no later than the midpoint of the first twelve months after the date of the Order may be included in rates. D.P.U. 85-266-A/271-A at 107.

As stated above, Bay State booked $10,015,746 in non-union salary expense in the test year (Exh. CMA/JTG-2, Sch. JTG-2, at 7 (Rev. 5)). During the test year, the Company granted a wage increase of three percent to non-union exempt employees and 2.5 percent to non-exempt, non-union employees (Exhs. CMA/KKC-1, at 28; CMA/KKC-7; CMA/JTG-2, Sch. JTG-6, at 7 (Rev. 5); CMA/JTG-7, WP JTG-2, at 1, 3, 11 (Rev. 2.)). Bay State proposed a $166,080 adjustment to reflect the annualization of the payroll increase that occurred during the test year

(Exhs. CMA/JTG-2, Sch. JTG-6, at 7 (Rev. 5); CMA/JTG-7, Sch. JTG-2, at 1 (Rev. 2)). Because the 2012 wage increase occurred before December 31, 2012, we find that the payroll adjustment of $166,080 is a known and measurable change to test year cost of service, and, therefore is allowed. See D.P.U. 12-86, at 113.

Regarding the 2013 non-union payroll increase, the Company provided evidence that the increase took place on June 1, 2013, which was prior to the close of the record in this proceeding (Exh. DPU-23-1). Specifically, the Company provided correspondence dated May 3, 2013, sent to NiSource management, announcing a 3.0 percent payroll increase for non-union, exempt employees and a 2.5 percent increase for non-union, non-exempt employees (Exh. DPU-23-1, Att. (A) at 1). Further, Bay State provided correspondence dated May 20, 2013, approving the payroll adjustments, for effect June 1, 2013 (Exh. DPU-23-1, Att. (B) at 1). Thus, the Department finds that the 2013 non-union payroll increase of $188,700 that took effect on June 1, 2013, is known and measurable.

Having found that the 2013 increase of $188,700 is known and measurable, the Department must consider whether it is reasonable in amount. Similar to the union wage increase, Bay State relied on salary information from AGA and TW to compare the Company's average base salaries and total compensation to six job titles within the Northeast region gas utility industry and general industry (Exhs. CMA/KKC-1, at 14, 24; CMA/KKC-4; DPU-4-7 & Atts.). Bay State's average non-union annual base salary is approximately 3.3 percent below the industry median, and the Company's average non-union annual base salary including incentive compensation is approximately one percent below the industry median (Exhs. CMA/KKC-1, at 24-25; CMA/KKC-4). In addition, the Company provided a comparison of its granted merit increases and the projected increases to both utilities and general industry in 2012 and 2013 to show that Bay State's non-union salary adjustments in 2012 and projected for 2013 are at, or slightly below, the market increases (Exhs. CMA/KKC-1, at 16; CMA/KKC-7). We find that the comparison demonstrates that the Company's non-union annual wages, including the scheduled increases, are reasonable in relation to other utilities in the Northeast (Exhs. CMA/KKC-4; CMA/KKC-7). Accordingly, because the non-union payroll increase that took effect on June 1, 2013, is known and measurable and reasonable in amount, we accept the proposed non-union payroll increase of $188,700.

The Department must now evaluate Bay State's proposed post-Order non-union payroll increase of $203,697. The Attorney General argues that because the Company has not documented the 2014 non-union wage increase, it does not meet the Department's rate recovery standards for such an increase and, as such, the Department should not include it in Bay State's proposed cost of service (Attorney General Brief at 69; Attorney General Reply Brief at 60). Bay State acknowledges that in its initial filing and during the investigatory phases of this case the Company was unable to provide an express commitment by management to grant the increase because the decision whether to grant the increase was not finalized (see Exhs. CMA/KKC-1, at 26-27; CMA/SHB-Rebuttal-1, at 19-20; DPU-23-2; Tr. 1, at 69-71). However, as noted above, the Company subsequently provided confirmation, by way of written correspondence received by the Department on January 27, 2014, that a three percent wage increase will be granted to non-union employees effective June 1, 2014 (Exh. CMA-1). The correspondence clearly explains the Company's intent and is signed by two representatives with appropriate authority to convey the confirmation of the increase. Therefore, we find that the wage increase is known and measureable and that Company has demonstrated an express commitment by management to grant the wage increase. See D.P.U. 09-30, at 191.

Moreover, because the Company proposed the wage increase as part of its initial filing in this case (see Exhs. CMA/KKC-1, at 26; CMA/JTG-2, Sch. JTG-6, at 7 (Rev. 5)), there was ample opportunity during the discovery, evidentiary hearings, and briefing phases of this case to inquire and comment about the amount of the expected increase and why the Company was unable to provide confirmation of the increase at an earlier date (see, e.g., Exhs. AG-DJE-1, at 15-17; DPU-23-2; Tr. 1, at 68-72, 161-162; Attorney General Brief at 69-71; Attorney General Reply Brief at 59-60). Therefore, the only remaining issue to be resolved post-hearings was the Company's express confirmation that the increase will be granted effective June 1, 2014. As such, we find that the Department's acceptance of the written correspondence and the inclusion of it into the evidentiary record is not prejudicial to any party.

Next, the Department must address whether there is an historical correlation between union raises and the proposed post-Order non-union raise. While the correlation does not have to be perfect, it must be reasonable. Essex County Gas Company, D.P.U. 87-59-A at 18 (1988). The record demonstrates that between 2003 and 2012, annual union wage increases were between zero[104] and 3.5 percent and non-union increases were between zero[105] and 3.5 percent (Exhs. CMA/KKC-5, at 1; AG-1-41). Further, for the years 2008 through 2012, Bay State

104 The Company's Springfield Division of Union Local 12026 - Clerical received a three percent lump sum payment in 2010 (Exh. AG-1-41, at 2). Excluding this zero percent increase in annual wages, the next lowest annual percent increase to union wages is 1.5 percent (Exh. AG-1-41, at 2).

105 Excluding the two percent lump sum payment for non-union exempt employees in 2009, non-union annual wage increases fall between 2.3 and 3.5 percent (Exhs. CMA/KKC-5, at 1; AG-1-41, at 3).

provided a coefficient of correlation for union and non-union exempt wage increases of negative 0.24 and for union and non-union, non-exempt wage increases of 0.54 (Exh. DPU-10-10). These coefficients of correlation, while not perfect, provide some evidence of a relationship between union and non-union wage increases and we recognize that the presence of zero percent increases would tend to skew any statistical analysis of the data. Thus, the Department finds sufficient correlation between union and non-union increases to consider the results as reasonable. Therefore, we find that a sufficient correlation exists between union and non-union wage increases. See D.P.U. 07-71, at 76; D.P.U. 87-59-A at 18.

Regarding the reasonableness of the Company's 2014 payroll adjustment, as discussed above, Bay State has demonstrated that its non-union compensation levels are within the average compensation ranges of comparable positions at utility and general industry employers in the Northeast (Exhs. CMA/KKC-1, at 24-25; CMA/KKC-4). Therefore, we find that the Company's 2014 non-union payroll increase of $203,697 is reasonable.

Based on the above, we find that Bay State has demonstrated that: (1) management has expressly committed to granting the 2014 wage increase; (2) there is an historical correlation between union and non-union payroll increases; and (3) the total non-union wage increase is reasonable. Accordingly, we accept the proposed adjustment post-Order non-union payroll increase of $203,697.

Finally, we note that we have accepted the written correspondence received on January 27, 2014, as evidence of management's commitment to grant the increase based on the circumstances presented in this case. In particular, we recognize that this case is the first base rate case to be adjudicated since the suspension period applicable to base rate cases was extended from six to ten months for gas and electric companies. Thus, we accept the Company's explanation that the extended suspension period, coupled with the fact that the decision to grant a non-union wage increase is made at the NiSource level, impacted the Company's ability to provide the requisite express commitment of a wage increase before the close of the record in this case. However, we caution the Company that our decision today is not intended to establish an alternative standard for approval of non-union wage increases.[106]

A company submitting a rate case filing before the Department has the affirmative burden of proof on all issues relevant to its rate filing. D.P.U. 09-39, at 294; Bay State Gas Company, D.P.U. 1535-A at 17 (1983). It is the company that initiates rate proceedings before the Department by filing for rate relief. D.P.U. 09-39, at 294; D.P.U. 1535-A at 17. Thus, the company has the burden of adequately justifying the specific amount of rate relief requested. D.P.U. 09-39, at 294; D.P.U. 1535-A at 17. If a company decides to time the filing of its rate case in a manner that prevents it from providing sufficient evidence to justify the requested relief, then the company should not expect the Department to allow the relief sought. Accordingly, going forward we expect that all electric and gas distribution companies intending to file a base rate case will take into account the ten-month suspension period along with any external or company-specific considerations, and structure their filings accordingly.

---

[106] We note that water companies have long been subject to a ten-month suspension period, and have been required to comply with the Department's directives regarding post-Order non-union wage increases. See, e.g., D.P.U. 12-86, at 116-117; D.P.U. 95-118, at 93.

4. Incentive Compensation

a. Introduction

NiSource's 2010 Omnibus Incentive Plan ("Plan") provides for Bay State's incentive compensation program for non-union employees[107] (Exhs. CMA/KKC-1, at 17; DPU-10-2, Att.). In setting incentive compensation for an employee, the Plan considers the performance of the employee's business unit and an employee's individual performance linked to customer, employee, process/capability, and financial goals (Exh. CMA/KKC-1, at 17-18). The Plan involves three performance tiers: the trigger; the target; and the stretch (Exhs. CMA/JTG-1, at 44; CMA/KKC-1, at 18). Specifically, the Company places each employee in a job scope level, and each job scope level has an associated incentive opportunity range, beginning at the trigger tier, which provides an incentive equal to 50 percent of a target level (Exh. CMA/KKC-1, at 17-18). The incentive compensation opportunity range increases through the target tier up to the stretch tier, which produces an incentive of 150 percent of the target level (Exh. CMA/KKC-1, at 18).

During the test year, the Company booked $2,285,211 in incentive compensation to O&M, and for 2013, the Company's management approved $2,418,390 in incentive compensation at the target level, which includes both O&M and capitalized amounts (Exhs. CMA/JTG-2, Sch. JTG-6, at 8 (Rev. 5); DPU-4-4; DPU-4-5, Att. at 2; DPU-10-3). The Company states that, during the test year, it paid incentive compensation at close to the highest possible level, i.e., the stretch tier (Exh. CMA/JTG-1, at 44). However, Bay State submits that,

[107] The Plan covers (i) all active exempt and non-exempt employees, other than "Covered Officers," (ii) employees who have received a final notice letter or equivalent during the year, and (iii) certain other non-eligible exempt employees (Exh. DPU-10-2, Att. at 1).

because the target level is designed to be representative of the Company's incentive compensation expenses over time, it is appropriate to adjust test year expense by $731,395 to reflect a more representative incentive compensation (Exhs. CMA/JTG-1, at 44; CMA/JTG-2, Sch. JTG-6, at 8 (Rev. 5)).

In this regard, the Company derived its representative incentive compensation by calculating 64.25 percent[108] of the 2013 target level amount of $2,418,390, which results in an adjusted incentive compensation amount of $1,553,816 (Exhs. CMA/JTG-1, at 44; CMA/JTG-2, Sch. JTG-6 (Rev. 5) at 8; DPU-10-3). As such, the Company proposes to decrease test year incentive compensation expense by $731,395 (Exhs. CMA/JTG-1, at 44; CMA/JTG-2, Sch. JTG-6, at 8 (Rev. 5)).

Bay State asserts that record evidence demonstrates that the Company's incentive compensation plan is reasonable and consistent with the Department's requirements (Company Brief at 77-78, citing Exh. CMA/KKC-1, at 17-26; Tr. 8, at 798, 814-815, 827, 830; D.P.U. 07-71, at 82-83; D.P.U. 93-60, at 99; D.P.U. 89-194/195, at 34). No other party addressed this issue.

b. Analysis and Findings

The Department has traditionally allowed incentive compensation expenses to be included in a utility's cost of service if they are: (1) paid in accordance with incentive plans that are reasonably designed to encourage good employee performance; and (2) reasonable in amount. D.P.U. 07-71, at 82-83; D.P.U. 89-194/89-195, at 34. For an incentive plan to be

108 This percentage represents the portion of total costs allocated to O&M based on test-year activity and adjusted for the impact of the sale of the EP&S business (Exh. DPU-10-3; see also, Exh. CMA/JTG-5).

reasonable in design, it must both encourage good employee performance and result in benefits to ratepayers. D.P.U. 07-71, at 83; D.P.U. 93-60, at 99.

The Department must first determine whether the Plan is reasonable in design. The record demonstrates that a portion of the Plan is tied to meeting financial performance objectives (Exh. DPU-10-2, Att. at 2). The Department has articulated its expectations on the use of financial targets in incentive plans and the burden required to justify the recovery of associated costs in rates. D.P.U. 10-55, at 253-254. Specifically, where companies seek to include financial goals as a component of incentive compensation design, the Department expects the attainment of such goals to be used as a threshold component, and for job performance standards designed to encourage good employee performance (e.g., safety, reliability, and customer satisfaction goals) to be used as the basis for determining individual incentive compensation. See D.P.U. 10-55, at 253-254. In the present case, Bay State appropriately uses financial incentives solely as the threshold component and then uses job performance measures as the basis for determining individual compensation awards (Exhs. CMA/KKC-1, at 17; DPU-10-2, Att. at 2). These performance measures include objectives related to safety, customer service, operational efficiency, and continuous improvement (Exh. CMA/KKC-1, at 19). The Department has previously found that these types of performance measures are appropriate as they are directly aligned with the interests of ratepayers. D.P.U. 12-25, at 162; D.P.U. 10-70, at 104. Therefore, based on the above considerations, we find the Plan to be reasonable in design.

The Department next must determine whether the incentive compensation costs are reasonable in amount. Bay State has provided documentation regarding its target level compensation compared to market compensation (Exhs. CMA/KKC-4). The Company's average non-union annual total compensation is approximately one percent below the industry median (Exhs. CMA/KKC-1, at 24-25; CMA/KKC-4). The Department finds that based on this evidence, Bay State has demonstrated that its incentive compensation costs are reasonable. Thus, the Company's proposed adjustment is allowed. Accordingly, the Department accepts the Company's adjustment to reduce its test year cost of service by $731,395.

5. Healthcare Costs

a. Introduction

During the test year, Bay State booked medical and dental insurance costs of $3,311,923 (Exhs. CMA/JTG-1, at 50; CMA/JTG-2, Sch. JTG-6, at 10 (Rev. 5)). The Company removed EP&S-related[109] benefits of $238,219 from the test year medical and dental insurance costs to arrive at an adjusted test year O&M medical and dental expense of $3,073,704 (Exh. CMA/JTG-2, Sch. JTG-6 (Rev. 5) at 10). Bay State proposes to increase its test year health insurance expense by $194,436 to reflect post-test year increases (Exhs. CMA/JTG-1, at 50-51; CMA/JTG-2, Sch. JTG-6, at 10 (Rev. 5)). Thus, Bay State's proposed adjusted annual health insurance expense is $3,268,140, which represents a net reduction to its test year cost of service of $43,783 ($3,311,923 – ($3,073,704 + $194,436)) (see Exh. CMA/JTG-2, Sch. JTG-25, at 2 (Rev. 5).

Bay State asserts that its healthcare costs are reasonable and that the Company's post-test year increase is known and measurable (Company Brief at 79-81, citing Exhs. CMA/JTG-1, at 50-51; CMA/KKC-1, at 29-30, 33; DPU-4-9, Atts. A, B; Tr. 8, at 773-775). Further, the

[109] See Section V for a discussion of EP&S-related issues.

Company maintains that it has demonstrated that Bay State has controlled healthcare costs through several initiatives (Company Brief at 80, citing Exh. CMA/KKC-1, at 32). No other party addressed this issue.

b. Analysis and Findings

To be included in rates, healthcare expenses must be reasonable. D.P.U. 92-78, at 29-30. In addition, any post-test year adjustments to healthcare expense must be known and measurable. The Berkshire Gas Company, D.T.E. 01-56, at 60 (2001); D.P.U. 96-50 (Phase I) at 46; North Attleboro Gas Company, D.P.U. 86-86, at 8 (1986). Further, companies must demonstrate that they have acted to contain their healthcare costs in a reasonable, effective manner. D.T.E. 01-56, at 60; D.P.U. 96-50 (Phase I) at 46; D.P.U. 92-78, at 29; Nantucket Electric Company, D.P.U. 91-106/91-138, at 53-54 (1992).

The Company has provided detailed information regarding its healthcare costs for the test year and post-test year periods (Exhs. CMA/JTG-2, Sch. JTG-6, at 10 (Rev. 5); CMA/JTG-7, WP JTG-2, at 12-13 (Rev. 2); AG-1-50, Att. A; AG-1-51; AG-1-52; DPU-4-17; DPU-4-18). The Department finds that the evidence demonstrates that the Company's healthcare costs for inclusion in the cost of service are reasonable in amount and known and measurable.

Further, the Department finds that the Company has taken appropriate measures to contain its healthcare costs. For example, the record demonstrates that Bay State obtains benefit coverage through a competitive bidding process (Exhs. CMA/KKC-1, at 31; AG-1-52). The record also shows that Bay State replaced its more costly health care indemnity plans with preferred provider organization plans, and the Company self-insures many of its plans, which reduces underwriting margins (Exhs. CMA/KKC-1, at 32; AG-1-52). Bay State also provides opt-out credits to employees who have alternative health care coverage, and the Company offered these credits at a fraction of the cost that would be required to provide coverage for these employees (Exhs. CMA/KKC-1, at 32; AG-1-52). Further, the Company ensures the reasonableness of the level of its healthcare benefits by periodically comparing the individual plans and packages at the NiSource level against other employer's benefit programs, including investor-owned utilities and the general industry (Exhs. CMA/KKC-1, at 30; DPU-4-9, Atts. A, B). The results of the most recent study show that Bay State's employer-paid benefits plan value is 3.2 percent below the median compared to energy industry employers and 1.9 percent below general industry employers (Exhs. CMA/KKC-1, at 33; DPU-4-9, Atts. A, B). Finally, the record demonstrates that Bay State benefits from the purchasing power associated with its NiSource affiliation by receiving competitive rates for its programs (Exhs. CMA/KKC-1, at 32; AG-1-52). Therefore, the Department finds that the Company has acted to contain its healthcare costs in a reasonable, effective manner.

Having determined that the Company's healthcare costs are reasonable and known and measurable, and that the Company has appropriately acted to contain costs, we conclude that the proposed adjustment is allowed. Accordingly, we accept Bay State's test year proposed increase to its test year cost of service of $194,436, and the net reduction to its cost of service of $43,783, which is incorporated in Schedule 2 of this Order (see also Exhs. CMA/JTG-2, Schs. JTG-6, at 1 (Rev. 5), JTG-25, at 2 (Rev. 5)).

B. Bad Debt Expense

1. Introduction

During the test year, Bay State booked $2,996,449 in bad debt expense related to its distribution service operations (Exhs. CMA/JTG-2, Sch. JTG-6, at 1, 5 (Rev. 5)). The Company proposes to increase its distribution-related bad debt expense by $842,714 over the test year level based on the application of a bad debt ratio (Exhs. CMA/JTG-1, at 40; CMA/JTG-2, Schs. JTG-6, at 5 (Rev. 5), JTG-25, at 2 (Rev. 5)).

The Company calculated its distribution-related bad debt ratio by dividing its total distribution-related net write-offs for 2010 through 2012 of $10,401,045, by its total billed distribution revenues for that same period of $595,090,230 (Exh. CMA/JTG-2, Sch. JTG-6, at 5 (Rev. 5)). This calculation results in a bad debt ratio of 1.75 percent (Exh. CMA/JTG-2, Sch. JTG-6, at 5 (Rev. 5)). The Company then multiplied the bad debt ratio of 1.75 percent by test year normalized distribution service revenue of $219,380,743[110] to arrive at a bad debt expense of $3,839,163 (Exh. CMA/JTG-2, Sch. JTG-6, at 5 (Rev. 5)). From this amount, the Company subtracted the booked test-year level of distribution-related bad debt expense of $2,996,449, to arrive at the proposed bad debt adjustment of $842,714 (Exh. CMA/JTG-2, Sch. JTG-6, at 5 (Rev. 5)).

The Company also calculated a bad debt expense associated with the proposed revenue increase. The Company multiplied the bad debt ratio of 1.75 percent by its proposed revenue

110 The Company states that its test year firm sales revenues, normalized to remove the effects of decoupling and unbilled revenue adjustments, were further adjusted to eliminate direct and indirect gas costs to arrive at the total test year normalized distribution service revenues (Exhs. CMA/JTG-1, at 40; CMA/JTG-2, Sch. JTG-6, at 5 (Rev. 5)).

increase of $29,911,284, to arrive at a proposed bad debt adjustment of $523,447 (see Exhs. CMA/JTG-2, Schs. CMA/JTG-1 (Rev. 5), CMA/JTG-2 (Rev. 5)).

Finally, during the test year, the Company booked $311,505 in bad debt expense associated with its EP&S business (Exhs. CMA/JTG-2, Schs. CMA/JTG-6, at 1 (Rev. 5), JTG-15 (Rev. 5); CMA/JTG-4, at 1). As noted in Section V above, Bay State sold its EP&S business in January of 2013. Thus, the Company proposes to remove the entire test year amount of EP&S-related bad debt from its cost of service (Exhs. CMA/JTG-1, at 16; CMA/JTG-2, Schs. CMA/JTG-6, at 1 (Rev. 5), JTG-15 (Rev. 5), JTG-25, at 2; CMA/JTG-4, at 1 (Rev. 2, at 1)).

The Company contends that its distribution-related bad debt adjustment is consistent with Department precedent (Company Brief at 83-84, citing D.P.U. 12-25, at 210-211, 216). No other party addressed this issue.

2. Analysis and Findings

The Department permits companies to include for ratemaking purposes a representative level of bad debt revenues as an expense in cost of service. D.P.U. 09-39, at 164; D.P.U. 96-50 (Phase I) at 70-71; D.P.U. 89-114/90-331/91-80 (Phase I) at 137-140. The Department has found that the use of the most recent three years of data available is appropriate in the calculation of bad debt expense. D.P.U. 96-50 (Phase I) at 71. A company's bad debt ratio is derived by dividing the three-year distribution-related net write-offs by the distribution-related billed revenues for the same period. This bad debt ratio is then multiplied by test year distribution-related billed revenues, adjusted for any distribution revenue increase or decrease that is approved in the current rate case. See D.P.U. 07-71, at 106-109; D.P.U. 96-50 (Phase I) at 71.

We find the method used by Bay State to calculate its distribution-related bad debt expense is consistent with Department precedent. See D.P.U. 12-25, at 216; D.P.U. 07-71, at 106-109; D.P.U. 96-50 (Phase I) at 70-71; D.P.U. 89-114/90-331/91-80 (Phase I) at 137-140. Therefore, the Department approves the application of the Company's distribution-related bad debt ratio of 1.75 percent, applied to test year distribution revenues (Exh. CMA/JTG-2, Sch. JTG-6, at 5 (Rev. 5)). As set forth above, application of the 1.75 percent bad debt ratio to the test year normalized distribution service revenues of $219,380,743, produces a bad debt expense of $3,839,163 (Exh. CMA/JTG-2, Sch. JTG-6, at 5 (Rev. 5)). During the test year, the Company booked $2,996,449 in distribution-related bad debt expenses (Exh. CMA/JTG-2, Sch. JTG-6, at 1, 5 (Rev. 5)). Accordingly, the Department approves the Company's proposed increase to its test year cost of service in the amount of $842,714.

As set forth above, the Company calculated a bad debt expense associated with its proposed revenue increase of $523,447 (see Exhs. CMA/JTG-2, Schs. CMA/JTG-1 (Rev. 5), CMA/JTG-2 (Rev. 5)). Applying the same 1.75 percent bad debt ratio set forth above to the distribution revenue increase approved in this case of $19,283,723 results in a bad debt expense in the amount of $337,465. Accordingly, the Department decreases the Company's proposed test year cost of service by $185,982.

Finally, the Department accepts the proposed adjustment to remove from the cost of service the test year bad debt expense of $311,505 associated with the sale of the EP&S business.

C. NiSource Corporate Services Company

1. Introduction

During the test year, the Company booked $38,049,074 in NCSC-related O&M expenses (Exh. CMA/JTG-2, Sch. JTG-6, at 9 (Rev. 5)). Bay State removed $1,446,958 in costs related to the EP&S business, as these expenses will not occur going forward,[111] thereby reducing the NCSC expense to $36,602,116 (Exh. CMA/JTG-2, Sch. JTG-6, at 9 (Rev. 5)). The Company proposes various adjustments to this amount, as discussed below.

NCSC provides professional and technical services to the Company, including accounting, payroll, auditing, budgeting, business promotion, electronic communications, employee services, engineering and research, gas dispatching, planning, risk management, tax, legal, operations support and planning, environmental, financial, data processing, telecommunications, and general advisory services (Exh. CMA/JTG-1, at 45-46). These services are provided at cost to all NiSource's affiliates on a system-wide basis pursuant to executed service agreements with each affiliate that designate the type of services to be performed and the method of calculating the charges for these services (Exhs. CMA/JTG-1, at 46; AG-1-26, at 1-15).

NCSC uses a job order system to track costs that are billable to its affiliates, including Bay State (Exh. CMA/JTG-1, at 47). The job orders include information on the specific services provided for each affiliate and the basis for allocating expenses in the event that more than one affiliate receives a benefit from the services provided by NCSC (Exh. CMA/JTG-1, at 47).

---

111 See Section V above.

NCSC allocates expenses only if direct billing for services is impractical or inappropriate (Exh. CMA/JTG-1, at 47).

2. Company Proposal

Bay State proposes several adjustments to its test year NCSC expenses: (1) a reduction of $15,308 for the Company's allocated portion of expenses that it considered to represent institutional advertising; (2) a reduction of $19,428 for charitable contributions that Bay State determined were not applicable for rate recovery based on Department precedent; (3) a reduction of $10,767 for NCSC dues and membership costs allocated to Bay State that the Company determined did not provide benefits to the Company's employees; (4) a reduction of $801,002 for other one-time costs that the Company considered inconsistent with Department precedent; (5) an increase of $201,945 in pension and PBOP expense; (6) a decrease of $50,000 for new allocation bases; (7) an increase of $718,719 reflecting the Company's allocated portion of the annualization of non-union merit increases that went into effect in 2012; a merit increase that took effect on June 1, 2013; and a merit increase that is scheduled to take effect on June 1, 2014; (8) a decrease of $559,248 in Bay State's allocated portion of incentive compensation to represent the target-level tier of performance; and (9) an increase of $11,374 in payroll taxes related to the Company's allocated increase in payroll expense and decrease in incentive compensation (see Exhs. CMA/JTG-1, at 47-49; CMA/JTG-2, Sch. JTG-6, at 9 (Rev. 5); CMA/JTG-7, WP JTG-2, at 15, 17 (Rev. 2); DPU-23-1 & Att. B at 1; AG-14-25; AG-24-1 & Att.; CMA-1). These adjustments result in a decrease of $523,715 to the Company's cost of service and result in a subtotal of $36,078,401, to which Bay State then applies an inflation adjustment of $848,129 (Exh. CMA/JTG-2, Sch. JTG-6, at 9 (Rev. 5)). Therefore, Bay State proposes a total adjustment of $324,414,[112] resulting in a proposed normalized NCSC cost of $36,926,530[113] (Exh. CMA/JTG-2, Sch. JTG-6 (Rev. 5) at 1, 9).

3. Positions of the Parties

a. Attorney General

i. Introduction

The Attorney General challenges several of the Company's proposed NCSC expenses. Specifically, she recommends that the Department remove: (1) the post-order NCSC salary, wage and associated payroll tax increases scheduled to take effect in June 2014; (2) D.P.U. 12-25-related rate case expenses; and (3) the inflation adjustment associated with the normalized test year charges from NCSC, contending that the Company has failed to control costs and that the charges from NCSC have escalated and are excessive (Attorney General Brief at 76-81, 84, 87, 91, citing Exh. AG-DR-3). Finally, the Attorney General also criticizes the number of revisions that Bay State made to its NCSC normalization adjustment, and she argues that treating NCSC costs as a moving target should be considered in evaluating the credibility of the Company's proposal (Attorney General Brief at 81-83).

ii. NCSC 2014 Non-Union Wage Increase

The Attorney General argues that the Department should reject the Company's proposed 2014 wage increase for NCSC employees of $301,509 because the increase is not known and measurable, and does not meet the Department's precedent for inclusion in rates (Attorney General Brief at 84-85, citing D.P.U. 12-25, at 151-152; D.P.U. 85-266-A/271-A,

---

112 $848,129 - $523,715 = $324,414.

113 $36,602,116 + 324,414 = $36,926,530.

at 107). Specifically, the Attorney General claims that Bay State failed to provide proof of management's commitment to grant the 2014 wage increase for NCSC employees (Attorney General Brief at 85, citing Exh. CMA/KKC-1, at 85-86). Therefore, the Attorney General recommends a $301,509 reduction to the normalized NCSC costs (Attorney General Brief at 86). In addition, the Attorney General asserts that $21,498 in payroll taxes associated with the 2014 payroll adjustment should be removed from the Company's proposed NCSC payroll tax adjustment (Attorney General Brief at 86, citing Exh. AG-DR-1, at 15).

iii. Prior Rate Case Expenses

The Attorney General argues that the normalized NCSC expense proposed by the Company includes $87,518 paid to John E. Skirtich, LLC ("Skirtich LLC") and $39,761 paid to David R. Mouser, LLC ("Mouser LLC") both of whom are contractors of NCSC (Attorney General Brief at 86, citing Exhs. AG-14-20, Att. at 1; AG-28-3).[114] According to the Attorney General, the evidence shows that these costs predominately reflect work performed for the Company's last rate case and should be denied (Attorney General Brief at 87; Attorney General Reply Brief at 56, citing Exhs. AG-24-12; AG-28-3). Further, the Attorney General contends that although the Company claims that Skirtich, LLC and Mouser, LLC have long-standing relationships with NCSC, such an arrangement does not justify the retaining of these costs (Attorney General Reply Brief at 56).

The Attorney General claims that Skirtich, LLC assisted with the following tasks in Bay State's last rate case: preparing and training employees on the rate year rate base proposal;

114 NCSC uses Skirtich, LLC as a consultant to provide regulatory and financial services supporting NiSource's natural gas distribution ("NGD") companies (Exh. AG-24-12). As a contractor, Mouser, LLC assists NGD companies with regulatory tasks (Exh. AG-28-3, at 2).

planning rate case support; cost of service support and review; rate base development; reviewing testimony and information requests and responses; and assisting with the allocated cost of service study ("ACOSS") compliance filing (Attorney General Brief at 88-89). Further, the Attorney General asserts that Skirtich, LLC trained NCSC employees on the preparation of the lead-lag study and assisted with the development of the ACOSS, both of which were supported by the Company's witnesses in D.P.U. 12-25 and the instant proceeding (Attorney General Brief at 88, citing Exh. AG-24-12).

In addition, the Attorney General argues that the Company's 2013 work plan for Skirtich, LLC includes assistance for rate case-related tasks (Attorney General Brief at 89). The Attorney General claims that these tasks include: reviewing the lead-lag study results, assisting and training on the ACOSS, preparing responses to information requests on the two aforementioned components, and performing other duties as required (Attorney General Brief at 88, citing Exh. AG-24-12, Att. C.).

Regarding the expenses that the Company incurred from Mouser, LLC the Attorney General asserts that the test-year NCSC charges to Bay State represent work related to D.P.U. 12-25 (Attorney General Brief at 89, citing Exh. AG-28-3, Att. C). The Attorney General claims that because the invoices from Mouser LLC show charges identified with "CMA" (Columbia Gas of Massachusetts), this work was related to Bay State's last rate case (Attorney General Brief at 89, citing Exh. AG-28-3, at Att. C).

The Attorney General also notes that if these two contractors assist with rate cases for NiSource's other natural gas distribution ("NGD") companies, then NCSC allocates the costs for their services to those companies in those years (Attorney General Brief at 87; Attorney General

Reply Brief at 56). Therefore, the Attorney General asserts that the costs incurred from Skirtich, LLC and Mouser, LLC do not reflect normal, on-going charges from NCSC to Bay State (Attorney General Brief at 87). As such, the Attorney General recommends reducing test year NCSC expenses by $127,279, representing the cost of these contractors' work (Attorney General Brief at 87, citing Exh. AG-24-12, Att. B; Attorney General Reply Brief at 56).

iv. Level of Normalized Charges and Inflation Adjustment

The Attorney General argues that in order for the Department to allow an inflation adjustment, a utility must demonstrate that it has implemented cost-containment measures, and that an inflation adjustment is not mandatory even if this threshold is met (Attorney General Reply Brief at 57-58). Thus, according to the Attorney General, the inflation adjustment is not automatic even if cost-containment measures can be identified (Attorney General Reply Brief at 57).

The Attorney General argues that the Department should disallow the inflation adjustment applied to test year NCSC charges and reduce test year expenses by $848,129 (Attorney General Brief at 89). First, the Attorney General claims that Bay Sate has not demonstrated any effort toward controlling NCSC cost escalations[115] (Attorney General Brief at 78). Second, she contends that costs that were appropriately removed from the cost of service are indicative of a corporate culture of excessive spending for services not directly related to the provision of services to the customers of its regulated operations (Attorney General Brief at 79). For example, the Attorney General notes that the Company removed $465,572 for charges for

115 As an example, the Attorney General notes that NiSource acquired a new corporate jet in the test year (Attorney General Brief at 78, citing Tr. 1, at 41). See Section VIII.H for a discussion of the costs associated with the corporate jet.

promotional services, entertainment, donations, sporting events, and other expenses not appropriate to charge ratepayers (Attorney General Brief at 79, citing Exh. AG-14-14, Att. at 2). Finally, the Attorney General maintains that the Company did not demonstrate that NCSC implemented any "meaningful" initiatives to control its costs allocated or directly charged to Bay State (Attorney General Brief at 79).

The Attorney General also argues that Bay State's charges from NCSC continue to increase (Attorney General Brief at 90). For example, the Attorney General notes that between 2008 and 2012, direct costs charged to the Company from NCSC increased from $22.7 million to more than $30.3 million, approximately a 33 percent increase (Attorney General Brief at 77, 90). During the test year, the Attorney General claims that direct costs increased by 8.26 percent over the prior year (Attorney General Brief at 77; Attorney General Reply Brief at 53, 58, citing Exh. AG-DR-1, at 7-8). In addition, the Attorney General asserts that indirect costs allocated to Bay State from NCSC increased from $6.7 million to over $13.2 million between 2008 and 2012, a 98 percent increase and, during the test year, these expenses increased by 7.95 percent over the prior year (Attorney General Brief at 77-78, 90; Attorney General Reply Brief at 53, 58, citing Exh. AG-DR-1, at 7-8). Overall, the Attorney General calculates that total charges to Bay State from NCSC increased by 47.9 percent between 2008 and 2012 (Attorney General Brief at 76). During the test year, the Attorney General states that total charges from NCSC to the Company increased by 8.14 percent over the prior year (Attorney General Brief at 77; Attorney General Reply Brief at 53, 58, citing Exh. AG-DR-1, at 7-8). Finally, the Attorney General claims that Bay State's O&M expenses increased 16.3 percent between 2008 and 2012 (Attorney General Brief at 76). According to the Attorney

General, O&M expenses increased 6.6 percent in a single year, or 4.7 percent after removing WMS costs, both of which exceeded the rate of inflation (Attorney General Reply Brief at 54, 55, citing Exh. AG-DR-1, at 9). The Attorney General notes that these cost increases occurred during a period of record low inflation (Attorney General Brief at 78).

Further, the Attorney General argues that Bay State's administrative and general expenses ("A&G"), on a per-customer basis, are 82 percent higher than a peer group average, 47 percent higher than the average for other Massachusetts gas utilities, and 118 percent higher than other NGD companies (Attorney General Brief at 90, citing Exhs. AG-23-1, at 23-24; AG-DD-1, at 82-84). The Attorney General notes that the majority of costs directly charged or allocated from NCSC to Bay State are classified as A&G expenses on Bay State's books (Attorney General Brief at 90). Therefore, the Attorney General argues, Bay State's level of A&G expense exceeds that of its peers and is "staggering" (Attorney General Brief at 90). In addition, the Attorney General asserts that the percentage of indirect costs allocated from NCSC to Bay State, compared to the total NCSC indirect costs allocated to all affiliates, increased from 8.62 percent to 10.6 percent from 2008 to 2009, and increased again to 10.82 percent in 2012 over the prior year (Attorney General Brief at 78). Thus, to incent NCSC to control costs passed on to Bay State's ratepayers, the Attorney General recommends denying the NCSC inflation adjustment (Attorney General Brief at 89-90).

The Attorney General notes that the Company argues that "'there are very specific reasons for the cost changes and, once made, the changes do not continue to occur'" (Attorney General Reply Brief at 55, citing Company Brief at 101). The Attorney General recognizes that if any of the charges from NCSC to Bay State are non-recurring, the level of expenses should stabilize or decline (Attorney General Reply Brief at 55). However, the Attorney General contends that this situation has not occurred, as costs have continued to rise (Attorney General Brief at 55). Thus, the Attorney General maintains that the upward trend in NCSC costs charged to Bay State is contrary to the Company's argument (Attorney General Reply Brief at 55).

Further, the Attorney General rejects Bay State's argument that a portion of the NCSC cost increase is due to a shifting of employees out of the affiliated NGD companies and into NCSC (Attorney General Reply Brief at 53). The Attorney General argues that if this shift were real, one would expect to see a similar decline in employee count and labor costs at the NGD level, but the evidence does not support this contention (Attorney General Reply Brief at 53-54). According to the Attorney General, labor costs charged from NCSC to Bay State during the test year increased $2 million over the prior year, or 14.3 percent in a single year (Attorney General Reply Brief at 53, citing Exh. AG-14-4). The Attorney General explains that during the same period, staff levels at Bay State did not decline, but rather the Company added twelve employees (Attorney General Reply Brief at 53, citing Exh. AG-1-44, Att. at 1-2). Further, the Attorney General asserts that Bay State's average employee count in 2012 exceeds the Company's average employee count in 2011 (Attorney General Reply Brief at 54). For these reasons, the Attorney General argues that the $2 million increase in labor costs charged to Bay State from NCSC in 2012 was not offset by a decrease in labor costs at the Company level (Attorney General Reply Brief at 54).

The Attorney General also argues that the Company's description of its cost-containment efforts are actions that NiSource should be taking in the normal course of business and do not reflect a service company undertaking extraordinary efforts to control cost increases (Attorney General Brief at 80, citing Exh. CMA/SMT-Rebuttal-1, at 9-11; Attorney General Reply Brief at 59).[116] The Attorney General contends that aside from the cost savings identified in NCSC's legal department that occurred prior to the test year, the Company did not quantify NiSource's cost containment and process improvement initiatives until the final day of hearings (Attorney General Brief at 79-80, citing RR-DPU-16). Moreover, the Attorney General maintains that Bay State's quantification of cost savings was deficient because the cost savings were not supported with information and workpapers or the additional costs incurred to achieve such cost savings (Attorney General Brief at 80, citing RR-DPU-16; Attorney General Brief Reply Brief at 59). In addition, the Attorney General contends that even if some savings occurred, NCSC did not control costs charged to Bay State given the continuing increases in charges over the last four years, which is not indicative of the service company implementing reasonable cost-containment measures (Attorney General Brief at 80-81; Attorney General Reply Brief at 58).

Based on the foregoing, the Attorney General asserts that the Department should deny the NCSC inflation adjustment (Attorney General Reply Brief at 58). Accordingly, the Attorney General recommends removing the $848,129 inflation adjustment from the proposed cost of service as an incentive for NCSC and Bay State to control service company costs

---

116 As examples of what she considers to be actions taken under the normal course of business, the Attorney General includes: (i) NiSource's information technology department's arrangement with IBM to lower telecommunication rates; (ii) the treasury department taking advantage of downward trends in interest rates for debt issuances; (iii) the corporate insurance department using mutual insurance; and (iv) the accounts payable department automating more invoices and reducing the number of manual checks (Attorney General Brief at 80, citing Exh. CMA/SMT-Rebuttal-1, at 9-11).

(Attorney General Brief at 90, citing Exh. AG-DR-Surrebuttal-1, at 5; Attorney General Reply Brief at 59).

v. Normalization Revisions

The Attorney General alleges that the number and magnitude of Bay State's revisions to its NCSC cost adjustments are extensive and troubling (Attorney General Brief at 81). According to the Attorney General, the four separate corrections with several versions of each revision affected multiple lines of the Company's schedules and workpapers containing the NCSC normalization adjustment (Attorney General Reply Brief at 9).[117] First, the Attorney General explains that Bay State's June 30, 2013 update shifted a portion of NCSC O&M expenses to the WMS adjustment and corrected several errors in the payroll, incentive compensation, and PEF adjustments (Attorney General Brief at 81, citing Exh. CMA/JTG-2, Sch. JTG-6, at 9 (Rev. 1)). According to the Attorney General, in the Company's second update, Bay State revised the normalized NCSC costs to adjust the following items: PEF transfers for EP&S; payroll annualization; incentive compensation; payroll taxes; reverse PEF transfers recorded in 2012 (net of EP&S); PEF-Gross NCSC Pension/OPEB costs; PEF adjusted gross NCSC pension/OPEB charged to capital; the inflation adjustment; and new allocation bases effective January 1, 2013 (Attorney General Brief at 82, citing Exhs. AG-14-1, Att.; CMA/JTG-8 (Rev.), WP JTG-2, at 15). Further, the Attorney General contends that in Bay State's September 3, 2013 update, the Company revised NCSC expenses for a third time, which included changes to: the net EP&S corporate services included in O&M expenses; other

---

117 Additionally, the Attorney General notes that in one of the corrections, a summary page describing the updates was more than four pages (Attorney General Reply Brief at 9, citing Exhs. AG-14-1; AG-DR-1, at 10-11).

one-time costs; reverse PEF transfers recorded in 2012 (net of EP&S PEF transfers); PEF carrying costs for NCSC pension/OPEB; PEF-gross NCSC pension/OPEB costs charged; PEF-Adjust for gross NCSC pension/OPEB charged to capital; employee expenses; and the inflation adjustment (Attorney General Brief at 82-83, citing Exhs. AG-DR-Surrebuttal-1, at 3-4; CMA/JTG-2, Sch. JTG-6, at 9 (Rev. 2); AG-14-1). According to the Attorney General, the September 3, 2013 revisions result from information not being properly accumulated and correctly inserted into the original workpapers (Attorney General Brief at 82-83, citing Exhs. AG-DR-Surrebuttal-1, at 2-3; AG-32-3, AG-32-4, AG-32-5, AG-32-6; AG-32-7).

Finally, the Attorney General claims that in its October 16, 2013 update, Bay State corrected an error in the inflation adjustment calculation for NCSC expenses (Attorney General Brief at 83). The Attorney General notes that the Company originally calculated normalized NCSC charges to Bay State of $37,900,754 and then revised the figure to $36,926,530 (Attorney General Brief at 83). According to the Attorney General, of the $974,224 reduction, Bay State shifted $681,837 to WMS costs (Attorney General Brief at 83). Thus, the Attorney General argues that the NCSC normalization calculation is "a moving target" (Attorney General Brief at 84).

According to the Attorney General, the Company should have exercised more care in preparing the original filing in order to avoid the four revisions because the Company's numerous revisions wasted time and undermined the credibility of the Company's witness who sponsored the exhibits and numbers contained therein (Attorney General Brief at 84; Attorney General Reply Brief at 9-10). Additionally, the Attorney General claims that the revisions and multiple versions of the NCSC normalization adjustment affected the Department's and Attorney General's review of the reasonableness of the resulting normalized costs, and that the Department cannot be confident that the current numbers are accurate (Attorney General Reply Brief at 9-10). The Attorney General asserts that the Department should consider the "lack of care" apparent in the Company's testimony and exhibits indicative of subpar management and consider this deficiency in assigning the weight given to the Company's evidence (Attorney General Brief at 84; Attorney General Reply Brief at 10).

Further, the Attorney General asserts that the number of mistakes and revisions made to the NCSC normalization adjustment falls outside an acceptable level of errors (Attorney General Reply Brief at 11). Therefore, the Attorney General argues that based on the numerous errors and revisions made to the NCSC normalization adjustment, and coupled with the increase in service company costs detailed above, the Department should deny the Company's inflation adjustment to NCSC expenses (Attorney General Reply Brief at 58). Further, the Attorney General recommends that the Department reduce the return on equity as a signal to Bay State's management that it must make more accurate filings in the future (Attorney General Reply Brief at 11). In this regard, the Attorney General dismisses any notion that such a sanction would cause a utility to conceal errors in future filings (Attorney General Reply Brief at 10). According to the Attorney General, the Company has an obligation to keep accurate entries in its books and reports and to attest truthfully to the Department as to facts material to its rate request (Attorney General Brief at 10, citing G.L. c. 166, §§ 80-85).

b. Company

i. Introduction

Bay State claims that none of the Attorney General's arguments regarding NCSC expenses evaluate the merits of the costs, or whether the costs are reasonable and prudent (Company Brief at 99). The Company asserts that the Department should reject the Attorney General's arguments because they are not correct, relevant, or substantiated by the record (Company Brief at 99).

ii. NCSC 2014 Non-Union Wage Increase

Bay State maintains that the Department should include the costs of the planned 2014 non-union merit payroll increase for NCSC employees for the same reasons as set forth above in Section VIII.A.3.b.ii applicable to Bay State employees (Company Brief at 103). The Company notes that the Attorney General's argument is mooted by the submission on January 27, 2014 of written confirmation of management's commitment to the increase (Company Brief at 103).

iii. Prior Rate Case Expenses

Bay State maintains that NCSC provides the Company with technical, regulatory, and professional support with internal resources, supplemented with contract work from other resources such as Skirtich, LLC and Mouser, LLC (Company Reply Brief at 26). According to Bay State, both contractors have worked for NCSC for numerous years and have provided routine and on-going[118] professional support services (Company Brief at 106). The Company maintains that during the test year NCSC utilized contract services from Skirtich, LLC and

118 The Company claims, for example, that Skirtich, LLC provided ongoing supporting services under contract for Bay State's two prior rate cases, D.P.U. 09-30 and D.T.E. 05-27 (Company Brief at 106, citing Exh. CMA/JTG-Rebuttal-1, at 18-19).

Mouser, LLC to meet work requirements for Bay State (Company Brief at 105; Company Reply Brief at 25). Bay State maintains that Skirtich, LLC and Mouser, LLC advise and assist NCSC employees in their current roles to manage regulatory activities (Company Brief at 105, citing Exh. CMA/JTG-Rebuttal-1, at 18). Thus, Bay State argues that Skirtich, LLC and Mouser, LLC are not consultants retained solely to provide services in connection with the Company's rate cases (Company Brief at 105; Company Reply Brief at 26).

According to the Company, both Skirtich, LLC and Mouser, LLC provide ongoing regulatory support as well as professional and technical services to NCSC and its operating affiliates and are likely to provide such services in the rate year (Company Brief at 105; Company Reply Brief at 25-26, citing CMA/JTG-Rebuttal-1, at 17-18). The Company argues that although a work plan is set annually, both contractors are able to assist wherever NCSC requires regulatory support (Company Brief at 106, citing Exh. CMA/JTG-Rebuttal-1, at 17). Therefore, Bay State asserts that Skirtich, LLC's and Mouser, LLC's costs are reasonable and representative of expected rate year costs because these contractors likely will perform other professional consulting work during the rate year (Company Brief at 105-106; Company Reply Brief at 26).

Further, the Company maintains that these work requirements do not cease to exist if Skirtich, LLC and Mouser, LLC do not provide assistance (Company Reply Brief at 27). As a result, Bay State argues that the Company would have to increase other NCSC resources and incur a higher full-time employee headcount and expense if it did not have the flexible contract arrangements with Skirtich, LLC and Mouser, LLC (Company Brief at 105-106; Company Reply Brief at 26). Thus, Bay State claims that if the expenses associated with these contractors are removed from the test year, the cost of service will understate the actual level of internal NCSC expense required by the Company (Company Reply Brief at 27). Therefore, the Company asserts that because the test year expenses for Skirtich, LLC's and Mouser, LLC's rate case support are normal, on-going costs, there is no basis to disallow these costs (Company Brief at 106, citing Exh. CMA/JTG-Rebuttal-1, at 18-19; Company Reply Brief at 27).

iv. Level of Normalized Charges and Inflation Adjustment

Bay State rejects the Attorney General's argument that if NCSC charges exceed the rate of inflation the Company should be penalized with a cost disallowance (Company Reply Brief at 25). Rather, the Company asserts that it has submitted sufficient evidence supporting the proposed cost increases and establishing that the level of expenses is necessary and appropriate for serving its customers, thereby meeting the Department's standard for affiliated company costs (Company Brief at 99-100, citing Exhs. AG-14-9; DPU-4-26; DPU-11-16; Company Reply Brief at 25, citing D.P.U. 12-25, at 232; D.P.U. 09-30, at 258; D.P.U. 89-114/90-331/91-80 (Phase I) at 79-80; Hingham Water Company, D.P.U. 88-170, at 21-22 (1989); D.P.U. 85-137, at 51-52).

According to the Company, a portion of the cost increases are not actually increases because functions transferred to NCSC from the operating affiliates are offset by decreases in local operating costs (Company Brief at 100). Further, the Company explains that the purported escalated costs cited by the Attorney General are gross amounts and do not exclude capitalized costs associated with work on Bay State's system (Company Brief at 100). The Company contends that based on its own calculations there is no evidence that the service company costs have escalated unchecked, as argued by the Attorney General (Company Brief at 100-101, citing Attorney General Brief at 76). Further, the Company asserts that the Attorney General has neither argued, nor demonstrated, that any of the NCSC costs charged to Bay State are imprudent or unnecessary in providing safe and reasonable service to the Company's customers (Company Brief at 101; Company Reply Brief at 24). Moreover, Bay State asserts that a market cost comparison for the 2012 affiliate company charges to the Company ("NCSC Cost Study")[119] examined the reasonableness of the service company charges (Company Brief at 102). The Company argues that the Attorney General has not challenged the results of the study (Company Brief at 102).

Bay State also rejects any notion that an increase in the Company's employee count has had an adverse effect on the level of NCSC charges (Company Reply Brief at 24). The Company notes that it added 84 employees to its construction and engineering departments since December 31, 2009, which were necessary to support Bay State's capital program and assist with providing safe and reliable service to the Company's customers (Company Reply Brief at 24, citing Exh. AG-7-3). Bay State also rejects any notion that a corporate culture of excess exists, and the Company notes that certain business expenses questioned as inappropriate by the Attorney General have been removed from the cost of service (Company Brief at 101-102, citing Exh. CMA/SMT-1-Rebuttal, at 7; Tr. 9, at 899-900).

Regarding cost containment, the Company asserts it contained costs in NCSC's legal department, IT, and treasury departments (Company Brief at 135). According to the Company,

---

[119] The NCSC cost study determines reasonableness by analyzing data with respect to: (1) NCSC's 2012 A&G charges to Bay State compared to those of other utility service companies; (2) the cost of NCSC services provided to the Company; and (3) the cost of NCSC's customer accounts services compared to those of other utilities (Exh. AG-1-8, Att. (t) at 4).

the IT department's cost-containment initiatives achieved over $12.1 million in cumulative savings since 2009 from tiered storage, application and software retirements, and server consolidations (Company Brief at 135, citing RR-DPU-16). In addition, Bay State argues that cost-containment initiatives in the treasury department implemented to control borrowing costs achieved cost savings of approximately $425,000 across NCSC from a reduction in fees (Company Brief at 135, citing Exh. CMA/SMT-1 Rebuttal at 10; RR-DPU-16). The Company claims that the Attorney General discounts quantitative cost-containment evidence, as described above, simply because it was provided in response to a record request (Company Brief at 102).

Bay State also makes qualitative arguments regarding its cost-containment measures (Company Brief at 135). The Company argues that NCSC utilized mutual insurance carriers' excess casualty insurance at rates lower than rates offered by commercial carriers (Company Brief at 136, citing Exh. CMA/SMT-1 Rebuttal at 10). Additionally, Bay State explains that the treasury department uses commercial insurance brokers to obtain competitive rates for NCSC's insurance programs, and the treasury department utilizes an insurance captive company, as a cost-effective alternative to a third-party carrier, to underwrite risks (Company Brief at 136, citing Exh. CMA/SMT-1 Rebuttal at 11).

Bay State argues that the aforementioned initiatives are evidence of its cost-containment efforts in satisfaction of the Department's long-held inflation adjustment standard[120] (Company Brief at 136; Company Reply Brief at 27). Therefore, the Company asserts that the Attorney General's arguments must be rejected and that the Department should approve the inflation allowance (Company Reply Brief at 27). According to the Company, to deny the

[120] See Section VIII.K.3 for discussion of the Department's inflation adjustment standard.

NCSC inflation adjustment would be punitive and fail to act as any future incentive regarding cost containment (Company Brief at 133, 136).

v. Normalization Revisions

Bay State argues that adjustments made to the NCSC expenses were minor and did not affect the credibility of the witness sponsoring the exhibits (Company Brief at 103). First, the Company states that the WMS O&M costs initially presented as part of the NCSC costs were transferred to the appropriate designation, thereby representing a change in the presentation of test year costs, but not a change in the revenue requirement (Company Reply Brief at 6-7). Second, the Company claims that it identified a data presentation issue with the NCSC incentive compensation expense, and that the Company "took great pains" to explain these issues and corrections to assist the Department and intervenors with their review of the Company's filing (Company Reply Brief at 7). Third, the Company explains that it adjusted NCSC pension and PBOP data to align it with the 2013 PEF filing that was to be made in mid-September 2013 (Company Reply Brief at 7, citing Exhs. CMA/JTG-1, at 8 (Rev. 2); CMA/JTG-7, WP JTG-2, (Rev. 2)). In addition, Bay State claims that it removed costs to address issues identified through discovery (Company Reply Brief at 7). Finally, the Company notes that it revised the NCSC inflation adjustment to ensure that the summary schedule and supporting workpapers were consistent (Company Reply Brief at 8, citing Exh. CMA/JTG-2, (Rev. 3)). Bay State argues that the corrections made to the NCSC normalization adjustment show the Company's attention to detail (Company Reply Brief at 8). Moreover, Bay State notes that the Attorney General had the opportunity to issue discovery on all of the corrections identified in advance of or during the evidentiary hearings (Company Reply Brief at 8).

Bay State asserts that it has the responsibility to make corrections and to provide a clear and comprehensive explanation of those adjustments for the benefit of the Department and intervenors (Company Reply Brief at 6). The Company argues that the Attorney General inappropriately targets inadvertent errors, identified and explained by the Company, to create a negative outcome in the proceeding (Company Reply Brief at 6). Moreover, the Company argues that the corrections made by Bay State to the NCSC normalization adjustment are not indicative of subpar management, and if the Department penalizes utilities for mistakes, it will create a strong disincentive for companies to identify errors (Company Brief at 103; Company Reply Brief at 6). Based on these considerations, Bay State argues that there is no basis for rejecting the NCSC normalization adjustment, and that the Department should find the Attorney General's arguments in this regard baseless (Company Brief at 103; Company Reply Brief at 8).

4. Analysis and Findings

a. Introduction

As noted above, Bay State proposes to include in its cost of service $36,926,530 in NCSC-related O&M charges to the Company for services rendered by NCSC in the test year (Exh. CMA/JTG-2, Sch. JTG-6 (Rev. 5) at 1, 9). Below, we address: (1) whether to include in the Company's cost of service the payments made to NCSC for services rendered in the test year; and (2) several of the Company's proposed adjustments to test year charges. In doing so, we address the various arguments made by the Attorney General and the Company.

b. Service Company Charges

i. Introduction

The Department permits rate recovery of payments to affiliates where these payments are: (1) for services that specifically benefit the regulated utility and that do not duplicate services already provided by the utility; (2) made at a competitive and reasonable price; and (3) allocated to the utility by a method that is both cost-effective in application and nondiscriminatory for those services specifically rendered to the utility by the affiliate and for general services that may be allocated by the affiliate to all operating affiliates. D.P.U. 12-25, at 231; D.P.U. 89-114/90-331/91-80 (Phase I) at 79-80; D.P.U. 88-170, at 21-22; D.P.U. 85-137, at 51-52. In addition, 220 C.M.R. § 12.04(3) provides that an affiliated company may sell, lease, or otherwise transfer an asset to a distribution company, and may also provide services to a distribution company, provided that the price charged to the distribution company is no greater than the market value of the asset or service provided.

ii. NCSC's Services to Bay State

In determining whether the services rendered by an affiliate specifically benefit a regulated utility and do not duplicate services already provided by the utility, it is necessary to examine whether there is any overlap between the services rendered by an affiliate and the operating company's functions. D.P.U. 08-27, at 80-81; Oxford Water Company, D.P.U. 1699, at 11-12 (1984). Charges to the Company from NCSC typically are for services that are conducted most cost-effectively on a shared basis and do not require a full-time local presence in Massachusetts (Exh. DPU-11-16). These include professional and technical services including accounting, payroll, auditing, budgeting, business promotion, electronic communications, employee services, engineering and research, gas dispatching, planning, risk management, tax, legal, operations support and planning, environmental, financial, data processing, telecommunications and general advisory services (Exhs. CMA/JTG-1, at 45-46; DPU-11-16). These services are performed by NCSC for Bay State pursuant to an executed contract that includes a description of the method of calculating the charges for these services (Exhs. CMA/JTG-1, at 46; AG-1-26, Att. at 1-15; AG-1-92 & Att. A).

Generally, if functions or departments overlap in title between Bay State and NCSC, the Company provides local service and NCSC provides training and expertise associated with that specific function (Tr. 1, at 86). For example, while both NCSC and the Company employ pipeline safety personnel, Bay State employees are locally involved in pipeline safety tasks and NCSC pipeline safety employees train the Company's employees on proper leak investigation and audit Bay State's work to ensure that all federal and state requirements are met (Tr. 1, at 84-85). Based on the foregoing consideration, we find that NCSC's services specifically benefit Bay State and do not duplicate services that the Company already performs. See D.P.U. 09-30, at 261.

iii. Competitiveness and Reasonableness of Charges to Bay State

Next, we evaluate whether NCSC charges to Bay State were at a competitive and reasonable price. In prior cases, when determining whether services were charged at a competitive and reasonable price, the Department has accepted a review of employer compensation structures, compared to the market, because service company charges tend to be primarily labor-related.[121] D.P.U. 12-25, at 233; D.P.U. 09-39, at 260. The Company's non-union salary analysis[122] compares NCSC salaries and total compensation to that of other utilities in the Northeast and North Central regions for four auditing positions, four engineering positions, two environmental health and safety positions, four financial analyst positions, two human resource positions, a technical trainer, a gas controller, a vehicle fleet employee, and two supply chain positions (Exh. CMA/KKC-6). Overall, NCSC's average annual base salary was found to be: (1) 3.2 percent below that of other comparable Northeast utilities; and (2) 1.6 percent above that of other comparable North Central utilities (Exh. CMA/KKC-6). NCSC's average annual total compensation was found to be: (1) 2.7 percent greater than that of other comparable Northeast utilities; and (2) 6.2 percent greater than that of other comparable North Central utilities (Exh. CMA/KKC-6).

In addition to comparing service company compensation to that of the market, the Company provided evidence of the competitiveness and reasonableness of NCSC costs. First, Bay State provided the results of an audit conducted by the Federal Energy Regulatory Commission ("FERC") that examined NCSC affiliate transactions[123] (see Exh. AG-1-8, Att. (s)). A review of the audit raises no concerns with the reasonableness of the costs charged to Bay

---

121 NCSC allocated or directly charged $10,248,381 in labor and $2,203,342 in incentive compensation expenses to the Company in the test year (Exh. CMA/JTG-7, WP JTG-2, at 15 (Rev. 2)).

122 Comparison data are from the AGA and TW surveys (Exh. CMA/KKC-6, nn.2, 3).

123 This audit included a review of NCSC's compliance with cross-subsidization restrictions on affiliate transactions, regulations under the Public Utility Holding Company Act of 2005, and the uniform system of accounts for public utilities and natural gas companies' accounting for service company transactions (Exh. AG-1-8, Att. (s) at 3).

State from NCSC (see Exhs. AG-1-8, Att. (s); DPU-4-28; DPU-4-29). Second, NCSC conducts an internal annual audit of NCSC cost allocations, including specific findings and recommendations (see Exhs. AG-1-8, Atts. (c), (d), (i), (l)). Third, NiSource's independent registered public accounting firm, Deloitte & Touche LLP ("Deloitte"), tests NCSC expense allocations for both contract and convenience billings as part of Deloitte's audit procedures used to support its opinions on NCSC affiliates' financial statements, which are included in state jurisdictional filings for FERC and for financial reporting under GAAP (Exh. AG-14-25, Att. A at 2)).[124] Finally, the Company commissioned the NCSC Cost Study, which shows that the cost of NCSC services to Bay State during 2012 were priced at the lower of cost or market (Exh. AG-1-8, Att. (t) at 1). The NCSC Cost Study also shows that on average, hourly rates for outside service providers[125] are 107 percent higher than comparable hourly rates charged to Bay State by NCSC (Exh. AG-1-8, Att. (t) at 4). In addition, the NCSC Cost Study shows that the cost per Bay State customer for A&G services provided by NCSC averaged $124 per customer, which is only one dollar more than the $123 per customer average for the comparison group service companies (Exh. AG-1-8, Att. (t) at 4).[126] Based on the foregoing, the Department finds that the NCSC expenses charged to Bay State were at a competitive and reasonable price.

124 Deloitte does not issue a formal report regarding NCSC expense allocation methodologies (Exh. AG-14-25, Att. A at 2).

125 The comparison group includes average hourly billing rates for Massachusetts-based attorneys, accountants, engineers, and a national average hourly billing rate for management consultants (Exh. AG-1-8, Att. (t) at 22-23). A national average was used for management consultants because they typically travel to the client's location (Exh. AG-1-8, Att. (t) at 23).

126 These A&G cost results were calculated using 2011 data, which was the latest year for which FERC Form No. 60 information was available at the time of the NCSC Cost Study

iv. Method of Allocating Costs to Bay State

Finally, we evaluate the method of allocating costs from NCSC to Bay State. When allocating costs among affiliates, it is preferable that costs associated with a specific utility are directly assigned to that utility. In the absence of a clear relationship between the cost and the affiliate, or when costs cannot be directly assigned, these costs are preferably allocated using cost-causative allocation factors to the extent such allocation factors can be applied, with general allocation factors used to allocate any remaining costs. D.P.U. 11-01/D.P.U. 11-02, at 318-321; D.P.U. 10-114, at 271-274.

As previously stated, NCSC charges are directly assigned whenever possible (Exhs. CMA/JTG-1, at 47; CMA/SMT-1 Rebuttal at 6; AG-1-92). Alternatively, when direct assignment is not possible, NCSC allocates costs to the Company through cost-based allocation factors (Exhs. CMA/JTG-1, at 47; CMA/SMT-1 Rebuttal at 6; AG-1-26, Att. at 1-15; AG-1-92 & Att. A). The allocation bases in use have been approved by the Securities and Exchange Commission and are filed annually with FERC (Exh. AG-1-92). The Company provided its cost allocation manual, a list and description of each basis, and explained that within each allocation basis there can be different allocations grouped by different affiliates who benefit from NCSC's services (e.g., all companies versus NGDs only) (Exhs. AG-1-26, Att. at 1-15; AG-1-92; AG-14-25, Atts. A, B). Bay State also provided detailed information on the percentages, by affiliated company, for each variation within the allocation bases (see Exh. AG-1-92, Att. B).

(Exh. AG-1-8, Att. (t) at 4). FERC Form No. 60 is an annual regulatory support requirement under 18 C.F.R. § 369.1 for centralized service companies. The report is designed to collect financial information from centralized service companies subject to FERC jurisdiction. See FERC Form No. 60, Annual Report of Centralized Service Companies, General Instructions for Filing FERC Form No. 60, at I (www.ferc.gov/docs-filing/forms/form-60/form-60.pdf.).

The Department has reviewed these allocation bases and finds them to be cost-effective and nondiscriminatory.

v. Conclusion

Based on the foregoing, the Company has demonstrated that NCSC's test year charges are: (1) for activities that specifically benefit the Company and that do not duplicate services already provided by Bay State; (2) made at a competitive and reasonable price; and (3) allocated to the Company by a method that is both cost-effective and nondiscriminatory. Accordingly, subject to our findings below, we include in the Company's cost of service expenses associated with the NCSC charges.

c. NCSC Non-Union Wage Increase

The Company proposes an increase of $718,719 in payroll included in NCSC bills, representing the Company's allocated portion of the annualization of merit increases that took effect in 2012, plus an increase that took effect on June 1, 2013, and an increase that is scheduled to take effect on June 1, 2014 (Exhs. CMA/JTG-1, at 48; CMA/JTG-2, Sch. JTG-6, at 9 (Rev. 5); CMA/JTG-7, WP JTG-2, at 15, 17 (Rev. 2); DPU-23-1 & Att. B at 1; CMA-1). Of this total: (1) $124,199 represents the 2012 annualization of merit increases; (2) $293,011 represents the June 1, 2013 increase; and (3) $301,509 represents the 2014 scheduled increase (Exh. CMA/JTG-7, WP JTG-2, at 17 (Rev. 2)). The Department finds that the proposed payroll adjustments to reflect wage increases that took effect in 2012 and 2013 are known and measureable and have already taken effect (CMA/JTG-7, WP JTG-2, at 15, 17 (Rev. 2); DPU-23-1 & Att. B at 1).

Regarding the wage increase scheduled to take effect on June 1, 2014, we find that this increase is known and measureable and that (i) management has expressly committed to granting the 2014 wage increase; and (ii) there is a historical correlation between union and non-union payroll increases (see Section VIII.A.3.c above). With respect to the reasonableness of the Company's proposed NCSC payroll increase, the Department reviewed Bay State's comparative analysis of NCSC base salaries and total compensation to utility and general industry salaries in the Northeast and North Central[127] regions of the US (see Exh. CMA/KKC-6). NCSC's average annual base salary is approximately 3.2 percent below the Northeast industry median and 1.6 percent above the North Central industry median (Exhs. CMA/KKC-1, at 25-26; CMA/KKC-6). NCSC's average annual base salary including incentive compensation is approximately 2.7 percent above the Northeast industry median and 6.2 percent above the North Central industry median (Exhs. CMA/KKC-1, at 25-26; CMA/KKC-6).

Based on the foregoing, the Department finds the NCSC payroll adjustments reasonable. Accordingly, the Department allows Bay State's proposed increase to the cost of service of $718,719, comprised of (1) $124,199 representing the 2012 annualization of merit increases; (2) $293,011 representing the 2013 scheduled increase; and (3) $301,509 representing the 2014 scheduled increase.

d. Prior Rate Case Expenses

The Attorney General argues that $127,279 of the Company's test year NCSC expense is associated with Skirtich, LLC and Mouser, LLC's contract work and is not reflective of normal, on-going charges from NCSC to Bay State (Attorney General Brief at 87, citing Exh. AG-24-12,

127 Many of the NCSC positions are located in either Merrillville, Indiana or Columbus, Ohio, which are included in the North Central region's data (Exh. CMA/KKC-1, at 25).

Att. B; Attorney General Reply Brief at 56). The Company maintains that the Skirtich, LLC and Mouser, LLC costs are reasonable and representative of expected rate year costs because these contractors will likely perform other professional consulting work during the rate year (Company Brief at 105-106; Company Reply Brief at 26).

In addition to the standard of review previously described for service company expenses, the Department permits a company to include expenses in its cost of service if it can demonstrate that the expense is either annually or periodically recurring or, if non-recurring, is extraordinary in nature. D.P.U. 89-114/90-331/91-80 (Phase I) at 152; Western Massachusetts Electric Company, D.P.U. 88-250, at 65-66 (1989); D.P.U. 1270/1414, at 33. In the absence of evidence that the test year expense is not representative, the Department will rely on the test year expense. D.P.U. 11-01/D.P.U. 11-02, at 348-349, 351-352.

Bay State incurred expenses of $87,518 for services provided by Skirtich, LLC during the test year (Exh. AG-14-20, Att. at 1). Skirtich, LLC's 2012 project schedule included tasks related to the Company's last rate case, but also to Bay State's financial plan (Exh. AG-24-12, Att. B at 1). Thus, it would be inappropriate to deny the entire test year expense for this contractor's services if the Department were to accept the Attorney General's position.

Additionally, NCSC's current contract with Skirtich, LLC became effective on December 1, 2009 for its services through November 30, 2014, and it has provided services to NCSC as a contractor for over ten years (Exh. AG-24-12, at 1 & Att. A at 1). Skirtich, LLC's tasks for 2013 include assistance and preparation of the Company's "2013 general rate case filing,"[128] as well as various training and regulatory support tasks, as requested (Exh. AG-24-12, Att. C at 1).[129] Thus, the Department concludes that expenses incurred from Skirtich, LLC's services are either annually or periodically recurring, and that there is no evidence showing that Skirtich, LLC will not provide services to the Company in the rate year. Therefore, the Department allows the Company to recover Skirtich, LLC's test year expense of $87,518 in the cost of service.

Turning to Mouser, LLC's services, the Company incurred expenses of $39,761 charged by Mouser, LLC during the test year (Exhs. AG-14-20, Att. at 1; AG-28-3, at 2). In addition to its services on the Company's last rate case, Mouser, LLC performed account reconciliations for miscellaneous revenue and tasks related to the Company's income statement and balance sheets during the test year (Exh. AG-28-3, Att. C at 19-21). In reviewing Bay State's invoices from Mouser, LLC, the Department calculated $30,768 for Mouser, LLC's services in D.P.U. 12-25 (Exh. AG-28-3, Att. C at 1-18). Thus, if the Department were to accept the Attorney General's position, it would be inappropriate to deny the entire test year expense for this contractor's services. Irrespective of this calculation, Mouser, LLC has provided regulatory support to NCSC for over a decade through an employment agency and, since 2009, Mouser, LLC provided direct services as a contractor (Exh. CMA/JTG-Rebuttal-1, at 16-17). Mouser, LLC is under contract to provide NCSC with regulatory support as needed (Exh. CMA/JTG-Rebuttal-1, at 16-17). The

---

128 The Department notes that Skirtich, LLC's expenses for its work on the instant proceeding are not included in the Company's proposed rate case expense (see Exhs. AG-DR-1, at 19; CMA/JTG-Rebuttal-1; DPU-1-1; DPU-1-5; DPU-1-6; DPU-1-7).

129 Skirtich, LLC's tasks also include training new regulatory analysts on the ratemaking process, strategic development, and support of regulatory filings (Exh. AG-24-12, Att. C at 1).

Department concludes that expenses incurred from Mouser, LLC's services are either annually or periodically recurring. Therefore, the Department allows the Company to recover test year expense of $39,761 in its cost of service.

e. Level of Normalized Charges and Inflation Adjustment

The Attorney General recommends that the Department deny the $848,129 inflation adjustment applied to residual NCSC O&M expenses (Attorney General Brief at 78-79). Bay State maintains that it provided evidence that demonstrates its cost-containment efforts and meets the Department's inflation adjustment standard (Company Brief at 136; Company Reply Brief at 27).

As discussed in Section VIII.K.3 below, an inflation allowance, properly calculated, is recoverable so long as a company demonstrates cost-containment measures. In Section VIII.K.3 below, we find that Bay State properly derived its proposed 3.76 percent inflation factor applicable to the Company's O&M expenses using the Gross Domestic Product Implicit Price Deflator ("GDPIPD") from the midpoint of the test year to the midpoint of the rate year (Exh. CMA/JTG-2, Sch. JTG-6, at 14 (Rev. 5)). The Company used the same inflation factor to derive its inflation allowance applicable to NCSC O&M expenses (Exh. CMA/JTG-7, WP JTG-2, at 20).

The Company has provided a number of examples of what it describes as cost-containment measures related to the inflation adjustment for residual NCSC O&M expenses (Exhs. CMA/SMT-1, Rebuttal at 9). These include: (1) efforts to reduce information technology costs; (2) leveraging banking relationships to obtain optimal pricing on credit facilities; (3) using industry mutual insurance companies to provide lower coverage rates than commercial carriers could provide; (4) using an insurance captive company to underwrite risks; (5) automating accounting invoices; (6) reducing the number of manual checks issued; (7) issuing long-term debt at low interest rates; and (8) obtaining rebates through the use of procurement and purchasing cards (Exh. CMA/SMT-1 Rebuttal, at 10-11; Tr. 7, at 894; RR-DPU-16). Further, as discussed above in Section VIII.A.5.b, on behalf of Bay State, NCSC has taken appropriate measures to contain its cost of providing health and dental care[130] (see Exhs. CMA/KKC-1, at 32-33; DPU-8-11; DPU-8-12; DPU-8-14). Based on the above considerations, the Department finds that the cost-containment efforts implemented by NCSC are sufficient to warrant the allowance of an inflation adjustment.

If an O&M expense has been adjusted or disallowed for ratemaking purposes, so that the expense is representative of costs to be incurred in the year following new rates, the expense also is removed in its entirety from the inflation allowance. D.P.U. 09-39, at 322; D.T.E. 05-27, at 204; D.T.E. 02-24/25, at 184-185; Blackstone Gas Company, D.T.E. 01-50, at 19 (2001); D.P.U. 88-67 (Phase I) at 141; D.P.U. 87-122, at 82. Bay State has adjusted its test year NCSC expense for a variety of items because these expenses have been separately adjusted for ratemaking purposes (Exh. CMA/JTG-7, WP JTG-2, at 20 (Rev. 2)). The Company also has removed test year expenses associated with various O&M items that were adjusted during the proceedings from its residual NCSC O&M expense calculation (Exhs. CMA/JTG-2, Sch. JTG-6, at 9 (Rev. 3); CMA/JTG-7, WP JTG-2, at 20 (Rev. 2)).

---

130 The Company's benefit plans correspond to the plans offered throughout the NiSource system, including health and welfare plans (health care coverage, dental coverage, vision care, term life insurance and disability insurance), and retirement savings plans (Exh. CMA/KKC-1, at 29-30).

The Company proposed an inflation allowance of $848,129. Because the Department denied $77,009 in NCSC-related expenses, the Department adjusted the residual NCSC O&M subject to the inflation allowance. Accordingly, the Department will reduce the Company's proposed cost of service by $2,896. In light of these findings, it is unnecessary to address the arguments made by the parties related to the level of normalized NCSC charges.

f. Normalization Revisions

Companies are under an obligation to ensure that their accounting records are accurate. Boston Edison Company, D.P.U./D.T.E 97-95, at 78 (2001). Accounting errors are not uncommon, and when they have been identified, the Department has directed companies to make the appropriate corrections. Colonial Gas Company, D.T.E. 98-128, at 49, n.33 (1999); D.P.U./D.T.E. 97-95, at 78; Assabet Water Company, D.P.U. 95-92, at 5-9 (1996), Witches Brook Water Company, D.P.U. 92-226, at 14 (1993).

Bay State's first adjustment transferred $681,837 of WMS O&M costs from the NCSC adjustment to the WMS adjustment (Exh. CMA/JTG-1, at 2 (Rev. 1)). Because the Company moved these costs to the more appropriate cost category, Bay State required additional changes to other components in its NCSC schedules and workpapers (Exhs. CMA/JTG-1, at 5 (Rev. 1); CMA/JTG-4, Sch. JTG-6, at 9, 15 (Rev. 1)). The Company's second revision to its revenue requirement simply identified a data presentation issue with the NCSC incentive compensation expense that similarly affected other components of the total NCSC costs (Exh. AG-14-1).

Bay State's third revision updated 2012 NCSC costs for a regulatory filing submitted by the Company in September 2013 (Exh. CMA/JTG-1, at 8 (Rev. 2)). This data was not available for inclusion in the Company's cost of service until its September 3, 2013 revenue requirement update. The third revision also included adjustments uncovered through discovery (Exhs. CMA/JTG-1, at 8 (Rev. 2); CMA/JTG-7, WP JTG-2, at 23 (Rev. 2)). Finally, the Company's fourth update included a minor revision to ensure that a summary schedule matched the supporting workpapers (Exh. CMA/JTG-2, Sch. JTG-6, at 6 (Rev. 3)).

The Department finds the Company's updates to its revenue requirement schedules were appropriate and necessary as part of the Company's ongoing obligation to ensure that its accounting records conform to Department requirements.[131] Further, we conclude that Bay State appropriately identified, explained, and corrected discrepancies, and that the Company updated costs for the most current data available. These adjustments provide the Department and the intervenors with a clear understanding of the Company's cost of service proposal. In this regard, we note that the aforementioned updates were completed by October 16, 2013, during evidentiary hearings and while the evidentiary record was still open. As such, the Attorney General and other intervenors had sufficient opportunity to thoroughly investigate the revisions. Accordingly, we reject the Attorney General's arguments and recommendations with respect to the Company's NCSC-related revenue requirement updates.

---

131 While the Department does not maintain a threshold for the number of acceptable errors in a company's petition, we note that the Department has dismissed rate case filings by utilities that fail to comply with elementary accounting and recordkeeping practices. See, e.g., Blackstone Gas Company, D.P.U. 19579 (1978); Cape Cod Gas Company/Lowell Gas Company, D.P.U. 18571/D.P.U. 18572, at 4-5 (1976) (company introduced an entirely new direct case based upon a more recent test period and consequently rendered the evidence so incomprehensible that the Department was unable to make a determination on the cost of service). Bay State's normalization revisions do not necessitate such treatment.

5. Conclusion

Based on the above analysis, the Department finds the Company's proposed test year NCSC expenses are consistent with Department precedent, subject to our finding in Section VIII.H regarding corporate jet expenses. Excluding the Company's proposed inflation adjustment to NCSC expenses, the Company's adjustments result in a proposed net decrease to its cost of service of $523,715. Accordingly, we allow the Company's proposed adjustment of $523,715.[132]

D. Technology Drive Building Lease Expense

1. Introduction

The Company booked lease expense of $656,032 during the test year (Exhs. CMA/JTG-2, Sch. JTG-6, at 1, 6 (Rev. 5); DPU-5-9 & Att. B). The lease for the Company's headquarters located on Friberg Parkway in Westborough, Massachusetts ("Friberg") expired on June 30, 2012, and the Company's headquarters were relocated to a building on Technology Drive, also located in Westborough ("Technology Drive Building"), effective July 1, 2012[133] (Exhs. CMA/JTG-1, at 41; Exh. DPU-5-9; DPU-6-16). The annual lease payment for Technology Drive is $439,229 (Exhs. CMA/JTG-1, at 41; CMA/JTG-2, Sch. JTG-6, at 6 (Rev. 5); DPU-5-9 & Atts).

---

132 The per Order adjustment on Schedule 2 of this Order includes the removal of $1,446,958 in NCSC costs related to EP&S. Thus, the adjustment found on Schedule 2 is ($523,715) - $1,446,958 = ($1,970,673).

133 The Company states that the decision to relocate was based on an assessment of its reduced space requirements as well as its ability to negotiate a lease for Technology Drive with an estimated $1.1 million annual cost savings (Exh. DPU 6-16).

In its initial filing, the Company proposed a $216,803 credit adjustment to its lease expense to reflect the difference between the annual Technology Drive Building lease payment and the amount of lease expense booked to the test year (Exh. CMA/JTG-2, Sch. JTG-6, at 6). The Company subsequently proposed an additional credit adjustment of $95,484 to reflect the portion of the Technology Drive Building lease expense that will be charged to NCSC (Exhs. CMA/JTG-2, Sch. JTG-6, at 6 (Rev. 5); DPU-6-18).

In addition to the proposed lease expense adjustments, the Company proposes two Technology Drive Building-related credits to O&M expense. First, the Company proposes to reduce its test year expense by $135,305 to include the estimated annual electricity cost of $38,771 and the elimination of $174,076 in costs associated with water/sewage and natural gas service at the new headquarters (Exhs. CMA/JTG-2, Sch. JTG-6, at 1 (Rev. 5); DPU-6-18).[134] Second, the Company proposes to remove $69,355 in costs associated with cafeteria expenses and building maintenance that were associated with the Friberg headquarters and no longer will be incurred at the Technology Drive Building (Exhs. CMA/JTG-2, Sch. JTG-6, at 1 (Rev. 5); DPU 6-18).[135] Bay State explains that the new headquarters do not have such costs and, therefore, the Company proposes to remove these costs from the cost of service through a credit adjustment to O&M expense of $69,355 (Exh. DPU 6-18). Bay State asserts that the proposed

[134] Pursuant to the lease, the landlord is responsible for furnishing water/sewer and natural gas at the new headquarters (Exh. DPU-5-9, Att. A at 19-20). The Company includes the referenced adjustments as reductions to the Company's Utilities and Fuel Used in Company Operations expense (see Exh. CMA/JTG-2, Sch. JTG-6, at 1 (Rev. 5)).

[135] This proposed adjustment is included as a reduction to the Company's Outside Services expense (see Exh. CMA/JTG-2, Sch. JTG-6, at 1 (Rev. 5)).

adjustments to the headquarters' lease expense should be approved by the Department (Company Brief at 85). No other party addressed this issue.

2. Analysis and Findings

A company's lease expense represents an allowable cost that qualifies for inclusion in its overall cost of service. D.T.E. 03-40, at 171; D.P.U. 88-161/168, at 123-125. Known and measureable increases in rental expense based on executed lease agreements with unaffiliated landlords are recognized in cost of service as are operating costs (maintenance, property taxes, etc.) that the lessee agrees to cover as part of the agreement. D.P.U. 95-118, at 42 n.24; D.P.U. 88-67 (Phase I) at 95-97. The Department applies a standard of reasonableness for inclusion of lease expense in the cost of service. D.P.U. 89-114/90-331/91-80 (Phase I) at 96.

As noted above, the Company booked test year lease expense of $656,032 (Exhs. CMA/JTG-2, Sch. JTG-6, at 1, 6 (Rev. 5); DPU-5-9, Att. B). The Company proposes to include in the cost of service $343,745 in expenses associated with its annual lease expense for the Technology Drive Building and to reduce the test year cost of service by $312,287 ($656,032 - $343,745) (Exh. CMA/JTG-2, Sch. JTG-6, at 6 (Rev. 5). The annual lease expense of $343,745 is comprised of a negotiated annual lease amount of $439,229, less an adjustment of $95,484 to reflect the portion of the lease expense charged to NCSC (Exhs. CMA/JTG-1, at 41; CMA/JTG-2, Sch. JTG-6, at 6 (Rev. 5); DPU-6-18). The Company's annual lease expense is a fixed sum based on an executed lease agreement (Exh. DPU-5-9, Att. A at 5). Therefore, the Department finds that the proposed lease expense, including the adjustment related to NCSC's share of the lease costs, is reasonable and represents a known and measurable change to the

Company's test year lease expense. Accordingly, the Department accepts the Company's proposal to decrease the cost of service by $312,287.

Bay State also proposes two separate adjustments: (1) to reduce the test year cost of service by $135,305 to reflect the estimated annual electricity cost of $38,771 and the elimination of $174,076 in costs associated with water/sewage and natural gas service at the new headquarters; and (2) to reduce the test year cost of service by $69,355 to reflect costs related to cafeteria and various maintenance expenses that no longer will be incurred at the new headquarters (Exhs. CMA/JTG-2, Sch. JTG-6, at 1 (Rev. 5); DPU-6-18). The Company states that these expenses represent incremental costs associated with the former Friberg office that will not be incurred at the Technology Drive Building (Exh. DPU-6-18). We have reviewed the nature of these adjustments. Under the lease agreement for the Technology Drive Building, cafeteria expenses and maintenance services of the type incurred at Friberg are no longer required (Exh. DPU-6-18). Therefore, the Department finds that these adjustments represent known and measurable changes to test year cost of service.

Turning to Bay State's proposed reduction in utilities expense, the Company estimates that it will incur $38,771 in annual electricity expenses at the Technology Drive Building (Exh. DPU-6-18). Although the Department does not typically accept estimates, we have recognized well supported estimates of incremental expenses associated with significant changes in processes or facilities as necessary to avoid a severe financial impact upon the utility. D.P.U. 95-118, at 148; D.P.U. 85-270, at 153-157. While the Company fails to explain the derivation of the expected electric expense at the Technology Drive Building, Bay State's former office space at Friberg consisted of 72,929 rentable square feet, in contrast to Technology Drive

Building's rentable area of 25,837 square feet (Exh. DPU-5-9 (A), at 4). See also D.T.E. 05-27, at 225. Moreover, the Technology Drive Building was in use during the last half of the test year, and indisputably required electricity (Exh. DPU-5-9).

Taking into consideration the decrease in rentable area at the Technology Drive Building and the timing of the relocation from Friberg, the Department accepts the Company's proposed reduction in utilities expense of $135,305. This adjustment, combined with the reduction of $69,355 noted above, produce a total reduction of $204,660 ($135,305 + $69,355). Accordingly, the Department accepts the Company's proposed reduction to test year cost of service of $204,660.

E. Other Lease Expenses – New Operational Facilities

1. Introduction

In addition to the lease expenses associated with the Technology Drive Building, the Company has included in its proposed revenue requirement lease expenses associated with three new operational centers located in Taunton, Marshfield, and Easthampton, Massachusetts (Exhs. AG-1-64 (Supp.); CMA/JTG-2, Sch. JTG-6, at 1 (Rev. 5)). According to the Company, these centers will replace undersized and outdated facilities located in Taunton, Hanover, and Northampton, Massachusetts, respectively (Exhs. AG-1-64 (Supp.); AG-1-64 (2nd Supp.)).

When Bay State decided to replace its Taunton and Hanover facilities, it was unable to locate suitable rental properties in its Brockton service area. Therefore, the Company and NiSource's real estate group purchased land in Taunton and Marshfield and contracted to construct new facilities at these locations (Exh. AG-1-64, at 3 (Supp.)). On September 20, 2013, Bay State conveyed the Taunton and Marshfield properties, which at time were unfinished, to two Ohio limited liability companies, MassTaunt 81 LLC ("MassTaunt") and MassMarsh 76 LLC ("MassMarsh"), respectively (Exh. AG-1-64 (Supp) Att. B at 1-2, Att. C at 1-2). On that same date, the Company executed lease agreements with MassTaunt and MassMarsh for the respective properties (see Exh. AG-1-64 (Supp). Atts. B, C at 1). The leases for both the Taunton and Marshfield facilities provide for each company to complete construction of the respective facilities by November 15, 2013, and for a lease commencement date of January 1, 2014 (Exh. AG-1-64 (Supp.) Att. B at 2, Att. C at 2).

The Easthampton operations center is owned by an unaffiliated third party, and is leased to Bay State through a local management company (see Exh. AG-1-64 (Supp.) Att. D at 1). The lease for this space was finalized on October 1, 2013, and has a 15-year term commencing on January 1, 2014, with two, five-year renewal options (Exhs. AG-1-64, at 1 (Supp.); AG-1-64 (2nd Supp.); AG-1-64 (Supp.) Att. D at 1, 2-3). Further details regarding the three facilities are provided below.

a. Taunton Facility

The Taunton operations center consists of a 7,000 square foot building located on approximately three acres of land (Exh. AG-1-64, (Supp.) C at 1). According to Bay State, the new facility will support approximately 30 employees, including three distribution crews, representing a 300 percent increase in personnel over the capacity of the current facility in Taunton (Exh. AG-1-64, at 2 (Supp.)). The Taunton operations center is designed to: (1) provide for an increased presence in the Brockton service territory, thereby improving customer and emergency response times; and (2) serve as a material distribution depot for use in local infrastructure replacement activities (Exh. AG-1-64, at 2 (Supp.)). Under the terms of the lease, construction at the new facility was expected to be finalized by November 15, 2013 (Exh. AG-1-64 (Supp.) Att. C at 2).

The annual rent for the Taunton facility is $216,000 for 2014, and will increase by one percent on the fifth, tenth, and fifteenth anniversary of the commencement of the lease (Exhs. AG-1-64, at 4 (Supp.); AG-1-64 (Supp.) Att. C at 2). The commencement of rent payments is triggered by delivery of possession of the building to the Company (Exh. AG-1-64 (Supp.) Att. C at 2). The Company also is obligated to pay for operational expenses, such as utilities, insurance, snow removal, landscaping, and janitorial services, as well as real estate taxes (Exhs. AG-1-64, at 3-4 (Supp.); AG-1-64 (Supp.) Att. A; AG-1-64 (Supp.) Att. C at 2, 3, 5). Bay State estimates that the Taunton facility will incur $34,612 in additional operational expenses and $24,435 in real estate taxes (Exh. AG-1-64 (Supp.) Att. A). Thus, the Company anticipates a total annual rent, operational expenses, and real estate taxes of $275,046[136] (Exh. AG-1-64 (Supp.) Att. A).

Bay State intends to capitalize 22.9 percent of the annual operating costs associated with this facility, based on the percentage of capitalized employee work hours at the facility (Exhs. AG-1-64, at 3 (Supp.); AG-1-64 (Supp.) Att. A).[137] Consequently, the Company proposes to include in its cost of service $212,167 in allocated O&M expense associated with the Taunton

[136] Throughout this Order there are immaterial differences in amounts in the Company's schedules, workpapers, and other supporting documents due to the use of rounding by the Company for presentation purposes.

[137] Based on a weighted average of capitalizable labor associated with the 30 employees the Company anticipates will be housed at the Taunton facility, the proposed allocation is 77.1 percent to O&M expense and 22.9 percent to capital (Exh. AG-1-64 (Supp.) Att. A).

facility (Exh. AG-1-64 (Supp). Att. A).[138] Because the Company booked $19,073 in test year costs associated with the now decommissioned Taunton facility, the Company proposes a net increase of $193,094 to its test year cost of service (Exhs. AG-1-64, at 2 (Supp.); AG-1-64 (Supp.) Att. A).

b. Marshfield Facility

The Marshfield operations center consists of a 6,000 square foot building located on approximately 1.83 acres of land (Exh. AG-1-64, (Supp.) B at 1). The Marshfield operations center is designed to: (1) provide an emergency response staging area, particularly for the storm-vulnerable seacoast area of the Company's service territory; (2) house a core group of operating staff that can also support a larger workforce if operating circumstances, such as coastal storms, warrant a temporary expansion of the assigned workforce; and (3) serve as a material distribution depot for use in local infrastructure replacement activities (Exh. AG-1-64, at 2 (Supp.)).

Under an arrangement similar to the Taunton facility lease, the annual rent for the Marshfield facility is $216,000 for 2014, and will increase by one percent on the fifth, tenth, and fifteenth anniversary of the commencement of the lease (Exhs. AG-1-64, at 4 (Supp.); AG-1-64 (Supp.) Att. B at 2). The commencement of rent payments is triggered by delivery of possession of the building to the Company (Exh. AG-1-64 (Supp.) Att. B at 2). The Company also is obligated to pay for operational expenses, such as utilities, insurance, snow removal,

138 The apparent difference is attributable to rounding the capitalized employees hours in the Company's presentation of its schedules. The remaining $62,879 would be capitalized, but the Company does not seek to include this portion in rate base (Exh. AG-1-64 (Supp.) Att. A n.2).

landscaping, and janitorial services, as well as real estate taxes (Exhs. AG-1-64, at 3 (Supp.); AG-1-64 (Supp.) Att. A; AG-1-64 (Supp.) Att. C at 2, 3, 5). Bay State estimates that the Marshfield facility will incur $29,696 in operational expenses and $57,338 in real estate taxes (Exh. AG-1-64 (Supp.) Att. A). Thus, the Company anticipates a total annual rent, operational expenses, and real estate taxes of $303,023 (Exh. AG-1-64 (Supp.) Att. A).

Bay State intends to capitalize 25.3 percent of the annual operating costs associated with this facility, based on the percentage of capitalized employee work hours at the facility (Exhs. AG-1-64, at 3 (Supp.); AG-1-64 (Supp.) Att. A).[139] Consequently, the Company proposes to include in its cost of service $226,325 in allocated operational expense associated with the Marshfield facility (Exh. AG-1-64 (Supp). Att. A).[140] Because the Company booked $31,798 in test year expenses associated with the now-decommissioned Hanover facility, the Company proposes a net increase of $194,527 to its test year cost of service (Exhs. AG-1-64, at 2 (Supp.); AG-1-64 (Supp.) Att. A).

c. Easthampton Facility

The Easthampton operations center consists of a 8,400 square foot building (Exh. AG-1-64, (Supp.) D at 1). Bay State explains that its current Northampton operating center has insufficient space to meet its recently enacted safe driving/parking requirements, and that its close proximity to the Company's adjacent propane facility precludes any expansion of

139 Based on a weighted average of capitalizable labor associated with the 15 employees the Company anticipates will be housed at the Marshfield facility, the proposed allocation is 74.7 percent to O&M expense and 25.3 percent to capital (Exh. AG-1-64 (Supp.) Att. A).

140 The allocated portion of capital amounts to $76,698, but the Company does not seek to include this portion in rate base (Exh. AG-1-64 (Supp.) Att. A n.2).

the facility's footprint (Exh. AG-1-64, at 2 (Supp.)). Consequently, Bay State entered into a lease for a new facility in Easthampton that provides the space necessary to accommodate the Company's safe driving/parking needs (Exhs. AG-1-64, at 2 (Supp.); AG-1-64 (2nd Supp.)). Bay State notes that the new facility will enable the Company to better stage its construction staff who will support infrastructure replacement activities in the Northampton area (Exhs. AG-1-64, at 2 (Supp.); AG-1-64 (2nd Supp.)).[141]

The annual rent for the Easthampton facility is $110,880 for 2014, and is subject to fixed increases each year for the duration of the lease term (Exh. AG-1-64 (Supp.) Att. D at 2). The Company also is obligated to pay operational expenses, such as utilities, insurance, snow removal, landscaping, and janitorial services, as well as real estate taxes (Exhs. AG-1-64, at 3-4 (Supp.); AG-1-64 (Supp.) Att. A; AG-1-64 (Supp.) Att. D at 4). Bay State estimates that the Easthampton facility will incur $75,730 in operational expenses (Exh. AG-1-64 (Supp.) Att. A).[142] The Company is responsible for paying the real estate taxes associated with the property (Exhs. AG-1-64, at 3 (Supp.); AG-1-64 (Supp.) Att. D at 4). Thus, the Company anticipates a total annual rent and O&M expense of $186,610 (Exh. AG-1-64 (Supp.) Att. A).

Bay State intends to capitalize 35.7 percent of the annual operating costs associated with this facility, based upon the percentage of capitalized employee work hours at the facility

---

[141] Because the site of the retired Northampton facilities will continue to be used for a liquefied natural gas facility, the Company did not eliminate depreciation or real estate taxes at this location (see Exh. AG-1-64 (Supp.) Att. A n.1).

[142] The Company did not provide an estimate of real estate taxes for 2014 (Exh. AG-1-64 (Supp.) Att. A).

(Exhs. AG-1-64, at 3 (Supp.); AG-1-64 (Supp.) Att. A).[143] Consequently, the Company proposes to include in its cost of service $119,972 in allocated O&M expense associated with the Easthampton facility (Exh. AG-1-64 (Supp). Att. A).[144] Because the Company booked $7,505 in test year expenses associated with the now decommissioned Northampton facility, the Company proposes a net increase of $112,467 to its test year cost of service (Exhs. AG-1-64, at 2 (Supp.); AG-1-64 (Supp.) Att. A).

2. Position of the Company

Bay State argues that the Taunton and Marshfield leases were necessary in order to provide facilities for emergency response staging, and that the Easthampton lease was necessary in order to provide facilities for infrastructure replacement staging (Company Brief at 85, citing Exhs. AG-1-64 (Supp.); AG-1-64 (2nd Supp.)). The Company maintains that it is appropriate to include the total O&M expenses associated with the three new leases, adjusted for expenses, real estate taxes, and inflation, in its cost of service (Company Brief at 85, citing Exhs. AG-1-64 (Supp.) Att. A; CMA/JTG-2, Sch. JTG-6, at 1 (Rev. 5)). No other party addressed this issue.

3. Analysis and Findings

A company's lease expense represents an allowable cost that qualifies for inclusion in its overall cost of service. D.T.E. 03-40, at 171; D.P.U. 88-161/168, at 123-125. The standard for

---

143 Based on a weighted average of capitalizable labor associated with the 15 employees the Company anticipates will be housed at the Easthampton facility, the proposed allocation is 64.3 percent to O&M expense and 35.7 percent to capital (Exh. AG-1-64 (Supp.) Att. A).

144 The allocated portion of capital amounts to $66,638, but the Company does not seek to include this portion in rate base (Exh. AG-1-64 (Supp.) Att. A n.2).

inclusion of lease expense is one of reasonableness. D.P.U. 89-114/90-331/91-80 (Phase I) at 96. Known and measurable increases in rental expense based on executed lease agreements with unaffiliated landlords are recognized in cost of service as are associated operating costs (e.g., maintenance, property taxes) that the lessee agrees to cover as part of the agreement. D.P.U. 95-118, at 42 n.24; D.P.U. 88-67 (Phase I) at 95-97.

Bay State's lease agreements with MassTaunt for the Taunton facility, and with MassMarsh for the Marshfield facility warrant some discussion. MassTaunt and MassMarsh are both Ohio-based special purpose corporations, sharing common offices, that acquired properties, which at the time were unfinished, from Bay State and entered into leaseback arrangements with the Company (Exh. AG-1-64 (Supp) Att. B at 1-2, Att. C at 1-2). In D.T.E. 05-27, at 149, the Company was directed to prepare a life-of-the-lease analysis of the comparative costs and benefits associated with a sale/leaseback of utility assets for all future sale/leaseback arrangements. While the Company provided an analysis of the aggregate expenses expected to be incurred over the terms of the leases (see Exh. AG-1-64 (Supp.) Att. A at 2-3), the Company provided no life-of-the-lease analysis in this proceeding, or any evidence on the Company's decision to enter into sale/leaseback arrangements with MassTaunt and MassMarsh. Moreover, the Department is concerned that these special-purpose corporations are affiliates of Bay State's parent company, NiSource.[145]

Sale/leaseback agreements of the type entered into by Bay State are generally entered into for the purpose of reducing cost of service. See D.T.E. 05-27, at 148-149. Thus, it is

145 MassTaunt and MassMarsh appear to share a common office space with Columbia Gas of Ohio, an affiliate of NiSource (see Exh. AG-1-64 (Supp.) Atts. B, C at 1; http://thepaguracompany.com/8100-corporate-centers).

appropriate to examine such arrangements to determine whether they actually benefit customers. Additionally, the Department has long recognized that lease agreements with affiliated companies warrant a greater level of scrutiny than similar agreements with unaffiliated third parties. See D.P.U. 95-118, at 41-46 (1996). Accordingly, the Department directs all gas and electric companies to provide, as part of their initial testimony in future rate proceedings, information regarding any sale/leaseback arrangements entered into by the company. This information shall identify the property at issue, the net book value of such property at the time of the sale/leaseback, the terms of the sale/leaseback agreement, any cost-benefit analysis performed as part of the decision to enter into the sale/leaseback arrangement, and information about the purchasing/leasing party, including whether the purchaser/lessor is an affiliate of the company.[146] Consistent with this directive, the Department directs Bay State, in its next rate case, to provide specific information that would enable the Department to compare the Company's expected lease expense over the life of the Taunton and Marshfield leases with the costs that would otherwise be incurred by the Company if it were to own the Taunton and Marshfield operations centers, using a return on rate base analysis. The Company should demonstrate that the lease expense over the life of the leases does not exceed the long-run avoided cost of owning and operating the Taunton and Marshfield operations centers. D.T.E. 05-27, at 149; D.P.U. 88-135/151, at 86.[147] As part of this requirement, the Company

146 A sale/leaseback arrangement with an affiliate may require specific Department approval under G.L. c. 164, § 94B.

147 If the results of the analysis demonstrate that the lease expense over the life of the leases exceeds the long-run avoided cost of owning and operating the Taunton and Marshfield operations centers, the Department may limit the lease expense to an amount equal to the

shall provide a full description of MassTaunt and MassMarsh, including its purpose, formation, ownership, and any affiliation with either NiSource or any other company within the NiSource system, as well as any contemporaneous analysis that was performed by the Company as part of its decision to enter into the sale/leaseback agreements with MassMarsh and MassTaunt. The Company is further directed to prepare a life-of-the-lease analysis of the comparative costs and benefits associated with a sale/leaseback of utility assets for all future sale/leaseback arrangements, and to provide all such analyses as part of the Company's direct testimony in all future rate cases.

Turning to the actual lease agreements themselves, the leases for the new facilities in Taunton, Marshfield and Easthampton were finalized in September and October of 2013 (Exh. AG-1-64 (Supp.) Atts. A-D). Given the occupancy date of January 1, 2014, specified by each lease, the Department is satisfied that the facilities at these locations are currently in use by the Company. The Department finds that the leases for the Taunton, Marshfield, and Easthampton facilities represent known and measurable changes to test year cost of service. D.P.U. 09-39, at 155; D.P.U. 95-118, at 42 n.24; D.P.U. 89-114/90-331/91-80 (Phase I) at 96.

The current annual rental expenses for the Taunton, Marshfield and Easthampton facilities are \$216,000, \$216,000, and \$110,880, respectively (Exhs. AG-1-64 (Supp.); AG-1-64 (Supp.) Atts. A-D). The Company further anticipates that the associated expenses (i.e., operating expenses, utilities, janitorial services, and real estate taxes) will be \$59,046 for the Taunton facility, \$87,023 for the Marshfield facility, and \$75,730 for the Easthampton facility, for a total associated expense of \$221,799 (see Exh. AG-1-64 (Supp.) Att. A at 1). The Company has also

annual revenue requirement associated with ownership of those facilities. D.T.E. 05-27, at 149 n.97.

proposed to reduce the total facilities lease and operating expense, inclusive of property taxes, of $764,679 by $206,215 for capitalized expenses, based on the expected percentage of capitalized payroll of employees to be housed at these locations (Exh. AG-1-64 (Supp.) Att. A at 1-5).

The Department typically does not allow proposed adjustments based on projections or estimates. D.T.E. 98-51, at 62, citing D.P.U. 92-210, at 83; Dedham Water Company, D.P.U. 849, at 32-34 (1982). However, we recognize that the addition of three new facilities requires some provision for associated O&M expense that will be incurred in the future. See, e.g., D.P.U. 12-86, at 146-147; D.P.U. 95-118, at 147; D.P.U. 84-32, at 17; D.P.U. 88-172, at 15-19.

The Department has examined the underlying analysis supporting the $558,464 in estimated O&M costs and $206,215 in capitalized costs associated with these three facilities (Exh. AG-1-64 (Supp.) Att. A). While these additional expenses cannot be known with certainty until they are actually incurred, Bay State has provided credible evidence supporting their aggregate inclusion in the Company's cost of service. See D.P.U. 12-25, at 252; D.P.U. 95-118, at 148. Therefore, the Department accepts the Company's proposed aggregate O&M expense of $558,464 for these three facilities. D.P.U. 12-86, at 146-147; D.P.U. 95-118, at 147.

The acquisition of these properties obviates the need for Bay State to maintain its former Taunton and Hanover facilities, and changes the Company's use of its Northampton facility. In recognition of these structural changes to the Company's operations, the Department will exclude the test year cost of service associated with these three facilities. D.P.U. 09-39, at 156; D.P.U. 89-114/90-331/91-80 (Phase I) at 153. In doing so, the Department notes that the test year expense associated with the former Taunton facility of $14,527 reports only ten months of rent expense totaling $10,000, nine months of electric expense totaling $1,866, and seven months of gas expense totaling $2,661 (Exh. AG-1-64 (Supp.) A at 4). There is no evidence that this facility had been closed prior to the completion of the new Taunton operations center. In order to recognize a full year of operations at the decommissioned Taunton location, the Department will increase the Company's reported test year expense rent expense associated with the Taunton facility by $2,000, and we will increase the Company's reported test year electric and gas expense by $622, and $1,901, respectively, for a total of $4,523.[148] These two adjustments produce a revised lease and operating expense for the decommissioned facilities of $62,899.[149]

Based on the foregoing analysis, the Department has derived a total lease and operating expense for the Taunton, Marshfield, and Easthampton facilities of $764,679, of which $558,466 will be treated as O&M expense and the remaining $206,215 of which will be capitalized.[150] We have also found that the test year lease and operating expense associated with the former Taunton, Hanover, and Easthampton facilities is $62,899, resulting in a net increase to test year

---

148 These calculations are based on the average monthly expense derived from the data provided in Exhibit AG-1-64 (Supp.) A at 4 of: (1) $1,000 for rent expense, multiplied by two months; (2) $207.33 for electric expense, multiplied by three months; and (3) $380.14 for gas expense, multiplied by five months. The sum of these calculations is $4,523.

149 This calculation is based on the cost of service for each of the Company's decommissioned facilities (Hanover, Taunton, and Northampton) plus the Department's aforementioned increase in lease and operating expense for the decommissioned Taunton facility, represented by ($31,798 + $19,073 + 7,505 + $4,523) (see Exh. AG-1-64 (Supp.) A at 1).

150 As noted above, the Company has not proposed to include the capitalized expenses in rate base.

cost of service of $495,565. Accordingly, we will reduce the Company's proposed cost of service by $4,523.

F. Depreciation Expense

1. Introduction

During the test year, the Company booked $33,616,303 in depreciation expense (Exh. CMA/JTG-2, Schs. JTG-1 (Rev. 5), JTG-7 (Rev. 5)). The Company applies a half-month convention in calculating depreciation expense, whereby one-half month of depreciation accruals are recorded in the first month that a plant item is placed into service, using the accrual rates approved in D.P.U. 12-25 (Tr. 6, at 697).[151]

Consistent with its proposal to include rate year rate base, Bay State calculated the rate year level of depreciation expense by annualizing the adjusted actual depreciation expense recorded for the month of June 2013 that related to depreciable plant in service as of December 31, 2012, plus non-revenue producing capital additions through June 30, 2013 (see Exhs. CMA/JTG-1, at 57-58; CMA/JTG-2, Sch. JTG-7 (Rev. 5)). Bay State recorded depreciation expense of $2,670,314 for the month ending June 30, 2013 (Exhs. CMA/JTG-2, Schs. JTG-7 (Rev. 5); JTG-21, at 1, 7 (Rev. 5)). This amount annualized for twelve months yields a proposed annualized depreciation amount of $32,043,763 (Exh. CMA/JTG-2, at Sch. 7 (Rev. 5)). Bay State then decreases its annualized expense by $1,655 to recognize the

---

151 In D.P.U. 12-25, the Company provided a depreciation study, and the Department approved most of the proposed accrual rates with revisions to four accounts. See D.P.U. 12-25, at 273-276, 314-323. The Company reviewed the accrual rates approved in D.P.U. 12-25 as well as the nature of plant activity since the last rate case and determined that a new study was not necessary for the instant case (Exhs. CMA/JTG-1, at 57; CMA/JTG-6).

disallowance of depreciation related to the Palmer/Mount Dumpling Road project, which was excluded from rate base in D.T.E. 05-27, at 79-80 (Exhs. CMA/JTG-1, at 57; CMA/JTG-2, Schs. JTG-7 (Rev. 5), JTG-19 (Rev. 5); Tr. 5, at 594-595).[152] This adjustment reduces the Company's proposed annualized depreciation expense to $32,042,109 (Exh. CMA/JTG-2, Schs. JTG-1 (Rev. 5), JTG-7 (Rev. 5)). The proposed depreciation expense of $32,042,109 represents a decrease of $1,574,194 over the test year level (Exh. CMA/JTG-2, Schs. JTG-1 (Rev. 5), JTG-7 (Rev. 5)). The Company attributes the decrease primarily to the impact of the sale of the EP&S business (Exhs. CMA/JTG-1, at 57; CMA/JTG-4, at 1).

Bay State provides that in calculating its depreciation expense for the rate year rate base, it applied the accrual rates approved in D.P.U. 12-25 to the various month end balances of depreciable plant (Exhs. CMA/JTG-1, at 58; CMA/JTG-2, Sch. JTG-21). The Company initially estimated plant additions and retirements for the months of January through June 2013, and applied the approved accrual rates to these estimated balances as well (Exhs. CMA/JTG-1, at 58; CMA/JTG-2, Sch. JTG-21, at 2-7; Tr. 6, at 696). Bay State then updated these estimates with actual month-end balances as the information became available during the course of this proceeding (see Exhs. CMA/JTG-1, at 9 (Rev. 1); CMA/JTG-1, at 6 (Rev. 2); CMA/JTG-2, Sch. JTG-21, at 2-7 (Revs. 1-5)).

---

152 Bay State sought to include the Palmer/Mount Dumpling Road project in the Company's rate base in D.T.E. 05-27. The Department found that the costs associated with this project were imprudently incurred and disallowed the project from rate base. D.T.E. 05-27, at 79-80. Further, the Department made adjustments to the Company's depreciation reserve and deferred income tax reserve. D.T.E. 05-27, at 80 n.58.

2. Positions of the Parties

a. Attorney General

The Attorney General argues that the Department should reject the Company's proposal to adjust the test year rate base to include non-revenue plant additions through June 2013, and, therefore, that the Department should eliminate the expenses related to these plant additions (Attorney General Brief at 56-57, citing Exh. AG-DJE-1, at 26). The Attorney General asserts that these expenses include an increase in depreciation expense of $411,662 (Attorney General Brief at 56).

b. Company

As noted above in Section VI.B.3.b, Bay State argues that the Department should include in the Company's rate base certain post-test year non-revenue producing capital additions. The Company notes that its rate base proposal includes the impact of depreciation on these capital additions (Company Brief at 53-54). Bay State asserts that the Department should approve the Company's calculation of depreciation expense (Company Brief at 137).

3. Analysis and Findings

Depreciation expense allows a company to recover its capital investments in a timely and equitable fashion over the service lives of the investments. D.T.E. 98-51, at 75; D.P.U. 96-50 (Phase I) at 104; Milford Water Company, D.P.U. 84-135, at 23 (1985); D.P.U. 1350, at 97. The purpose of a depreciation study is to develop accrual rates that are then applied to plant balances. In Bay State's last rate case, adjudicated just over a year ago and based on a 2011 test year, the Department reviewed the Company's depreciation study and, as noted above, approved most of the Company's proposed account-specific accrual rates with several revisions. See D.P.U. 12-25, at 305-323. A company is not prohibited from applying the approved accrual rates developed from a plant balance as of a specific date to those plant balances in service on a different date, provided there are no significant changes in plant composition in the intervening period. D.P.U. 08-35, at 145; D.P.U. 92-250, at 70.

In the instant case, the Company applied the account-specific accrual rates approved in the last rate case to its (i) 2012 test-year end depreciable plant and (ii) plant balances representing the first six months of 2013 (Exh. CMA/JTG-1, at 58; CMA/JTG-2, Schs. JTG-20 (Rev. 5), JTG-21, at 2-7 (Rev. 5)). We find that there have been no significant changes in plant composition between the time that the accrual rates were approved and June 30, 2013 (Exhs. CMA/JTG-6; CMA/JTG-2, Schs. JTG-20, JTG-21, at 7). Therefore, we find it appropriate in this case for Bay State to apply the account-specific accrual rates approved in D.P.U. 12-25. However, based on our findings in Section VI.B.4 above concerning post-test year rate base additions, we conclude that Bay State's proposed depreciation expense requires modification.

Specifically, we find that the Company is entitled to recover depreciation for plant in service at the end of the test year at previously approved accrual rates. The Company is not entitled to recover depreciation for post-test year non-revenue producing capital additions. As such, the Department will base the Company's depreciation expense on its December 31, 2012 plant balances and the previously approved accrual rates (see Exhs. CMA/JTG-2, Sch. JTG-21, at 2 (Rev. 5)). Application of the accrual rates approved in D.P.U. 12-25 to the Company's depreciable plant balances as of December 31, 2012 results in a monthly depreciation accrual of $2,640,546 (see Exh. CMA/JTG-2, Sch. JTG-21, at 2 (Rev. 5)). This monthly depreciation accrual is equivalent to an annual depreciation accrual of $31,686,554 (i.e., $2,640,546 x 12). The Department further adjusts this amount to remove $1,655 in disallowed depreciation associated with the Palmer/Mount Dumpling Road project (Exh. CMA/JTG-2, Schs. JTG-7 (Rev. 5); JTG-19 (Rev. 5)). See D.T.E. 05-25, at 79-80. Thus, the total depreciation expense approved for the Company is $31,684,899, which represents a decrease of $1,931,404 over the test year expense level.

Based on this analysis, the Department finds that the Company's annual depreciation expense is $31,684,899. Accordingly, we reduce the Company's proposed depreciation expense by $357,210 ($32,042,109 - $31,684,899). (Exh. CMA/JTG-2, Schs. JTG-1 (Rev. 5), JTG-7 (Rev. 5)).

G. Amortization Expense for Utility Plant

1. Introduction

During the test year, Bay State booked $12,426,761 in amortization expense (Exh. CMA/JTG-2, Sch. JTG-8 (Rev. 5)).[153] Consistent with its proposal to include rate year rate base, Bay State calculated the rate year level of amortization expense by annualizing the adjusted actual amortization expense recorded for the month of June 2013 related to each of its amortizable capital expenditures, including the new information systems (i.e., NiFit and WMS), and excluding amortization of goodwill (Exhs. CMA/JTG-1, at 30, 59; CMA/JTG-2, Schs. JTG-8 (Rev. 5), JTG-22, at 1, 3 (Rev. 5); JTG-24 (Rev. 5)). Bay State recorded $245,065

---

153 This amount includes $10,989,478 in amortization of goodwill recorded on Bay State's books of account associated with the Company's acquisition by NiSource in 1999 (Exh. AG 1-21, Att. (CMA)). The Company has excluded this amortization from its proposed amortization expense (compare Exh. CMA/JTG-2, Sch. JTG-24 with Exh. AG-1-21, Att. (CMA)).

in amortization expense for the month ending June 30, 2013 (Exhs. CMA/JTG-2, Schs. JTG-8 (Rev. 5), JTG-22, at 1, 3 (Rev. 5); JTG-24 (Rev. 5)). This amount annualized over twelve months yields a proposed annualized amortization expense of $2,940,784 (Exh. CMA/JTG-2, Schs. JTG-1 (Rev. 5); JTG-5 (Rev. 5); JTG-8 (Rev. 5); JTG-25, at 1, 3 (Rev. 5)). The proposed annualized amount of $2,940,784 represents a reduction of $9,485,977 in Bay State's test year amortization expense, which the Company attributes primarily to the removal from the revenue requirement of amortization expense related to goodwill (Exhs. CMA/JTG-1, at 59; CMA/JTG-2, Schs. JTG-1 (Rev. 5), JTG-5 (Rev. 5), JTG-8 (Rev. 5); JTG-18 (Rev. 5)).

2. Positions of the Parties

a. Attorney General

The Attorney General argues that the Department should reject the Company's proposal to adjust the test year rate base to include non-revenue plant additions through June 2013, and, therefore, that the Department should eliminate the expenses related to these plant additions (Attorney General Brief at 56-57, citing Exh. AG-DJE-1, at 26). The Attorney General asserts that these expenses include an increase in amortization expense of $1,006,804 (Attorney General Brief at 56).

b. Company

As noted above in Section VI.B.3.b, Bay State argues that the Department should include in the Company's rate base certain post-test year non-revenue producing capital additions. The Company notes that its rate base proposal includes the impact of amortization on these capital additions (Company Brief at 53-54). Bay State asserts that the Department should approve the Company's calculation of amortization expense (Company Brief at 137).

3. Analysis and Findings

The Company's proposed amortization expense relates to organization costs and information technology investments (Exh. CMA/JTG-2, Sch. JTG-24 (Rev. 5)). Organization costs are eligible for inclusion in rate base, provided they are directly related to the company or any corporate predecessors. D.P.U. 92-111, at 68; Glacial Lake Charles Aquifer Water Company, D.P.U. 88-197, at 7-9 (1989). The Department also has found that information technology investments are eligible for inclusion in rate base, upon a demonstration that such costs satisfy the Department's prudent used and useful standard. D.T.E. 05-27, at 87; D.T.E. 03-40, at 82; D.P.U. 93-60, at 24-25. Because these items tend to be of an intangible nature, these costs are not recovered through depreciation rates, but rather by amortizing them over an appropriate period of time. For example, information technology investments are amortized over a period of time that strikes a balance between the need to continue improvements in service technology and the need to maintain intergenerational equity, which may include consideration of the purpose of the particular application and a goal of consistency among and between similar applications. Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25, at 153 (2002); Boston Gas Company, D.P.U. 93-60-D at 4 (1994). The Department will adjust test year amortization expense levels for known and measurable changes. D.T.E. 03-40, at 299-301. Further, the Department excludes from cost of service amortization of goodwill associated with acquisition premiums, consistent with its exclusion from capitalization. See The Berkshire Gas Company, D.T.E. 03-89, at 21 (2004).

Based on our findings in Section VI.B.4 above concerning post-test year rate base additions, we conclude that Bay State's proposed amortization expense requires modification. Specifically, we find that the Company is entitled to recover amortization expense for the test year at previously approved initial lives. The Company is not permitted to recover amortization expense associated with post-test year non-revenue producing capital additions, with the exception of the amortization expense directly associated with the NiFit project.[154] The Department also notes that a number of the Company's amortizations were fully expired by the end of 2012 and into 2013 (i.e., Organization Charges Lawrence, Work Force Management, CIS Enhancement, and Multi Jurisdictional Unbundling) (Exh. CMA/JTG-2, Sch. JTG-24 (Rev. 5)). Finally, the Department notes that the Company is using amortizations that vary significantly by month for five software programs (i.e., Call Center VOIP, Power Plant Upgrade, Customer Relationship Management Phase II, Mobile Web Phase 2 and GIS Transition Milestone) (Exh. CMA/JTG-2, Sch. JTG-24 (Rev. 5)).

The Department has reduced the Company's amortization expense by $146,476, resulting in a new amortization expense of $2,794,308. First, the Department recalculated the Company's amortizable plant balances for purposes of setting rates to include plant balances as of December 31, 2012 of $15,404,365 and the NiFit capital investment of $8,370,662 (Exh. CMA/JTG-2, Sch. JTG-24 (Rev. 5)) (see Section VI.B.4.d.iii above). This recalculation produces an amortizable plant balance, adjusted for the inclusion of the post-test year NiFit project, of $23,775,027. Next, the Department applied the respective approved amortization rates to these plant balances to derive a monthly amortization expense. In doing so, the

154 Amortization of implementation costs for the NiFit project is addressed in Section VIII.L.

Department excluded those amortization rates associated with fully amortized plant as described above for Account 301 (Organization Charges Lawrence) and Account 303 (Work Force Management, CIS Enhancement, and Multi Jurisdictional Unbundling) (see Exh. CMA/JTG-2, Sch. JTG-24 Rev. 5)). The Department also applied straight-line amortization to those software balances where the Company proposed variable monthly amortizations (Call Center VOIP, Power Plant Upgrade, Customer Relationship Management Phase II, Mobile Web Phase 2 and GIS Transition Milestone) (see Exh. CMA/JTG-2, Sch. JTG-24 (Rev. 5)).

Consistent with the inclusion of the NiFit project in rate base, the Department will include in the Company's cost of service the amortization expense associated with this investment. Bay State proposed, and the Department accepted, an initial life of 120 months for the NiFit project, which results in a monthly amortization amount of $69,756 (Exh. CMA/JTG-2, Sch. JTG-24 (Rev. 5); see Section VI.B.4.e above).[155] When the NiFit project amortization is included in the above amortization expense, it yields a total annual amortization expense of $2,794,308 (see Exh. CMA/JTG-2, Sch. JTG-24 (Rev. 5)).

As noted above, the Company booked $12,426,761 in amortization expense and proposed to reduce this amount by $9,485,977 for an adjusted amortization expense of $2,940,784 (Exh. CMA/JTG-2, Schs. JTG-1 (Rev. 5), JTG-5 (Rev. 5), JTG-8 (Rev. 5)). Accordingly, having found that the proper level of amortization expense is $2,794,308, we will further reduce the Company's proposed cost of service by $146,476.

---

155 The amortization amount associated with the NiFit project is $8,370,662, and the annual amortization is $69,756 ($8,370,662÷ 120 months) (Exh. CMA/JTG-2, Sch. JTG-24 (Rev. 5)).

H. NiSource Corporate Jet Expense

1. Introduction

NCSC leases two jet airplanes, a Hawker 800XP ("Hawker") and a Cessna Model 680 Sovereign ("Cessna"), that are used to transport employees of NiSource's subsidiaries, including those of Bay State, for various business purposes throughout NiSource's service territory (Exh. AG-1-54; Tr. 1, at 42).[156] NCSC also charters flights on other aircraft for use in transporting employees of NiSource's subsidiaries, including those of Bay State (Exh. AG-1-54).

During the test year, NCSC billed Bay State a total of $432,627 for air transportation expenses and the use of NCSC's corporate aircraft, representing both direct billings and allocations to the Company (see Exh. DPU-4-26, Atts. A through J at 2). Of these amounts, NCSC's billings to Bay State included $133,349 in aircraft leasing costs and $25,759 in charter flight costs (Exh. DPU-12-5).[157]

2. Positions of the Parties

a. Attorney General

The Attorney General argues that the Company has failed to make economic, least-cost travel choices, and now seeks to "double down" by including a second jet in its cost of service (Attorney General Brief at 91). In support of her position, the Attorney General contends that during the test year, Bay State included $180,559 for leasing and chartering executive jets for its

156 In addition to these aircraft, NCSC owns three patrol airplanes and two helicopters that are used to monitor various pipeline and transmission assets in the Midwest; the associated costs are borne directly by NCSC and NIPSCo, and not allocated to Bay State (Exh. AG-1-54).

157 NCSC's total test year aircraft lease expenses were $1,571,795, with total test year charter expenses of $353,270 (Exh. DPU-12-5).

officers, including $146,253 in leases that represents a 190 percent increase over the Company's lease expense in the previous year (Attorney General Brief at 91, citing Exh. AG-1-54; D.P.U. 12-25, at 121).[158] The Attorney General contrasts this increase with the fact that the number of officers at the Company has not doubled since 2011, the test year used in D.P.U. 12-25 (Attorney General Brief at 91).

The Attorney General maintains that while Bay State's officers may prefer to be comfortable in their travels, the Company has "clearly gone overboard" in providing corporate jets to meet corporate travel needs (Attorney General Brief at 91-92). The Attorney General points out that because Bay State's service area is well served by Boston's Logan Airport, the costs associated with these jets are essentially for the benefit of the Company's other NiSource affiliates (Attorney General Reply Brief at 60). Moreover, the Attorney General maintains that the Company's claims that the increase in test year lease expense should be offset by the decrease in test year charter expense ignores the fact that the acquisition of the new aircraft leases will result in additional maintenance, insurance, and taxes that would not be incurred for travel as either commercial airline passengers or under a charter arrangement (Attorney General Reply Brief at 60-61).

The Attorney General maintains that while NiSource's shareholders may choose whether to provide executives with this form of travel benefit, the associated burden should fall upon the shareholders themselves, and not the Company's customers (Attorney General Brief at 91). The Attorney General asserts that a utility's failure to make economic and least cost choices in

---

158 The Attorney General argues that while Bay State revised the test year expense amounts provided in Exhibit AG-1-54 to those in Exhibit DPU-12-5, the Company failed to update its original response in Exhibit AG-1-54, thus producing two different expense levels in the record (Attorney General Reply Brief at 60 n.15).

providing service would not be tolerated in the competitive market place, and likewise should not be tolerated in determining the rates for monopoly services (Attorney General Brief at 92).

b. Company

The Company contends that corporate jet expenses are valid business expenses associated with providing services to Bay State customers, and have been approved in past rate cases as reasonable (Company Brief at 119, citing D.P.U. 12-25, at 263-264; Company Reply Brief at 28-29). The Company maintains that private and chartered aircraft are not luxuries, but provide an effective and efficient way to transport employees of a large multi-state enterprise, including travel to destinations that are not considered airport hubs (Company Brief at 107, citing Exh. AG-1-54; Company Reply Brief at 28).

Further, Bay State maintains that the Attorney General's calculations are based on inaccurate data. According to the Company, the actual aircraft lease and charter expense is $159,108, not $180,559 (Company Brief at 107-108, citing Exh. DPU-12-5). Moreover, the Company maintains that while its total lease and charter expenses increased by 39 percent between 2011 and 2012, charter expenses actually decreased by 60 percent, or $38,248, over that same period (Company Brief at 108, citing D.P.U. 12-25, at 262; Exh. DPU-12-5). Bay State further claims that the Attorney General has cited to no record evidence that NiSource owns and/or leases two aircraft (Company Brief at 108). The Company concludes that the Attorney General offers no new evidence to justify the exclusion of these expenses from cost of service, and has thus failed to rebut the Company's own evidence and reliance on precedent to justify the inclusion of the expenses in cost of service (Company Brief at 108).

3. Analysis and Findings

The Department recognizes that out-of-state travel for business meetings that directly or indirectly affect Bay State's operations can be considered to have been made for the benefit of the Company's customers, and thus reasonable expenses associated with such travel are allowable for ratemaking purposes.[159] D.P.U. 12-25, at 263; D.T.E. 05-27, at 233; D.P.U. 92-111, at 154.[160] The Department has found that the use of lease and charter jets provide a cost-effective means of travelling throughout NiSource's multi-state operating territory. D.P.U. 12-25, at 263; D.T.E. 05-27, at 232. Therefore, it is reasonable to allocate some aircraft lease and charter expenses to Bay State.

In the instant case, NCSC relies on two leased aircraft and other private aircraft charters to transport Company personnel (i.e., officers and other employees) conducting Company-related business (Exhs. AG-1-54; DPU-12-5). During the test year, Bay State was allocated \$133,349 in aircraft lease costs and \$25,759 in charter aircraft costs, for a total of \$159,108 (Exh. DPU-12-5). In contrast, during 2011, the test year used in Bay State's previous rate case, the Company was allocated \$50,364 in aircraft lease costs and \$64,007 in charter aircraft costs, for a total of \$114,371. D.P.U 12-25, at 259 n.160. The total test year expense thus represents a 165 percent increase in aircraft lease expense alone, and a 39 percent increase over the total aircraft lease and charter expenditures, booked in 2011. The reason for the increase in aircraft lease expense is the

---

159 While one NiSource officer's compensation package includes air travel for commuting to his office, none of his compensation expenses are allocated to Bay State (Exhs. AG-1-2(4) 2013 at 43; AG-1-38, Att. at 2; Tr. 9, at 845).

160 The Department has excluded from cost of service vehicles and vehicle-related expenses when use of those vehicles was found to be unreasonable. Fall River Gas Company, D.P.U. 750, at 15 (1982); Lowell Gas Company, D.P.U. 18571/18572, at 12-13 (1976).

addition of a Cessna with a total test year lease expense of $909,290, of which $77,009 was allocated to the Company (Exhs. AG-1-54; AG-30-6).[161] While Bay State has demonstrated the propriety of leased aircraft and charter flight expenses in its cost of service, the Company has failed to justify the addition of a second plane to NCSC's air fleet, or the allocation of costs associated with this second aircraft.

Based on the foregoing analysis, the Department finds that the Company has failed to substantiate the need for an additional corporate jet. Therefore, the Department removes the lease expense associated with the Cessna from Bay State's proposed cost of service. Accordingly, the Department will reduce the Company's leased aircraft expense by $77,009.

I. Rate Case Expense

1. Introduction

Initially, Bay State estimated that it would incur $1,344,083 in rate case expense (Exh. CMA/JTG-2, Sch. JTG-6, at 2). Bay State's proposed rate case expense includes expert services related to: (1) a labor and benefits consultant; (2) legal services provider; (3) a review of depreciation issues;[162] and (4) miscellaneous services including photocopying, couriers, newspaper publication, and transcripts (Exh. CMA/JTG-2, Sch. JTG-6, at 2). Based on its final invoices and projected costs to complete the compliance filing,[163] Bay State proposes a final rate

161 We note that in its last rate case, the Company reported that NCSC leased only one corporate jet – the Hawker 800XP (see D.P.U. 12-25, at 259, citing Exh. AG-1-54 (Rev.)).

162 The Company ultimately did not incur any costs related to the depreciation review (see Exh. DPU-19-9 (Supp. A)).

163 As explained below, Bay State seeks to recover $20,000 in rate case expense for work to complete the compliance filing (Exh. DPU-19-9 (Supp. A) at 2).

case expense of $1,173,475 (see Exhs. CMA/JTG-2, Sch. JTG-6, at 2 (Rev. 5); DPU-19-9 (Supp. A) at 1, 2). Bay State proposes to normalize its rate case expense over three years (Exhs. CMA/JTG-1, at 36-37; CMA/JTG-2, Sch. JTG-6, at 2 (Rev. 5)). Normalizing the proposed rate case expense of $1,173,475 over three years produces an annual expense of $391,158 (Exh. CMA/JTG-2, Sch. JTG-6, at 2 (Rev. 5)).

The Company issued a RFP for legal representation to seven potential bidders and received five responses (Exhs. DPU-1-1; DPU-1-2, Atts.). The Company assembled an internal review team to evaluate the bids on qualitative and quantitative criteria (Exhs. DPU-1-3, Atts.; DPU-19-4; DPU-19-6). Specifically, the review teams reviewed and scored each proposal and rated each of the bidders on seven evaluation criteria including: (1) expertise in representing utilities in major rate cases; (2) knowledge of Massachusetts statutes and DPU precedent; (3) familiarity with NiSource and Bay State; (4) staff/resources depth; (5) major commercial impediments, including conflicts of interest; (6) hourly rates, other billing determinants; and, (7) cost-containment proposals (Exh. DPU-1-3, Att. A). The Company did not issue a RFP for its labor and benefits consultant or for services related to the depreciation review (Exh. DPU-1-1, at 2).

2. Positions of the Parties

a. Attorney General

i. Labor and Benefits Consultant

The Attorney General concedes that the Department previously authorized the Company to engage its labor and benefits consultant without a competitive bidding process because of the existing relationship between the Company and the consultant (Attorney General Brief at 100, citing D.P.U. 12-25, at 192). However, the Attorney General argues that the Company still has an obligation to provide invoices for outside services that detail the number of hours billed, the billing rate, and the specific nature of services performed, and that the failure to do so can result in disallowance of the undocumented costs (Attorney General Brief at 100, citing D.T.E. 02-24/25, at 193).

In this regard, the Attorney General claims that the Company has failed to provide proper documentation of its labor and benefit analysis expenses and that the invoices submitted did not include the details necessary to justify the amounts included (Attorney General Brief at 101, citing Exh. DPU 19-9(B) at 61-62; Attorney General Reply Brief at 61-62). According to the Attorney General, due to the lack of invoice detail the Department cannot determine if the expenses were reasonable, appropriate, prudently incurred and proportional to the work performed (Attorney General Brief at 101, citing D.P.U. 10-55, at 323). As such, the Attorney General argues that the full amount of rate case expense for labor and benefits analysis should be denied (Attorney General Brief at 101; Attorney General Reply Brief at 62).

ii. Legal Services Provider

The Attorney General argues that Bay State has failed to demonstrate that its choice of legal services provider was reasonable and cost-effective (Attorney General Brief at 94, citing D.P.U. 11-01/D.P.U. 11-02, at 247; Attorney General Reply Brief at 65). The Attorney General first takes aim at the reasonableness of Bay State's selection process. In particular, the Attorney General argues that the Department should give no weight to the evaluative score-sheets and selection memoranda submitted to support the Company's choice of legal service provider because the Company employee who conducted the RFP process and scored and evaluated the bids for legal services did not attest or swear to the selection materials on the record, and was not presented as a witness in this proceeding (Attorney General Brief at 95, citing 220 C.M.R. § 1.10(1)). Further, the Attorney General claims that the Company's witness who sponsored evidence related to the selection of legal services, has no personal knowledge of the scoring or evaluation of the submitted bids (Attorney General Brief at 95, citing Tr. 9, at 929-931). Therefore, the Attorney General asserts that the Company has failed to meet its burden to show that its RFP evaluation process was reasonable (Attorney General Brief at 95).

The Attorney General also argues that the Company's scoring of the bids for legal services was flawed because it assigned unreasonable scores for two categories, "hourly rate, other billing determinants" and "firm staff/resources depth," thereby giving the winning bidder in these categories an unreasonably high score (Attorney General Brief at 95-97, citing Exh. DPU-1-3, Att.)). With respect to the "hourly rate, other billing determinants" category, the Attorney General asserts that the Company's assigned scores were objectively unreasonable (Attorney General Brief at 96). The Attorney General notes that, of five bidders, the chosen law firm submitted the second highest cost bid, yet still received a score of nine out of ten, while lower cost bids received a score of seven out of ten (Attorney General Brief at 96, citing Exh. DPU-1-3(a), at 1). With respect to "firm staff/resources depth" category, the Attorney General notes that although the Company found that each of the five bidders had resources sufficient to litigate this case, the winning bidder was awarded a score of ten for this category, while other firms who proposed larger teams were awarded scores of six to nine (Attorney General Brief at 97, citing Exh. DPU 1-3(a)). Therefore, the Attorney General contends that the scoring for this category was unreasonable (Attorney General Brief at 97).

Next, the Attorney General argues that Bay State's choice of legal services provider was not cost-effective because the chosen bidder did not provide the lowest bid and was likely to be the highest cost provider (Attorney General Brief at 97-98; Attorney General Reply Brief at 62-63). In this regard, the Attorney General rejects the notion that the experience of the chosen legal services provider would result in a more efficient rate case proceeding and, therefore, a lower overall rate case expense (Attorney General Brief at 98, citing Exhs. DPU-1-3, Att. B at 11; DPU-1-4; Attorney General Reply Brief at 62-63). Thus, the Attorney General asserts that the Department should limit the Company's recovery of expenses related legal services to the lowest bid amount or, alternatively, to the median of the bid amounts (Attorney General Brief at 93, 97, 99).[164]

b. Company

i. Introduction

Bay State argues that its proposed rate case expense is reasonable (Company Brief at 88). Further, the Company contends that from the outset of this case, it analyzed and implemented initiatives to reduce rate case expense, including relying on internal personnel and expertise to support various proposals in its rate case filing (Company Brief at 88-89, citing Exhs. CMA/SHB-1, at 11-13; DPU-1-3; DPU-1-10; DPU-1-14). In addition, the Company notes that it conducted a competitive procurement process for legal services, and that it

164 In this regard, the Attorney General raises additional arguments regarding the accuracy of the bid amounts in light of the anticipated work to be performed in this case (Attorney General Brief at 97-99 (confidential); Attorney General Reply Brief at 64). The Attorney General's contentions implicate confidential information, so they will not be summarized here. However, they relate to the Attorney General's ultimate assertion that recovery for expenses related to legal fees should be limited to the lowest bid amount (Attorney General Brief at 97; Attorney General Brief at 97-99 (confidential)).

worked to control overall rate case expense by monitoring the costs of its outside consultants, reviewing invoices, and providing internal resources to assist these external representatives (Company Brief at 90, citing Exhs. DPU 1-1; DPU 1-2; DPU-1-13). The Company's arguments with respect to the selection of its outside service providers challenged by the Attorney General are discussed in further detail below.

ii. Labor and Benefits Consultant

Bay State argues that it did not engage in a competitive solicitation for its labor and benefits consultant because the expertise provided by this service provider is relied upon on an ongoing basis by NiSource to establish the employee compensation structure for NiSource and its operating affiliates (Company Brief at 91, citing Exh. DPU-1-5). Thus, according to the Company, the services of the labor and benefits consultant are necessary in this case to provide the documentation and analysis that underlie the Company's employee compensation costs because the provider is the entity that has this information (Company Brief at 91, citing Exh. DPU-1-5). Bay State asserts that the cost of using another entity would have been prohibitive due to all of the research and pre-case preparation that would have been needed to educate a provider less familiar with the Company's employee compensation structure (Company Brief at 91, citing Exhs. DPU-1-1; DPU-1-5; DPU-1-9).

Finally, the Company argues that it has fully documented the scope of work provided by its labor and benefits consultant, and that the costs related to such work are reasonable, appropriate, prudent and proportional to the work performed (Company Reply Brief at 32-33, citing Exhs. CMA/KKC-1, at 4-6, 33; DPU-19-9(B); Tr. 8, at 71-72).

iii. Legal Services Provider

Bay State rejects the Attorney General's argument that the RFP selection process was unreasonable and unsupported by sufficient evidence. The Company contends that in a rate case there are a substantial number of people who work on various aspects of the case, and to require testimony from all of these people as to the scope of their work would create an administrative burden for all parties involved (Company Brief at 93, n.19). The Company asserts that the witness who presented testimony on rate case expense was supported by the Company's employee who prepared the RFP and scored and evaluated the bids (Company Brief at 93, n.19). Further, Bay State notes that this latter employee was present during the evidentiary hearings and available for cross-examination by the Attorney General (Attorney General Brief at 93, n.19).

Bay State argues that it believed that its choice of legal representative would be the lowest cost provider because the selected firm (1) proposed an hourly rate comparable to the other bidders, and also proposed significant cost controls, including caps on certain portions of the case; and (2) has extensive experience with the Company, thereby avoiding the need for an extensive "ramp-up" by another firm and, at the same time, lowering the number of hours required to prepare and present the case (Company Brief at 92, citing Exhs. DPU-1-3; DPU-1-4; DPU-19-5; Company Reply Brief at 30). The Company also notes that no bidder offered a hard cap on total case costs and, for all law firms, the Company would not be charged for work that was not performed (Company Brief at 92). Thus, according to the Company, the dispositive issue in selecting a legal representative was which law firm would be likely to minimize the overall number of hours of work required on the case (Company Brief at 92-93).

Bay State argues that the Attorney General's assessment of the bids is flawed because it is based exclusively on a comparison of the cost estimates provided by the bidders and ignores factors outside of the Company's control, such as the level of discovery conducted by the parties, which might affect the actual costs to be incurred in the proceeding (Company Brief at 93; Company Reply Brief at 30-31). Thus, in this regard, the Company asserts that reliance on estimated legal expenses as a hard cap for rate case recovery is inherently punitive (Company Brief at 93; Company Reply Brief at 31). Further, the Company contends that there is no basis to conclude that any legal provider that was not chosen would have had a lower total cost than the selected firm, and that the Attorney General's analysis of the bids does not support this conclusion (Company Brief at 93, citing Exh. DPU-19-5). Moreover, Bay State asserts that there is no legal standard that requires the Company to select the lowest bidder as long as the selection of service provider is reasonable and cost-effective (Company Brief at 93-94; Company Reply Brief at 29-30). The Company contends that the Attorney General seeks to improperly substitute her judgment for that of the Company in making a reasonable and cost-effective choice of legal representation and, therefore, that the Attorney General's claims should be rejected (Company Brief at 95; Company Reply Brief at 32).

Finally, Bay State asserts that, as a result of the Department's ratemaking precedent regarding normalization of rate case expense, the Company has borne a large percentage of rate case costs incurred in its last three rate cases (Company Reply Brief at 32 & n.4, citing Exh. DPU-1-16). Therefore, the Company rejects any notion that shareholders should be responsible for any portion of the rate case expense incurred in this proceeding (Company Reply Brief at 32).

3. Analysis and Findings

a. Introduction

The Department allows recovery for rate case expense based on two important considerations. First, the Department permits recovery of rate case expense that has actually been incurred and, thus, is considered known and measurable. D.P.U. 11-01/D.P.U. 11-02, at 234; D.P.U. 10-114, at 219-220; D.P.U. 07-71, at 99; D.T.E. 05-27, at 157; D.T.E. 98-51, at 61-62. Second, such expenses must be reasonable, appropriate, and prudently incurred. D.P.U. 11-01/D.P.U. 11-02, at 234; D.P.U. 10-114, at 219-220; D.P.U. 09-30, at 227; D.T.E. 98-51, at 58; D.P.U. 95-118, at 115-119; D.P.U. 84-32, at 14.

The overall level of utility rate case expense has been, and remains, a matter of concern for the Department. D.P.U. 11-01/D.P.U. 11-02, at 235; D.P.U. 10-114, at 219-220; D.P.U. 07-71, at 99; D.T.E. 03-40, at 147; D.T.E. 02-24/25, at 192; D.P.U. 93-60, at 145. Rate case expense, like any other expenditure, is an area in which companies must seek to contain costs. D.P.U. 11-01/D.P.U. 11-02, at 235; D.P.U. 10-114, at 219-220; D.P.U. 07-71, at 99; D.T.E. 03-40, at 147-148; D.T.E. 02-24/25, at 192; D.P.U. 96-50 (Phase I) at 79. All companies are on notice that the risk of non-recovery of rate case expenses looms should they fail to sustain their burden to demonstrate cost containment associated with their selection and retention of outside service providers. D.P.U. 11-01/D.P.U. 11-02, at 235; D.P.U. 10-114, at 219-220; D.P.U. 09-39, at 290-293; D.P.U. 09-30, at 238-239; D.T.E. 03-40, at 153. Further, the Department has found that rate case expenses will not be allowed in cost of service where such expenses are disproportionate to the relief being sought. D.P.U. 11-01/D.P.U. 11-02, at 235; D.P.U. 10-114, at 219-220; D.P.U. 10-55, at 323; see D.P.U. 93-223-B at 16. Moreover, in its continuing scrutiny of the overall level of rate case expense, the Department may require shareholders to shoulder a portion of the expense. D.P.U. 11-01/D.P.U. 11-02, at 235; D.P.U. 10-114, at 219-220; D.P.U. 08-35, at 135.

b. Competitive Bidding

i. Introduction

The Department has consistently emphasized the importance of competitive bidding for outside services in a petitioner's overall strategy to contain rate case expense. See, e.g., D.P.U. 11-01/D.P.U. 11-02, at 235; D.P.U. 10-114, at 221; D.P.U. 09-30, at 227; D.T.E. 05-27, at 158-159; D.T.E. 03-40, at 148; D.T.E. 02-24/25, at 192. If a petitioner elects to secure outside services for rate case expense, it must engage in a competitive bidding process for these services. D.P.U. 11-01/D.P.U. 11-02, at 236; D.P.U. 10-114, at 221; D.P.U. 09-30, at 227; D.P.U. 07-71, at 99-100, 101; D.T.E. 03-40, at 153. In all but the most unusual of circumstances, it is reasonable to expect that a company can comply with the competitive bidding requirement. D.P.U. 11-01/D.P.U. 11-02, at 236; D.P.U. 10-55, at 342. The Department fully expects that competitive bidding for outside rate case services, including legal services, will be the norm. D.P.U. 11-01/D.P.U. 11-02, at 236; D.P.U. 10-55, at 342.

The requirement of having to submit a competitive bid in a structured and organized process serves several important purposes. First, the competitive bidding and qualification process provides an essential, objective benchmark for the reasonableness of the cost of the services sought. D.P.U. 11-01/D.P.U. 11-02, at 236; D.P.U. 10-114, at 221; D.P.U. 09-30, at 228-229; D.P.U. 07-71, at 101; D.T.E. 03-40, at 152. Second, it keeps even a consultant with a stellar past performance from taking the relationship with a company for granted.

D.P.U. 11-01/D.P.U. 11-02, at 236; D.P.U. 10-114, at 221; D.P.U. 07-71, at 101; D.T.E. 03-40, at 152. Finally, a competitive solicitation process serves as a means of cost containment for a company. D.P.U. 11-01/D.P.U. 11-02, at 236; D.T.E. 03-40, at 152-153.

The competitive bidding process must be structured and objective, and based on a RFP process that is fair, open, and transparent. See D.P.U. 11-01/D.P.U. 11-02, at 236; D.P.U. 10-114, at 221; D.P.U. 09-30, at 227-228; D.P.U. 07-71, at 99-100; D.T.E. 03-40, at 153. The timing of the RFP process should be appropriate to allow for a suitable field of potential consultants to provide complete bids, and provide for sufficient time to evaluate the bids. D.P.U. 11-01/D.P.U. 11-02, at 236; D.P.U. 10-114, at 221; D.P.U. 10-55, at 342-343. Further, the RFPs issued to solicit consultants must clearly identify the scope of work to be performed and the criteria by which the consultants will be evaluated. D.P.U. 11-01/D.P.U. 11-02, at 236-237; D.P.U. 10-114, at 221-222; D.P.U. 10-55, at 343.

The Department does not seek to substitute its judgment for that of a petitioner in determining which consultant may be best suited to serve the petitioner's interests, and obtaining competitive bids does not mean that a company must necessarily retain the services of the lowest bidder regardless of its qualifications. D.P.U. 11-01/D.P.U. 11-02, at 237; D.P.U. 10-114, at 222; D.T.E. 03-40, at 153. The need to contain rate case expense, however, should be accorded a high priority in the review of bids received for rate case work. D.P.U. 10-114, at 222; D.T.E. 03-40, at 153. In seeking recovery of rate case expenses, companies must provide an adequate justification and showing, with contemporaneous documentation, that their choice of outside services is both reasonable and cost-effective. D.P.U. 11-01/D.P.U. 11-02, at 236; D.P.U. 10-114, at 222; D.T.E. 03-40, at 153.

c. Company's Rate Case Consultants

i. Labor and Benefits Consultant

The Company seeks to include in its rate case expense $18,606 in costs associated with its labor and benefits consultant (Exhs. CMA/JTG-2, Sch. JTG-6, at 2 (Rev. 5); DPU-19-9 (Supp. A) at 2). As an initial matter, we note that Bay State's labor and benefits consultant did not sponsor testimony, but rather assisted the Company by providing information relative to the Company's compensation program (Exhs. DPU-1-9; DPU-1-12; Tr. 8, at 771-772; 774-775, 777-784; Tr. 9, at 914-916; RR-AG-15). We find that the Company has provided sufficient justification for forgoing the competitive bidding process in selecting this outside service provider. The record demonstrates that this consultant is Bay State's compensation and benefits consultant and, as such, the Company already has a retention agreement in place for the consultant's services (Exhs. CMA/KKC-1, at 4-5; DPU-1-1, at 2). Further, the services provided by this consultant for the instant rate case are associated with the presentation and explanation of the services that the consultant provides on an ongoing basis for NiSource and the Company (Exhs. CMA/KKC-1, at 4-5; DPU-1-1; Tr. 8, at 769, 770). As such, we conclude that it is unlikely that an alternative service provider, less familiar with NiSource and the Company and the foundational data upon which the ultimate opinions would be based, could duplicate these specialized services for a lower cost, especially when considering the expense associated with issuing separate RFPs for these services. See D.P.U. 12-25, at 192; D.P.U. 09-30, at 233. Thus, conducting a separate RFP for process sake, rather than to establish a field of potential bidders and establish price and non-price qualifications, would have been unnecessary and inefficient. See D.P.U. 12-25, at 192; D.P.U. 10-114, at 231; D.P.U. 09-30, at 232. Moreover, we find that the Company's use of its "in house" labor and benefits expert is evidence of appropriate cost-containment efforts (Exh. DPU-1-13).

The Attorney General challenges the costs associated with this service provider, and argues that the supporting invoices do not contain sufficient detail to warrant cost recovery by the Company (Attorney General Brief at 101, citing Exh. DPU 19-9(B) at 61-62; Attorney General Reply Brief at 61-62). We disagree. We find sufficient evidence in the record to establish the scope of work performed by the outside service provider and to enable the Department to make a determination as to the reasonableness of the costs incurred relative to the work provided (see Exhs. CMA/KKC-1, at 4-6, 33; DPU-19-9(B) at 61-62; DPU-19-9 (Supp. B) at 90-92; DPU-4-11; DPU 4-12; DPU 4-13; Tr. 8, at 771-772; 774-775, 777-784; Tr. 9, at 914-916; RR-AG-15). In this regard, we note that the total cost incurred by the Company ($18,606) for this consultant's services was substantially less than the original estimated amount ($75,000), and that it is not unreasonable or disproportionate to the overall scope of work provided (Exhs. CMA/JTG-2, Sch. JTG-6, at 2 (Rev. 5); DPU-19-9 (Supp. A); DPU-19-9(B); DPU-19-9 (Supp. B)). Based on these considerations, we find that the expenses incurred in relation to the labor and benefits consultant are reasonable, appropriate, and prudently incurred.

ii. Legal Services Provider

The Company seeks to include in its rate case expense $981,510 in costs associated with its legal representation in the current rate case (Exhs. CMA/JTG-2, Sch. JTG-6, at 2 (Rev. 5); DPU-19-9 (Supp A.) at 2).[165] As discussed above, Bay State issued a RFP for legal services and selected its legal representative following an internal evaluation of the bids received

[165] As noted above, this amount includes $20,000 for work to complete the compliance filing (Exh. DPU-19-9 (Supp. A) at 2). This cost item is discussed below.

(Exhs. DPU-1-1, at 1-2; DPU-1-2, Atts.; DPU-1-3, Atts.; Tr. 9, at 928-930;). The Attorney General argues that the selection process was skewed because of scoring improprieties associated with certain evaluation criteria (Attorney General Brief at 95-97). Further, the Attorney General argues that the selection of legal counsel was not cost-effective because the chosen bidder did not provide the lowest bid and was likely to be the highest cost provider (Attorney General Brief at 97-98; Attorney General Reply Brief at 62-63). We reject both of these arguments.

The Company bears the burden of demonstrating that its selection of legal counsel was both reasonable and cost-effective. See D.P.U. 11-01/D.P.U. 11-02 , at 247-248; D.P.U. 10-114, at 222; D.P.U. 10-55, at 343; D.P.U. 09-30, at 230-231; D.T.E. 03-40, at 153. In doing so, the best evidence to aid the Company in satisfying its burden is contemporaneous documentation of its well analyzed decision-making. D.P.U. 10-114, at 227; D.P.U. 08-35, at 130-121; D.T.E. 03-40, at 83-84, 153. As an initial matter, we are not persuaded by the Attorney General's contention that the Company's selection of legal counsel was deficient because the results of the RFP process were presented in this proceeding by a Company employee who did not participate in the issuance of the RFP or the bidder scoring or evaluation process (Attorney General Brief at 95, citing 220 C.M.R. § 1.10(1)). The employee who testified regarding rate case expense is the president of the Company, he has testified regarding the retention of legal counsel in the past two rate cases, and he is familiar with the various factors that drive the selection of legal counsel (see Exh. CMA/SHB-1, at 1, 2; Tr. 9, at 926-946, 953-981). Further, at the time that the bidder scoring sheets and related evaluation material applicable to this rate case were discussed at the evidentiary hearings, the particular employee responsible for those documents was present and available for cross-examination (see generally Tr. 9). Therefore, there was no prejudice to the Attorney General in the presentation of the Company's case on this issue since she had the opportunity to examine the veracity of the exhibits on the record. See D.P.U. 07-71, at 7-8. Moreover, the Attorney General had ample opportunity during the nearly four months that passed between the filing of the case and the close of discovery to inquire about the specifics of the RFP process, including the criteria used to determine category weights.

We have reviewed the scoring and evaluation material submitted by the Company, as well as the testimonial evidence regarding the selection process (Exhs. DPU-1-3, Atts. A, B; DPU-19-6; Tr. 9, at 928-935). We are satisfied that the selection process was appropriate and that the bidders were scored and evaluated in a reasonable and equitable manner. We decline to substitute our judgment for that of the Company in evaluating each bidder against each criterion.

Further, we find that Bay State gave appropriate weight to the billing structures of the various bidders and any differences among them, and considered other important price factors, such as price caps and other cost-containment features (Exhs. DPU-1-3, Atts.; DPU-1-4; DPU-19-5; DPU-19-6; Tr. 9, at 928, 936-938). In addition, although the selected firm was not the lowest bidder, we conclude that the amount of the bid was not unreasonable or disproportionate to the overall scope of work provided (see Exhs. DPU-1-2, Att. B(3); DPU-1-3, Atts.; DPU-19-9 (Supp. A); CMA/JTG-2, Sch. JTG-6, at 2 (Rev. 5)). Moreover, we find that Bay State considered other important factors in selecting legal counsel, including the selected law firm's rate case experience, knowledge of the gas industry and Department precedent, previous close working relationship with the Company, and familiarity with NiSource and Company operations (Exhs. DPU-1-3, Att. B at 10-11; DPU-1-14).

Based on our review of the record and the foregoing considerations, we find that the competitive bidding process used by the Company to select its legal representative was structured and objective, and based on a RFP process that was fair, open and transparent (Exhs. DPU-1-1; DPU-1-2, Atts.; DPU-1-3, Atts.; DPU-1-14; DPU-19-1; DPU-19-3). Further, we find that the Company in selecting its legal counsel gave proper consideration to price and non-price factors in selecting a reasonably priced service provider who possesses expertise and experience, knowledge of Department ratemaking precedent and practice, familiarity with the Company's operations, and a comprehensive understanding of the tasks to be performed (Exhs. DPU-1-2, Atts.; DPU-1-3, Atts.; DPU-1-4; DPU-19-5; DPU-19-6; Tr. 9, at 926-946, 953-981). Thus, we conclude that the Company's selection of legal counsel was both reasonable and cost-effective, despite the fact that the Company did not choose the lowest bidder. See D.P.U. 11-01/D.P.U. 11-02 , at 247-248; D.P.U. 10-114, at 222; D.P.U. 10-55, at 343; D.P.U. 09-30, at 230-231; D.T.E. 03-40, at 153. Finally, we find that the expenses associated with legal services were reasonable, appropriate, and prudently incurred (see Exhs. DPU-1-7, Att. B; DPU-19-9, Att. B; DPU-19-9 (Supp. B)).

d. Various Rate Case Expenses

i. Miscellaneous

The Company seeks to include in its rate case expense $173,359 in costs associated with miscellaneous services (Exhs. CMA/JTG-2, Sch. JTG-6, at 2 (Rev. 5); DPU-19-9 (Supp. A)). The Company states that these miscellaneous costs include fees associated with photocopying, producing case materials for filing with the Department, distributing materials to the service list, and costs associated with transcripts, notice publication, freight, and courier services

(Exhs. CMA/JTG-2, Sch. JTG-6, at 2 (Rev. 5); DPU-1-11). Neither the Attorney General nor any other party challenges the inclusion of these costs in rates. Nevertheless, the Company bears the burden of demonstrating that these costs were reasonable, appropriate, and prudently incurred. D.P.U. 11-01/D.P.U. 11-02, at 265; D.P.U. 10-114, at 224-225; D.T.E. 98-51, at 58; D.P.U. 95-118, at 115-119; D.P.U. 84-32, at 14.

The Department has directed companies to provide all invoices for outside rate case services. D.P.U. 11-01/D.P.U. 11-02, at 265; D.P.U. 10-114, at 236; D.T.E. 03-40, at 157; D.T.E. 02-24/25, at 193-194. The Department has reviewed the invoices provided by the Company, and we find them to be properly itemized for recovery (see Exhs. DPU-1-7, Att. B; DPU-19-9, Att. B; DPU-19-9 (Supp. B)). Further, the level and type of costs included here are commensurate with the various types of activities to be expected in rate case proceedings, such as legal notice requirements, copying expenses, and obtaining transcripts (see Exhs. DPU-1-7, Att. B; DPU-19-9, Att. B; DPU-19-9 (Supp. B)). Moreover, based on our review of the invoices, we find that these miscellaneous expenses were reasonable, appropriate, and prudently incurred.

ii. Fees for Rate Case Completion

The Company has included in its rate case expense $20,000 in costs associated with legal fees for completion of compliance filing work in this case (see Exhs. DPU-19-7; DPU-19-9 (Supp. A) at 2). The Department's long-standing precedent allows only known and measurable changes to test year expenses to be included as adjustments to cost of service. D.P.U. 11-01/D.P.U. 11-02, at 266; D.P.U. 10-114, at 237; D.T.E. 03-40, at 161; D.T.E. 02-24/25, at 195; D.T.E. 98-51, at 61-62. Proposed adjustments based on projections or estimates are not known and measurable, and recovery of those expenses is not allowed.

D.P.U. 11-01/D.P.U. 11-02, at 266; D.P.U. 10-114, at 237; D.T.E. 03-40, at 161-162; D.T.E. 02-24/25, at 196; D.T.E. 01-56, at 75. The Department does not preclude the recovery of fixed fees for completion of compliance filing work in a rate case, but the reasonableness of the fixed fees must be supported by sufficient evidence. D.P.U. 11-01/D.P.U. 11-02, at 266-267; D.P.U. 10-114, at 237; D.T.E. 03-40, at 162; D.T.E. 02-24/25, at 196. Given an adequate showing of the reasonableness of fixed contracts to complete a case after the record closes and briefs are filed, a company may qualify to recover such expenses. D.P.U. 11-01/D.P.U. 11-02, at 267; D.P.U. 10-114, at 237; D.T.E. 03-40, at 162; D.T.E. 02-24/25, at 196. We have stated that documented and itemized proof is a prerequisite to recovery. D.P.U. 11-01/D.P.U. 11-02, at 267; D.P.U. 10-114, at 237; D.T.E. 03-40, at 162; D.T.E. 02-24/25, at 196. Assuming that the fixed fee agreement is properly supported, the fact that the consultants and the company have agreed to complete the service for a fixed fee gives the Department a level of confidence in the reasonableness of the level of effort and consequent expenditure to carry the case through to the compliance filing. D.P.U. 11-01/D.P.U. 11-02, at 267; D.P.U. 10-114, at 237; see D.P.U. 10-55, at 338. The winning bid proposes a fixed fee of $20,000 for compliance work (see Exhs. DPU-19-7; DPU-19-9 (Supp. A) at 2). Given that this is a known and measurable amount, we find that these costs are reasonable and supported by sufficient evidence.

e. Normalization of Rate Case Expense

The proper method to calculate a rate case expense adjustment is to determine the rate case expense, normalize the expense over an appropriate period, and then compare it to the test year level to determine the adjustment. D.P.U. 10-55, at 338-339; D.T.E. 05-27, at 163; D.T.E. 03-40, at 163; D.T.E. 02-24/25, at 197; D.T.E. 98-51, at 62; D.P.U. 95-40, at 58. The

Department's practice is to normalize rate case expenses so that a representative annual amount is included in the cost of service. D.P.U. 10-55, at 338-339; D.T.E. 05-27, at 163; D.T.E. 03-40, at 163; D.T.E. 02-24/25, at 191; D.T.E. 01-56, at 77; D.T.E. 98-51, at 53; D.P.U. 96-50 (Phase I) at 77; The Berkshire Gas Company, D.P.U. 1490, at 33-34 (1983). Normalization is not intended to ensure dollar-for-dollar recovery of a particular expense; rather, it is intended to include a representative annual level of rate case expense. D.P.U. 10-55, at 339; D.T.E. 05-27, at 163; D.T.E. 03-40, at 163-164; D.T.E. 02-24/25, at 191; D.P.U. 96-50 (Phase I) at 77.

The Department determines the appropriate period for recovery of rate case expense by taking the average of the intervals between the filing dates of a company's last four rate cases, including the present case, rounded to the nearest whole number. D.P.U. 10-55, at 339; D.T.E. 05- 27, at 163 n.105; D.T.E. 03-40, at 164 n.77; D.T.E. 02-24/25, at 191. If the resulting normalization period is deemed unreasonable or if the company has an inadequate rate case filing history, the Department will determine the appropriate normalization period based on the particular facts of the case. South Egremont Water Company, D.P.U. 86-149, at 2-3 (1986).

The Company proposes a three-year rate case expense normalization period based on the average interval between its last four rate cases (Exhs. CMA/JTG-1, at 36-37; CMA/JTG-2, Sch. JTG-6, at 2 (Rev. 5)).[166] This normalization period is supported by the record

[166] In determining the normalization period, the Company calculated the average interval between this rate case and D.P.U. 12-25 (1.0 years); D.P.U. 12-25 and D.P.U. 09-30 (3.0 years), and D.P.U. 09-30 and D.T.E. 05-27 (4.0 years) (Exh. CMA/JTG-2, Sch. JTG-6, at 2 (Rev. 5)). The average interval between these cases is 2.67 years, which is rounded up to three years (Exhs. CMA/JTG-1, at 37; CMA/JTG-2, Sch. JTG-6, at 2 (Rev. 5)).

(Exh. CMA/JTG-2, Sch. JTG-6, at 2 (Rev. 5)). Accordingly, the Department concludes that the appropriate normalization period for Bay State's rate case expense is three years.

f. Requirement to Control Rate Case Expense

The Department recognizes the extraordinary nature of a base rate proceeding and the associated investment of resources that is required for a petitioner to litigate its case before the Department. We re-emphasize yet again, however, our growing concern with the amount of rate case expense associated with base rate proceedings and the need for companies to control these costs. D.P.U. 11-01/D.P.U. 11-02, at 270; D.P.U. 10-55, at 341; D.P.U. 09-39, at 286; D.P.U. 09-30, at 227; D.P.U. 08-35, at 129; D.P.U. 07-71, at 99; D.T.E. 03-40, at 147; D.T.E. 02-24/25, at 192; D.P.U. 93-60, at 145.

As we have in the sections above, the Department will continue to closely scrutinize rate case expense and continue to enforce the requirement that a petitioner in a gas or electric rate case engage in a competitive bidding process for its rate case consultants. See D.P.U. 11-01/D.P.U. 11-02, at 253; D.P.U. 10-55, at 343. We will disallow recovery of rate case expense where a petitioner fails to adhere to Department precedent and cannot demonstrate that its choice of consultants is reasonable and cost-effective. See D.P.U. 10-55, at 343.

There are clear benefits to shareholders from approval of rate increases and, therefore, the Department will continue to consider whether shareholders should shoulder a portion of the expense. See D.P.U. 11-01/D.P.U. 11-02, at 270; D.P.U. 10-55, at 343-344; D.P.U. 10-70, at 166; D.P.U. 08-35, at 135. Therefore, the Department will continue to require all gas and electric companies in future rate case filings to consider proposals for some portion of the rate case expense to be borne by shareholders. D.P.U. 11-01/D.P.U. 11-02, at 270.

In this case, Bay State states that it thoroughly considered this issue, and it provides several reasons why it is not proposing that shareholders bear a portion of rate case expense (Exh. DPU-1-16). We find that the Company has provided sufficient justification for not proposing that shareholders bear a portion of the rate case expense incurred in this proceeding (Exh. DPU-1-16). We reach this conclusion based on the specific facts of this case, and we do not establish a universally applicable rule at this time.

g. Conclusion

Bay State has proposed a total rate case expense of $1,173,475 (Exh. CMA/JTG-2, Sch. JTG-6, at 2 (Rev. 5)). Based on the above findings, the Department concludes that the correct level of normalized rate case expense is $391,158 ($1,173,475/three years).

J. Amortization of Deferred Farm Discount

1. Introduction

The Department stated in Farm Discounts, D.T.E. 98-47, Letter Order at 6 (November 16, 1998), that gas distribution companies may defer costs associated with the implementation of the farm discount for consideration in a subsequent general base rate case. The Department authorized Bay State to propose, as part of its next general base rate case, the recovery of deferred amounts of revenue discounts made available to qualified farm customers.

From 2002 through 2004, Bay State provided $76,600 in farm discounts to eligible farmers (Exhs. CMA/JTG-1, at 38; CMA/JTG-2, Sch. JTG-6, at 3 (Rev. 5)). In D.T.E. 05-27, the Department provided for the amortization of this amount over ten years, or $7,660 annually, because this was the expected period before the Company's next rate case. D.T.E. 05-27, at 191.

The Company provided farm discounts from 2005 through 2008 totaling $73,132 (Exhs. CMA/JTG-1, at 38; CMA/JTG-2, Sch. JTG-6, at 3 (Rev. 5)). Bay State amortized this amount over the remaining 73 months of the ten-year period established by the Department in D.T.E 05-27 (Exhs. CMA/JTG-1, at 38; CMA/JTG-2, Sch. JTG-6 (Rev. 5) at 3). This calculation produced an annual amortization amount of $12,022 (Exhs. CMA/JTG-1, at 38; CMA/JTG-2, Sch. JTG-6, at 3 (Rev. 5)).

From 2009 through 2011, Bay State provided farm discounts totaling $112,652 (Exhs. CMA/JTG-1, at 38; CMA/JTG-2, Sch. JTG-6, at 3 (Rev. 5)). The Company amortized this amount over 60 months, or $22,530 annually (Exhs. CMA/JTG-1, at 38; CMA/JTG-2, Sch. JTG-6, at 3 (Rev. 5)).

Finally, for 2012, Bay State provided $25,151 in farm discounts (Exhs. CMA/JTG-1, at 38; CMA/JTG-2, Sch. JTG-6, at 3 (Rev. 5)). The Company proposes to amortize this amount over 36 months, based on the typical recovery period for rate case expense, thereby yielding an annual amortization amount of $8,384 (Exhs. CMA/JTG-1, at 38; CMA/JTG-2, Sch. JTG-6, at 3 (Rev. 5)).

Based on the four deferred farm discount credit periods detailed above, the Company proposes a total annual amortization amount of $50,596 ($7,660 + $12,022 + $22,530 + $8,384) and it asserts that the Department should accept this amortization amount (Exhs. CMA/JTG-1, at 38; CMA/JTG-2, Sch. JTG-6, at 3 (Rev. 5); Company Brief at 84). No other party addressed this issue on brief.

2. Analysis and Findings

Consistent with precedent, the Department finds that Bay State is allowed to recover the test-year farm discount credit of $25,151. See D.P.U. 09-30, at 263; D.T.E. 02-24/25, at 203-205; D.T.E. 98-47, Letter Order at 6. The Department has allowed amortization of the deferred farm discounts over periods consistent with the normalization period used to normalize rate case expense. See D.P.U. 10-70, at 144; D.P.U. 09-30, at 263; D.T.E. 05-27, at 191; D.T.E. 02-24/25, at 204-205. Therefore, the Department directs the Company to amortize Bay State's farm discount expense over three years (or $8,384 annually), which is consistent with the three-year normalization period approved for the Company's rate case expense, as set forth in Section VIII.I above. See D.P.U. 10-70, at 144; D.P.U. 09-30, at 263 D.T.E. 05-27, at 191; D.T.E. 02-24/25, at 204-205.

The Company proposes to recover an annual amortization expense of $50,596, which represents the sum of the annual amortization amounts associated with the four periods of deferred farm discount credits. The Department approves this adjustment to Bay State's cost of service with the recognition that some of the prior deferral amounts might be fully amortized before the Company's next rate case[167] and that the Company might provide future farm credits that result in additional deferral amounts. As such, the Department will review the annual farm credit amortization amount in the Company's next base rate case and determine whether any adjustments are necessary.

[167] In particular, the amortization period associated with the farm discounts provided from 2002 through 2008 ends on November 30, 2015 (see Exh. CMA/JTG-2, Sch. JTG-6, at 3 nn.1, 2 (Rev. 5)).

K. Inflation Allowance

1. Introduction

In its initial filing, the Company proposed an inflation adjustment of $907,608 (Exh. CMA/JTG-2, Sch. JTG-6, at 1). Bay State then revised its inflation adjustment to $748,507 based on updated expense reporting (Exhs. CMA/JTG-2, Sch. JTG-6, at 1 (Rev. 5)). The Company used the GDPIPD (as sourced from IHS Global Insight, a consultant of economic forecasts, trends, and events) to calculate its inflation allowance (Exh. CMA/JTG-2, Sch. JTG-6, at 14 (Rev. 5)). The Company calculated the change in the GDPIPD from the midpoint of the test year to the midpoint of the rate year,[168] to compute a 3.76 percent inflation factor (Exhs. CMA/JTG-1, at 56; CMA/JTG-2, Sch. JTG-6, at 14 (Rev. 5)). Bay State multiplied this inflation factor by the adjusted test year expense associated with twelve O&M expense categories that the Company considered were eligible for an inflation allowance (Exh. CMA/JTG-2, Sch. JTG-6, at 1 (Rev. 5)).[169]

---

168 The test-year period used for the revenue-requirement analysis is the twelve-month period ending December 31, 2012 (Exh. CMA/JTG-1, at 5). Given the ten-month suspension period applicable to this case, the "rate year" for this proceeding is the period March 1, 2014 through February 28, 2015, and the midpoint of the rate year is September 1, 2014 (Exh. CMA/JTG-1, at 5).

169 These expense categories consisted of : (1) $29,688 in advertising expense; (2) $304,409 in self-insurance expense; (3) $8,184,745 in outside services; (4) $1,052,283 in other rents and leases; (5) a credit of $58,376 in leases associated with decommissioned facilities; (6) $1,273,220 in employee expenses; (7) $188,705 in company memberships; (8) $1,984,524 in materials and supplies; (9) $1,665,868 in fuel used for company operations; (10) $73,002 in regulatory commission expense; (11) $778,451 in employee thrift plan expenses; and (12) $4,430,595 in stores and vehicle clearing expense, for a total expense subject to inflation of $19,907,114 (see Exh. CMA/JTG-2, Sch. JTG-6, at 1 (Rev. 5)).

2. Positions of the Parties

a. Attorney General

The Attorney General does not challenge the Company's inflation allowance applicable to its residual O&M expenses. As discussed in Section VIII.C.3.a.iv above, the Attorney General does take issue with the inflation adjustment applicable to expenses billed to Bay State from NCSC.

b. Company

The Company argues that it has implemented cost-containment measures to support its inflation adjustment (Company Brief at 133). In particular, Bay State contends that a number of organizational changes within the Company's customer service operations have resulted in savings associated with billing, mailing and payment, field dispatch, scheduling, data entry, revenue recovery, planning and engineering, and communication and administration functions (Company Brief at 133, citing Exhs. AG-7-8; AG-23-1). Bay State notes that in its last rate case the Department found that the Company had reduced annual operating costs by approximately $2.0 million through these same types of efforts (Company Brief at 133, citing D.P.U. 12-25, at 368). According to the Company, these cost reductions, in addition to others, provide "strong evidence" that the Company has implemented cost-containment measures that provide direct benefits to customers (Company Brief at 133). Therefore, Bay State asserts that the Department should approve the Company's inflation allowance (Company Brief at 133).

3. Analysis and Findings

The inflation allowance recognizes that known inflationary pressures tend to affect a company's expenses in a manner that can be measured reasonably. D.T.E. 02-24/25, at 184;

D.T.E. 01-56, at 71; D.T.E. 98-51, at 100-101; D.P.U. 96-50 (Phase I), at 112-113; D.P.U. 95-40, at 64. The inflation allowance is intended to adjust certain O&M expenses for inflation where the expenses are heterogeneous in nature and include no single expense large enough to warrant specific focus and effort in adjusting. Boston Edison Company, D.P.U. 1720, at 19-21 (1984). The Department permits utilities to increase their test year residual O&M expense by an independently published price index from the midpoint of the test year to the midpoint of the rate year. D.P.U. 08-35, at 154-155; D.T.E. 02-24/25, at 184; D.P.U. 95-40, at 64; D.P.U. 92-250, at 97-98. In order for the Department to allow a utility to recover an inflation adjustment, the utility must demonstrate that it has implemented cost-containment measures. D.P.U. 09-30, at 285; D.P.U. 08-35, at 154; D.T.E. 02-24/25, at 184.

In the instant case, Bay State calculated its inflation allowance from the midpoint of the test year to the midpoint of the rate year, using the GDPIPD as an inflation measure (Exhs. CMA/JTG-1, at 56; CMA/JTG-2, Sch. JTG-6, at 14 (Rev. 5)). We find that this calculation method and use of GDPIPD are consistent with Department precedent. D.P.U. 08-35, at 154-155; D.T.E. 02-24/25, at 184; D.P.U. 95-40, at 64; D.P.U. 92-250, at 97-98. Further, we conclude that the Company properly derived its proposed 3.76 percent inflation factor through the aforementioned calculation method (Exh. CMA/JTG-2, Sch. JTG-6, at 14 (Rev. 5)).

Next, we turn to the cost-containment measures undertaken by the Company. The Company has provided a number of examples of cost-containment measures related to its requested inflation adjustment (Exhs. DPU-10-9; AG-7-8). These include: (1) efforts to reduce health maintenance organization costs; (2) an increase in preferred provider organization medical plan deductibles, co-pays and co-insurance, as well as increased enrollment in high deductible medical plans; (3) the implementation of internal auditing procedures to ensure that health care-related bills are accurate; (4) reduced administrative rates applicable to the Company's dental plan; (5) the conversion to a less costly pension formula; and (6) the elimination of pension and post-retiree medical and life insurance for the majority of new hires (Exhs. DPU-8-11; DPU-8-12; DPU-8-14; DPU-10-9). Further, as discussed above in Section VIII.A.5.b, the Company has taken appropriate measures to contain its healthcare costs. In addition, we find that Bay State has demonstrated reasonable measures to control its property and liability insurance expense through annual evaluations of insurance programs and policies and through the Company's affiliation with NiSource Insurance Company, Inc. ("NICI") (Exh. CMA/JTG-1, at 51-52; see also D.P.U. 12-25, at 246).[170] Finally, we find that because Bay State's aforementioned organizational changes were largely due to restructuring of cost centers, it is reasonable to expect that costs savings will continue (see Exh. AG-7-8). Based on the above considerations, the Department finds that the Company has implemented cost-containment measures that provide direct customer benefits to warrant the allowance of an inflation adjustment.

The Department finds that an inflation allowance adjustment equal to the most recent forecast of GDPIPD for the appropriate period as proposed by Bay State, applied to the Company's approved level of residual O&M expense, is proper in this case. If an O&M expense

---

[170] NiSource created NICI to provide insurance coverage for its affiliates (Exh. CMA/JTG-1, at 51). NICI participates in the annual evaluation process undertaken to review exposures, premiums and coverage (Exh. CMA/JTG-1, at 51). The Company relies on NICI to provide stable coverage at a reasonable cost when the commercial market does not provide satisfactory coverage or prices (Exh. CMA/JTG-1, at 52).

has been adjusted or disallowed for ratemaking purposes, such that the adjusted expense is representative of costs to be incurred in the year following new rates, the expense also is removed in its entirety from the inflation allowance. D.P.U. 09-39, at 322; D.T.E. 05-27, at 204; D.T.E. 02-24/25, at 184-185; D.T.E. 01-50, at 19; D.P.U. 88-67 (Phase I) at 141; Commonwealth Gas Company, D.P.U. 87-122, at 82 (1987). The Company has already proposed adjustments to the following expense categories: (1) advertising expense; (2) self insurance expense; (3) outside services; (4) leases associated with decommissioned facilities; (5) employee expenses; (6) utilities and fuel used for company operations; and (7) regulatory commission expense (see Exh. CMA/JTG-2, Sch. JTG-6, at 14 (Rev. 5)). The Department has reviewed these proposed adjustments, and finds that the following expenses have been adjusted to such an extent as to obviate the need for a additional inflation component: (1) self insurance expense; and (2) leases associated with decommissioned facilities. Therefore, the test year expense associated with these items, totaling $244,033, will be removed from Bay State's residual O&M expense calculations, as shown in Table 1. In addition, the Department has adjusted the Company's expenses related to executive jets (see Section VIII.H.3 above). Therefore, we have removed the Company's test year expenses associated with these items from its residual O&M expenses as shown again in Table 1. As shown on Table 1, the inflation allowance for Bay State is $739,257. The Company proposed an inflation allowance of $748,507. Accordingly, the Department will reduce the Company's proposed cost of service by $9,250.

Table 1

Test Year O&M Expense per Books	$	140,090,455
Adjusted Per Books	$	130,712,424
Less Company Adjusted Items:		
Metscan Amortizations		1,361,256
Normalized Rate Case Expense		391,158
Amortization of Deferred Farm Discount Credits		50,596
Postage		1,620,420
Uncollectible Accounts		3,839,163
Rent and Leases - Headquarters Building		343,745
Labor		31,068,525
Incentive Compensation		1,553,816
NIFIT and WOMS costs to Amortize		1,516,909
Medical and Dental Insurance		3,268,140
Corporate Insurance		4,015,082
New Lease and Assoc. Costs		558,464
Regulatory Commission Expense		657,780
Bad Debt Write-offs Included in CGA		3,023,302
DSM Implementation		5,615,953
ERC Remediation		2,093,774
Pension/PBOP		12,375,046
Regulatory Amortization		225,952
Total	$	73,579,081
Subtotal (Adusted per Books-Company Adjustments)	$	57,133,343
NiSource Corporate Services Company	$	36,926,530
Less Excluded Test Year Expenses:		
Self-Insurance		304,409
Removal of Test Year Cost for 3 Leases		(58,376)
Corporate Jet		77,009
Total Excluded Test Year Expenses	$	323,042
O&M Expenses Subject to Inflation:		
Bay State		19,661,081
NCSC (Net Non-Labor after Adjs.)		22,479,605
Residual O&M expense	$	42,140,686
Projected Inflation Rate		3.76%
Inflation Allowance Bay State	$	739,257
Inflation Allowance NCSC	$	845,233
Total Inflation Allowance	$	1,584,490

L. NIFIT and WMS Costs to Amortize

1. Introduction

During the test year, the Company booked $1,276,337 in expenses associated with NiFit, primarily related to data conversion and employee training (Exhs. CMA/SHB-1, at 30; CMA/JTG-2, Sch. JTG-6, at 16). In its initial filing, the Company estimated that it would incur an additional $1,723,663 in NiFit-related implementation costs through June of 2013, for a total implementation expense of $3,000,000[171] (Exhs. CMA/JTG-1, at 21; CMA/JTG-2, Sch. JTG-6, at 16). Bay State subsequently reported that the actual NiFit implementation costs for 2013 were $1,430,405, thus producing a total NiFit implementation cost of $2,706,742 (see Exh. CMA/JTG-2, Sch. JTG-6, at 16 (Rev. 5)).

Also during the test year, the Company booked $1,098,134 in expenses related to the overhaul of its Work Order Management System ("WOMS") and implementation of a new Work Management System ("WMS") (Exh. CMA/JTG-2, Sch. JTG-6, at 16).[172] The Company subsequently updated this amount to include $681,837 in test year WMS implementation costs allocated from NCSC and $64,014 in additional WMS implementation costs incurred during 2013 (Exhs. CMA/JTG-1, at 2 (Rev. 1); CMA/JTG-2, Sch. JTG-6, at 9, 16 (Rev. 1); AG-13-23,

171 While Bay State anticipated that it would incur further NiFit implementation costs in the spring of 2014, the Company did not quantify such costs or propose their recovery in this proceeding (Exh. CMA/RAF-1, at 9; Tr. 2, at 232).

172 The WMS tracks project work and integrates it with customer and accounting databases (Exh. CMA/DEM-1, at 19; 41-42). The WMS was placed into service in October 23, 2012 (Exh. CMA/DEM-1, at 42).

Att.; AG-28-2). Thus, the Company's total WMS implementation cost is $1,843,985[173] (see Exh. CMA/JTG-2, Sch. JTG-6, at 16 (Rev. 5)).

Bay State requests approval to create a regulatory asset[174] for its NiFit and WMS implementation costs, and to amortize the regulatory account balance over three years (Exhs. CMA/JTG-1, at 22; CMA/JTG-2, Sch. JTG-6, at 16 (Rev. 5)). The Company selected the three-year amortization period to coincide with the Company's proposed rate case expense recovery schedule (Exhs. CMA/JTG-1, at 22; CMA/JTG-2, Sch. JTG-6, at 16 (Rev. 5)).

2. Positions of the Parties

a. Attorney General

The Attorney General argues that the Company seeks to include in the cost of service a disproportionate share of the costs associated with NiFit and WMS (Attorney General Brief at 71; Attorney General Reply Brief at 45-46). In this regard, the Attorney General notes that while the benefits associated with these programs might not be easily quantifiable, benefits do exist and customers should not have to pay the costs of the programs without receiving such benefits (Attorney General Brief at 72-73, citing Exhs. AG-DJE-1, at 18-19; CMA/RAF-5, at 3; Attorney General Reply Brief at 45-46). According to the Attorney General, the amortization of the deferred NiFit and WMS costs should be based on an appropriate matching of the costs and benefits of those programs (Attorney General Brief at 72; Attorney General Reply Brief at 45).

---

173 $1,098,134 + $681,837 + $64,014 = $1,843,985.

174 A regulatory asset is an incurred cost for which a regulatory agency such as the Department allows a regulated company to record a deferral, thereby allowing the cost to be considered for recovery at some future date (Exh. DPU-22-24). See also D.T.E. 03 47-A at 3 n.2.

With respect to NiFit O&M expenses, the Attorney General contends that the program was not in service during the test year and, consequently, customers received no benefits from the program during that period (Attorney General Brief at 73; Attorney General Reply Brief at 46). In order to achieve what she considers to be a proper matching between the benefits and costs of the NiFit project, the Attorney General argues that the amortization of the NiFiT-related costs should commence at the time that NiFiT became operational, i.e., in June of 2013 (Attorney General Brief at 73-74, citing Exhs. AG-DJE-1, at 20-21; AG-DJE-Surrebuttal-1, at 2). On this basis, the Attorney General proposes that the NiFit-related expenses be excluded from consideration in the Company's rate case at this time (Attorney General Brief at 73-74; Attorney General Reply Brief at 45-46).

Turning to the WMS O&M expenses, the Attorney General notes that because this system went into service in late October of 2012, it is reasonable to expect that customers received about two months of benefits related to that project (Attorney General Brief at 73; Attorney General Reply Brief at 46). Thus, the Attorney General asserts that the amortization period for the WMS project should begin on November 1, 2012, so that the date upon which customers are responsible for costs associated with the WMS aligns with the date upon which the system's benefits began to accrue to those customers (Attorney General Brief at 73, citing Exh. AG-DJE-1, at 20). Thus, the Attorney General concludes that the Company's proposed WMS amortization of $614,662 should be reduced to $102,444, so that only two months of WMS-related expenses are included in base rates (Attorney General Brief at 73, citing Exh. AG-DJE-1, at 20).

b. Company

The Company claims that the NiFit and WMS expenses are known and measurable, were prudently incurred, and of relevant size to warrant the creation of a regulatory asset (Company Brief at 114-123; Company Reply Brief at 22-23). Furthermore, the Company contends that, in providing known and measurable NiFit and WMS costs, it also has demonstrated that these costs were prudently incurred and subject to various cost-containment measures (Company Brief at 115-120, citing Exhs. CMA/RAF-1, at 26-28, 31-32, 35-37; CMA/RAF-2; CMA/RAF-5; DPU-2-4; DPU-2-8; Tr. 1, at 223-226). The Company notes that the Attorney General does not challenge the prudency of the costs incurred (Company Brief at 120, citing Exh. AG-DJE-Rebuttal-1, at 4-5).

The Company maintains that the size of the expenses related to the NiFit and WMS programs warrant the creation of a regulatory asset to allow for cost recovery under Department precedent (Company Brief at 121, citing D.T.E. 03-47-A at 3 n.2). According to Bay State, the total NiFit and WMS costs incurred to date of approximately $4.5 million constitute ten percent of the Company's pre-tax operating expense, and thus their disallowance would, on their own, trigger a base rate proceeding in order to ensure cost recovery (Company Brief at 121, citing Exh. CMA/JTG-1, at 22-23).

Bay State further maintains that there is no Department ratemaking practice that mandates a "matching" of costs and benefits in order to include reasonable and prudent capital additions, such as NiFit and WMS in rate base (Company Reply Brief at 23 n.3). The Company argues that the elimination of risks associated with the obsolescence of its legacy information technology system through implementation of the NiFit project, as well as the greater integration of work order, customer information, and accounting databases achieved with WMS, demonstrate substantial benefits to customers that began accruing immediately upon the implementation of the NIFIT and WMS programs (Company Brief at 114-115,122-123, citing Exh. CMA/DEM-1, at 41-42; CMA/JTG-Rebuttal-1, at 14, 16; CMA/RAF-Rebuttal-1, at 4). Therefore, Bay State rejects the Attorney General's claims about a mismatch of costs and benefits (Company Brief at 122-123, citing Exhs. CMA/JTG-Rebuttal-1, at 9-16; CMA/RAF-Rebuttal-1, at 1-5; AG-DJE-Rebuttal-1, at 2, 4; Company Reply Brief at 22-23).

For all of the above reasons, Bay State advocates that the Department allow the Company to amortize its NiFit and WMS project expenses over a three-year period (Company Brief at 121; Company Reply Brief at 23).

3. Analysis and Findings

a. NiFit and WMS Expense Recovery

Test year expenses that recur on an annual basis are eligible for full inclusion in cost of service unless the record supports a finding that the level of the expense in the test year is abnormal. If such a finding is made, it is necessary to normalize the expense to reflect the amount that is likely to recur on a normal, annual basis. D.P.U. 1270/1414, at 33. Test year expenses that do not recur on an annual basis, but rather are demonstrated to recur periodically over time, are normalized so that the cost of service will include only the appropriate portion of the expense. This allocation is determined by examining the periodicity of the expense and apportioning only an annualized amount to the cost of service. D.P.U. 1270/1414, at 33. Non-recurring expenses incurred in the test year are ineligible for inclusion in the cost of service unless it is demonstrated that they are so extraordinary in nature and amount as to warrant their collection by amortizing them over an appropriate time period. D.P.U. 1270/1414, at 33.[175]

The record shows that, during the test year and through June 2013, the Company incurred $2,706,742 in NiFit implementation costs and $1,843,985 in WMS implementation costs (Exh. CMA/JTG-2, Sch. JTG-6, at 16 (Rev. 5). The portion of these costs incurred in 2013 was incurred beyond the test year. The Department has previously allowed the recovery of post-test year costs that are known and measurable. See, e.g., D.P.U. 11-43, at 178-179; D.P.U. 89-114/90-331/91-80 (Phase I) at 33, 46-47; D.P.U. 88-67 (Phase I) at 144-145. In the instant case, the post-test year implementation costs associated with the NiFit project and WMS system have been incurred, and the costs have been documented in this proceeding (Exhs. CMA/RAF-1, at 2-3 (Revs. 1, 2); CMA/RAF-8, Sch. CMA/RAF-1 (Rev. 1); CMA/RAF-9, Sch. CMA/RAF-1 (Rev. 2); CMA/JTG-2, Sch. JTG-6, at 16 (Rev. 5); DPU-2-12; DPU-9-2; AG-2-37; AG-15-5; AG-16-1; AG-17-11; RR-DPU-17, Att.). Therefore, we find that they are known and measurable.

The Company claims that the costs associated with the NiFit project and WMS are "incremental, extraordinary, but periodically recurring" expenses (Exhs CMA/RAF-1, at 38; DPU-2-9). However, the Company did not estimate the future costs associated with periodic major maintenance of the NiFit system (Exh. DPU-2-9). While gas distribution utilities incur information technology implementation costs on an ongoing basis, it is indisputable that specific information technology projects, such as NiFit and WMS, have distinct start and completion

175 Post-test year expenses of this nature, such as NiFit expenses incurred in 2013, would be accorded the same treatment. D.P.U. 1720, at 87-88.

dates. The fact that Bay State is seeking amortization treatment for these expenses leads us to conclude that the Company considers these costs to be non-recurring expenses.

Non-recurring expenses incurred in the test year are ineligible for inclusion in the cost of service unless it is demonstrated that they are so extraordinary in nature and amount as to warrant their collection by amortizing them over an appropriate time period. D.P.U. 1270/1414, at 33. Post-test year expenses of this nature, such as NiFit expenses incurred in 2013, would be accorded the same treatment. D.P.U. 1720, at 87-88. Although the Company bases its definition of extraordinary on a percentage of operating expense, the Department finds that the more appropriate standard to determine what constitutes an extraordinary expense is derived from our standard for determining eligibility for deferral accounting, which is based on total operating revenues. See Fitchburg Gas and Electric Light Company, D.P.U. 09-61, at 11 (2009); Aquarion Water Company of Massachusetts, D.T.E. 03-127, at 9 (2004); North Attleboro Gas Company, D.P.U. 93-229, at 7 (1994); see also D.T.E. 03-40, at 30; D.T.E. 02-24/25, at 80-81. The Company's total gas operating revenues during calendar year 2012 were $406,336,809 (Exh. AG-1-2(6) (2012) at 4). We are persuaded that a one-time expense of approximately $4.5 million for a gas distribution company with annual revenues of approximately $406 million is extraordinary in amount. Based on the record, we conclude that the NiFit and WMS costs are extraordinary in nature and amount and that their exclusion from the Company's cost of service would serve to distort the Company's equity position and improperly assign legitimate above-the-line expenses entirely to shareholders (Exhs. CMA/JTG-1, at 22-23; DPU-2-1; DPU-2-2; DPU-9-3; DPU-9-4; DPU-9-5). As such, we conclude that the costs are eligible for collection over an appropriate amortization period. D.P.U. 11-43, at 179; D.P.U. 1720, at 87-88; D.P.U. 1270/1414, at 33.[176]

b. Amortization Period

Having determined that the Company may recover the NiFit and WMS implementation costs incurred during 2012 and through June 2013, we now turn to the recovery period appropriate for these extraordinary, non-recurring expenses. The Company proposed a three-year amortization period. Amortizations are based on a case-by-case review of the evidence and underlying facts. See, e.g., D.P.U. 93-223-B at 14; D.P.U. 84-145-A at 54. In establishing the amortization period for the recovery of technology and software-related costs, the Department seeks to strike a balance between the need to continue improvements in service technology and the need to maintain intergenerational equity, which may include consideration of the purpose of the particular technology or software application and achieving consistency among and between similar applications. D.T.E. 02-24/25, at 153; D.P.U. 93-60-D at 4.

The Attorney General argues that in order to achieve a proper balance between costs and customer benefits, the dates upon which the projects came into service should determine the commencement of the amortization periods and the amounts to be amortized (Attorney General Brief at 73-74, citing Exhs. AG-DJE-1, at 20-21; AG-DJE-Surrebuttal-1, at 2; Attorney General Reply Brief at 46). We disagree. In considering the recovery amount for extraordinary and nonrecurring expenses, the Department finds that it is unnecessary to match the period over which the costs are incurred to the period over which customers receive benefits. We are not

176 Because we allow the amortization of these costs as part of this Order, we need not address the Company's request for the Department to establish a regulatory asset for the recovery of these costs.

persuaded that for recovery of extraordinary and nonrecurring expenses, such as the NiFit and WMS program costs, there needs to be a contemporaneous incurrence of costs and benefits. Therefore, we decline to accept the Attorney General's recommendation.

The Department recognizes the rapid rate of technological improvements, and that the pace of such developments may render information systems obsolete after a relatively short period of time. See D.T.E. 02-24/25, at 153; D.P.U. 94-50, at 324. As such, recovery of technology-related implementation costs over an excessive amortization period would tend to discourage utilities from innovations that serve to improve service to their customers. D.T.E. 02-24/25, at 153. At the same time, it is reasonable to expect that a utility's information systems should remain in service for some years after inception and benefit future customers. D.T.E. 02-24/25, at 153. Therefore, an unduly short amortization is inappropriate because it shifts a disproportionate amount of the costs of these projects to current customers. D.T.E. 02-24/25, at 153; D.P.U. 93-60-D at 4. The Department has considered such factors as the amount under consideration for amortization, the value of the amount to ratepayers based on certain amortization periods, and the impact of the adjustment on the Company's finances and income. D.P.U. 10-55, at 227; D.P.U. 93-223-B at 14; D.P.U. 84-145-A at 54. Based on these considerations and the record in this case, we find that an amortization period of four years strikes an appropriate balance between the need to continue improvements in service technology and the need to maintain intergenerational equity.

c. Conclusion

The Department has approved the amortization of $4,550,727 in total NiFit and WMS implementation costs, which is comprised of $2,706,742 associated with the NiFit program and

$1,843,985 associated with the WMS system (Exh. CMA/JTG-2, Sch. JTG-6, at 16 (Rev. 5)). The Company's proposed three-year amortization of the total costs yields an annual revenue requirement of $1,516,909 (Exh. CMA/JTG-2, Sch. JTG-6, at 16 (Rev. 5)). The Department's approved four-year amortization of the total NiFit and WMS implementation costs results in an annual revenue requirement of $1,137,682 ($4,550,727/4 years). Accordingly, we will further reduce the Company's proposed cost of service by $379,227 ($1,516,909 - $1,137,682).

M. Deferred State Income Tax Deficiencies

1. Introduction

On July 24, 2013, the Massachusetts legislature passed the Transportation Finance Bill, H3535. In pertinent part, the Transportation Finance Bill repealed G.L. c. 63, § 52A, which provided for a state franchise tax rate of 6.5 percent for public utility corporations (Exh. CMA/BMS-1, at 2). See also G.L. c.46, § 39.[177] Consequently, utility corporations will lose their separate tax status for tax years beginning on and after January 1, 2014, and become subject to the tax rates applicable to corporations pursuant to G.L. c. 63, § 39.

Because the new income tax rate will be in place when Bay State's new distribution rates take effect on March 1, 2014, the Company has incorporated the new corporate tax rate of eight percent on net income in its computation of state franchise taxes, as well as the effects of the increase in state income taxes on Bay State's federal income taxes (Exhs. CMA/BMS-1, at 2;

---

177 Electric, gas, water, telephone, railroad, and similar businesses within Massachusetts were previously taxed at a rate of 6.5 percent on their net income. G.L. c. 63, § 52A, repealed by G.L. c. 46, § 39 (2013). In contrast, other Massachusetts business corporations pay corporate excise taxes equal to an amount not greater than either: (1) the sum of eight percent on their net income and 0.26 percent of (i) its tangible property or (ii) its net worth if it is an intangible property corporation; or (2) $456.00. G.L. c. 63, § 39; see also Milford Water Company, D.P.U. 12-86, at 245 (2013).

CMA/JTG-2, Sch. JTG-11 (Rev. 5)).[178] As discussed in detail below, the Company asserts that the new tax rate will create several categories of tax deficiencies.[179] The Company proposes to amortize these deficiencies as described below.

2. Company's Proposals

a. Deferred Income Tax Deficiency

Bay State submits that the difference in the state franchise tax rate from the time of filing of this case to the date of the Order creates a deficiency in the Company's deferred income taxes of $3,509,882 (Exhs. CMA/BMS-1, at 2, 3; CMA/BMS-2). Bay State provides that application of the increase in the state income tax rate from 6.5 percent to eight percent to the Company's deferred income tax deficiency, net of deferred income taxes associated with items expected to reverse in 2013 or considered to represent standing rate base adjustments, would result in the recording of a regulatory asset of $5,869,368 pursuant to Statement of Financial Accounting Standard No. 109, "Accounting for Income Taxes" ("FAS 109") (Exhs. CMA/BMS-1, at 3-4; CMA/BMS-2).[180] The Company proposes to begin amortizing the $3,509,882 deferred income tax deficiency on March 1, 2014, once new distribution rates go into effect (Exh. CMA/BMS-1, at 4). According to the Company, because it does not have the vintage plant account data

---

178 The Company does not include in its calculation of income taxes the personal property tax component of the corporate excise tax.

179 The new state franchise tax rate also serves to increase the Company's overall cost of service and, therefore, the Company's revenue requirement (Exhs. CMA/BMS-1, at 2-3; CMA/JTG-2, Schs. JTG-2 (Rev. 5), JTG-3 (Rev. 5)).

180 The Company states that the 0.26 percent tangible property component provided for in G.L. c. 63, § 39 is not a factor in the deferred tax computation, because that tax component does not represent a tax on income (Exh. DPU-24-28).

associated with specific assets, it is therefore eligible to use the South Georgia[181] method to amortize its deferred income tax deficiencies (Exh. CMA/BMS-1, at 4).

In its selection of an appropriate amortization period, the Company notes that in D.P.U. 92-111 the Department approved recovery of a FAS 109 regulatory asset that was amortized over a 25-year period (Exh. CMA/BMS-1, at 5). Subsequently, the Company incurred additional tax liabilities and, in D.T.E. 05-27, the Department authorized the Company to recover the deficiency over the remaining life of the regulatory asset approved in D.P.U. 92-111, which at that time was just over 13 years (Exh. CMA/BMS-1, at 5). The Company states that if it were to amortize its current deferred income tax deficiency of $3,509,882 over the remaining 3.917 years that would exist by March 1, 2014, an increase of $896,064 per year in amortization expense would be required (Exhs. CMA/BMS-1, at 5-6; DPU-24-19).[182] Because the Company's deferred income tax deficiency includes deferred income taxes associated with plant installed on and after 1993, however, Bay State determined that it would be inappropriate to amortize the deficiency over the remaining 3.917 years under the method prescribed in D.P.U. 92-111 (Exh. CMA/BMS-1, at 6). Thus, the Company determined that an amortization period of 20 years was appropriate, on the basis that this period was more representative of the remaining estimated life in the Company's utility plant (Exh. CMA/BMS-1, at 6). Under Bay

181 The South Georgia method refers to a method of recovering accumulated deferred income tax deficiencies resulting from changes in tax rates on a straight-line basis, by amortizing the deficiency over the remaining regulatory life of the property (Exh. DPU-24-21). This approach is referred to as the South Georgia method, because it was first prescribed by the Federal Power Commission in South Georgia Natural Gas Company, FPC RP-77-32. D.P.U. 92-111, at 171 n.49; D.P.U. 87-59, at 55-56.

182 The Company derives this amount by dividing the $3,509,882 deferred income tax deficiency by 3.917 years (Exhs. CMA/BMS-1, at 5-6; DPU-24-19).

State's proposal, the use of a 20-year amortization period would result in an increased amortization of $175,494 per year, and would cease on February 28, 2034 (Exhs. CMA/BMS-1, at 6; DPU-24-19).[183]

b. Pension and PBOP Deferred Income Tax Deficiency

Bay State notes that in D.T.E. 05-27 the Department authorized the Company to record a regulatory asset for its current additional minimum liability related to the Company's pension plan (Exh. CMA/BMS-1, at 6). The Company also was authorized to establish an annual reconciling mechanism ("PAM") to collect or refund to customers any differences between the actual pension and PBOP expenses and the amounts included in rates (Exh. CMA/BMS-1, at 6). See also D.T.E. 05-27, at 119-120. According to the Company, deferred income taxes on the balances of the various components of the pension and PBOP liabilities are included in the calculation of the regulatory asset and the PAM (Exh. CMA/BMS-1, at 6). The Company notes that the balances of these deferred taxes have been calculated at the 6.5 percent tax rate in place at the time of the filing of this case, but that the balances will reflect the higher state franchise tax rate of eight percent in the future (Exh. CMA/BMS-1, at 6-7).

The Company states that the change in tax rates results in a deferred income tax deficiency in the latest PAM of $299,094 (see Exhs. CMA/BMS-1, at 7; CMA/BMS-3; DPU-24-22). The Company proposes to recover the deferred income tax deficiency associated with the PAM over the same 20-year period as the utility plant using the South Georgia method (Exh. CMA/BMS-1, at 7). This proposal results in an additional annual amortization of

---

183 The Company derives this amount by dividing the $3,509,882 deferred income tax deficiency by 20 years (Exhs. CMA/BMS-1, at 6; DPU-24-19).

$14,955 ($299,094/20=$14,955) to be recovered through the PAM (Exhs. CMA/BMS-1, at 7; CMA/BMS-3).

c. Environmental Remediation Clause Deferred Tax Deficiency

Bay State notes that, as authorized in Manufactured Gas Generic Investigation, D.P.U. 89-161 (1990), the Company has been using a Cost of Gas and Remediation Adjustment Clause ("RAC") to recover certain environmental response costs associated with the remediation of former manufactured gas facilities (Exh. CMA/BMS-1, at 7). According to Bay State, the RAC includes the reduction of any deferred tax benefits resulting from deductions taken on the Company's income tax returns for the environmental response costs (Exh. CMA/BMS-1, at 7). The Company notes that in the latest RAC, the deferred income tax liabilities have been calculated at the 6.5 percent tax rate in place at the time of the filing of this case, but that the balances will reflect the higher state franchise tax rate of eight percent in the future (Exh. CMA/BMS-1, at 7). The Company states that the change in tax rates results in a deferred income tax deficiency in the RAC of $13,175 (Exhs. CMA/BMS-1, at 7; CMA/BMS-3). The Company proposes to recover the deferred income tax deficiency associated with the RAC over the same 20-year period as proposed for other deferred income taxes using the South Georgia method (Exh. CMA/BMS-1, at 7). This proposal results in an additional annual amortization of $659 ($13,175/20=$659) to be recovered through the RAF (Exhs. CMA/BMS-1, at 7; CMA/BMS-3). The Company reiterated its proposed deferred income tax deficiencies calculations on brief (Company Brief at 138-140). No other party addressed this issue.

3. Analysis and Findings

FAS 109 requires companies to recognize on their financial statements all previously unrecorded future income tax liabilities (Exh. CMA/BMS-1, at 4). See also D.T.E. 05-27, at 227. As a result of complying with that mandate, the Company identifies $3,822,151 in additional deferred income tax liabilities associated with the change in the Massachusetts franchise tax rate from 6.5 percent to eight percent applicable to net income, and seeks to recover this amount over 20 years (Exhs. CMA/BMS-1, at 5-6; CMA/BMS-2; CMA/BMS-3). Of this amount, $3,509,882 would be recovered through Bay State's distribution rates, and the remaining $312,269 would be recovered through the Company's PAM and RAC reconciling mechanisms (see Exhs. CMA/BMS-2; CMA/BMS-3).

The Department recognizes that the change in Bay State's state income tax expense arising from the enactment of the Transportation Financing Bill results in deficiencies in the Company's deferred state income tax reserve (Exh. CMA/BMS-1, at 2-4). The Department has reviewed the Company's deferred income tax liability calculations and finds them to be accurate (Exhs. CMA-BMS-2; CMA-BSM-3; DPU-24-18, Atts. A-E; DPU-24-27).

Turning to the Company's proposed amortization period, while the Department has previously approved the recovery of the Company's FAS 109 regulatory assets over approximately 25 years, this recovery period was based on the remaining life of Bay State's utility plant in service at the time. D.T.E. 05-27, at 227-228 n.136; D.P.U. 92-111, at 126, 173. The Company's proposed 20-year amortization period is based on the estimated remaining service life of its plant assets (see Exh. CMA/JTG-2, Sch. JTG-21, at 1 (Rev. 5)).[184] Moreover, the proposed amortization period is consistent with the period applied by the Department in previous cases involving deferred income tax deficiencies under the South Georgia method. D.P.U. 95-40, at 50; D.P.U. 92-111, at 172-173; D.P.U. 87-59, at 55-56.

Based on the foregoing, the Department approves the Company's proposed total deferred income tax liability of $3,822,151 to be recovered over a period of 20 years. Of this amount, $3,509,882 shall be recovered through Bay State's distribution rates, $299,094 shall be recovered through the Company's PAM, and $13,175 shall be recovered through the Company's RAC mechanism. Bay State has included the entire amount in its distribution rate income tax calculation, producing an income tax adjustment of $191,108 ($3,822,151 / 20 years) (Exh. CMA/JTG-2, Schs. JTG-11, JTG-25, at 8 (Rev. 5)). Because only $3,509,882 will be recovered through the Company's distribution rates, the Department finds that the correct income tax adjustment is $175,494 ($3,509,882 / 20 years). Accordingly, the Department has reduced Bay State's proposed income tax adjustment by $15,614. The effect of this adjustment on the Company's income tax expense is presented in Schedule 8 of this Order.

---

184 Bay State's net plant balance as of December 31, 2012, of $613,201,413 (i.e., $1,061,544,657 - $448,343,244), divided by the Company's annualized depreciation accruals of $31,662,972 (i.e., $2,638,581 x 12), equals 19.37 years (Exh. CMA/JTG-2, Sch. JTG-21, at 1 (Rev. 5)).

IX. CAPITAL STRUCTURE AND RATE OF RETURN

A. Introduction

Bay State proposes a weighted average cost of capital ("WACC") of 8.85 percent, representing the rate of return to be applied to the Company's rate base to determine the total return on its investment (Exhs. CMA/VVR-1, at 3-4; CMA/VVR-3). The WACC is based on: (1) a proposed capital structure comprised of 46.32 percent long-term debt and 53.68 percent common equity; (2) a proposed cost of long term debt of 5.83 percent; and (3) a proposed rate of return on common equity ("return on equity" or "ROE") of 11.45 percent (Exhs. CMA/VVR-3; CMA/VVR-6; CMA/VVR-7).[185] The WACC is then applied to a proposed rate base of $476,523,686 to determine the required return on investment component of base rates of $42,172,346 (Exh. CMA/JTG-2, Sch. JTG-2 (Rev. 5)).

In determining its proposed ROE, the Company applied the discounted cash flow ("DCF") model, the capital asset pricing model ("CAPM") (including two variations of the model), and the risk premium model ("RPM"), using the market and financial data developed for three proxy comparison groups (Exh. CMA/VVR-1, at 5-6). As discussed in further detail below, the three proxy groups include: (1) a proxy group consisting of nine publicly traded natural gas distribution companies ("Gas LDC Group"); (2) a proxy group consisting of nine publicly traded combination gas and electric utility companies ("Combination Utility Group"); and (3) a proxy group consisting of 43 non-regulated companies ("Non-Regulated Group") (Exh. CMA/VVR-1, at 24-25, 33-34).

---

185 In Bay State's last rate case the Department set an allowed ROE of 9.45 percent. D.P.U. 12-25, at 444.

In addition, the Company used the comparable earnings approach ("CEA") to validate its conclusions of the DCF, CAPM and RPM (Exh. CMA/VVR-1, at 5, 11). The components of the Company's proposal, including the capital structure, cost of debt, proxy groups and ROE, are discussed below. In addition, we discuss the Attorney General's proposed capital structure, cost of debt, proxy group, and ROE.

B. Capital Structure

1. Company's Proposal

As of the end of the test year, Bay State's capital structure consisted of $229,000,000 in long-term debt and $265,412,629 in common equity, corresponding to a capitalization ratio of 46.32 percent long-term debt and 53.68 percent common equity (Exhs. CMA/VVR-1, at 55; CMA/VVR-6). The Company's long-term debt consists of: (i) $139,000,000 in intercompany promissory notes held by NiSource Finance Corporation ("NFC"), a special-purpose financing subsidiary of NiSource; (ii) $40,000,000 in promissory notes held by unaffiliated entities; and (iii) $50,000,000 in a post-test year re-issuance of an intercompany note to NFC on March 18, 2013 (Exhs. CMA/VVR-1, at 57; CMA/VVR-7; AG-1-2 (6) at 33 (2012); AG-8-9, Att.). The Company's common equity balance excludes $174,206,809 to account for the unamortized plant acquisition relating to the purchase of Bay State by NiSource in 1999 (Exhs. CMA/VVR-1, at 55; CMA/VVR-6).

2. Positions of the Parties

a. Attorney General

The Attorney General argues that the Company's proposed capital structure is not consistent with that of NiSource, in that Bay State has a much higher common equity ratio than

NiSource (Attorney General Brief at 107, citing Exh. JRW-5, at 1-2). She contends that this difference has a significant effect because the Company's bond ratings and debt costs are directly tied to NiSource's bond ratings (Attorney General Brief at 107, citing Exh. AG/JRW-1, at 15). Moreover, the Attorney General maintains that NiSource provides the ultimate source of capital to the Company (Attorney General Brief at 107, citing Exh. AG/JRW-1, at 15-16; Attorney General Reply Brief at 66).

In recognition of NiSource's role in the funding of Bay State's operations, the Attorney General proposes an alternative capital structure consisting of 50 percent long-term debt and 50 percent common equity to determine Bay State's overall weighted cost of capital in this case (Attorney General Brief at 107-108, citing Exh. AG/JRW-1, at 15-16; Attorney General Reply Brief at 66). The Attorney General notes that her Attorney General Gas Proxy Group's median common equity ratio of 48.5 percent, as well as the Company's statement that the average common equity ratio approved in gas rate cases in 2013 is 50.13 percent, indicate that the typical common equity ratio for gas distribution companies is significantly lower than that of Bay State on a standalone basis (Attorney General Brief at 107, citing Tr. 4, at 417; Attorney General Reply Brief at 66).

b. Company

The Company argues that its use of the actual test year capital structure is consistent with Department precedent (Company Brief at 141, citing D.P.U. 12-25, at 386-388; D.P.U. 09-30, at 303-304; D.T.E. 05-27, at 269-272; Company Reply Brief at 37-38). Further, Bay State asserts that the Department has consistently found that it will depart from using the actual capital structure only when the actual structure "deviates from sound utility practices" (Company Brief at 142, citing D.P.U. 12-25, at 386; Company Reply Brief at 38, citing D.P.U. 10-114, at 288). In this regard, the Company denies that its test year end capital structure deviates from sound utility practice (Company Reply Brief at 38). In fact, the Company notes that the proposed capital structure is nearly identical to the capital structures approved by the Department in the Company's previous three rate case proceedings (Company Brief at 142, citing D.P.U. 12-25, at 388, D.P.U. 09-30, at 304; D.T.E. 05-27, at 272; Company Reply Brief at 38). Bay State also contends that its debt-to-equity ratio falls within the typical range for gas companies, as evidenced by the common equity ratios of the Gas LDC Group used in the Company's cost of equity analysis (Company Brief at 142, citing Exh. CMA/VVR-1, at 56-57).[186]

3. Analysis and Findings

A company's capital structure typically consists of long-term debt, preferred stock, and common equity. D.P.U. 07-71, at 122; D.T.E. 03-40, at 319; D.T.E. 01-56, at 97; Pinehills Water Company, D.T.E. 01-42, at 17-18 (2001). The ratio of each capital structure component to the total capital structure is used to weight the cost (or return) of each capital structure component to derive a WACC. The WACC is used to calculate the return on rate base for calculating the appropriate debt service and profits for the company to be included in its revenue requirements. D.P.U. 07-71, at 122; D.T.E. 03-40, at 319; D.T.E. 01-42, at 18; D.P.U. 86-149, at 5.

Within a broad range, the Department will defer to the management of a utility in decisions regarding the appropriate capital structure, and normally will accept the utility's test

186 Bay State points out that the comparison companies in the Gas LDC Group had an average common equity ratio of 56.1 percent (Company Brief at 142, citing Exh. CMA/VVR-1, at 56-57).

year-end capital structure, unless the capital structure deviates substantially from sound utility practice. Mystic Valley Gas Company v. Department of Public Utilities, 359 Mass. 420, 428-429 (1971); D.P.U. 1360, at 26-27; Blackstone Gas Company, D.P.U. 1135, at 4 (1982); see also Cambridge Electric Light Company, D.P.U. 20104, at 42 (1979). The SJC also has found that the use of a parent company's capital structure as a proxy for that of the regulated subsidiary would not be appropriate unless the subsidiary's capitalization was so unreasonably and substantially varied from usual practice as to impose an unfair burden on the consumer. Mystic Valley Gas Company v. Department of Public Utilities, 359 Mass. 420, 428-430 (1971); Boston Gas Company v. Department of Public Utilities, 359 Mass. 292, 301-302 (1971); New England Telephone and Telegraph Company v. Department of Public Utilities, 360 Mass. 443, 471 (1971).

Bay State's operations are confined to gas distribution in Massachusetts (Exh. CMA/SHB-1, at 2-3). In contrast, NiSource is a multi-state holding company with natural gas transmission, storage, and distribution operations, as well as electric generation, transmission, and distribution operations (Exhs. CMA/SHB-1, at 3-4; AG-1-2 Att. 1, at 7-8, 16 (2012)). Through NFC, the Company obtains capital from its parent company, NiSource (Exhs. CMA/VVR-1, at 57-58; AG-1-2 Att. 1 (2012) at 9). However, Bay State and NiSource are separate legal entities, each with different operations, capital requirements, and bond ratings (Exh. AG-1-11). In view of these differing operations, the Department finds that Bay State's capital requirements differ from those of NiSource and, therefore, that it would be inappropriate to impute NiSource's capital structure to the Company, even on a weighted basis. D.P.U. 85-137, at 110-111; see also Massachusetts Electric Company, D.P.U. 18599, at 29-32

(1976); D.P.U. 18204, at 18-26; Mystic Valley Gas Company v. Department of Public Utilities, 359 Mass. 420, 428-430 (1971); Boston Gas Company v. Department of Public Utilities, 359 Mass. 292, 301-302 (1971); New England Telephone and Telegraph Company v. Department of Public Utilities, 360 Mass. 443, 471 (1971).

Bay State's proposed 53.68 percent common equity ratio is within the range of common equity ratios of the companies in the Gas LDC Group (Exh. CMA/VVR-1, at 55). Moreover, the Company's common equity ratio generally corresponds to the common equity ratios approved in recent years by the Department for gas distribution companies. See D.P.U. 12-25, at 388 (53.7 percent); D.P.U. 11-01/D.P.U. 11-02, at 378 (42.60 percent); D.P.U. 10-114, at 291, 383 (50.17 percent). We are not persuaded that the Company's common equity ratio deviates substantially from sound utility practice. Although Bay State's common equity ratio may be somewhat higher than those of some of the companies in the Gas LDC Group, that fact alone does not warrant the imputation of a hypothetical capital structure. See D.P.U. 12-25, at 388; D.P.U. 08-35, at 190-191; D.P.U. 91-106/138, at 97. To the extent that the Company's common equity ratio may differ from that of other companies, this distinction is more appropriately addressed as part of the Company's proposed return on equity than through imputation of a hypothetical capital structure.

Based on the foregoing analysis, the Department accepts the Company's proposed capital structure consisting of 46.32 percent long-term debt and 53.68 percent common equity, and we decline to accept the Attorney General's recommended capital structure. The effects of Bay State's capital structure on the Company's WACC are provided in Schedule 5 of this Order.

C. Cost of Debt

1. Company's Proposal

The Company proposes an effective cost of debt of 5.83 percent (Exhs. CMA/JTG-2, Sch. JTG-12 (Rev. 5); CMA/VVR-1, at 57; CMA/VVR-3; CMA/VVR-7). This rate represents the weighted average of interest rates associated with the $229,000,000 in outstanding promissory notes detailed above (Exhs. CMA/VVR-1, at 57-58; CMA/VVR-7; AG-1-2 (6) at 33-34 (2012)). The interest rates on the $189,000,000 in promissory notes held by NFC and the $40,000,000 in notes held by unaffiliated entities range between 4.97 percent and 6.43 percent (Exhs. CMA/VVR-7; AG-1-2 (6) at 33 (2012)). The proposed cost of debt includes $392,388 in amortization of call premiums and unamortized debt expense associated with five of the debt issues; of these amortizations, $128,832 represents amortizations associated with debt that has been redeemed by the Company (Exhs. CMA/VVR-1, at 57-58; CMA/VVR-7).

2. Positions of the Parties

a. Attorney General

The Attorney General argues that Bay State failed to refinance its outstanding notes with NFC, which would have saved the Company more than $5.1 million per year in interest expense (Attorney General Brief at 108, citing D.P.U. 12-25, at 389). Further, the Attorney General argues that NiSource is "most likely" financing Bay State's notes entirely with short-term debt, thereby extracting "huge profits" from ratepayers given the difference between the 5.83 percent long-term debt rate that the Company charges customers and the 1.07 percent interest rate it pays for short-term debt (Attorney General Brief at 108, citing Exh. AG-1-6, Att. C). The Attorney General asserts that the Company was imprudent in failing to reduce its interest costs through a refinancing of its outstanding notes with NFC, and that the Department should adjust the cost of service accordingly (Attorney General Brief at 108; Attorney General Reply Brief at 66-67).

b. Company

Bay State argues that the 5.83 percent long-term debt rate is consistent with Department precedent because it: (i) reflects the Company's actual cost of debt issuances, and (ii) includes recognition of the expenses associated with Bay State's early redemption of its previously outstanding higher-cost debt, which is necessary to compensate the Company for the costs it incurred to obtain a lower embedded cost of debt (Company Brief at 142-143, citing Exhs. CMA/VVR-1, at 57; CMA/VVR-7). Bay State further contends that the Department has accepted this approach to calculating the long-term debt rate for the Company in its prior rate case proceedings (Company Brief at 143, citing D.P.U. 12-25; D.P.U. 09-30; D.T.E. 05-27).

3. Analysis and Findings

In calculating the WACC, the Company uses an embedded cost of debt rate of 5.83 percent (Exhs. CMA/VVR-1, at 57; CMA/VVR-3; CMA/VVR-7; CMA/JTG-2, Sch. JTG-12 (Rev. 5)). The cost of debt is based upon the issuance rate on (i) outstanding promissory notes between the Company and NFC, and (ii) two unaffiliated notes (see Exhs. CMA/VVR-1 at 57; CMA/VVR-7; AG-1-2 (6) at 33 (2012)). The interest rates on these notes range between 4.97 percent and 6.43 percent (Exhs. CMA/VVR-7; AG-1-2 (6) at 33 (2012)).

The Attorney General contends that the Company was imprudent by failing to refinance the outstanding debt held by NFC to lower market rates, claiming that doing so would save

ratepayers more than $5.1 million (Attorney General Brief at 108; Attorney General Reply Brief at 66-67). As noted above, NFC holds $189,000,000 in promissory notes issued by Bay State (Exhs. CMA/VVR-1, at 57; CMA/VVR-7; AG-1-2 (6) at 33 (2012); AG-8-9, Att.). While there is no explicit impediment to Bay State refinancing this debt, neither is there any obligation on the part of NFC to provide such financing, particularly if such a refinancing would trigger NFC's own call premiums and other make-whole provisions (see Tr. 4, at 454-456).
See also D.P.U. 12-25, at 393. Therefore, it is highly likely that Bay State would have to obtain its own financing in the external capital markets (Tr. 4, at 457). Because the public capital markets currently require a minimum transaction size of $250 million for a debt issue to be index-eligible, the Company would be required to obtain financing through the private placement market, and the Department is persuaded that a private placement of the $189,000,000 debt held by NFC would require substantial transaction costs (Tr. 4, at 457-458).

Based on these considerations, the Department finds that the Company's current debt instruments carry reasonable interest rates. Accordingly, the Department accepts the Company's proposed embedded cost of debt rate of 5.83 percent in determining an appropriate WACC.

D. Proxy Groups

1. Company's Proxy Groups

The Company presents its cost of equity analysis utilizing the capitalization and financial statistics of three proxy groups, representing what it considers to be alternative investment opportunities of comparable risk (Exhs. CMA/VVR-1, at 25, 33-34, 37-38, 42-43; CMA/VVR-8; CMA/VVR-9; CMA/VVR-10; CMA/VVR-11). As stated above, the Gas LDC Group is comprised of nine publicly traded natural gas distribution companies (CMA/VVR-1, at 24-25).

The selected companies are classified by the Value Line Investment Survey ("Value Line") as a natural gas utility with a safety rank of "1", "2", or "3",[187] and a beta that is within two standard deviations of the mean beta for the Value Line companies (Exh. CMA/VVR-1, at 24). The companies in the Gas LDC Group have a Standard & Poor's Ratings Services ("S&P") corporate credit rating between A+ and BBB-,[188] and earn at least 60 percent of their operating income from regulated gas distribution operations (Exh. CMA/VVR-1, at 24). Each selected company currently pays dividends that have not been discontinued or reduced during the previous five years (Exh. CMA/VVR-1, at 24). Additionally, the companies in the Gas LDC Group have a significant revenue stabilization mechanism in place and have not recently been involved in or been a target of an acquisition (Exh. CMA/VVR-1, at 24).

The Combination Utility Group is comprised of nine publicly traded combination gas and electric utility companies with risk characteristics similar to the Gas LDC Group (Exh. CMA/VVR-1, at 37). The companies in the Combination Utility Group are classified by

---

187 The Value Line safety rank measures the total risk of a stock relative to the approximately 1,700 other stocks within the Value Line ranking system. Safety ranks are given a scale from 1 (safest) to 5 (riskiest): Rank 1 – these stocks, as a group, are safer, more stable, and least risky investments relative to the Value Line universe; Rank 2 – these stocks, as a group, are safer and less risky than most; Rank 3 – these stocks, as a group, are of average risk and safety. See Definitive Guide, The Value Line Ranking System at 3, available at www3.valueline.com/pdf/The_Value_Line_Ranking_System.pdf.

188 A company with a credit rating of "A" is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories ("AAA" and "AA"). However, the company's capacity to meet its financial commitments is still strong. A company with a credit rating of "BBB" exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity to meet its financial commitments. The use of a "+" or "-" sign shows the relative standing of the company within the rating category. See Standard & Poor's Ratings Definitions at 5, available at www.standardandpoors.com/ratingsdirect.

Value Line as an electric utility with a safety rank of "1", "2", or "3" and an S&P corporate credit rating between A+ and BBB- (Exh. CMA/VVR-1, at 37). The selected companies have been engaged in both the natural gas distribution and electric distribution businesses for at least the past five years, and are not currently operating nuclear power generation facilities, are not acting as significant independent power producers, and are not engaging in major gas transmission and storage activities (Exh. CMA/VVR-1, at 37). The included companies also currently pay dividends that have not been discontinued or reduced during the previous five years, and the companies have not recently been an acquisition target (Exh. CMA/VVR-1, at 37).

The third proxy group, the Non-Regulated Group, is comprised of 30 "highly-stable" domestic companies with risk characteristics equivalent to, or superior to, the Gas LDC Group (Exh. CMA/VVR-1, at 42). The companies in the Non-Regulated Group are classified by Value Line as a conservative stock with a safety rank now lower than "1" (Exh. CMA/VVR-1, at 42). Each of the selected companies has a Value Line maximum beta of 0.75 and an S&P corporate credit rating that is no lower than BBB- (Exh. CMA/VVR-1, at 42). The selected companies are not in the gas and/or electric distribution businesses, and are not an investment company (Exh. CMA/VVR-1, at 42). Also, each selected company currently pays dividends and has at least one consensus earnings estimate published by an information service provider such as Thomson Reuters Corporation ("Reuters") or Zacks Investment Research ("Zachs") (Exh. CMA/VVR-1, at 42).

2. Attorney General's Proxy Group

In her cost of equity analysis, the Attorney General evaluates the return requirements of investors on the common stock of a proxy group of eight publicly held gas distribution companies ("Attorney General Gas Proxy Group") (Exhs. AG/JRW-1, at 4, 13; JRW-4). These selected companies are listed in AUS Utility Reports as a natural gas distribution, transmission and/or integrated gas company, and as a natural gas utility by Value Line Standard Edition (Exh. AG/JRW-1, at 13). The selected companies also have an investment grade bond rating by Moody's Investor Service ("Moody's") and S&P (Exh. AG/JRW-1, at 13). In addition, the Attorney General eliminated two companies from the group, New Jersey Resources and UGI, due to their low percentage of revenues from regulated gas operations (Exh. AG/JRW-1, at 13).

The median operating revenues for the Attorney General Gas Proxy Group companies is $1,570,700,000, and median net plant for the group is $3,037,000,000 (Exh. AG/JRW-1, at 14). The group receives 71 percent of their revenues from regulated gas operations, has an A2 Moody's bond rating[189] and an A bond rating from S&P, a current common equity ratio of 48.5 percent, and an earned return on common equity of 10.1 percent (Exh. AG/JRW-1, at 14).

3. Positions of the Parties

a. Attorney General

The Attorney General notes that the Company's Gas LDC Group is the same as her Attorney General Gas Proxy Group with the exception of New Jersey Resources, which she has excluded due to the low proportion of revenues derived from regulated gas operations

189 Bonds rated "A" by Moody's are judged to be upper-medium grade and are subject to low credit risk. The modifier "2" indicates a mid-range ranking. See Moody's Investor Services Rating Symbols and Definitions, available at www.moodys.com/pages/am002002.aspx.

(Attorney General Brief at 110, citing Exhs. AG/JRW-1, at 13; CMA/VVR-1, at 25). According to the Attorney General, however, the exclusion of New Jersey Resources does not affect the results of her analysis (Attorney General Brief at 110, citing Tr. 10, at 1050).

In contrast to her general acceptance of Bay State's Gas LDC Group, the Attorney General argues that the Company's Combination Utility Group and Non-Regulated Group are inappropriate proxies for evaluating the cost of equity for the Company's gas distribution operations (Attorney General Brief at 110-111). She argues that because the cost of capital from a market perspective is important to the cost of equity determination, it is appropriate to evaluate the cost of capital based on a group of utilities with a similar investment risk profile (Attorney General Brief at 109, citing Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591 (1944) ("Hope") and Bluefield Water Works and Improvement Company v. Public Service Commission of West Virginia, 262 U.S. 679 (1923) ("Bluefield")). Further, the Attorney General notes that the Department has generally rejected equity cost rate estimates that are based on the non-regulated groups (Attorney General Brief at 111, citing D.T.E. 01-56, at 116; D.P.U. 96-50 (Phase I) at 132; D.P.U. 92-250, at 160-161; D.P.U. 92-111, at 280-281; The Berkshire Gas Company, D.P.U. 905, at 48-49 (1982)).

Further, the Attorney General notes that the companies in the Combination Utility Group receive only 23 percent of their revenues from regulated gas operations (Attorney General Brief at 110, citing Exh. AG/JRW-1, at 53-54). In addition, she asserts that the companies in the Combination Utility Group have a higher risk profile than gas distribution companies as indicated by a lower average bond rating than gas distribution companies (Attorney General Brief at 110-111, citing Exh. AG/JRW-1, at 53-54). Therefore, the Attorney General considers this group to have a higher risk profile than gas distribution companies, thus rendering it an inappropriate proxy to use in evaluating the cost of equity for the Company (Attorney General Brief at 111).

The Attorney General maintains that the Non-Regulated Group also is an inappropriate proxy for evaluating the cost of equity for the Company (Attorney General Brief at 111). She states that the companies included in this group are in business lines that are "vastly different" from the gas distribution business and do not operate in a highly regulated environment (Attorney General Brief at 111, citing Exh. AG/JRW-1, at 54-55). Further, the Attorney General contends that growth rate forecasts of Wall Street analysts have an upward bias of earnings per share ("EPS"), particularly for unregulated companies and, therefore, that DCF equity cost rate estimates for this group are particularly overstated (Attorney General Brief at 111, citing Exh. AG/JRW-1, at 54-55). As such, the Attorney General asserts that the Non-Regulated Group is an inappropriate proxy to use in evaluating the cost of equity for the Company (Attorney General Brief at 111).

b. Company

Bay State argues that its three proxy groups produce an analysis that meets the Department's objectives of: (1) developing a group of companies that are fundamentally similar to the Company without matching the Company in every detail, (2) producing an analysis that is sufficiently reliable, and (3) reducing the risk of including statistically significant anomalies into the analysis (Company Brief at 147-148). Bay State argues that its Gas LDC Group is composed of nine gas distribution companies that derive at least 60 percent of their operating income from regulated gas distribution operations and have significant revenue stabilization mechanisms

(Company Brief at 148, citing Exh. CMA/VVR-1, at 24). Bay State adds that nearly all of the companies in the Gas LDC Group employ infrastructure trackers comparable to the Company's TIRF (Company Brief at 148, citing Exh. CMA/VVR-1, at 54).

Regarding the Combination Utility Group, the Company notes that a majority of the companies included therein have been accepted by the Department in establishing ROEs for gas distribution companies (Company Brief at 149, citing D.P.U. 11-01/D.P.U. 11-02, at 380, 412). Further, the Company maintains that the Department has found that the risk differential between gas and electric operations is not significant enough to exclude electric distribution companies from consideration in determining the ROE of a gas distribution company (Company Brief at 149). In this regard, the Company notes that both electric and gas utilities have similar risks in that they are both capital intensive, highly regulated, provide an essential commodity, and have similar betas (Company Brief at 149, citing Exh. CMA/VVR-1, at 35).

Finally, concerning the Non-Regulated Group, the Company argues that it is comprised of 30 companies classified as conservative, and that they are considered low-risk companies by the Value Line (Company Brief at 149, citing Exh. CMA/VVR-1, at 42-43). Bay State argues that like CMA and other gas distribution companies, these non-regulated companies have a low beta and Value Line has assessed them as exhibiting safety, financial strength and stock price stability (Company Brief at 149, citing Exh. CMA/VVR-1, at 45-46).

4. Analysis and Findings

The Department has accepted the use of a proxy group of companies for evaluation of a cost of equity analysis when a distribution company does not have common stock that is publicly traded. See D.P.U. 08-35, at 176-177; Fitchburg Gas and Electric Light Company, D.T.E. 99-118, at 80-82 (2001); D.P.U. 92-78, at 109-110. The Department has stated that companies in the proxy group must have common stock that is publicly traded and must be generally comparable in investment risk. D.P.U. 1300, at 97.

In our evaluation of the proxy groups used by Bay State and the Attorney General, we recognize that it is neither necessary nor possible to find a group in which the companies match the Company in every detail. See D.T.E. 99-118, at 80; D.P.U. 87-59, at 68; Boston Gas Company, D.P.U. 1100, at 135-136 (1982). Rather, we may rely on an analysis that employs valid criteria to determine which companies will be in the proxy group, and that provides sufficient financial and operating data to discern the investment risk of the Company versus the proxy group. See D.T.E. 99-118, at 80; D.P.U. 87-59, at 68; D.P.U. 1100, at 135-136.

The Department expects diligence on the part of parties in assembling proxy groups that will produce statistically reliable analyses required to determine a fair rate of return for the Company. See D.P.U. 10-55, at 480-482. Overly exclusive selection criteria may affect the statistical reliability of a proxy group, especially if such screening criteria result in a limited number of companies in the proxy group. D.P.U. 10-55, at 480-482. The Department expects parties to limit criteria to the extent necessary to develop a larger as opposed to a narrower proxy group. D.P.U. 10-114, at 299; see D.P.U. 10-55, at 481-482. To the extent that a particular company's characteristics differ from those of the others in a proxy group, those differences should be identified in sufficient detail to enable a reviewer to discern any effects on investment risk. D.P.U. 10-114, at 299; D.P.U. 10-55, at 480-482.

We find that Bay State and the Attorney General each employed a set of valid criteria to select their respective proxy groups, and that they each provided sufficient information about the proxy groups to allow the Department to draw conclusions about the relative risk characteristics of the Company versus the members of the proxy groups. See D.P.U. 12-25, at 402; D.P.U. 09-30, at 307. Therefore, the Department will rely on those proxy groups to determine the Company's required cost of equity. Our acceptance of these groups notwithstanding, we raise two factors that we also will take into consideration in determining the appropriate ROE for the Company. First, the Company's decoupling mechanism is but one form of a wide range of revenue recovery mechanisms used by members of the parties' proxy groups that the financial market and regulatory community consider to be revenue stabilization mechanisms. D.P.U. 10-114, at 300; D.P.U. 10-55, at 482; D.P.U. 09-30, at 308; see also D.P.U. 07-50-A at 72. Second, some of the companies in the Company's proxy groups are involved in non-regulated businesses beyond distribution activities, potentially making these companies more risky, all else being equal and, in turn, potentially more profitable than the Company. D.P.U. 11-01/D.P.U. 11-02, at 385; D.P.U. 10-114, at 300; D.P.U. 09-30, at 309; D.P.U. 07-71, at 135. Therefore, while we accept the parties' proxy groups as a basis for cost of capital proposals, we also will consider the particular characteristics of the Company as opposed to members of the proxy groups when determining the appropriate ROE.

E. Return on Equity

1. Company's Proposal

The Company's analytical models based on the application of analytical models to the financial data of its three proxy groups discussed above suggest an ROE in the range of 11.05 to 11.65 percent (Exh. CMA/VVR-1, at 3). The models/methods employed by the Company for the analysis include the DCF model, CAPM, RPM, CEA, and two variants of the CAPM: (1) a size-adjusted CAPM, and (2) the Empirical CAPM ("ECAPM") (Exh. CMA/VVR-1, at 5). The various models/methods used by the Company resulted in 16 individual cost of equity estimates, derived from applying the various analytical models/methods to the market and financial data of the proxy group companies (Exh. CMA/VVR-1, at 6). The Company then performed a comparative risk assessment to adjust the cost of equity estimates for each proxy group to match the relative risk profile of Bay State, adjusting the estimates up by 0.49 percent for the Gas LDC Group, 0.25 percent for the Combination Utility Group and 0.71 percent for the Non-Regulated Group (Exh. CMA/VVR-1, at 10, 33, 45, 46). Based upon the measures of central tendency for the DCF, CAPM,[190] RPM and CEA results, the Company concludes that its cost of equity is in the range of 11.05 to 11.65 percent and, therefore, Bay State recommends that the Department approve a ROE of 11.45 percent for the Company (Exh. CMA/VVR-1, at 11).[191]

2. Attorney General's Proposal

The Attorney General proposes a cost of equity of 8.75 percent based on DCF and CAPM analyses (Exh. AG/JRW-1, at 2). Using the Attorney General Gas Proxy Group, the DCF analysis results in an estimated equity cost rate of 8.75 percent, while her CAPM analysis results in an estimated equity cost rate of 7.30 percent (Exhs. AG/JRW-1, at 39, 49; JRW-10; JRW-11). However, since the Attorney General gives greater weight to the DCF model, she uses the upper end of the range as the equity cost rate and, therefore, she concludes that the appropriate equity cost rate for the Attorney General Gas Proxy Group is 8.75 percent (Exh. AG/JRW-1, at 50).

---

190 The CAPM measure includes the traditional CAPM, size-adjusted CAPM, and ECAPM (see Exh. CMA/VVR-1, at 9).

191 The Company's cost of capital witness stated that his conclusions were heavily influenced by the DCF, CAPM, and RPM models and that the CEA results were used to validate his conclusions (Exh. CMA/VVR-1, at 11).

In support of her recommended ROE, the Attorney General states that the gas distribution industry is Value Line's lowest risk industry as measured by beta and, therefore, has the lowest cost of equity capital in the United States according to the CAPM (Exh. AG/JRW-1, at 50). Further, the Attorney General maintains that capital costs for utilities, as indicated by long-term bond yields, still are at historically low levels, even given the increase in these rates over recent months (Exh. AG/JRW-1, at 50-51). Further, the Attorney General states that growth in the economy is tepid, unemployment is still at 7.30 percent, and interest rates and inflation are at relatively low levels, all resulting in expected returns on financial assets remaining low (Exh. AG/JRW-1, at 51).

3. Positions of the Parties

a. Attorney General

The Attorney General challenges Bay State's opinion that the historically low interest rates are abnormal, and the Company's contention that large-scale increases in interest rates are on the horizon (Attorney General Brief at 103, citing Exh. CMA/VVR-Rebuttal-1, at 16-21; Attorney General Reply Brief at 103)). The Attorney General argues that the 100-basis point increase in ten-year Treasury rates from mid-2012 to November, 2013 does not necessarily mean that equity capital costs for gas companies have increased dramatically over that time (Attorney General Brief at 104, citing Exh. AG/JRW-Surrebuttal-1, at 4-8; Tr. 10, at 1035-1039). Based on these current market conditions and her cost of equity analysis, the Attorney General asserts that the Department should accept her ROE proposal (Attorney General Brief at 130-131).

b. Company

Bay State argues that its proposed 11.45 percent ROE reflects current capital market conditions and is the result of a number of widely accepted common equity cost models (Company Brief at 141, citing Exh. CMA/VVR-3). Further, Bay State contends that due to the Company having a revenue decoupling mechanism and an infrastructure tracking mechanism, precedent obligates the Department to provide a return commensurate with the returns for similar enterprises having corresponding risks (Company Brief at 144, citing Attorney General v. Department of Public Utilities, 392 Mass. 262, 266 (1984), citing Hope at 603). In this regard, the Company notes that its proposed ROE of 11.45 percent is based, in part, on two proxy groups consisting of utility companies that have corresponding risks, given that these utility companies, in general, have already implemented revenue stabilization mechanisms and have infrastructure tracking mechanisms (Company Brief at 144, 158-159, citing Exh. CMA/VVR-1, at 52-54). Thus, according to Bay State, any reduction in the ROE because the Company has a decoupling mechanism or an infrastructure tracking mechanism is based solely on speculation and conjecture and inconsistent with Department precedent (Company Brief at 144).

In addition, Bay State argues that the ROE authorized in this case must allow the Companies to maintain its credit and ability to attract capital (Company Brief at 144-145, citing Boston Edison v. Department of Public Utilities, 375 Mass. 305, 315 (1978), citing Hope at 603; New England Telephone & Telegraph Co. v. Department of Public Utilities, 327 Mass. 81, 88 (1951); Massachusetts Electric Company v. Department of Public Utilities, 376 Mass. 294, 299 (1978); Attorney General v. Department of Public Utilities, 392 Mass. 262, 265 (1984)). Bay State argues that in setting the ROE in this case, the Department must recognize that the Company needs to be in a position to attract capital on a going forward basis, and that without a fair return, the Company will not be able to attract investors to maintain safe and reliable service (Company Brief at 145). In this regard, Bay State asserts that the Attorney General's proposed ROE of 8.75 percent is both unreasonable and unsupported by the record, would impair the Company's ability to attract capital at a reasonable cost, and is inconsistent with ROEs granted by the Department over the past two decades (Company Brief at 159, 180-181). Accordingly, Bay State argues that the Department should reject the Attorney General's proposed ROE and approve the Company's proposed ROE of 11.45 percent (Company Brief at 145, 159).

4. Discounted Cash Flow Model

a. Company's Proposal

The DCF model is based on the premise that investors value financial assets on the basis of their expected future cash flows, discounted by the appropriate risk-adjusted rate of return (Exh. CMA/VVR-1, at 60). The Company employs the constant growth DCF model,[192] which is comprised of a forward-looking dividend yield component and an expected dividend growth rate into perpetuity (Exh. CMA/VVR-1, at 63, 65-66). The estimates of dividend yield were obtained from Value Line (Exh. CMA/VVR-1, at 66-67). The Company relied heavily on the consensus earnings estimates of "sell-side" equity analysts and the Value Line Investment Survey earnings estimates in estimating the appropriate growth rate (Exh. CMA/VVR-1, at 75).[193] According to

---

[192] The constant growth DCF model is also referred to as the standard form DCF model (Exh. CMA/VVR-1, at 63-65).

[193] The Company states that earnings growth forecasts are an acceptable substitute for dividend growth rates because over multiple time horizons they demonstrate more

Bay State, substantial academic research supports the use of earnings forecasts as an appropriate proxy for the expected growth rate component of the DCF model (Exh. CMA/VVR-1, at 75-76).

The Company estimates a DCF for each proxy group by adding the dividend yield and EPS growth estimates and then making a leverage adjustment and a flotation cost adjustment (CMA/VVR-1, at 92). According to the Company, a leverage adjustment is required when the market value equity capitalization of the proxy companies is materially higher than the corresponding book value capitalization, thereby understating or overstating the level of financial risk (Exh. CMA/VVR-1, at 92-93). The adjustment is calculated for each proxy group as: (1) the after-tax difference between the unlevered cost of capital[194] and the cost of debt, weighted by the ratio of debt to common stock; and (2) the difference between the unlevered cost of capital and the dividend rate on preferred stock, weighted by the ratio of preferred stock to common stock (Exh. CMA/VVR-1, at 97). The leverage adjustments calculated by the Company increase the DCF estimates for the Gas LDC Group by 54 basis points, the Combination Group by 87 basis points, and the Non-Regulated Group by 54 basis points (Exh. CMA/VVR-1, at 98-99).

The Company's flotation cost adjustment is intended to account for the "significant" costs of issuing equity (Exh. CMA/VVR-1, at 100). In determining the flotation cost adjustment, the Company considers the underwriting discounts of between 3.00 and 3.25 percent, and the

---

consistent growth patterns and are expected to parallel utility dividend growth rates in the long run Exh. CMA/VVR-1, at 75). Bay State notes that the practice is consistent with constant growth theory and is widely accepted in regulatory proceedings (Exh. CMA/VVR-1, at 75).

194 Unlevered cost of capital refers to the hypothetical cost of capital for an all equity financed firm (Exh. CMA/VVR-1, at 96).

transaction costs for legal fees, accounting fees, and printing fees, to arrive at 3.25 to 3.50 percent of the total equity offering value (Exh. CMA/VVR-1, at 102-103). Because firms typically have a capitalization structure composed of more than 40 percent equity, the Company estimates the flotation factor to be 1.014 percent (1 + (3.50 percent x 40 percent) = 1.014 percent) (Exh. CMA/VVR-1, at 103).

The Company's DCF estimate, adjusted for leverage and flotation, is 10.18 percent for the Gas LDC Group, 11.22 percent for the Combination Utility Group, and 12.06 percent for the Non-Regulated Group (Exh. CMA/VVR-1, at 106, 107, 110). The Company notes that the DCF model relies on strict underlying assumptions that are not always observed in reality (Exh. CMA/VVR-1, at 64).[195]

b. Attorney General's Proposal

The Attorney General relies on a constant growth DCF model, reasoning that the public utility business is in the steady-state (or constant-growth) stage of a three-stage DCF (Exh. AG/JRW-1, at 27). The cost of equity indicated by the Attorney General's DCF analysis is 8.75 percent (Exh. JRW-10, at 1). To determine the cost of capital using her constant growth

---

195 The strict assumptions underlying the constant growth DCF model include: (1) dividends and earnings grow at the same constant growth rate (or constant average growth trend); (2) book value per share and the stock price also grow at the same constant growth rate; (3) investors expect the same rate of return ("K") in all future periods, implying no changes in risk and a flat yield curve; (4) the discount rate, "K", must exceed the expected constant growth rate, "g"; (5) a fixed dividend payout ratio will be maintained; (6) a fixed price-earnings (P/E) multiple will be maintained; (7) dividends are only paid at the end of each year; and (8) no external financing occurs, as growth is financed strictly through the retention of earnings (or alternatively, any new sales of stock only occur at book value). Despite the fact that these assumptions are not always reflective of reality, the Company states that the constant growth model maintains its usefulness due to its ability to adequately explain investor behavior and the stock market valuation process (Exh. CMA/VVR-1, at 64 n.20).

DCF model, the Attorney General sums the estimated dividend yield and growth rates of her proxy group (Exh. AG/JRW-1, at 27, 39). The dividend yield used by the Attorney General in her DCF analysis is 5.00 percent (Exhs. AG/JRW-1, at 39; JRW-10, at 1). The Attorney General calculates the DCF dividend yield by taking the average of the six-month average dividend yield and the July 2013 dividend yield for the Attorney General Gas Proxy Group based on data supplied by AUS Utility Reports (Exhs. AG/JRW-1, at 29; JRW-10, at 2). The dividend yield is obtained by dividing the annualized expected dividend in the coming quarter by the current stock price (Exh. AG/JRW-1, at 29). To annualize the expected dividend, the Attorney General multiplied the expected dividend for the coming quarter by four and multiplied the result by one-half of the expected growth rate (Exh. AG/JRW-1, at 29).

In developing the expected growth rate, the Attorney General relies on the historic and projected growth rates of EPS, dividends per share ("DPS"), and book value per share ("BVPS") provided by Value Line and the EPS growth forecasts of Wall Street analysts provided by Yahoo! Inc., Reuters and Zacks (Exh. AG/JRW-1 at 31). Although the Attorney General assumes that EPS and dividends will exhibit similar growth rates over the very long term, she relies on DPS and BVPS to balance the shortcomings of relying solely on EPS as a proxy, specifically in recognition of an upward bias among Wall Street securities analysts (Exh. AG/JRW-1, at 35). The DCF growth rate for the proxy group used in the Attorney General's analysis is 3.65 percent (Exh. JRW-10, at 1). The Attorney General's analysis then adds the adjusted dividend yield and the estimated growth rate to determine a cost of equity for the proxy group (Exh. JRW-10, at 1). The DCF analysis performed by the Attorney General yields a cost of equity of 8.75 percent (Exh. JRW-10, at 1).

c. Positions of the Parties

i. Attorney General

The Attorney General argues that her DCF estimated cost of equity of 8.75 percent, based on a 3.74 percent growth adjusted dividend yield and a 5.00 percent growth rate, is appropriate to apply to Bay State (see Attorney General Brief at 111-112, citing Exh. AG/JRW-1, at 31-32). The Attorney General maintains that her model incorporates a growth rate that is not overly reliant on the EPS forecasts of Wall Street analysts, which she argues are "overly optimistic and upwardly biased" (Attorney General Brief at 112, citing Exhs. AG/JRW-1, at App. B).

The Attorney General argues that the DCF analysis provided by the Company should be rejected by the Department for five reasons. First, as discussed above, the Attorney General argues that because the DCF model proposed by Bay State is based on the Company's three proxy groups, the DCF results must be rejected (Attorney General Brief at 113). Second, she notes that the Company's analysis relies excessively on the EPS growth forecasts of Wall Street analysts and Value Line, which are overly optimistic and upwardly biased (Attorney General Brief at 114, citing Exh. AG/JRW-1, at 57).

Third, the Attorney General argues that the Company's primary error in its DCF analysis is the asymmetric elimination of DCF results (Attorney General Brief at 114). In this regard, the Attorney General contends that the Company eliminated DCF results in the proxy groups for companies that had equity cost rates below 7.35 percent (Attorney General Brief at 114, citing Exh. CMA/VVR-1, at 85-92). She claims that by eliminating only the low-end outliers, the Company has effectively increased its DCF analysis from approximately 8.80 percent to

9.40 percent for the Gas Utility Group (Attorney General Brief at 114, citing Exh. AG/JRW-1, at 57).

Fourth, the Attorney General argues that the leverage adjustment made by the Company is inappropriate and has been rejected by the Department in the past (Attorney General Brief at 115-116, citing D.P.U. 09-30, at 358-359; D.T.E. 05-27, at 298; D.T.E. 03-40, at 357; D.T.E. 01-56, at 105; D.P.U. 906, at 100-101; Eastern Edison Company, D.P.U. 837, at 49 (1982)). According to the Attorney General, the leverage adjustment increases the ROE for utilities that have high returns on common equity and decreases the ROE for utilities that have low returns on common equity (Attorney General Brief at 115, citing Exh. AG/JRW-1, at 60-61). She also contends that the Department has rejected the price-book analysis because it fails to recognize variables such as a company's geographic location, load factors, and customer make-up, which can affect price-book ratios (Attorney General Brief at 116, citing D.P.U. 906, at 100-101). In addition, the Attorney General notes that the price-book analysis has been found to rely excessively on investors' perceptions of the relationship between market and book prices in their investment decisions (Attorney General Brief at 116, citing D.P.U. 837, at 49).

Finally, the Attorney General argues that the Company's proposed DCF model is flawed because it includes an unnecessary flotation cost adjustment (Attorney General Brief at 116, citing Exh. AG/JRW-1, at 62-64). Specifically, the Attorney General contends that the Company should not be compensated for flotation costs that it does not pay (Attorney General Brief at 116, citing Exh. AG/JRW-1, at 62-64). She also notes that the Department has consistently rejected the inclusion of flotation costs in the cost of service (Attorney General Brief at 116, citing The Berkshire Gas Company, D.P.U. 90-121, at 180 (1990); D.P.U. 88-67 (Phase I) at 193; D.P.U. 86-280-A, at 112; D.P.U. 85-137, at 100). Moreover, the Attorney General claims that the Department also has consistently rejected flotation cost adjustments in determining ROE, because investors already take into account issuance costs in their decision to purchase stock at a given price (Attorney General Brief at 116, citing D.P.U. 90-121, at 180; D.P.U. 88-67 (Phase I) at 193; D.P.U. 86-280-A, at 112; D.P.U. 85-137, at 100).

ii. Company

Bay State argues that it has not relied excessively on the EPS growth rate forecasts of Wall Street analysts, as the Attorney General suggests, but rather the Company maintains that it has placed significant weight on both historical EPS growth rates and retention growth rates (Company Brief at 168, citing Exhs. CMA/VVR- Rebuttal-1, at 40; CMA/VVR-8). Further, the Company contends that the upward bias of Wall Street analysts' forecasts for EPS growth has not been proven with respect to electric and gas utilities and EPS growth rates, as the companies actually have exceeded the forecasts of equity analysts by approximately 150 to 175 basis points in recent years (Company Brief at 168, citing Exhs. CMA/VVR- Rebuttal-1, at 39; CMA-AG-1-2, Att.; Tr. 10, at 1037). In addition, the Company claims that the DCF analysis must recognize that investors' expectations of EPS growth rates drive stock prices, regardless of whether the forecasts on which they are based ultimately turn out to be optimistic or pessimistic (Company Brief at 168, citing Exh. CMA/VVR-Rebuttal-1, at 38). As such, the Company argues that the Department should continue to recognize forecast data as an appropriate measure of growth (Company Brief at 169, citing D.T.E. 05-27, at 298; D.T.E. 03-40 at 358).

Bay State also argues that it did not apply an asymmetric classification and elimination of DCF results, as suggested by the Attorney General, but rather that the Company appropriately relied on FERC precedent in eliminating the outliers in the DCF analysis (Company Brief at 167, citing Exh. CMA/VVR-Rebuttal-1, at 35-36). According to Bay State, reliance on FERC precedent recognizes that a test of reasonableness and economic logic should be applied in evaluating the results (Company Brief at 167). Bay State notes that in the Combination Utility Group it removed "low-end" outliers and a "high-end" outlier from a total of nine companies (Company Brief at 167, citing Exhs. CMA/VVR-Rebuttal-1, at 36; CMA/VVR-9). The Company states that the DCF estimates for the Gas LDC Group were sufficiently high as to make the elimination of "high-end" outliers unnecessary under the FERC standard (Company Brief at 167, citing Exhs. CMA/VVR-Rebuttal-1, at 36; CMA/VVR-9). The Company states that the Department, although not bound by FERC precedent, has accepted it in determining an appropriate ROE and should do so in this case (Company Brief at 168, citing D.T.E. 98-51, at 122).

Regarding the leverage adjustment, Bay State maintains that it is necessary to recognize the increased financial risk attributable to applying a value-derived DCF analysis to a book value-based capital structure, and the Company argues that DCF estimates are based on market value capital structures that are associated with a lower level of investment risk (Company Brief at 169, citing Exh. CMA/VVR-Rebuttal-1, at 41). According to the Company, it has been demonstrated time and again that the cost of equity is dependent on the capital structure (Company Brief at 169, citing Exh. CMA/VVR-Rebuttal-1, at 41).

Further, the Company states that its parent company, NiSource incurred $7.1 million in stock placement fees attributable to the acquisition of Bay State in February 1999 (Company Brief at 170, citing Exh. CMA/VVR-Rebuttal-1, at 67). Therefore, according to the Company, a 1.4 percent flotation cost adjustment providing it a return on a previously incurred issuance cost is appropriate (Company Brief at 170, citing Exh. CMA/VVR-Rebuttal-1, at 67).

In addition, Bay State argues that the DCF analysis provided by the Attorney General is flawed and should be rejected by the Department (Company Brief at 165). The Company contends that the Attorney General's proposed DCF analysis uses the mean and median values of the individual companies even when those values "do not pass fundamental tests of reasonableness and economic logic" (Company Brief at 165-166, citing Exh. CMA/VVR-Rebuttal-1, at 30). For example, the Company claims that rational investors would not invest in a stock that expects a future equity return that is negative or a return that is lower or only marginally higher than the rate on corporate fixed-income securities (Company Brief at 166, citing Exh. CMA/VVR-Rebuttal-1, at 33). Thus, according to the Company, the Attorney General ignored these "fundamental concepts of reasonableness and economic logic" in developing her DCF analysis and, as a result, the growth rate assumptions incorporated therein are illogical and downwardly biased (Company Brief at 166, citing Exh. CMA/VVR-Rebuttal-1, at 33).

Bay State also argues that there is a timing mismatch created by using the six-month historical stock price in calculating the dividend yield, as the Attorney General has done (Company Brief at 166, citing CMA/VVR-Rebuttal-1, at 30). The Company asserts that recent stock price averages generally reflect the current growth and return expectations of investors (Company Brief at 166, citing Exh. CMA/VVR- Rebuttal-1, at 31-32). Moreover, the Company notes that the Department has placed "greater weight on the more recent dividend yields" (Company Brief at 166, citing D.T.E. 03-40 at 358).

Finally, the Company argues that the Attorney General places excessive reliance on DPS and BVPS, as these metrics have inconsistent growth patterns and have limited influence on investor growth expectations (Company Brief at 166-167, citing Exh. CMA/VVR-Rebuttal-1, at 29-30). According to the Company, the Department has in the past been critical of the role DPS plays in the DCF calculation (Company Brief at 167, citing D.P.U. 10-114, at 312).

d. Analysis and Findings

The Company has proposed a ROE of 11.75 percent, which is in the range of 10.18 to 12.06 percent produced by its DCF analysis (Exhs. CMA/VVR-1, at 106-110; CMA/VVR-3). The Attorney General has proposed a ROE of 8.75 percent based on her DCF analysis (Exh. AG/JRW-1, at 39). Both the Company and the Attorney General use a form of the DCF model that assumes an infinite investment horizon and a constant growth rate (Exhs. CMA/VVR-1, at 63; AG/JRW-1, at 27). This model has a number of very strict assumptions (e.g., the infinite investment horizon and dividend growth at a constant rate in perpetuity) (Exh. CMA/VVR-1, at 64 n.20). These assumptions affect the estimates of cost of equity. D.P.U. 10-114, at 312; D.P.U. 09-39, at 387.

Because regulation establishes a level of authorized earnings for a utility that, in turn, implicitly influences DPS, estimation of the growth rate from such data is an inherently circular process. D.P.U. 10-114, at 312; D.P.U. 10-55, at 512; D.P.U. 09-30, at 357-358. In addition, the DCF model includes an element of circularity when applied in a rate case, because investors' expectations depend upon regulatory decisions. D.P.U. 10-70, at 253; D.P.U. 09-30, at 357-358. Consequently, this circularity affects the reliability of the Company's and the Attorney General's DCF models. The Attorney General's DCF model places less emphasis on analyst forecasts of EPS growth rates, which to some extent compensates for this circularity, but an element of circularity remains in her DCF model as well. (see Exh. AG/JRW-1, at 38-39).

The Company and Attorney General arrive at their respective estimates based on different data sources to estimate the dividend yield and growth rates (Exhs. CMA/VVR-1, at 71, 75, 77; AG/JRW-1, at 30-35). The Company uses the Value Line estimates as the basis for its expected dividend yields, while the Attorney General calculates the dividend yield by applying one-half of the growth rate to a six-month average dividend yield (Exhs. CMA/VVR-1, at 66; AG/JRW-1, at 31). The Department finds that both the Company's and the Attorney General's approaches are logical and reasonable; further, there is no evidence on the record to establish that investors rely overwhelmingly on one approach over the other. Therefore, we find that the two approaches provide a credible basis for evaluating a determination of the Company's allowed ROE.

In addition, the Company and the Attorney General use different growth rates in their respective DCF analyses (Exhs. CMA/VVR-1, at 84-85, 106-110; AG/JRW-1, at 39). Determining the appropriate long-term growth expectations of investors in a DCF analysis can be difficult and controversial (Exhs. CMA/VVR-1, at 63; AG/JRW-1, at 30). The Company relies on an historical and forward-looking growth analysis using EPS, DPS, BVPS, and retention growth rates, with emphasis placed on the EPS rates because of the "significant influence" it has on expectations of growth and earnings (Exh. CMA/VVR-1, at 71-73). The Attorney General bases her growth rate on the same metrics, but she does not elevate the importance of the EPS in her analysis because of the "overly optimistic and upwardly biased" forecasts of Wall Street Analysts, of which she claims investors are aware (Exhs. AG/JRW-1, at 4, 36, 59, 71; AG/JRW-16, App. B). The Department, appreciating that the EPS forecasts of Wall Street analysts are relied upon heavily by investors, gives credit to the Attorney General's argument that investors are aware of the upward bias and take it into consideration in evaluating the Company's DCF analysis of the Combination Utility Group and Non-Regulated Group. The Department notes a lack of pronounced bias exhibited in the EPS forecasts for the gas distribution companies (Exh. JRW-16, App. B at B-13).

Since regulation establishes a level of allowed earnings, which, in turn, implicitly influences EPS, DPS, and BVPS, estimation of the growth rate from such data is an inherently circular process. See Charles F. Phillips, Jr., The Regulation of Public Utilities – Theory and Practice, PUBLIC UTILITY REPORTS, INC., 1993, at 396, 398. Accordingly, we consider this limitation in evaluating the DCF cost of equity estimates.

An additional disagreement between the Company and the Attorney General concerns the elimination of outliers in the proxy groups (Exhs. CMA/VVR-1, at 85-87; AG/JRW-1, at 57). The Company has relied on FERC precedent to eliminate low-end ROEs that are less than 100 basis points of the cost of debt, or 7.75 percent, and high-end ROEs above 17.7 percent (Exh. CMA/VVR-1, at 87-89). The Attorney General argues that the Company is eliminating only low-end multipliers, thereby skewing the results (Attorney General Brief at 114, citing Exh. AG/JRW-1, at 57). The Department, while mindful of FERC's policies and practices, finds that they are not appropriately applied here.

The consequence of eliminating the results of the outlier estimates produces a DCF analysis that relies on a particularly small sample set. Overly exclusive selection criteria may affect the statistical reliability of a proxy group, especially if such screening criteria result in a limited number of companies in the proxy group. D.P.U. 10-114, at 299. The Department expects parties to limit criteria to the extent necessary and to develop a larger as opposed to a narrower proxy group. See D.P.U. 10-55, at 481-482. Additionally, the Department finds that, to some extent, errors in the model assumptions are responsible for DCF cost of equity anomalies. These assumption errors are likely to impact the DCF cost of equity in either direction. Further, removing the outliers considerably reduces the sample size of the estimates. The "total group" approach averages the data of all proxy group companies without removing outlier DCF results (Exh. CMA/VVR-1, at 6). The Department notes the Company's acknowledgement that the total group approach is commonly used (Exh. CMA/VVR-1, at 6).

Therefore, the Department finds that it is appropriate to retain all of the DCF estimates of the proxy group when evaluating the Company's ROE. Based on this conclusion, we further find that the Company's DCF analysis overestimates the cost of equity by eliminating observations.

5. Capital Asset Pricing Model

a. Company's Proposal

The Company uses the CAPM to estimate the cost of equity for each of its three proxy groups (Exh. CMA/VVR-1, at 5). The CAPM is a market-based investment model based on

Capital Market Theory and Modern Portfolio Theory ("MPT").[196] In the CAPM, the required rate of return is equal to the expected risk-fee rate of return plus a premium for the implicit systematic risk of the security (Exh. CMA/VVR-1, at 112). There are three necessary components to compute the cost of equity with the CAPM: (1) an expected risk-free rate of return; (2) the beta, a measure of systematic risk; and (3) the market risk premium (Exh. CMA/VVR-1, at 111-112, 112-113). For the risk-free rate, the Company uses the short-to-intermediate forecasts of the 30-year U.S. Treasury Bond yield (Exh. CMA/VVR-1, at 117, 120).[197] The Company's CAPM analyses use a risk-free rate of 4.46 percent, which is the average of the Blue Chip Financial Forecast and the Value Line forecast of the 30-year Treasury Bond yield (Exh. CMA/VVR-1, at 117).

The Company's market risk premium, derived from the total return on the overall stock market minus the risk-free rate of return, is based on both a prospective and an historical basis (Exh. CMA/VVR-1, at 115-116). The Company calculates the prospective market risk premium using forward-looking DCF analyses for both the S&P 500 Index and the Value Line 1,700 stock universe (Exh. CMA/VVR-1, at 115). Historical returns data published by Ibbotson for the period between 1926 and 2011 are used for the historical analysis (Exh. CMA/VVR-1, at 115). A prospective market risk premium of 8.29 percent was determined for all three proxy groups by subtracting the prospective risk-free rate of return from the prospective market rate of return,

---

196 MPT advances the concept of an efficient frontier of dominating investment portfolios providing the highest level of return for a given level of risk (Exh. CMA/VVR-1, at 111 n.39). The specific concepts of MPT that influence the CAPM are the relationship between risk and return, and the value of portfolio diversification in eliminating firm specific risk (Exh. CMA/VVR-1, at 111 n.39).

197 The Company states that it has used forecasted interest rates rather than current interest rates because the latter are currently at all-time lows (Exh. CMA/VVR-1, at 117, 120).

(Exh. CMA/VVR-1, at 118). The Company derived an historical market risk premium of 6.60 percent by subtracting the arithmetic average of historical income return on long-term government bonds from the arithmetic average of total returns for the S&P 500 for the period from 1926 to 2011 (Exh. CMA/VVR-1, at 120). The Company then took the average of the prospective market risk premium and the historical market risk premium to determine a market risk premium of 7.45 percent (Exh. CMA/VVR-1, at 124).

The Company obtained the beta coefficients for each of the proxy groups from Value Line, consisting of 0.66 for the Gas LDC Group, 0.71 for the Combination Utility Group and 0.65 for the Non-Regulated Group (Exh. CMA/VVR-1, at 124). The Company then made a "leverage" adjustment to each of the beta coefficients to reflect the financial risk associated with a book value, rate-setting capital structure (Exh. CMA/VVR-1, at 125). The leverage-adjusted betas are 0.74 for the Gas LDC Group, 0.83 for the Combination Utility Group, and 0.71 for the Non-Regulated Group (Exh. CMA/VVR-1, at 126, 128).

The Company's traditional CAPM analysis yields a ROE of 9.97 percent for the Gas LDC Group, 10.64 percent for the Combination Utility Group, and 9.75 percent for the Non-Regulated Group (Exh. CMA/VVR-1, at 132). The flotation cost adjustments are 0.14 percent for the Gas LDC Group, 0.15 percent for the Combination Utility Group, and 0.17 percent for the Non-Regulated Group, thus increasing the cost of equity estimates to 10.11 percent for the Gas LDC Group, 10.79 percent for the Combination Utility Group, and 9.92 percent for the Non-Regulated Group (Exh. CMA/VVR-1, at 132).

In addition to the traditional CAPM, the Company considered two variants of the CAPM, a size-adjusted CAPM and the ECAPM (Exh. CMA/VVR-1, at 5). The size-adjusted CAPM uses size premiums and valuation information provided by Ibbotson, and assigns a size premium of 1.14 percent to the Gas LDC Group and Combination Utility Group, and negative 0.38 percent to the Non-Regulated Group (Exh. CMA/VVR-1, at 132). The results, including the flotation adjustment, are cost of equity estimates of 11.25 percent for the Gas LDC Group, 11.93 percent for the Combination Utility Group, and 9.54 percent for the Non-Regulated Group (Exh. CMA/VVR-1, at 132).

The ECAPM weights the risk premium component of the traditional CAPM model by assigning a weight of 25 percent to the market risk premium and 75 percent to the company-specific, beta-adjusted risk premium (Exh. CMA/VVR-1, at 131). The Company's ECAPM model analysis resulted in ROE estimates of 10.45 percent for the Gas LDC Group, 10.96 percent for the Combination Utility Group, and 10.29 percent for the Non-Regulated Group (Exh. CMA/VVR-1, at 132). The Company then made a flotation adjustment, increasing the ROE estimates to 10.59 percent, 11.11 percent, and 10.46 percent, for the Gas LDC Group, Combination Utility Group and Non-Regulated Group, respectively (Exh. CMA/VVR-1, at 132). The central tendency of the CAPM-derived cost of equity and its variants were 10.65 percent for the Gas LDC Group, 11.25 percent for the Combination Utility Group and 10.00 percent for the Non-Regulated Group (Exh. CMA/VVR-1, at 132).[198]

b. Attorney General's Proposal

In estimating the Company's cost of equity, the Attorney General also performed a CAPM analysis (Exh. AG/JRW-1, at 24). The Attorney General uses the traditional CAPM approach in which the cost of equity is equal to the sum of the interest rate on risk-free bond and

---

198 Central tendency is measured using the mean and the median values of the CAPM and variants by proxy group (see Exh. CMA/VVR-1, at 11).

a risk premium (Exh. AG/JRW-1, at 40). In her CAPM analysis, the Attorney General uses the upper bound of the six-month average yield on 30-year U.S. Treasury Bonds or 4.0 percent as the risk free rate (Exh. AG/JRW-1, at 42). The risk premium is the product of a company's beta coefficient and the market risk premium (Exh. AG/JRW-1, at 40-41). To calculate the beta coefficient, the Attorney General performed a regression analysis of the stock returns of the proxy group companies against the return of the S&P 500, representing the market (Exhs. AG/JRW-1, at 42-43; JRW-11, at 3). The average beta coefficient for the proxy group is 0.65 (Exhs. AG/JRW-1, at 43; JRW-11, at 3). The Attorney General uses an estimated market risk premium of 4.39 percent, calculated by taking the median value of the more than 30 studies considered (Exhs. AG/JRW-1, at 47; JRW-11, at 5).

The CAPM analysis performed by the Attorney General resulted in a cost of equity of 7.3 percent (Exh. AG/JRW-1, at 49-50). The Attorney General places less emphasis on the CAPM cost of equity results due to her belief that risk premium studies such as the CAPM provide a less reliable indication of equity costs for public utilities (Exh. AG/JRW-1, at 24).

c. Positions of the Parties

i. Attorney General

The Attorney General argues that the Company's CAPM analysis is flawed and, therefore, "useless" (Attorney General Brief at 120). She argues that the Company uses an unrealistic risk-free rate of 4.46 percent, which is well above current market yields, including the yield on a 30-year U.S. Treasury Bond, which as of August 2013 was 3.60 percent (Attorney General Brief at 121, citing AG/JRW-1, at 65-75). Further, the Attorney General contends that the equity risk premium of 7.45 percent used by the Company is based on the average of the Ibbotson historical risk premium results and a projected market risk premium of 8.29 percent, calculated as the average of the Value Line three-to-five-year annual return projection and a DCF projection using the S&P 500 (Attorney General Brief at 121, citing Exh. CMA/VVR-1, at 115-116). According to the Attorney General, both the historical and projected return are poor measures of expected market risk premiums (Attorney General Brief at 121-122, citing Exh. AG/JRW-1, at 68-75).

The Attorney General argues that the Department should rely on a maximum market equity risk premium of 5.00 percent in any CAPM analysis that it uses in determining the cost of equity capital for the Company (Attorney General Brief at 119). She notes that 5.00 percent is the midpoint equity risk premium for studies published in the 2010-2013 time period, and that this percentage is consistent with the rate used by McKinsey & Co. for corporate valuation purposes; a 2010 Pablo Fernandez survey of 6,000 financial analysts; the equity risk premium employed by chief financial officers as reported in a June 2013 Duke University survey; and the equity risk premium forecasts reported in the Federal Reserve Bank of Philadelphia's Annual Survey of Professional Forecasters published February 13, 2013 (Attorney General Brief at 119, citing Exh, AG/JRW-1, at 47-48, 49).

In addition, the Attorney General notes that the yield on 30-year U.S. Treasury Bonds was in the range of 2.6 to 4.0 percent over the 2011-2013 time period and, as noted above, is currently 3.60 percent (Attorney General Brief at 117, 121, citing Exh. AG/JRW-1, at 40-50, 65-75). In this regard, the Attorney General argues that the use of a 4.0 percent interest rate provides a conservatively high estimate of the risk-free rate for the CAPM (Attorney General Brief at 117-118, citing AG/JRW-1, at 40-50).

Turning to the Company's risk premiums, the Attorney General argues that Bay State's approach has empirical problems that result in the historical market returns producing inflated estimates of expected risk premiums, including survivorship biases, and unattainable return bias (Attorney General Brief at 122, citing Exh. AG/JRW-1, at App. B). The Attorney General contends that Value Line's three- to-five-year annual return projections employed in the Company's CAPM analysis are consistently high relative to actual experienced returns, resulting in upwardly biased equity risk premium (Attorney General Brief at 122, citing Exh. AG/JRW-1, at 69-70). In addition, the Attorney General argues that the Company's DCF expected market return using the S&P 500 is upwardly biased because it uses the EPS growth rate of Wall Street analysts who are overly optimistic and upwardly biased (Attorney General Brief at 123, citing Exh. AG/JRW-1, at App. B). Moreover, the Attorney General argues that the Company's long-term growth rate of 10.40 percent is inconsistent with historical economic and earnings growth, which are in the range of five to seven percent (Attorney General Brief at 123, citing Exhs. AG/JRW-1, at 72, App. B at 75). In this regard, the Attorney General asserts that a growth rate of four to five percent is more appropriate in the current economy, since it has seen slow gross domestic product growth (Attorney General Brief at 124).

The Attorney General also argues that the Department should reject the Company's proposed size adjustment premiums (Attorney General Brief at 126). She notes that although the Company's adjustments are based on historical stock market returns, there are empirical errors in that approach that make the Ibbotson size premiums a poor measure upon which to rely (Attorney General Brief at 125, citing Exh. AG/JRW-1, at 74-75, 75-78). The Attorney General also argues that a size premium would be inappropriate for a utility because of regulation and monitoring by state and federal regulatory agencies, and the uniform accounting and reporting standards for public utilities (Attorney General Brief at 125, citing Exh. AG/JRW-1, at 75-78). In addition, the Attorney General contends that the size premiums found in various studies are attributable to rebalancing presumptions and disappear within two years (Attorney General Brief at 125, citing Exh. AG/JRW-1, at 75-78). Finally, the Attorney General asserts that Department precedent rejects the use of size premiums, and she contends that the Company has not provided any new evidence or argument that such precedent should be changed (Attorney General Brief at 125-126, citing D.P.U. 09-30, at 362; D.P.U. 08-35, at 216-217).

ii. Company

The Company argues that the CAPM calculation of 7.40 percent developed by the Attorney General contains major flaws and must be rejected (Company Brief at 170, citing Attorney General Brief at 117). The Company contends that the 4.00 percent risk-free rate of return used in the Attorney General's CAPM analysis is inappropriate because it is based upon historical U.S. Treasury Bond yields (Company Brief at 70, citing Exh. CMA/VVR-Rebuttal-1, at 43-44). Further, Bay State asserts that the CAPM model is actually a forward-looking model, requiring the use of an anticipated risk-free rate during the rate-effective period (Company Brief at 170, citing Exh. CMA/VVR-Rebuttal-1, at 44, 54).

According to the Company, the current interest rate environment is an historical anomaly, the result of the combined effects of a prolonged period of investors switching into lower risk securities since the 2008-2009 financial crisis and the unprecedented monetary policy actions of the Board of Governors of the Federal Reserve System ("Federal Reserve") (Company Brief at 170-171, citing Exh.CMA/VVR-Rebuttal-1, at 53). The Company claims that the Department has recognized this historical anomaly by expressing concerns that the use of current interest rates would likely understate the risk-free rate of return expectations and, therefore, the equity return expectations of investors (Company Brief at 171, citing D.P.U. 11-01/D.P.U. 11-02, at 416). Further, the Company contends that long-term interest rates are very likely to rise at a rapid pace when the economy begins to fully recover and the Federal Reserve reverses course on its monetary policy interventions (Company Brief at 171, citing Exh. CMA/VVR-Rebuttal-1, at 16; Tr. 4, at 425-426). The Company asserts that the appropriate risk-free rate of return assumption to use in the CAPM is in the range of 4.40 to 4.50 percent, based upon recent Blue Chip financial publication interest rate forecasts (Company Brief at 171, citing Exh. CMA/VVR-Rebuttal-1, at 44).

Additionally, the Company argues that the Attorney General incorrectly calculated the risk premium (Company Brief at 171). According to the Company, the Attorney General: (i) ignored sources of information and publications such as Ibbotson and Value Line, both of which investors often reference in forming their market return and risk premium expectations; (ii) inappropriately relied upon the geometric mean, rather than the arithmetic mean, when evaluating historical returns data for purposes of estimating expected market returns and market risk premiums; and (iii) incorrectly indicates that the Ibbotson-derived historical risk premium assumption has an arithmetic mean of 5.70 percent, when Ibbotson actually reported an arithmetic mean of 6.70 percent (Company Brief at 171-172, citing Exh. CMA/VVR-Rebuttal-1, at 25, 45, 47, 48-49, 49-50, 56).

Finally, Bay State argues that the Attorney General's criticism of the Company's CAPM approach is without merit (Company Brief at 172). The Company cites four reasons in support of this argument: (i) the ECAPM is not an invalidated, ad hoc version of the CAPM, as the Attorney General alleges; (ii) the Company's use of a risk-free interest rate of 4.46 percent should not be rejected because, based upon recent interest rate forecasts by the Blue Chip financial publications, the appropriate risk-free rate of return assumption to employ in the CAPM is in the range of 4.40 percent to 4.50 percent; (iii) Ibbotson historical returns and projected market returns, on which the Company's equity risk premium is based, are not "poor measures of expected market premiums" as alleged by the Attorney General; and (iv) the Company's size adjustment in the CAPM is supported by several studies and should not be rejected (Company Brief at 172-173, citing Attorney General Brief at 120-121; Exh. CMA/VVR-Rebuttal-1, at 16-17, 44, 54, 57, 58, 59; D.P.U. 11-01/D.P.U. 11-02, at 416).

Based on the above, the Company asserts that the Department should consider the Company's CAPM approach and, consistent with Department precedent, give at least some weight to this approach in setting the Company's ROE (Company Brief at 174, citing D.T.E. 01-56, at 113).

d. Analysis and Findings

The Department has previously found that the traditional CAPM as a basis for determining a utility's cost of equity has limited value because of a number of questionable assumptions that underlie the model. See D.P.U. 10-114, at 318; D.P.U. 10-70, at 267;

D.P.U. 08-35, at 207;[199] D.T.E. 03-40, at 359-360; Commonwealth Electric Company, D.P.U. 956, at 54 (1982). For example, the Department has not been persuaded that long-term government bonds are the appropriate proxy for the risk-free rate, and has found that the coefficient of determination for beta is generally so low that the statistical reliability of the results is questionable. D.T.E. 01-56, at 113; D.P.U. 93-60, at 256-257; D.P.U. 92-78, at 113; D.P.U. 88-67 (Phase I) at 184.

The Attorney General's CAPM analysis employs a risk-free rate of 4.0 percent, using the upper bound of the prior six months' 30-year Treasury bond rates as a proxy (Exh. AG/JRW-1, at 42).[200] Current federal monetary policy, which is intended to stimulate the economy, has pushed treasury yields to near-historic lows (Exh. CMA/VVR-1, at 14-15). Consequently, a CAPM analysis based on current treasury yields at historic lows may tend to underestimate the risk-free rate over the long term, and thereby understate the required ROE. See D.P.U. 12-25, at 427; D.P.U. 11-01/D.P.U. 11-02, at 416.

The Company's CAPM analysis develops a risk-free rate of 4.46 percent based on an evaluation of interest rate forecasts from Blue Chip and Value Line (Exh. CMA/VVR-1, at 117).

---

199 In D.P.U. 08-35, at 207 n.131, the Department identified the following questionable assumptions used in the CAPM: (1) capital markets are perfect with no transaction costs, taxes, or impediments to trading, all assets are perfectly marketable, and no one trader is significant enough to influence price; (2) there are no restrictions to short-selling securities; (3) investors can lend or borrow funds at the risk-free rate; (4) investors have homogeneous expectations (i.e., investors possess similar beliefs on the expected returns and risks of securities); (5) investors construct portfolios on the basis of the expected return and variance of return only, implying that security returns are normally distributed; and (6) investors maximize the expected utility of the terminal value of their investment at the end of one period.

200 The yield on the 30-year Treasury bond is currently at 3.6 percent, and has been as high as 4.0 percent over the 2011-2013 time period (Exh. AG/JRW-1, at 42).

The CAPM is based on investor expectations and, therefore, it is appropriate to use a prospective measure for the risk-free rate component. The Blue Chip and Value Line estimates are widely relied on by investors and provide a useful proxy for investor expectations for the risk-free rate.

The Attorney General's analysis determines a market risk premium of 4.39 percent, relying on an analysis of numerous surveys of financial professionals, including financial forecasters, CFOs and academics (Exhs. AG/JRW-1, at 47; JRW-11, at 5). Originally developed in the early 1960s for investment analysis purposes, the CAPM is considered an ex-ante, forward-looking model which recognizes that investors are generally risk averse and will demand higher returns in exchange for assuming higher levels of investment risk (Exh. CMA/VVR-1, 111). Therefore, it is appropriate to base the market risk premium on investors' perception of the additional risk. The Company uses a market risk premium of 7.45 percent, the average of an estimated 8.29 percent prospective risk premium and a 6.60 percent historic risk premium (Exhs. CMA/VVR-1, at 118, 120, 124; CMA/VVR-13, at 1, 4, 7). There are a number of empirical problems that inflate the historic risk premium, including survivorship and unattainable return biases (Exh. AG/JRW-1, at 68). The Company's prospective market risk premium is the result of performing DCF analyses on the S&P 500 Index and the Value Line 1,700 stock universe (Exhs. CMA/VVR-1, at 115; CMA/VVR-13, at 1, 4, 7). As stated above, the CAPM model has a number of unrealistic and restrictive assumptions. Therefore, the Department finds this approach to be less reliable than the survey results of financial professionals.

The Department finds that the Attorney General's approach to developing a market risk premium is preferable. Furthermore, the Department notes that the Company has repeatedly stated that investors rely on Wall Street financial analysts in making investment decisions (see Exhs. CMA/VVR-1, at 70, 75-82; CMA/VVR- Rebuttal-1, at 31, 36-41, 57). The Pablo Fernandez survey of over 6,000 financial analysts and companies indicates an estimated market risk premium of 5.70 percent, which is consistent with the 5.00 percent used in the Attorney General's analysis (Exhs. AG/JRW-1, at 49; JRW-11, at 6).

The Company uses beta coefficients for the Gas LDC Group, Combination Utility Group and Non-Regulated Group of 0.74, 0.83 and 0.78, which include a leverage adjustment (Exh. CMA/VVR-1, at 126). The Attorney General has employed a beta coefficient for the Attorney General Gas Proxy Group of 0.65 (Exh. AG/JRW-1, at 43). As discussed above, the leverage adjustment is inappropriate and the Department will consider the unlevered values of the beta coefficient (0.66, 0.71, and 0.65 for the Gas LDC Group, Combination Utility Group, and Non-Regulated Group, respectively) when evaluating the Company's CAPM analysis.

Based on the above considerations, the Department will place limited weight on the results of the respective CAPM estimates in determining the appropriate ROE. To the limited extent that the Department relies on CAPM estimates, because the magnitude of the deficiencies within the Company's proposed CAPM is greater the Department gives more weight to the Attorney General's proposed CAPM.

6. Risk Premium Model

a. Company's Proposal

The Risk Premium Model is based on the concept that investing in common stock is riskier than investing in debt and, therefore, investors require a higher rate of return for equity

(Exh. CMA/VVR-1, at 133).[201] The Risk Premium Model estimates the cost of equity capital by summing the estimates of the prospective cost of debt and expected equity risk premium (Exh. CMA/VVR-1, at 134). The Company determines the prospective cost of debt for each proxy group by using the forecasted bond yields for Aaa bonds and, using a comparison group's average credit rating, determines a credit/yield spread adjustment (Exh. CMA/VVR-1, at 137-138). The resulting prospective cost of debt estimates are 5.68 percent for the Gas LDC Group, 5.92 percent for the Combination Utility Group, and 5.46 percent for the Non-Regulated Group (Exhs. CMA/VVR-1, at 138; CMA/VVR-14, at 1, 7, 9).

The Company calculated the equity risk premium as an average of two approaches: a total market approach and a public utility index approach (Exh. CMA/VVR-1, at 138-143). The total market approach is determined as the average of an historical risk premium analysis based on the arithmetic average of total returns for the S&P 500 for the period from 1926 to 2011, and prospective risk premium analyses based on forward-looking DCF analyses for both the S&P 500 Index and the Value Line 1700 stock universe (Exhs. CMA/VVR-1, at 139, 141; CMA/VVR-13; CMA/VVR-14). These prospective risk premium analyses were conducted for each proxy group (Exhs. CMA/VVR-1, at 147; CMA/VVR-14). The Company then made a leverage adjustment to reflect the level of financial risk associated with a book value capital structure (Exh. CMA/VVR-1, at 142-143). The public utility index approach was calculated by

---

[201] The risk premium method of determining the cost of equity recognizes that common equity capital is more risky than debt from an investor's standpoint, and that investors require higher returns on stocks than on bonds to compensate for the additional risk. The general approach is relatively straight forward: (1) determine the historical spread between the return on debt and the return on equity; and (2) add this spread to the current debt yield to derive and estimate of current equity return requirements. (emphasis added). Roger A. Morin, Regulatory Finance, Utilities Cost of Capital (1994) at 269.

comparing the market returns of the S&P Public Utility index for the period from 1926 to 2011 with the average annual yield for long-term utility bonds for the 1926 to 2011 period (Exh. CMA/VVR-1, at 143). The results of the Company's Risk Premium Model analysis, including the flotation adjustment, are a cost of equity of 10.42 percent for the Gas LDC Group, 10.96 percent for the Combination Utility Group, and 10.31 percent for the Non-Regulated Group (Exh. CMA/VVR-1, at 144-145).

b. Positions of the Parties

i. Attorney General

The Attorney General argues that the Company's Risk Premium Model has grossly overstated the base yield and over-inflated the required risk premium (Attorney General Brief at 127). She notes that while the Company uses a base yield of 5.68 percent for A-rated public utility bonds, the current yield is below 4.54 percent (Attorney General Brief at 127, citing Exhs. AG/JRW-1, at 79; JRW-3, at 1). Further, the Attorney General contends that the yield-to-maturity of a bond is above the expected return, which includes credit risk and, therefore, is in excess of investor return requirements (Attorney General Brief at 127, citing Exhs. AG/JRW-1, at 79; JRW-3, at 1). The Attorney General asserts that the Company's estimated equity risk premium is subject to the same empirical flaws discussed above relative to the CAPM (Attorney General Brief at 127, citing Exh. AG/JRW-1, at 80-81).

ii. Company

The Company rejects the Attorney General's contention that the base yield is overstated and the risk premium is over-inflated (Company Brief at 174). The Company asserts that, for the same reasons argued above with respect to the CAPM, the Risk Premium approach is appropriately based on a prospective cost of corporate debt (Company Brief at 174, citing Exh. CMA/VVR-Rebuttal-1, at 59-60). Further, the Company argues that the base yield used in its Risk Premium Model is based on the prospective cost of corporate debt estimated by reputable interest rate forecasts such as Blue Chip (Company Brief at 174, citing Exh. CMA/VVR-Rebuttal-1, at 60). In addition, the Company contends that its equity risk premium is not inflated and that "there should be no dispute that the earnings estimates of equity analysts are the most widely-referenced source of earnings growth rate" (Company Brief at 174, citing Exh. CMA/VVR-Rebuttal-1, at 38-39, 60). In addition, Bay State notes that the current S&P 500 projected growth rate of 10.40 percent is 142 basis points below the 87-year historical average, thus indicating that the Company's analysis is not overstated (Company Brief at 174, citing Exh. CMA/VVR-Rebuttal-1, at 57). Based on these considerations, the Company argues that its Risk Premium approach should be considered as a "supplemental approach" in determining an ROE (Company Brief at 175, citing D.P.U. 07-71, at 137).

c. Analysis and Findings

The Department has repeatedly found that an equity risk premium analysis can overstate the amount of company-specific risk and, therefore, the cost of equity. See D.P.U. 10-114, at 322; D.P.U. 10-70, at 269; D.P.U. 88-67 (Phase I) at 182-184. More specifically, the Department has found that the return on long-term corporate or public utility bonds may have risks that could be diversified with the addition of common stock in investors' portfolios and, therefore, that the risk premium model overstates the risk accounted for in the resulting cost of equity. D.P.U. 10-114, at 322; D.P.U. 10-70, at 269; D.P.U. 90-121, at 171; D.P.U. 88-67 (Phase I) at 182-183. Nonetheless, the Department has acknowledged the value of the risk premium model as a supplemental approach to other ROE models. D.P.U. 10-114, at 322; D.P.U. 10-70, at 269; D.P.U. 07-71, at 137; D.T.E. 99-118, at 85-86.

In this particular case, the Company's risk premium analysis suffers from a number of limitations, including potential imprecision in the assessment of future cost of corporate debt and the measurement of the risk-adjusted common equity premium. The Department has criticized the use of corporate bond yields in determining the base component of the risk premium analysis. D.P.U. 09-39, at 388-389; D.P.U. 08-35, at 202; D.P.U. 90-121, at 171. The Department also has recognized the circularity inherent in the use of authorized utility returns to derive the risk premium. D.P.U. 10-114, at 322; D.P.U. 90-121, at 171; D.P.U. 88-67 (Phase I) at 182-183.

The Attorney General argues that the Company's base yield of 5.68 percent is overstated considering that current yields are 4.54 percent (Attorney General Brief at 127). The Company argues that the risk premium analysis is a forward-looking approach and, therefore, that using the prospective cost of debt is appropriate (Company Brief at 174). The Department disagrees with the Company, in that the RPM is not a forward-looking approach and that the current bond yields would be the appropriate basis to use in this analysis. Accordingly, the Department finds that Bay State's RPM tends to overstate the required ROE for the Company.

In addition, the estimation of the market risk premium suffers from the same limitations that were discussed with respect to the CAPM, specifically that it is, in part, (i) based on a DCF analysis, thereby incorporating the strict assumptions of that model; and (ii) relying on historical data that are skewed by survivorship bias. Accordingly, we will place limited weight on the results of the Company's Risk Premium Model.

7. Comparable Earnings Approach

a. Company's Proposal

The Company states that the CEA is an opportunity cost concept, meaning that the fair rate of return for a utility should be no less than the highest available return among alternative investments of comparable risk (Exh. CMA/VVR-1, at 145-146). The Company selected a ten-company subgroup of the Non-Regulated Group ("Non-Regulated Select Group") as the basis for the CEA (Exh. CMA/VVR-1, at 149). The Non-Regulated Select Group excluded those companies that have achieved, or have forecasted, ROEs above 17.0 percent (Exh. CMA/VVR-1, at 149). The ten-year historical return on book common equity for the subgroup was 13.9 percent while the five-year forecasted average book ROE was 14.1 percent (Exh CMA/VVR-1, at 154). In performing its CEA, the Company took the average of the ten-year historical and five-year forecast return, or 14.0 percent (Exh. CMA/VVR-1, at 154).

b. Positions of the Parties

i. Attorney General

The Attorney General notes that Department precedent does not support the use of CEA analyses because these analyses fail to recognize the differences in investment risk between firms in highly competitive industries and those that are regulated monopolies (Attorney General Brief at 28, citing D.P.U. 09-30, at 360-361; D.P.U. 08-35, at 207; D.T.E. 03-40, at 359-360; D.P.U. 956, at 54). Further, she argues that the CEA used by the Company is based on a proxy group comprised of companies that do not operate in a highly regulated environment (Attorney General Brief at 128, citing Exh, AG/JRW-1, at 82). The Attorney General asserts that the Company has not offered any new evidence or arguments that should cause the Department to change its precedent (Attorney General Brief at 128).

ii. Company

The Company argues that the Department should reject the Attorney General's criticism of the CEA (Company Brief at 175). According to Bay State, the companies used in the comparison group are classified as conservative stocks and are considered low risk, by virtue of having low beta coefficients similar to those of Bay State and other gas distribution companies (Company Brief at 175, citing Exh. CMA/VVR-1, at 39, 42-43). Further, the Company contends that Value Line characterizes the companies in its comparison group as having high levels of safety, financial strength and stock price stability (Company Brief at 175, citing Exh. CMA/VVR-1, at 39). The Company argues that the comparison companies need only to be similar with respect to their corresponding risk, but do not have to be utilities, in order to be considered comparable (Company Brief at 175, citing Hope; Bluefield).

c. Analysis and Findings

The Department has generally rejected the results of the CEA analysis because the risk criteria provided were not sufficient to establish the comparability of the non-price-regulated group of firms with the distribution company being considered. D.P.U. 08-35, at 210; D.T.E. 01-56, at 116. The average beta of the Company's proposed proxy group is 0.70, which is not similar to the beta for the natural gas industry of 1.15 (Exhs. CMA/VVR-15, at 2; JRW-8). However, the Department has found that the use of the beta as a criterion in selecting a comparable group of companies is not a reliable investment risk indicator given its statistical measurement limitations. D.P.U. 96-50 (Phase I) at 132. Moreover, the beta, which is a measure of risk based on the CAPM, reflects the limitations of that model, including its unrealistic assumptions as identified above. Therefore, beta alone is not a sufficient basis for selecting an appropriate proxy group. See D.P.U. 08-35, at 210; D.T.E. 01-56, at 116.

The companies in Bay State's proxy group exhibit an A+ average Value Line Financial Strength and stock price stability index of 97, which reflects a lower overall risk profile as compared to the proxy group used in D.P.U. 12-25, and also demonstrates a slightly lower risk profile than the Gas LDC Group in the current proceeding (Exh. CMA/VVR-1, at 150). Additionally, the group has an average long-term bond rating from Moody's of A3, compared to the rating of Baa2 for Bay State (Exhs. CMA/VVR-1, at 26, 47; CMA/VVR-15, at 2). However, although these are indications of comparable risk, we are not persuaded that any of these measures fully captures the value of operating a regulated monopoly in a revenue decoupled market. None of the firms in the proxy group are able to avail themselves of a regulatory authority for rate relief should they find themselves in a period of negative, or extremely low earnings. In addition, the Department notes that the Company has not identified any jurisdiction in which the CEA has been relied upon to determine an appropriate cost of equity.

The Department notes that the Company used the CEA to validate the conclusions of the DCF, CAPM and RPM analyses. For all of these reasons, the Department will not rely on the results of the CEA as a basis for determining the allowed ROE for the Company.

8. Cost of Equity Impact of Decoupling

a. Positions of the Parties

i. Attorney General

The Attorney General argues that the Department should reduce the allowed ROE to compensate for the impact of decoupling (Attorney General Brief at 130). She argues that the decreased risk to the Company associated with decoupling is not reflected in the stock prices of all of the companies in the Gas LDC Group (Attorney General Brief at 130). Further, she contends that the number of decoupled customers is not necessarily a good proxy for decoupled revenues, as large C&I customers' bills are based on gas volumes consumed (Attorney General Brief at 129, citing Exh. AG/JRW-1, at 85-87). In addition, the Attorney General claims that the companies in the Gas LDC Group derive a significant portion of their revenues from unregulated gas distribution business and are not subject to rate stabilization mechanisms and, therefore, that these companies do not approximate the riskiness of Bay State (Attorney General Brief at 129, citing Exhs. AG/JRW-1, at 83; Tr. 4, at 409).

The Attorney General also claims that the Company's decoupled percentage figures include not only customers of companies that have a full revenue decoupling rate design mechanism, but also customers of companies with a weather normalization adjustment and customers of companies that have a straight-fixed variable rate structure (Attorney General Brief at 129, citing Exh. AG/JRW-1, at 85-87). Therefore, the Attorney General argues that the Company's summary figures of revenue decoupled customers overstate the percent of fully decoupled customers (Attorney General Brief at 129, citing Exh. AG/JRW-1, at 85-87). Moreover, according to the Attorney General, by addressing only the revenues associated with decoupled customers, the Company's analysis ignores the impact of unregulated revenues on the riskiness of the companies in the Gas LDC Group (Attorney General Brief at 129, citing Exh. AG/JRW-1, at 85-87). Further, the Attorney General asserts that it is significant that the Gas LDC Group receives only 70 percent of revenues from regulated gas operations while the Company receives 98.32 percent of revenues from such operations (Attorney General Brief at 129, citing Exh. AG/JRW-1, at 83; Tr. 4, at 409). On this basis, the Attorney General concludes that the unregulated portion of the activities of the companies in the Gas LDC Group is riskier and more volatile than the regulated activities of the gas utility operations (Attorney General Brief at 130, citing Exh. AG/JRW-1, at 83).

ii. Company

Bay State argues that the ROE analyses performed on its proxy groups includes the impact of decoupling, and to make a further adjustment would be to double count the impact of decoupling (Company Brief at 175-176, 178). In addition, the Company claims that 91.46 percent of the customers of the companies in the Gas LDC Group and 45.35 percent of customers in the Combination Utility Group have rates subject to a revenue stabilization mechanism similar to Bay State's decoupling mechanism (Company Brief at 176, citing Exhs. CMA/VVR-1, at 52-54; CMA/VVR-5; CMA/VVR-Rebuttal-1, at 64; AG-5-10; AG-5-11; DPU-16-20, Att.). Moreover, the Company states that it has undertaken an analysis demonstrating that 70 to 90 percent of the revenues of the Gas LDC Group companies are subject to stabilization mechanisms (Company Brief at 177, citing Exh. CMA/VVR-Rebuttal-1, at 64).

Further, Bay State argues that weather normalization and straight-fixed variable rates are generally comprehensive and produce a result comparable to that of Bay State's decoupling mechanism (Company Brief at 177). In addition, the Company contends that a majority of proxy group companies already employ revenue stabilization mechanism and investors' perceptions would not be materially affected by the minor differences among them (Company Brief at 177, citing Exh. CMA/VVR- Rebuttal-1, at 64). The Company also claims that its revenue stabilization mechanism analysis is based on the same source data that investors use in forming their risk perceptions, specifically Form 10-K and Form 10-Q filings with the Securities Exchange Commission (Company Brief at 178, citing Exh. CMA/VVR-Rebuttal-1, at 63).

Finally, Bay State argues that by claiming that only 70 percent of revenues are from regulated gas operations, the Attorney General focuses on the wrong measure and ignores operating income as the more appropriate measure (Company Brief at 177-178, citing Exh. CMA/VVR-1, at 66). In this regard, the Company contends that operating income has a more direct impact on net earnings and cash flows and, therefore, better addresses the issue of whether revenue stabilization mechanisms actually reduce earnings variability (Company Brief at 178, citing Exh. CMA/VVR-Rebuttal-1, at 66). The Company asserts that a recent empirical study conducted by economists affiliated with the Brattle Group found no evidence that the presence of a revenue stabilization mechanism reduces the cost of capital for gas distribution companies (Company Brief at 178, citing Exh. CMA/VVR-1, at 47-49).

b. Analysis and Findings

In D.P.U. 07-50-A, the Department stated that, because decoupling is designed to ensure that distribution companies' revenues are not adversely affected by reductions in sales, by definition decoupling reduces earnings volatility. Such reduction in earnings volatility should reduce risks to shareholders and, thereby should serve to reduce the required ROE. D.P.U. 07-50-A at 72; Revenue Decoupling, D.P.U. 07-50, at 1-2 (2007). The Department stated, however, that it will consider the impact of a decoupling mechanism on a distribution company, along with all other factors affecting that company's required ROE, in the context of a rate proceeding, where the evidence and arguments may be fully tested. D.P.U. 07-50-A at 74. We consider below the impact of the Company's revenue decoupling mechanism on its allowed ROE.

All companies in the Gas LDC Group have some form of decoupling or revenue stabilization mechanisms (Exh. CMA/VVR-5, at 1). A review of the various mechanisms indicates that there is a wide range of approaches used for revenue stabilization from one regulatory jurisdiction to another, including full decoupling, weather normalization, straight fixed variable rate design and conservation incentive programs (Exhs. CMA/VVR-5; AG/JRW-1, at 82). Thus, the fact that the comparison group of companies has revenue stabilization mechanisms does not mean that the comparison groups fully match the risk profile of the Company. Investors who consult 10-Q and 10-K filings are savvy enough to appreciate the distinction between a weather normalization adjustment and full decoupling. Accordingly, we do not accept Bay State's argument that there is no need to consider the equity cost impact of decoupling because the Gas LDC Groups use some form of revenue stabilization mechanism. Likewise, we are not convinced that the comparison groups fully capture the risk-reducing impact of the Company's decoupling mechanism. We will, instead, examine the specific risk profile of the Company, and the specific features of the Company's revenue decoupling mechanism, to arrive at the appropriate determination of the effect of risk on the Company's required ROE.

9. Conclusion

The standard for determining the allowed ROE is set forth in Hope and Bluefield. The allowed ROE should preserve the Companies' financial integrity, allow it to attract capital on reasonable terms, and be comparable to returns on investments of similar risk. See Hope at 603, 605; Bluefield at 692-693.

In support of its calculations of an appropriate ROE, Bay State has presented analyses using the DCF model, CAPM, RPM and CEA, and has used financial data of three comparison groups. The Attorney General has presented her own analyses using the DCF model and CAPM, using the financial data of a comparison group of eight gas distribution companies. The use of these empirical analyses in this context, however, is not an exact science. A number of judgments are required in conducting a model-based rate of return analysis. Even in studies that purport to be mathematically sound and highly objective, crucial subjective judgments are made along the way and necessarily influence the end result. Western Massachusetts Electric Company, D.P.U. 18731, at 59 (1977). Each level of judgment to be made contains the possibility of inherent bias and other limitations. D.T.E. 01-56, at 117; D.P.U. 18731, at 59.

As stated above, the record demonstrates that all these equity cost models suffer from a number of simplifying and restrictive assumptions. Applying them to the financial data of a comparison group of companies could provide results that may not be reliable for the purpose of setting Bay State's ROE. In the case of the DCF model, for example, which was used by both Bay State and the Attorney General, we note the limitations of the DCF analysis, including the simplifying assumptions that underlie the constant growth model and the inherent limitations in comparing the Company to publicly traded companies. As stated above, we reject Bay State's attempt to make leverage and flotation cost adjustments to the DCF-determined ROE. The CAPM analyses relied upon by Bay State and the Attorney General also are flawed, because of the assumptions necessary under traditional CAPM theory as well as the determination of beta, but additionally the Attorney General understates the risk free rate and the Company overstates the market risk premium.

We recognize that the revenue decoupling mechanism employed by Bay State will reduce the variability of the Company's revenues and, accordingly, reduce its risks and its investors' return requirement. See D.P.U. 09-30, at 371-372; D.P.U. 07-50-A at 72-73. Although the companies in the Gas LDC Group and the Attorney General Gas Proxy Group all have some form of revenue stabilization or decoupling mechanisms, the degree of revenue stabilization varies among the companies in the comparison groups and, on the whole, is not as comprehensive as the Company's decoupling mechanism.

Further, we note that a considerable portion of the revenues of companies in the Combination Utility Group and the Non-Regulated Group are derived from non-regulated and competitive lines of business that could skew the risk profile comparability with Bay State in a manner that, all else being equal, would tend to overstate the comparison groups' risk profile relative to that of the Company. Therefore, in applying this comparability standard, we will consider such risk differentials in determining the Company's allowed ROE.

While the results of analytical models are useful, the Department must ultimately apply its own judgment to the evidence to determine an appropriate rate of return. We must apply to the record evidence and argument considerable judgment and agency expertise to determine the appropriate use of the empirical results. Our task is not a mechanical or model-driven exercise. D.P.U. 10-55, at 522; D.P.U. 08-35, at 219-220; D.T.E. 07-71, at 139; D.T.E. 01-56, at 118; D.P.U. 18731, at 59; see also Boston Edison Company v. Department of Public Utilities, 375 Mass. 1, 15 (1978). The Department must account for additional factors specific to a company itself that may not be reflected in the results of the models.[202] In this case, one factor we have considered in determining the allowed ROE relates to Bay State's use of fully reconciling mechanisms to recover certain costs outside of base rates. Bay State presently has in place fully reconciling mechanisms for a range of expense categories, including gas costs, supply-related bad debt, and an LDAC that fully reconciles costs related to demand side management, pension and PBOP expenses and residential assistance adjustments, and a capital tracking mechanism to recover investments in cast iron, wrought iron and bare steel infrastructure replacement, thus reducing regulatory lag in recovery. As a result of this Order, Bay State will retain these reconciling mechanisms as well as its revenue decoupling mechanism and an Attorney General consultant cost recovery mechanism. The presence of these fully reconciling mechanisms covering a significant portion of the Company's expenses results in a lower risk for Bay State than otherwise would be the case.

Based on a review of the evidence presented in this case, the arguments of the parties, and the considerations set forth above, the Department finds that an allowed ROE of 9.55 percent is within a reasonable range of rates that will preserve Bay State's financial integrity, will allow

202 For example, the Department has set rates of ROE that are at the higher or lower end of the reasonable range based on above average or subpar management performance. See, e.g., D.P.U. 08-27, at 134-138; D.T.E. 02-24/25, at 231; D.P.U. 92-250, at 161-162; D.P.U. 92-78, at 115; D.P.U. 89-114/90-331/91-80 (Phase I) at 225.

it to attract capital on reasonable terms, will be comparable to earnings of companies of similar risk and, therefore, is appropriate in this case. In making these findings, we have considered both qualitative and quantitative aspects of the Company's various methods for determining its proposed rate of ROE, as well as the arguments of and evidence presented by the parties in this proceeding.

X. RATE STRUCTURE

A. Rate Structure Goals

Rate structure is the level and pattern of prices charged to customers for their use of utility service. The rate structure for each rate class is a function of the cost of serving that rate class, and rates are designed to recover the cost to serve that rate class. Utility rate structures must be efficient and simple, and must ensure continuity of rates, fairness between rate classes, and corporate earnings stability. D.P.U. 12-25, at 444; D.P.U. 10-114, at 341; D.P.U. 10-55, at 535; D.P.U. 09-39, at 401; D.T.E. 03-40, at 365; D.T.E. 02-24/25, at 252; D.T.E. 01-56, at 134; D.T.E. 01-50, at 28.

An efficient rate structure is designed to allow a company to recover the cost of providing the service and to provide an accurate basis for consumers' decisions about how to best fulfill their needs. The lowest-cost method of fulfilling each consumer's needs should also be the lowest-cost method for society as a whole. Thus, efficiency in rate structure means setting cost-based rates that recover the cost to society of the consumption of resources used to produce the utility service. D.P.U. 12-25, at 444-445; D.P.U. 10-114, at 342; D.P.U. 10-55, at 535-536; D.P.U. 09-39, at 401; D.T.E. 03-40, at 365-366; D.T.E. 02-24/25, at 252; D.T.E. 01-56, at 135; D.T.E. 01-50, at 28. In practice, meeting the goal of efficiency should involve rate structures that provide strong signals to consumers to decrease energy consumption in consideration of price and non-price social, resource, and environmental factors. Effective use of energy resources means reducing the total amount of energy consumed without compromising service reliability through the use of more efficient technologies and practices, with clear and timely pricing information, as part of a sustainable energy policy.[203]

A simple rate is one that consumers easily understand. Rate continuity means that changes to rate structure should be gradual to allow consumers time to adjust their consumption patterns in response to a change in structure. Fairness means that no class of consumers should pay more than the costs of serving that class. Earnings stability means that the amount a company earns from its rates should not vary significantly over a period of one or two years. D.P.U. 12-25, at 445; D.P.U. 10-114, at 342; D.P.U. 10-55, at 536; D.P.U. 09-39, at 402; D.T.E. 03-40, at 366; D.T.E. 02-24/25, at 252-253; D.T.E. 01-56, at 135; D.T.E. 01-50, at 28-29.

There are two steps in determining rate structure: cost allocation and rate design. The cost allocation step assigns a portion of the company's total costs to each rate class through an ACOSS. The ACOSS represents the cost of serving each class at equalized rates of return, given the company's level of total costs. D.P.U. 12-25, at 445-446; D.P.U. 10-114, at 342; D.P.U. 10-55, at 536; D.P.U. 09-39, at 402; D.T.E. 03-40, at 366; D.T.E. 02-24/25, at 253; D.T.E. 01-56, at 135; D.T.E. 01-50, at 29.

There are four steps to develop an ACOSS. The first step is to classify costs by category, according to the service function they provide, either: (1) production; (2) transmission and distribution; or (3) general. The second step is to classify expenses in each functional category

---

[203] See An Act Relative to Green Communities, St. 2008, c. 169; An Act Establishing the Global Warming Solutions Act, St. 2008, c. 298.

according to the factors underlying their causation (i.e., demand-, energy-, LDAC- or customer-related). The third step is to identify the most appropriate allocator for costs in each classification within each function. The fourth step is to allocate all of a company's costs to each rate class based upon the cost groupings and allocators chosen, and to sum these allocations in order to determine the total costs of serving each rate class. D.P.U. 09-39, at 402-403; D.T.E. 03-40, at 366-367; D.T.E. 02-24/25, at 253; D.T.E. 01-56, at 136; D.T.E. 98-51, at 131-132; D.P.U. 96-50 (Phase I) at 133-134.

The results of the ACOSS are compared to the revenues collected in the test year for each rate class that have been weather normalized and adjusted for known and measurable changes. If the percent difference in these amounts is close to the overall percent increase granted, then the revenue increase or decrease may be allocated among the rate classes so as to equalize the rates of return and ensure that each rate class pays the cost of serving it. If, however, the percent difference between the allocated cost and the test year revenue for a given rate class is significantly higher than the overall percent increase granted, then, for reasons of continuity, the rate class revenue increase or decrease may be allocated so as to reduce the difference in rates of return among rate classes, but not to equalize them in a single step. D.P.U. 09-39, at 403; D.T.E. 02-24/25, at 253-254; D.T.E. 01-56, at 136; D.T.E. 01-50, at 29.

As the previous discussion indicates, the Department does not determine rates based solely on the results of the ACOSS, but also explicitly considers the effect of its rate structure decisions on the amount customers are billed. For instance, the pace at which fully cost-based rates are implemented depends in part on the effect of the changes on customers. In moving toward our goal of efficiency, the Department also considers the effect of rates on low-income customers. D.P.U. 09-39, at 403-404; D.T.E. 03-40, at 367; D.T.E. 02-24/25, at 254; D.T.E. 01-56, at 137; D.T.E. 01-50, at 29-30. The Department's rate structure goals must balance the often divergent interests of various customer classes and prevent any class from subsidizing another class unless a clear record exists to support such subsidies – or unless such subsidies are required by statute, e.g., G.L. c. 164, § 1F(4)(I). The Department reaffirms its rate structure goals that result in rates that are fair, cost-based, efficient, and enable customers to adjust to changes. D.P.U. 09-39, at 404; D.T.E. 02-24/25, at 254; D.T.E. 01-56, at 137; D.T.E. 01-50, at 30.

The second step in determining the rate structure is rate design. The level of the revenues to be generated by a given rate structure is governed by the cost allocated to each rate class in the cost allocation process. The pattern of prices in the rate structure, which produces the given level of revenues, is a function of the rate design. The rate design for a given rate class is constrained by the requirement that it should produce sufficient revenues to cover the cost of serving the given rate class and, to the extent possible, meet the Department's rate structure goals discussed above. D.P.U. 09-39, at 404; D.T.E. 03-40, at 368; D.T.E. 02-24/25, at 254-255; D.T.E. 01-56, at 136-137; D.T.E. 01-50, at 30.

B. Bay State's ACOSS

1. Introduction

Bay State performed an ACOSS that assigns or apportions, based on cost-causation principles, the Company's total cost of service to each rate class (Exhs. CMA/MPB-1, at 7; CMA/MPB-2, Schs. MPB-2-1, MPB-2-2, MPB-2-3, MPB-2-4, MPB-2-5-CUS, MPB-2-5-DEM, MPB-2-5-COM, MPB-2-5-LDAC). The Company used the results of the ACOSS as a key input in developing rates and to provide an informed cost basis for evaluating the relative magnitude of the various individual tariff charges, including the customer charges, the commodity charges, and the seasonal demand charges (Exh. CMA/MPB-1, at 7-8).

Bay State's allocation procedure involved several steps. First, the Company functionalized costs into the following principal service areas: production, transmission, distribution, and general (Exh. CMA/MPB-1, at 8). Second, the Company classified costs as related either to demand, energy/commodity, customer, or LDAC (Exh. CMA/MPB-1, at 8). Third, the Company allocated or assigned the functionalized and classified costs to the various customer rate classes directly or through external or internal allocators (Exh. CMA/MPB-1, at 8-9). Direct assignment refers to specifically identifying or isolating the cost of service attributable to a specific activity or classification of cost (Exh. CMA/MPB-1, at 8). Bay State developed external allocators from its accounting and customer information records (Exh. CMA/MPB-1, at 9). The Company developed internal allocators within the ACOSS from previously allocated plant investment or functional O&M costs (Exh. CMA/MPB-1, at 9).

Bay State asserts that its ACOSS properly apportions the Company's costs and revenues to customer classes in a manner consistent with Department precedent and, therefore, that the ACOSS should be adopted by the Department (Company Brief at 184-188). No other party addressed the Company's proposed ACOSS.

2. Analysis and Findings

The Department has evaluated Bay State's proposed ACOSS, as described above, and finds that it has assigned or allocated the Company's costs to each rate class consistent with Department precedent for cost allocation. D.T.E. 03-40, at 369; D.T.E. 01-56, at 138;

D.P.U. 96-50 (Phase I) at 136. The Department directs the Company to re-run its ACOSS in its compliance filing to allocate its costs and expenses as approved in this Order.

C. Marginal Cost Study

1. Introduction

Bay State's marginal cost study filed in this case is an update to the study that was filed by the Company and accepted by the Department in D.P.U. 12-25, at 462 (Exhs. CMA/JAF-2, at 43; CMA/JAF-2, Sch. JAF-2-7, at 1; CMA/JAF-4, WP JAF-2). The updates performed by the Company in the current marginal cost study comprise: (1) changes to headers and revisions to the appropriate year, test year, and rate year to reflect that the current marginal cost study is an update of the study presented in D.P.U. 12-25; (2) changes to the cost of debt, ROE, inflation, property tax, property tax escalation, and cash working capital (non-fuel) rates to reflect values that Bay State proposes in this case; and (3) updates to the delivery write-offs, delivery revenues, design day demand, calendar month sales, and customer count categories to reflect a test year-end of 2012 and not 2011, which was the test year in D.P.U. 12-25 (Exh. CMA/JAF-2, Sch. JAF-2-7, at 1).

The Company states that the results of the updated marginal cost study are similar in magnitude to the study presented in the last rate case, and that because the updated results are in constant dollars, the results are appropriate and can be utilized for the Company's pricing in this case (Exh. CMA/JAF-2, at 44). Further, Bay State notes that the results of the updated marginal cost study present the only pricing results that the Company will be using subsequent to the Department's order in this proceeding (Exh. CMA/JAF-2, at 44). Specifically, the annual unit capacity costs per MMBtu for unconstrained and constrained distribution capacity will be incorporated into the Dual Fuel tariff provision and also will be used for guidance in establishing minimum pricing for any possible special contract pricing (Exh. CMA/JAF-2, at 44). In addition, the minimum variable Interruptible Transportation ("IT") rate will be inserted in the Company's standard IT Agreement, which is part of the Company's IT tariff (Exh. CMA/JAF-2, at 44).

Bay State asserts that because only one year has passed since the last marginal cost study, the data and associated results are recent and reasonably up to date (Exh. CMA/JAF-2, at 43). Further, the Company contends that filing a marginal cost study that updates a recently approved study is consistent with Department precedent (see Exh. CMA/JAF-2, at 43, citing D.P.U. 10-114, at 351-355; Company Brief at 191). No other party addressed the Company's updated marginal cost study.

2. Analysis and Findings

As noted, the Company's marginal cost study is an update of the study presented in D.P.U. 12-25. The Department accepted the Company's proposed marginal cost study, noting that it incorporated sufficient detail to allow a full understanding of the methods used to determine the marginal cost estimates. D.P.U. 12-25, at 462. In particular, the Department found that, consistent with the directives in D.T.E. 05-27, at 322 & n.170, the Company had excluded from its marginal cost study all production, transmission and customer costs as they are irrelevant to the design of distribution rates under the Department's current policy. D.P.U. 12-25, at 461. Further, the Department concluded that in developing the marginal cost study the Company used: (1) reliable data as required by Department precedent; (2) proper econometric techniques to provide a statistically reliable estimate of the marginal O&M expense;

(3) appropriate historical data in its regression analysis; and (4) multi-variate regression techniques. D.P.U. 12-25, at 461, citing D.T.E. 03-40, at 376-377. In addition, the Department determined that the Company performed appropriate diagnostic tests to ensure the appropriateness of the regressions in the marginal cost study. D.P.U. 12-25, at 461-462. Finally, we found that Bay State provided adequate justification for the theoretical modifications used to determine the marginal cost of distribution pressure support. D.P.U. 12-25, at 462. Based on these considerations, we concluded that Bay State had used the most robust marginal cost study model available and, therefore, we accepted the Company's marginal cost study. D.P.U. 12-25, at 462.

We have reviewed the Company's proposed updates and changes to the marginal cost study approved in D.P.U. 12-25, and we find them to be reasonable and appropriate (Exhs. CMA/JAF-2, Sch. JAF-2-7, at 1). Further, we conclude that the results of the marginal cost study are consistent in magnitude with the study presented in D.P.U. 12-25 and are appropriate for use in setting the Company's proposed pricing in this case (Exhs. CMA/JAF-2-7, at 2; CMA/JAF-4, WP JAF-2-7). As the Company's proposed marginal cost study in the instant case is effectively an update of the previously approved study, the Department accepts the Company's proposed marginal cost study. See D.P.U. 10-114, at 354.

D. Rate Design

1. Introduction

The Company used the class revenue requirements at equalized rates of return that were produced from its ACOSS as the initial revenue targets to collect from its rate classes (Exh. CMA/JAF-2, at 8). The Company initially evaluated these revenue targets to determine if they would cause any customer class to receive a base rate increase greater than 125 percent of the proposed overall base rate increase (Exhs. CMA/JAF-2, at 8; CMA/JAF-2, Sch. JAF-2-1, at 9-10). Subsequently, Bay State revised its proposed rate design in order to conform to G.L. c. 164, § 94I, which was added by Section 20 of an Act Relative to Competitively Priced Electricity in the Commonwealth, St. 2012, c. 209 ("Section 20") (see RR-DPU-10).[204] Section 20 revises G.L. c. 164, § 94 by inserting after section 94H the following section:

> Section 94I. In each base distribution rate proceeding conducted by the department under section 94, the department shall design base distribution rates using a cost-allocation method that is based on equalized rates of return for each customer class; provided, however, that if the resulting impact of employing this cost-allocation method for any 1 customer class would be more than 10 per cent, the department shall phase in the elimination of any cross subsidies between rate classes on a revenue neutral basis phased in over a reasonable period as determined by the department.

The Company subsequently evaluated the initial revenue targets to determine if they would cause any customer class to receive an increase greater than ten percent of each class's total test year revenues, and to the extent the increase was over ten percent, the excess amount was allocated to the other rate classes, thus limiting each class's total revenue increase to ten percent or less (RR-DPU-10, Att.). The total amount of revenues over the ten percent was allocated to the remaining classes based on the ratio of each of the remaining class's test year base revenue target to the group's total test year base revenue target (Exh. CMA/JAF-2, at 10; RR-DPU-10, Att. at 9-10). The customer classes that exceeded the ten percent cap, and for which the Company capped the total revenue increase at ten percent of the proposed overall revenue increase, were Rate R-1/R-2 and Outdoor Lighting Rate L (RR-DPU-10, Att. at 9).

---

[204] Section 20 was passed on August 3, 2012.

Once the revenue requirement to be collected from each customer class was determined, the Company designed each rate component for that class. Bay State's proposed customer charges are a function of managing bill impacts within a class while moving moderately toward a cost-based customer charge (Exh. CMA/JTG-2, at 23). The Company states that the closer customer charges are moved toward a fully cost-based charge, the rate serves to more fairly charge for, and to more accurately reflect, the cost of providing service, thereby resulting in a more fair charge to individual customers (Exh. CMA/JTG-2, at 29). Bay State proposes to implement for its rate classes cost-based customer charges that range from 43 percent to 85 percent of the way toward fully embedded customer cost, with commercial classes significantly closer to fully cost-based customer charges than residential customers (Exh. CMA/JAF-2, Sch. JAF-2-2).

The Company calculated customer charge revenue by multiplying the test year number of customers bills by the proposed customer charge for each rate class (Exh. CMA/JAF-2, at 24). Next, the Company subtracted from each customer class's revenue requirement the revenue generated from the proposed customer charges, and proposed to recover the remaining revenue through volumetric charges for the peak and off-peak seasons (Exh. CMA/JTG-2, at 14-15). Bay State proposed seasonal volumetric charges based on inclining block volumetric delivery charges[205] in compliance with the Department's mandate in D.P.U. 08-35, at 249 (Exh. CMA/JAF-2, at 17).

The Company determined the block break point for the delivery charges using a bill frequency analysis that determined the consumption strata at which the maximum number of

205 The two extra high annual use customer classes (G/T-43/53), however, have both seasonal flat volumetric rates and demand rates (Exh. CMA/JAF-2, at 34).

customers would be impacted by a moderate fluctuation in their gas consumption (Exhs. CMA/JAF-2, at 18-19; CMA/JAF-4, WP JAF-2-3). Bay State determined that an amount equal to one percent of the average annual consumption for each customer class represents a moderate level of incremental consumption (Exh. CMA/JAF-2, at 19). In setting the break point between head block and tail block rates, the Company proposed the consumption level that will optimize the price signal for customers to reduce their consumption (Exh. CMA/JAF-2, at 18, 26). Accordingly, at the head/tail block breaks proposed by the Company, a moderate usage change results in an incremental price change and a maximum change in average price (Exh. CMA/JAF-2, at 18). The Company proposed to set the tail block price for each rate class at between 102 percent and 110 percent greater than the average volumetric average rate for that class (Exhs. CMA/JTG-2, at 17; CMA/JTG-2, Sch. CMA/JAF-2-4).

2. Cost Based Rate Design for Reconciling Factors

In December 2012, pursuant to Section 51 of an Act Relative to Competitively Price Electricity in the Commonwealth, St. 2012, c. 209 (“Section 51”), the Department opened an investigation to establish a cost-based rate design for costs that are currently recovered from distribution customers though a reconciling factor. See Cost-Based Rate Design, D.P.U. 12-126, Vote and Order Opening Investigation at 1 (December 20, 2012). On December 17, 2013, the Department issued its final Order and approved each distribution company’s cost-based rate design, subject to certain modifications and directives. See Cost-Based Rate Design, D.P.U. 12-126A through D.P.U. 12-126I at 31-32 (2013).

As part of the investigation, the Department reviewed each company’s bill impacts by customer class and determined that a phase-in of the Section 51 rate redesign was warranted to maintain rate continuity. D.P.U. 12-126A through D.P.U. 12-126I at 29-30. Further, the Department found that because the reconciling charges are recovered from distribution customers, the Department would rely on legislative guidance from Section 20 and apply a phase-in approach to achieve cost-based rates in those instances where the change in total costs, holding supply costs constant, is greater than ten percent. D.P.U. 12-126A through D.P.U. 12-126I at 30. Further, the Department concluded that because reconciling items are recovered dollar for dollar, the phase-in must be implemented by capping the increase to each reconciling factor so that the revenues collected to recover that factor's costs, including any subsidy amount, are all collected within that factor's charge. D.P.U. 12-126A through D.P.U. 12-126I at 30.

In particular, the Department determined that to the extent the increase to the total bill is greater than ten percent, a company shall cap the increase to each rate class, for each reconciling factor, at no greater than 120 percent of the increase to that reconciling factor. D.P.U. 12-126A through D.P.U. 12-126I at 30.[206] The remaining revenue increase (i.e., the amount above the 120 percent cap) is to be allocated based on test year base distribution revenues, among those classes whose revenue requirement falls below the 120 percent rate cap. D.P.U. 12-126A through D.P.U. 12-126I at 31. The Department directed the companies to implement the

---

206 The Department found that a 120 percent cap was appropriate under the circumstances because: (1) it appropriately balances the rate structure goals of continuity and fairness by ensuring that final charges for each rate class approach the cost to serve that class; (2) the limited cross-subsidization maintained by the cap will resolve over time and will not unduly distort rate efficiencies; and (3) the magnitude of change to any one class is contained within reasonable bounds. D.P.U. 12-126A through D.P.U. 12-126I at 30-31. The Department also determined that a 120 percent cap was consistent with caps the Department had imposed on changes to base distribution rates. D.P.U. 12-126A through D.P.U. 12-126I at 31, citing D.P.U. 10-114, at 363; D.P.U. 10-70, at 328.

redesigned reconciling factors on the date that the factor would have otherwise been updated in 2014, pursuant to each company's respective tariffs. D.P.U. 12-126A through D.P.U. 12-126I at 31-32.

3. Positions of the Parties

a. Attorney General

i. Introduction

The Attorney General makes several recommendations regarding the Company's proposed rate design. First, she maintains that Bay State should eliminate several of its reconciling mechanisms (Attorney General Brief at 8). Second, according to the Attorney General, Bay State's proposed rate design neglects to address the impact of Section 20 and the Department's proceeding in D.P.U. 12-126 (Attorney General Brief at 132; Attorney General Reply Brief at 68). Finally, the Attorney General asserts that the Department should eliminate inclining block rates and institute a flat volumetric rate structure (Attorney General Brief at 135). Each of the Attorney General's arguments is discussed in further detail below.

ii. Elimination of Reconciling Mechanisms

The Attorney General argues that the Company should agree to a three- to-five year hiatus in rate case filings (Attorney General Brief at 8). Alternatively, the Attorney General asserts that the Department should eliminate several of Bay State's reconciling mechanisms (Attorney General Brief at 8). According to the Attorney General, the purpose of a reconciling mechanism is to reduce the frequency of rate cases (Attorney General Brief at 8, citing D.T.E. 03-47-A at 17 n.17; Attorney General Reply Brief at 4, citing Worcester Gas Light Company, D.P.U. 11209 (1955)). The Attorney General argues that the Company's frequent rate case filings and the potential for continued annual rate cases negate the benefit of reconciling mechanisms, increase expenses that are passed on to ratepayers, and create an administrative burden for the Department and the Attorney General (Attorney General Brief at 8; Attorney General Reply Brief at 4-5). Thus, according to the Attorney General, the Department should design rates that reflect the potential of annual rate case filings (Attorney General Reply Brief at 5, citing Tr. 1, at 10-11).

In this regard, the Attorney General recommends that the Department eliminate Bay State's pension and PBOP expense factor, its revenue decoupling adjustment factor ("RDAF"), and its TIRF (Attorney General Brief at 8-9; Attorney General Reply Brief at 4). According to the Attorney General, because test year adjustments could be made in annual rate case filings, there is no need for separate, repetitive, time consuming, and unnecessary reconciling mechanism proceedings (Attorney General Brief at 8-9; Attorney General Reply Brief at 4). Further, the Attorney General maintains that the elimination of these three reconciling mechanisms will not harm Bay State's financial condition, as the Company would recover in one rate case proceeding the same costs that otherwise would be recovered in three separate proceedings (Attorney General Reply Brief at 4).

Finally, the Attorney General questions Bay State's motive in filing the instant rate case and rejects any notion that it was done to close a revenue gap (Attorney General Reply Brief at 5-6). Instead, the Attorney General maintains that Bay State was performing well following its last rate case, and that the instant filing is a punitive measure directed at the Department because NiSource "did not get what it wanted" in D.P.U. 12-25 (Attorney General Reply Brief at 5-7). According to the Attorney General, the Company's earnings over its cost of capital are closer to 13.9 percent return on average common equity instead of the 6.44 percent Bay State claims to be earning (Attorney General Reply Brief at 7). In support of this assertion, the Attorney General claims that Bay State's income is lower because of the amounts that NCSC and NiSource Finance Corporation have "extracted" from the Company, including $5 million in above-market interest charges, and because NCSC charged $6 million in A&G expenses to the Company (Attorney General Reply Brief at 6, citing Exh. AG-DR-1, at 6-8). Further, the Attorney General notes that warmer than normal weather during the test year reduced sales and revenues by over $10 million, which, according to the Attorney General, suppressed the Company's annual return on common equity (Attorney General Reply Brief at 6, citing Exh. CMA/JTG-2, Sch. JTG-25, at 9 (Rev. 1)). Finally, the Attorney General claims that annualizing new base rates during the test year increases the Company's revenues by an additional $11 million (Attorney General Reply Brief at 6-7, citing Exh. CMA/JTG-2, Sch. JTG-25, at 9 (Rev. 1)). Therefore, the Attorney General asserts that Bay State's claimed return of $16.8 million and return on common equity of 6.44 percent during the test year are not supported on the record (Attorney General Reply Brief at 6, citing Exh. AG-1-2, Att. (6) (2012) at 7).

iii. Effect of Section 20 and D.P.U. 12-126 on Rate Design

The Attorney General argues that the Company ignores the effect of Section 20 on its proposed rate design and instead continues to advocate a revenue allocation between classes wherein no class would receive a rate increase in excess of 125 percent of the proposed rate increase (Attorney General Reply Brief at 68, citing Company Brief at 193). According to the Attorney General, the provisions of Section 20 supersede the Department's "125 percent cap"

(Attorney General Brief at 132). Further, the Attorney General asserts that the provisions of Section 20 will negate the need to provide subsidies to the C&I High Annual, Low Winter (G/T52) and C&I Extra High Annual, Low Winter (G/T-53) classes (Attorney General Reply Brief at 68-69).

The Attorney General also argues that, in the rate year, customers will experience rate impacts from both the instant rate case and D.P.U. 12-126, and that it is within the Department's discretion to limit significant adverse rate impacts (Attorney General Brief at 134). Therefore, the Attorney General asserts that the Department, in determining the revenue allocation by class in the instant proceeding, should consider the bill impacts of both proceedings in the context of Section 20 (Attorney General Brief at 134).

In particular, the Attorney General argues that the Department's Order in D.P.U. 12-126 will create decreases for larger C&I rate classes (Attorney General Brief at 133, citing RR-DPU-11). The Attorney General asserts that the Department should avoid resulting subsidies to the larger C&I rate classes that could arise by virtue of the rate design in the instant case by using the rate impacts from the two proceedings (i.e., D.P.U. 13-75 and D.P.U. 12-126) to offset one another (Attorney General Brief at 133). Specifically, the Attorney General argues that the Department should incorporate rate decreases from D.P.U. 12-126 into the Company's rate design in this case for the benefit of those C&I customers (Attorney General Brief at 133).[207]

---

[207] Regarding the extra-large use C&I customers, the Attorney General argues that the Department should adopt the Attorney General's proposal to use full cost-based customer charge in setting rates for these customers, as these customers have the greatest ability to change usage in response to price signals and such an approach would help satisfy the goal of fairness by reducing intra-class subsidies (Attorney General Brief at 134-135, citing Exhs AG/RSB-1, at 7–8; CMA/JAF-Rebuttal-1, at 6-7).

Further, the Attorney General argues that there are significant bill impacts for residential non-heating rates associated with D.P.U. 12-126 (Attorney General Reply Brief at 69). According to the Attorney General, only the residential non-heating class is subject to Section 20's ten-percent cap once the rate changes associated with D.P.U. 12-126 are incorporated into the Company's rate design calculations (Attorney General Brief at 133, citing RR-DPU-11). Thus, the Attorney General recommends capping the residential non-heating increase at four percent so that the total increase for the residential non-heating class as a result of this proceeding and D.P.U. 12-126 would be less than ten percent (Attorney General Brief at 133, citing RR-DPU-11).

Finally, the Attorney General argues that in the instant case and in all future proceedings, any increases to amounts recovered through reconciling mechanisms should be considered as part of the "resulting impact" under the new ten-percent cap established by Section 20 (Attorney General Brief at 133). The Attorney General claims that reconciling mechanisms are designed for distribution companies to recover revenues, previously recovered through base rates, separate from base rates because of volatility in their levels (Attorney General Brief at 133). Thus, according to the Attorney General, reconciliation cost increases, as well as base rate increases, are clearly limited by Section 20 (Attorney General Brief at 134).

iv. Inclining Block Rates

The Attorney General recommends that the Department eliminate inclining block rates because: (i) maintaining correct price signals, by eliminating inclining block rates, for natural gas consumption will benefit the environment by encouraging customers to switch from heating oil and electric appliances to natural gas; (ii) customers have incentives to conserve natural gas consumption without inclining block rates because customers pay higher delivery and supply charges when they do not conserve; (iii) inclining block rates create inter-class and intra-class subsidies; (iv) inclining block rates impose higher costs per unit on high-usage customers, even though the marginal cost to deliver those additional units to those customers is lower; and (v) customers are not aware of inclining block rates, so this rate design likely has minimal effect on customers' efforts to conserve (Attorney General Brief at 135-136, citing Tr. 6, at 634-635, 659). Further, according to the Attorney General, the Department is not fully persuaded that inclining block rates encourage end-use energy efficiency (Attorney General Brief at 135-136, citing D.P.U. 12-25, at 468). Therefore, the Attorney General asserts that the trade-off between minimal conservation and the decline in economic efficiency through intra- and inter-class subsidies is "simply not worth it" (Attorney General Brief at 136). For these reasons, the Attorney General argues that inclining block rates for natural gas violate the Department's ratemaking principles of fairness and efficiency and should be eliminated (Attorney General Brief at 135-136).

Finally, the Attorney General argues that the Department should not consider revising Bay State's inclining block rate structure to increase its impact on high- and low-volume customers (Attorney General Brief at 137). The Attorney General maintains that increasing the differential between head and tail blocks would exacerbate the existing issues with the current rate structure and reduce simplicity and fairness in Bay State's rate design (Attorney General Brief at 137, citing Tr. 6, at 658-659). In addition, the Attorney General claims that even if modifying the inclining block rate structure created more awareness among customers, they would still have no means to measure their consumption in a given month and respond to the price differential (Attorney General Brief at 137, citing Tr. 6, at 634).

b. Company

i. Introduction

Bay State asserts that its proposed rates recover the Company's total revenue requirement, are consistent with Department precedent, and balance the Department's policy goals, principles, and objectives, including fairness in cost recovery, efficiency, simplicity, continuity, and earnings stability (Company Brief at 192, citing Exh. CMA/JAF-2, at 5-6; Company Brief at 212-213). Bay State asserts that its proposed rate design: (1) allows reasonable recovery of customer-related costs through customer charges; (2) meets the Department's goal of rate continuity because it has proposed gradual changes to rates; (3) is fair because rates reasonably reflect the underlying costs of providing service; and (4) complies with Section 20 (Company Brief at 212-213; Company Reply Brief at 40).

ii. Elimination of Reconciling Mechanisms

The Company argues that it has the right to petition the Department under G.L. c. 164, § 94 to establish just and reasonable rates where existing rates are no longer providing an adequate return (Company Brief at 14, citing Fitchburg Gas and Electric Light Company, 371 Mass. 881, 884 (1977); Boston Edison Company v. Department of Public Utilities, 375 Mass. 1, at 10-12 (1978); Massachusetts Electric Company v. Department of Public Utilities, 376 Mass. 294, at 299-300 (1978)). Bay State maintains that its earned return on equity in the test year was 6.44 percent and its expected earned return for 2013 is 7.2 percent, compared to the return on equity allowed in D.P.U. 12-25 of 9.45 percent (Company Brief at 15, citing Exhs. AG-1-12; AG-6-11). Thus, the Company asserts that it is exercising its legal right to seek a base rate proceeding where its return on equity is 225 basis points below the level found by the Department to meet statutory requirements (Company Brief at 15).

Further, Bay State claims that if the Attorney General's recommendation to eliminate the Company's PEF, RDAF, and TIRF is accepted by the Department, then the Company will be unable to overcome the financial obstacles that these factors are designed to mitigate (Company Brief at 14). The Company claims that the Attorney General's objective to reduce the frequency of the Company's rate cases to every three to five years by eliminating these reconciling mechanisms will actually cause annual base rate cases rather than avoid them (Company Brief at 15-16). Bay State explains that the magnitude of year-to-year expenses of the PEF will increase the necessity of rate cases without the reconciling factor (Company Brief at 16, citing Exh. AG-6-11). In addition, the loss of the RDAF increases the necessity of rate cases and impairs the Company's ability to implement energy efficiency measures (Company Brief at 16). Finally, removing the TIRF will end the Company's infrastructure replacement program and limit pipe replacement to the minimum required to maintain a safe and reliable system (Company Brief at 16). Thus, Bay State maintains that although the Department has the authority to modify its reconciling mechanisms, the Attorney General's argument is not a valid reason to do so (Company Brief at 15).

In addition, Bay State claims that there exists a revenue gap of approximately $6.3 million between rates set in D.P.U. 12-25 and the cost of running the Company's system in 2013 (Company Brief at 16). The Company suggests that approval of the DISC (see Section IV.3 above) will reduce the gap between costs and cost recovery by approximately

$3.9 million (Company Brief at 16, citing Exhs. AG-6-11; AG-6-19, Att. at (c); AG-6-20). According to Bay State, the DISC is the most effective means to reduce the frequency of the Company's rate cases (Company Brief at 17).

Further, Bay State rejects as arbitrary and flawed the Attorney General's contention that the Company should be earning a return of 13.9 percent (Company Reply Brief at 2). Bay State denies that NCSC and NiSource Finance Corporation are "extracting" income from the Company, and the Company notes that the Attorney General has not rebutted evidence showing that these affiliates provide valid services to Bay State (Company Reply Brief at 2). In addition, the Company claims that the impact of warmer than normal weather is mitigated by the RDAF; thus reported earnings for 2012 include the benefit of RDAF revenues, contrary to the Attorney General's assertion, and such earnings would have been much lower without the RDAF (Company Reply Brief at 3). Bay State also rejects the notion that annualizing the increases allowed in D.P.U. 12-25 would increase earnings, because these increases were not, and cannot ever be, collected in 2012 (Company Reply Brief at 3). The Company explains that it annualized the revenues from D.P.U. 12-25 in its revenue requirement analysis and the results show a projected return on equity of 7.2 percent for 2013 (Company Brief at 3, citing Exh. AG-6-11). Therefore, Bay State asserts that such claims made by the Attorney General are false and should be rejected (Company Brief at 3).

iii. Effect of Section 20 and D.P.U. 12-126 on Rate Design

The Company submits that it revised its presentation of the impacts of its preferred rate design in order to conform to the rate design provisions of Section 20 (Company Brief at 206, citing RR-DPU-10; Company Reply Brief at 40). Specifically, according to the Company, its revised proposal limits the resulting impact to ten percent or less, which is consistent with the mandate of Section 20 (Company Brief at 206; Company Reply Brief at 40, citing RR-DPU-11).

Bay State opposes the Attorney General's recommendation that the Company's proposed base distribution rate increases should be added to the class revenue effects of the Department's decision in D.P.U. 12-126, as such an outcome is contrary to Section 20 (Company Brief at 211; Company Reply Brief at 41). The Company maintains that Section 20 does not require combining class revenue changes from a separate proceeding on reconciling mechanisms with the class revenue changes resulting from a base rate case (Company Brief at 211). In support of its argument, the Company asserts that Section 20 applies to "each base distribution rate proceeding," and including the rate effects from proposals in other proceedings than a base rate proceeding is inconsistent with this directive (Company Brief at 211; Company Reply Brief at 41). Further, the Company argues that rates designed from a base distribution rate proceeding generally establish relatively long-term rate changes, and should not be a "catchall" for revenue changes attributable to reconciling or tracker rates in other proceedings (Company Brief at 211). For all of these reasons, Bay State asserts that its revised rate design, which is consistent with Section 20, should be adopted by the Department in this proceeding (Company Brief at 206, 211).

iv. Inclining Block Rates

The Company explains that it adhered to the Department's policy on inclining block rates in its proposed rate design (Company Brief at 192, 212). However, Bay State believes that a rate design that recovers most or all of the Company's fixed costs through a fixed distribution charge, with a small, flat volumetric rate, is simple, efficient, fair, cost-based, and passes on appropriate price signals to customers (Company Brief at 212). Accordingly, the Company finds merit in the Attorney General's recommendation to eliminate inclining block rates (Company Brief at 212).

4. Analysis and Findings

a. Elimination of Reconciling Mechanisms

The Department addressed the use of reconciling mechanisms as a ratemaking tool in D.P.U. 07-50-A at 50, where we found that it was generally appropriate to permit the companies to continue to use fully reconciling cost recovery mechanisms after the implementation of revenue decoupling. The Department noted that at the time these mechanisms were approved, the costs to be recovered were found to be volatile and fairly large in magnitude, neutral to fluctuations in sales volumes, and beyond the control of the companies. D.P.U. 07-50-A at 50, citing D.T.E. 05-27, at 183-186; D.T.E. 03-47-A at 25-28, 36-37. The Department stated that it would consider which, if any, of the costs should continue to be fully reconciled via separate mechanisms or recovered, instead, via base rates as circumstances change. D.P.U. 07-50-A at 50. The Department also noted that such consideration would take place on a case by case basis in a base rate proceeding, where the distribution company must demonstrate that continued recovery in a separate mechanism is warranted. D.P.U. 07-50-A at 50.

The Attorney General argues that unless Bay State is willing to forego rate case filings for a period of three to five years, the Department should expect annual filings and, therefore, eliminate the Company's PEF, RDAF, and TIRF reconciling mechanisms (Attorney General Brief at 8). The Attorney General does not challenge the specifics of the mechanisms, but rather rests her arguments solely on the potential for frequent rate case filings.

We find that the continuation of the PEF, RDAF and TIRF is warranted at this time. Regarding the PEF, we approved Bay State's reconciling mechanism to recover its pension and PBOP costs to address the negative effects associated with the magnitude and volatility of the Company's pension and PBOP expense. See D.T.E. 05-27, at 123-124. The record demonstrates that the Company's pension costs have continued to be volatile over the last several years (see Tr. 5, at 527, 583, 591-593; Tr. 8, at 863-866; RR-DPU-9; RR-DPU-15). For example, the annual pension and PBOP expense declined 31.8 percent from 2006 to 2007 and increased 125.6 percent from 2008 to 2009 (RR-DPU-15). Between 2011 and 2012, these costs increased by 41.7 percent (RR-DPU-15, Att.). Total PEF expenses have ranged from approximately $5.6 million to $12.7 million since the implementation of the PEF mechanism (RR-DPU-15, Att.). Thus, we conclude that it is appropriate for the Company to continue the recovery of pension and PBOP costs through the PEF. Moreover, the termination of a reconciling pension and PBOP mechanism would require further analysis of, among other items, financial and accounting standards, the disposition of any remaining over- or under-collections associated with the reconciling mechanism, the ratemaking treatment to be accorded prepaid pension and PBOP balances, and the effect of such a termination on the required return on equity. See D.P.U. 09-30, at 214-215. None of these issues has been addressed by the Attorney General or explored as part of this proceeding.

The Company's decoupling mechanism was approved in D.P.U. 09-30, at 86-118, in response to the Department's directive that all distribution companies were to be operating under decoupling plans by year-end 2012. See D.P.U. 07-50-A at 84. We reiterate that promoting the implementation of all cost-effective demand resources is a top priority for the Department.

D.P.U. 07-50-A at 24. There is no evidence in this proceeding that the Company's RDAF is not functioning as intended and designed, or that the RDAF has prevented the Company from deploying energy efficiency measures. See D.P.U. 07-50-A at 87. Further, the RDAF's semi-annual reconciliation adjustments meet the Department's rate design goals of earnings stability, rate continuity, and efficiency. D.P.U. 07-50-A at 87. Based on these considerations, we find that the Company's decoupling reconciliation mechanism shall continue, subject to the modifications discussed in Section XI.C.1 below.

The Company's TIRF was approved in D.P.U. 09-30, at 129-135. The Department continues to recognize that there are public safety, service reliability, and environmental concerns associated with the reliance on aging leak-prone facilities in gas companies' distribution systems. See D.P.U. 12-25, at 45; D.P.U. 10-114, at 56; D.P.U. 10-55, at 122. Further, the Department continues to find that use of a TIRF mechanism is likely to provide an incentive for a more sustained, aggressive replacement of leak-prone infrastructure. D.P.U. 12-25, at 45; D.P.U. 10-114, at 56; D.P.U. 10-55, at 122. There has been no evidence presented in this proceeding to convince us that the TIRF should be eliminated. As such, subject to the modifications discussed above in Section IV above, the Company shall continue to recover certain infrastructure replacement costs through this reconciling mechanism.

Based on the above findings, we are not persuaded that the Company's PEF, RDAF, and TIRF should be eliminated so that annual adjustments currently made in these reconciling mechanisms instead would be calculated in annual base rate filings. Accordingly, we reject the Attorney General's recommendations and we direct Bay State to continue to recover appropriate costs through these mechanisms. In light of these findings, it is unnecessary to address any of the remaining arguments made by the parties.

b. Effect of Section 20 and D.P.U. 12-126 on Rate Design

As noted above, the Company originally submitted a rate design that evaluated revenue targets to determine if any customer class would receive a base rate increase greater than 125 percent of the proposed overall base rate increase (Exhs. CMA/JAF-2, at 8; CMA/JAF-2, Sch. JAF-2-1, at 9-10). The Company then submitted a response to Record Request DPU-10, in which it revised its rates to conform to Section 20. Therefore, we find no merit in the Attorney General's contention that the Company did not consider Section 20 in its proposed rate design.

The Attorney General also argues that the Department, when determining the revenue allocation by class in the instant proceeding, should consider the bill impacts resulting from this case and those resulting from the D.P.U. 12-126A through D.P.U. 12-126I proceeding, and that such consideration further should be made in the context of Section 20 (Attorney General Brief at 134). As an initial matter, we note that the Department does not permit a company to update test year reconciling rate revenues for post-test year changes in rates, since costs recovered through reconciling mechanisms are volatile and change frequently. A company's rate design that results from a base distribution rate proceeding establishes long-term rate changes and should not encompass reconciling rate revenues that change annually or semi-annually. Further, we find that including such reconciling rate revenues in Bay State's rate design is not practical in light of our decision in D.P.U. 12-126A through D.P.U. 12-126I, the recent issuance date of this Order, and the frequency of the Company's updates to its reconciling mechanism factors.

In D.P.U. 12-126A through D.P.U. 12-126I at 31-32, the Department directed Bay State to implement redesigned reconciling factors on the date that the factor would have otherwise been updated. Pursuant to Bay State's applicable LDAC and revenue decoupling adjustment clause ("RDAC") tariffs, a number of the Company's reconciling mechanism rates are scheduled to be updated on May 1, 2014 or November 1, 2014, depending upon the mechanism (see M.D.P.U. Nos. 108, 109; Exh. CMA/JAF-3, Sch. JAF-3-1-P at 106-144 (Rev.) (proposed M.D.P.U. Nos. 143, 144)).[208] Thus, the "resulting impact" from the redesigned reconciling mechanisms that the Attorney General seeks to incorporate into the Company's rate design is not known at this time and will not be known until after the Order in this case is issued.[209] For instance, the Company's reconciling rates in the RDAC tariff previously changed on May 1, 2013 and November 1, 2013, during the course of the investigation in this case. Thus, these rates effective: (i) November 1, 2013 will be in effect for two months of the rate year, (ii) May 1, 2014 will be in effect for six months of the rate year, and (iii) November 1, 2014 will be in effect for four months of the rate year (see M.D.P.U. Nos. 109; Exh. CMA/JAF-3,

---

208 The Company adjusts its reconciling mechanisms semi-annually in its LDAC and RDAC tariffs; thus some reconciling rates change on May 1, while others change on November 1 of each year (see M.D.P.U. Nos. 108, 109; Exh. CMA/JAF-3, Sch. JAF-3-1-P at 106-144 (Rev.) (proposed M.D.P.U. Nos. 143, 144)).

209 During the course of the instant proceeding, the Company sought to provide sample bill impacts of the effect of combining the proposed rates in this proceeding and the redesigned reconciling rates resulting from the investigation in D.P.U. 12-126A through D.P.U. 12-126I (see RR-DPU-11). However, at the time, the Department's decision in D.P.U. 12-126A through D.P.U. 12-126I had not been issued and the Company was unaware of the costs to be included in the redesigned reconciling mechanisms rates. Therefore, the Company calculated the bill impacts using redesigned reconciling rates designed to recover the remaining months of annual costs for those rates in effect at that time (i.e., those in effect as of November 1, 2013) (see RR-DPU-11). Consequently, the Company's calculations are primarily illustrative and provide limited probative value.

Sch. JAF-3-1-P at 137-144 (Rev.) (proposed M.D.P.U. No. 144)). As a result, the rates in effect as of the date of this Order differ from those contained in Bay State's initial filing and those that will become effective during the rate year. Therefore, in order for the Department to incorporate reconciling rate revenues into the Company's rate design in this case, we would be compelled to choose between revenues generated from existing rates that soon will change and no longer be representative and future revenues that cannot be determined with any level of precision. We find neither choice to be acceptable in the context of designing the Company's base rates. Accordingly, we reject the Attorney General's recommendation to incorporate reconciling rate revenues in the Company's rate design for this case.

Finally, we address the Attorney General's argument that reconciliation mechanism cost increases are limited by the provisions of Section 20 (Attorney General Brief at 133-134). In D.P.U. 12-126A through D.P.U. 12-126I, at 30, the Department concluded that because its investigation was not a base distribution proceeding, the requirements of Section 20 did not apply. Nonetheless, we found that because the reconciling charges at issue are recovered from distribution customers, we would rely on legislative guidance from Section 20 and apply a phase-in approach to achieve cost-based rates in those instances where the change in total costs, holding supply costs constant, is greater than ten percent. D.P.U. 12-126A through D.P.U. 12-126I, at 30. Further, we determined that because reconciling items are recovered dollar for dollar, the phase-in must be implemented by capping the increase to each reconciling factor so that the revenues collected to recover that factor's costs, including any subsidy amount, are all collected within that factor's charge. D.P.U. 12-126A through D.P.U. 12-126I, at 30. Therefore, we concluded that, to the extent the increase to the total bill is greater than ten percent, the companies shall cap the increase to each rate class, for each reconciling factor, at no greater than 120 percent of the increase to that reconciling factor. D.P.U. 12-126A through D.P.U. 12-126I, at 30. Based on these findings in D.P.U. 12-126A through D.P.U. 12-126I, at 30, the Attorney General's arguments are moot and it is unnecessary to address them any further.

c. Inclining Block Rates

The Department has found that the design of distribution rates should be aligned with important state, regional, and national goals to promote the most efficient use of society's resources and to lower customers' bills through increased end-use efficiency. D.P.U. 08-35, at 249. To best meet these goals, the Department found that rates should have an inclining block rate structure and that any resulting loss in revenues from declining sales should be recovered through a decoupling mechanism. D.P.U. 08-35, at 249. However, the Department noted that the consumer price signal is from the total bill, and not only the distribution portion of the bill, and that because the commodity portion of the bill is the relatively greater portion of the total cost, consumers who reduce load will see their overall costs come down. D.P.U. 08-35, at 248. Although sending efficient price signals is a fundamental objective of rate design, it is always part of the balancing the Department applies in setting rates in a manner that is consistent with law and precedent. D.P.U. 07-50-A at 28.

In the Company's last rate case, the Department expressed its concerns regarding the inclining block rate structure and stated an expectation to address these concerns in a future proceeding. D.P.U. 12-25, at 468. In particular, the Department was not fully persuaded that inclining block rates encourage end-use energy efficiency. D.P.U. 12-25, at 468. First, the difference between the head and tail block rates generally are small. D.P.U. 12-25, at 468. Second, customers currently have no information as to when they are about to hit the tail block, and thus do not have a signal to help them conserve. D.P.U. 12-25, at 469. The Department's concerns persist. Moreover, both the Attorney General and the Company have recommended moving to a flat volumetric distribution rate to recover those revenues in excess of the revenues collected through the customer charge.

Regarding our first concern, the difference in price between Bay State's head and tail blocks is relatively small, as it ranges from approximately two cents per therm for larger C&I customers, to approximately six cents per therm for residential customers (see RR-DPU-10, at 13). Regarding our second concern, evidence on the record demonstrates that an inclining block rate structure may not affect the amount of gas customers consume. In particular, the Company provided ten years of weather normalized average consumption per customer for the residential and commercial customer groups (Exh. DPU-20-12). The data show that for some months, average use per customer increased after the implementation of inclining block rates (see Exh. DPU-20-12). In other months during subsequent years, there is a decline or no change in average use per customer (Exh. DPU-20-12). The Department recognizes that many factors can affect the consumption behavior of a customer and, as Bay State stated, it would be extremely difficult to assess customers' sensitivity to an inclining block rate structure in an econometric analysis (see Tr. 6, at 634). However, based on record evidence, the Department has observed no discernible reduction in average consumption per customer since Bay State implemented inclining block rates. Accordingly, based on the foregoing, the Department finds that there is insufficient evidence to establish that Bay State's inclining block rate structure sends the appropriate price signals to customers to conserve consumption, or that such a rate structure results in cost-based rates that recover the cost to society of the consumption of resources used to produce the utility service.

Moreover, the Company indicated that very few of its customers have the ability to monitor gas consumption throughout the month,[210] and those customers who have that ability must obtain the data from a third-party gas supplier (Exh. DPU-20-19). To Bay State's knowledge, this communication does not occur, and if it did, there would be a lag between actual consumption and the availability of the data (Exh. DPU-20-19). Further, the Company is unable to provide any customers with information as to when they are about to reach the tail block rate (Exh. DPU-20-19). Thus, customers are not aware of, or able to reduce their usage in response to, the impact of an inclining block rate structure (Tr. 6, at 365).

In addition, Bay State's inclining block rate structure creates intra-class subsidies between the high-use and low-use customers in a rate class and, as such, it does not recover costs consistent with how the Company incurs costs (Exh. DPU-20-15, at 1). According to the Company, the inclining block rate structure causes an inequitable shift of the volumetric revenue requirement to high-use customers within a rate class (Exh. DPU-20-15, at 1). An inclining block rate results in the incremental cost of delivering additional volumes of gas being set at above average cost, and there is no evidence to support a finding that the incremental cost of remaining distribution service associated with distribution or main capacity escalates above the average volumetric cost as volume increases (Exh. DPU-20-15, at 1). Thus, higher user customers pay for more than their equitable share of the volumetric portion of the distribution

210 Only daily-metered service transportation customers have this ability (Exh. DPU-20-19).

revenue requirement than smaller use customers because the unit cost (or the marginal cost) of incremental gas deliveries is relatively minimal, and delivering additional volumes does not increase the embedded costs of providing delivery service (Exh. DPU-20-15, at 2).[211]

Based on the foregoing, we find that while, in theory, inclining block rates should send a price signal to customers to promote end-use efficiency, there is no evidence that the Company's existing inclining block rate structure accomplishes such goals. The differential between the head and tail block is minimal; therefore there is little incentive for customers to conserve by remaining below the higher tail block price. Further, very few customers even have the ability to monitor their consumption, and thus the majority of those customers billed through inclining block rates are unaware if, or when, their consumption is about to reach the tail block. Moreover, there is no evidence of a significant reduction in average use per customer after the implementation of inclining block rates for Bay State (see Exhs. DPU-20-12; DPU-20-13). Accordingly, we direct the Company to redesign rates with a flat volumetric distribution rate. That is, the head block rate and tail block rate should be set at the same volumetric price. This rate structure best meets our rate design goals of efficiency and simplicity, and it ensures fairness between rate classes. The Department notes that its decision today is limited to this case. The Department also directs Bay State, when designing the rates for the individual rate classes, to truncate the distribution rates at four decimal places so that rates are designed to collect no more than the allowed revenue requirement. See D.P.U. 10-70, at 333.

---

211 The delivery of additional volumes would affect only the cost of adding additional distribution capacity in the event of load growth at some point (Exh. DPU-20-15, at 2).

d. Conclusion

Section 20 modifies G.L. c. 164 by directing the Department in each base distribution rate proceeding to design rates based on equalized rates of return by customer class, if the resulting impact for any one customer class is not more than ten percent. See G.L. c. 164, § 94I. The Department's long-standing policy regarding the allocation of class revenue requirements is that a company's total distribution costs should be allocated on the basis of equalized rates of return. See D.T.E. 03-40, at 384; D.T.E. 02-24/25, at 256; D.T.E. 01-56, at 139; D.P.U. 92-210, at 214. This allocation method satisfies the Department's rate structure goal of fairness. However, the Department must balance its goal of fairness with its goal of continuity. To do this, we have reviewed the changes in total revenue requirements by rate class and the annual and seasonal bill impacts by consumption level within rate classes after the application of the ten percent cap, pursuant to Section 20 (see RR-DPU-10). Based upon our review, the Department finds it necessary to apply an additional cap so that no rate class shall receive a distribution rate increase greater than 200 percent of the overall distribution rate increase. This directive is based on the fact that after the application of the ten percent cap pursuant to Section 20, some classes would still receive significant base distribution rate increases, such as G/T-53 and Outdoor Lighting (see RR-DPU-10, Att. at 9-10). The Department finds that 200 percent is an appropriate cap that meets our rate structure goals of fairness and continuity by ensuring that: (1) the final rates to each rate class represent or approach the cost to serve that class; (2) the limited level of cost subsidization created by the cap will not unduly distort rate efficiencies; and (3) the magnitude of change to any one class is contained within reasonable bounds. See D.P.U. 09-39, at 422. The Department directs Bay State to calculate the

200 percent cap as shown on Schedule 11. Therefore, the Department accepts the Company's rate design as proposed in RR-DPU-10, subject to the 200 percent cap and the Department's directives regarding inclining block rates, above. Regarding the proper level to set the customer charge and volumetric rates for each residential and commercial rate class, the Department will make this determination on a rate class by rate class basis based on a balancing of our rate design goals.

E. Rate by Rate Analysis[212]

1. Rate R-1, R-3 (Residential Non-Heating and Heating)

a. Introduction

Rate R-1 is available to residential customers whose usage is not from gas space-heating equipment, while Rate R-3 is available to all residential customers whose usage includes gas space-heating equipment. Both Rate R-1 and Rate R-3 require that a customer take service through one meter in a single building that contains no more than four dwelling units (Exhs. CMA/JAF-3, Sch. JAF-3-1-P at 145-147 (Rev.) (proposed M.D.P.U. No. 145), 151-152 (Rev.) (proposed M.D.P.U. No. 147)). Bay State's current and proposed Rates R-1 and R-3 distribution charges are as shown in the following tables:

[212] Proposed rates listed in this section are from the Company's original rate design proposal (see Exh. CMA/JAF-2, Sch. JAF-2-1). The proposed customer charges do not vary between the Company's original proposal and its revised proposal set forth in response to Record Request DPU 10, which the Company argues should be accepted.

Rate R-1	**Current**		**Proposed**	
	On-Peak	Off-Peak	On-Peak	Off-Peak
Customer Charge ($)	$10.94	$10.94	$12.60	$12.60
Head Block Size (Therms)	10	10	10	10
Head Block Rate ($/Therm)	$0.4394	$0.4394	$0.5686	$0.5686
Tail Block Rate ($/Therm)	$0.4909	$0.4909	$0.6343	$0.6343
Exh. CMA/JAF-2, Schs. JAF-2-1, at 1, 13; JAF-2-3				

Rate R-3	**Current**		**Proposed**	
	On-Peak	Off-Peak	On-Peak	Off-Peak
Customer Charge ($)	$10.94	$10.94	$12.60	$12.60
Head Block Size (Therms)	85	15	85	15
Head Block Rate ($/Therm)	$0.3341	$0.3341	$0.3900	$0.3900
Tail Block Rate ($/Therm)	$0.3798	$0.3798	$0.4421	$0.4421
Exh. CMA/JAF-2, Schs. JAF-2-1, at 13; JAF-2-3				

b. Analysis and Findings

According to the Company's ACOSS, the embedded customer charge for Rate R-1 is $26.49 and the embedded customer charge for Rate R-3 is $29.29 (Exh. CMA/JAF-2, Sch. JAF-2-2). Based on a review of the embedded costs and the seasonal and annual bill impacts on customers, the Department finds that a monthly customer charge of $12.20 for Rate R-1 and Rate R-3 is reasonable. However, based on our findings in Section X.D.4.c above, the Department directs the Company to modify its volumetric charges for the R-1 and R-3 rate classes so that these rate classes are charged based on a flat rate structure. Such rate design satisfies our simplicity goal, as well as our continuity goal because it produces bill impacts that are moderate and reasonable, considering the size of the increase. Therefore, the Department directs the Company to set the volumetric charges for Rates R-1 and R-3 to collect the remaining class revenue requirement approved in this filing using the methods approved above, which maintains the peak and off-peak rate at the same amount.

2. Rate R-2, R-4 (Low Income Residential Non-Heating and Heating)

a. Introduction

Rate R-2 is a subsidized rate that is available at single locations to residential customers for domestic non-heating purposes in private dwellings and individual apartments (Exh. CMA/JAF-3, Sch. JAF-3-1-P at 148-150 (Rev.) (proposed M.D.P.U. No. 146)). Rate R-4 is a subsidized rate that is available at single locations to residential customers for domestic heating purposes in private dwellings and individual apartments (Exh. CMA/JAF-3, Sch. JAF-3-1-P at 153-154 (Rev.) (proposed M.D.P.U. No. 149)).

A customer is eligible for either rate upon verification of the customer's receipt of any means-tested public benefit program or verification of eligibility for the low-income home energy assistance program or its successor program, for which eligibility does not exceed 60 percent of the median income in Massachusetts based on a household's gross income or other criteria approved by the Department (Exh. CMA/JAF-3, Sch. JAF-3-1-P at 148, 153 (Rev.)). See also Order Promulgating Final Emergency Regulations, D.P.U. 08-104-A, at 2-3 (2009). Rate R-2 has the same delivery service rates as Rate R-1, and Rate R-4 has the same delivery service rates as Rate R-3. Bay State proposes that customers on Rate R-2 and Rate R-4 receive a 25 percent discount off the total charges for Rate R-1 and Rate R-3 (Exhs. CMA/JAF-2, at 12; CMA/JAF-2, Schs. JAF-2-1, at 13; JAF-2-6, at 3-4).

b. Analysis and Findings

According to the Company's ACOSS, the embedded customer charge for Rate R-2 is $26.49 and the embedded customer charge for Rate R-4 is $29.29 (Exh. CMA/JAF-2, Sch. JAF-2-2). Based on a review of the embedded costs and the seasonal and annual bill impacts on customers, the Department finds that a monthly customer charge of $12.20 for Rate R-2 and Rate R-4 is reasonable. However, based on our findings in Section X.D.4.c above, the Department directs the Company to modify its volumetric charges for the R-2 and R-4 rate classes so that these rate classes are charged based on a flat rate structure. Such rate design satisfies our simplicity goal, as well as our continuity goal because it produces bill impacts that are moderate and reasonable, considering the size of the increase. Therefore, the Department directs the Company to set the volumetric charges for Rates R-2 and R-4 to collect the remaining class revenue requirement approved in this filing using the methods approved above, which maintains the peak and off-peak rate at the same amount.

3. Rate G/T-40 (C&I Low Annual Use/Low Load Factor)

a. Introduction

The G/T-40 rate is available to C&I customers whose annual usage is less than 5,000 therms and whose usage during the peak period is greater than or equal to 70 percent of annual use as determined by Company records and procedures (Exh. CMA/JAF-3, Sch. JAF-3-1-P at 155-156 (Rev.) (proposed M.D.P.U. No. 149)). Bay State's current and proposed rate G-40 customer and distribution charges are as shown in the following table:

Rate G/T-40	**Current**		**Proposed**	
	On-Peak	Off-Peak	On-Peak	Off-Peak
Customer Charge ($)	$17.51	$17.51	$20.40	$20.40
Head Block Size (Therms)	25	25	25	25
Head Block Rate ($/Therm)	$0.3166	$0.3166	$0.3572	$0.3572
Tail Block Rate ($/Therm)	$0.3673	$0.3673	$0.4182	$0.4182
Exh. CMA/JAF-2, Schs. JAF-2-1, at 1, 13; JAF-2-3				

b. Analysis and Findings

According to the Company's ACOSS, the embedded customer charge for Rate G/T-40 is $44.18 (Exh. CMA/JAF-2, Sch. JAF-2-2). Based on a review of the embedded costs and the seasonal and annual bill impacts on customers, the Department finds that a monthly customer charge of $19.80 for Rate G/T-40 is reasonable. However, based on our findings in Section X.D.4.c above, the Department directs the Company to modify its volumetric charges for the G/T-40 rate class so that this rate class is charged based on a flat rate structure. Such rate design satisfies our simplicity goal, as well as our continuity goal because it produces bill impacts that are moderate and reasonable, considering the size of the increase. Therefore, the Department directs the Company to set the volumetric charges for Rate G/T-40 to collect the remaining class revenue requirement approved in this filing using the methods approved above, which maintains the peak and off-peak rate at the same amount.

4. Rate G/T-41 (C&I Medium Annual Use/Low Load Factor)

a. Introduction

The G/T-41 rate is available to C&I customers whose annual usage is between 5,000 and 39,999 therms and whose usage during the peak period is greater than or equal to 70 percent of annual use as determined by Company records and procedures (Exh. CMA/JAF-3, Sch. JAF-3-1-P at 157-159 (Rev.) (proposed M.D.P.U. No. 150)). Bay State's current and proposed rate G/T-41 customer and distribution charges are as shown in the following table:

Rate G/T-41	**Current**		**Proposed**	
	On-Peak	Off-Peak	On-Peak	Off-Peak
Customer Charge ($)	$71.11	$71.11	$79.20	$79.20
Head Block Size (Therms)	950	150	1,150	150
Head Block Rate ($/Therm)	$0.1865	$0.1865	$0.2324	$0.2324
Tail Block Rate ($/Therm)	$0.2175	$0.2175	$0.2589	$0.2589
Exh. CMA/JAF-2, Schs. JAF-2-1, at 1, 13; JAF-2-3				

b. Analysis and Findings

According to the Company's ACOSS, the embedded customer charge for Rate G/T-41 is $135.50 (Exh. CMA/JAF-2, Sch. JAF-2-2). Based on a review of the embedded costs and the seasonal and annual bill impacts on customers, the Department finds that a monthly customer charge of $78.30 for Rate G/T-41 is reasonable. However, based on our findings in Section X.D.4.c above, the Department directs the Company to modify its volumetric charges for the G/T-41 rate class so that this rate class is charged based on a flat rate structure. Such rate design satisfies our simplicity goal, as well as our continuity goal because it produces bill impacts that are moderate and reasonable, considering the size of the increase. Therefore, the Department directs the Company to set the volumetric charges for Rate G/T-41 to collect the remaining class revenue requirement approved in this filing using the methods approved above, which maintains the peak and off-peak rate at the same amount.

5. Rate G/T-42 (C&I High Annual Use/Low Load Factor)

a. Introduction

The G/T-42 rate is available to C&I customers whose annual usage is between 40,000 and 249,999 therms and whose usage during the peak period is greater than or equal to 70 percent of annual use as determined by Company records and procedures (Exh. CMA/JAF-3, Sch. JAF-3-1-P at 160-162 (Rev.) (proposed M.D.P.U. No. 151)). Bay State's current and proposed rate G/T-42 customer and distribution charges are as shown in the following table:

Rate G/T-42	**Current**		**Proposed**	
	On-Peak	Off-Peak	On-Peak	Off-Peak
Customer Charge ($)	$233.02	$233.02	$282.20	$282.20
Head Block Size (Therms)	6,600	1,200	7,800	1,200
Head Block Rate ($/Therm)	$0.1713	$0.0768	$0.2055	$0.1096
Tail Block Rate ($/Therm)	$0.1932	$0.1064	$0.2319	$0.1469
Exh. CMA/JAF-2, Schs. JAF-2-1, at 1, 13; JAF-2-3				

b. Analysis and Findings

According to the Company's ACOSS, the embedded customer charge for Rate G/T-42 is $347.75 (Exh. CMA/JAF-2, Sch. JAF-2-2). Based on a review of the embedded costs and the seasonal and annual bill impacts on customers, the Department finds that a monthly customer charge of $290.00 for Rate G/T-42 is reasonable. However, based on our findings in Section X.D.4.c above, the Department directs the Company to modify its volumetric charges for the G/T-42 rate class so that this rate class is charged based on a flat rate structure. Such rate design satisfies our simplicity goal, as well as our continuity goal because it produces bill impacts that are moderate and reasonable, considering the size of the increase. Therefore, the Department directs the Company to set the volumetric charges for Rate G/T-42 to collect the remaining class revenue requirement approved in this filing using the methods approved above, which maintains the ratio of peak to off-peak revenue requirement proposed by Bay State.

6. Rate G/T-50 (C&I Low Annual Use/High Load Factor)

a. Introduction

The G/T-50 rate is available to C&I customers whose annual usage is less than 5,000 therms and whose usage during the peak period is less than 70 percent of annual use as determined by Company records and procedures (Exh. CMA/JAF-3, Sch. JAF-3-1-P at 166-167 (Rev.) (proposed M.D.P.U. No. 153)). Bay State's current and proposed rate G/T-50 customer and distribution charges are as shown in the following table:

Rate G/T-50	**Current**		**Proposed**	
	On-Peak	Off-Peak	On-Peak	Off-Peak
Customer Charge ($)	$17.51	$17.51	$20.40	$20.40
Head Block Size (Therms)	25	25	25	25
Head Block Rate ($/Therm)	$0.2865	$0.2865	$0.3224	$0.3224
Tail Block Rate ($/Therm)	$0.3574	$0.3574	$0.4017	$0.4017
Exh. CMA/JAF-2, Schs. JAF-2-1, at 1, 13; JAF-2-3				

b. Analysis and Findings

According to the Company's ACOSS, the embedded customer charge for Rate G/T-50 is $46.38 (Exh. CMA/JAF-2, Sch. JAF-2-2). Based on a review of the embedded costs and the seasonal and annual bill impacts on customers, the Department finds that a monthly customer charge of $19.80 for Rate G/T-50 is reasonable. However, based on our findings in Section X.D.4.c above, the Department directs the Company to modify its volumetric charges for the G/T-50 rate class so that this rate class is charged based on a flat rate structure. Such rate design satisfies our simplicity goal, as well as our continuity goal because it produces bill impacts that are moderate and reasonable, considering the size of the increase. Therefore, the Department directs the Company to set the volumetric charges for Rate G/T-50 to collect the remaining class revenue requirement approved in this filing using the methods approved above, which maintains the peak and off-peak rate at the same amount.

7. Rate G/T-51 (C&I Medium Annual Use/High Load Factor)

a. Introduction

The G/T-51 rate is available to C&I customers whose annual usage is between 5,000 and 39,999 therms and whose usage during the peak period is less than 70 percent of annual use as determined by Company records and procedures (Exh. CMA/JAF-3, Sch. JAF-3-1-P at 168-170 (Rev.) (proposed M.D.P.U. No. 154)). Bay State's current and proposed rate G/T-51 customer and distribution charges are as shown in the following table:

Rate G/T-51	**Current**		**Proposed**	
	On-Peak	Off-Peak	On-Peak	Off-Peak
Customer Charge ($)	$71.11	$71.11	$79.20	$79.20
Head Block Size (Therms)	650	450	600	500
Head Block Rate ($/Therm)	$0.1766	$0.0982	$0.2163	$0.1306
Tail Block Rate ($/Therm)	$0.1954	$0.1089	$0.2403	$0.1421
Exh. CMA/JAF-2, Schs. JAF-2-1, at 1, 13; JAF-2-3				

b. Analysis and Findings

According to the Company's ACOSS, the embedded customer charge for Rate G/T-51 is $108.07 (Exh. CMA/JAF-2, Sch. JAF-2-2). Based on a review of the embedded costs and the seasonal and annual bill impacts on customers, the Department finds that a monthly customer charge of $78.30 for Rate G/T-51 is reasonable. However, based on our findings in Section X.D.4.c above, the Department directs the Company to modify its volumetric charges for the G/T-51 rate class so that this rate class is charged based on a flat rate structure. Such rate design satisfies our simplicity goal, as well as our continuity goal because it produces bill impacts that are moderate and reasonable, considering the size of the increase. Therefore, the Department directs the Company to set the volumetric charges for Rate G/T-51 to collect the remaining class revenue requirement approved in this filing using the methods approved above, which maintains the ratio of peak to off-peak revenue requirement proposed by Bay State.

8. Rate G/T-52 (C&I High Annual Use/High Load Factor)

a. Introduction

The G/T-52 rate is available to C&I customers whose annual usage is between 40,000 and 249,999 therms and whose usage during the peak period is less than 70 percent of annual use as determined by Company records and procedures (Exh. CMA/JAF-3, Sch. JAF-3-1-P at 171-173 (Rev.) (proposed M.D.P.U. No. 155)). Bay State's current and proposed Rate G/T-52 customer and distribution charges are as shown in the following table:

Rate G/T-52	**Current**		**Proposed**	
	On-Peak	Off-Peak	On-Peak	Off-Peak
Customer Charge ($)	$233.02	$233.02	$282.20	$282.20
Head Block Size (Therms)	5,600	3,200	5,600	3,200
Head Block Rate ($/Therm)	$0.1597	$0.0760	$0.1924	$0.0959
Tail Block Rate ($/Therm)	$0.1851	$0.0871	$0.2185	$0.1090
Exh. CMA/JAF-2, Schs. JAF-2-1, at 1, 13; JAF-2-3				

b. Analysis and Findings

According to the Company's ACOSS, the embedded customer charge for Rate G/T-52 is $316.21 (Exh. CMA/JAF-2, Sch. JAF-2-2). Based on a review of the embedded costs and the seasonal and annual bill impacts on customers, the Department finds that a monthly customer charge of $290.00 for Rate G/T-52 is reasonable. However, based on our findings in Section X.D.4.c above, the Department directs the Company to modify its volumetric charges for the G/T-52 rate class so that this rate class is charged based on a flat rate structure. Such rate design satisfies our simplicity goal, as well as our continuity goal because it produces bill impacts that are moderate and reasonable, considering the size of the increase. Therefore, the Department directs the Company to set the volumetric charges for Rate G/T-52 to collect the remaining class revenue requirement approved in this filing using the methods approved above, which maintains the ratio of peak to off-peak revenue requirement proposed by Bay State.

9. Rate G/T-43 (C&I Extra High Annual Use/Low Load Factor) and Rate G/T-53 (C&I Extra High Annual Use/High Load Factor)

a. Introduction

The G/T-43 rate is available to C&I customers whose annual usage is greater than 250,000 therms and whose usage during the peak period is greater than or equal to 70 percent of annual use as determined by Company records and procedures (Exh. CMA/JAF-3, Sch. JAF-3-1-P at 163-165 (Rev.) (proposed M.D.P.U. No. 152)). The G/T-53 rate is available to C&I customers whose annual usage is greater than 250,000 therms and whose usage during the peak period is less than 70 percent of annual use as determined by Company records and procedures (Exh. CMA/JAF-3, Sch. JAF-3-1-P at 174-176 (Rev.) (proposed M.D.P.U. No. 156)). The Company notes that base rates for these two rate classes have been the same since their implementation, approved in Bay State Gas Company, D.P.U. 95-104 (1995) (Exh. CMA/JAF-2, at 36). The results of Bay State's ACOSS show that cost-based rates for both classes are reasonably close, with offsetting volumetric and demand unit costs to serve (Exh. CMA/JAF-2, at 36). The Company's current and proposed rates G/T-43 and G/T-53 customer and distribution charges are as shown in the following table:

Rate G/T-43 & 53	**Current**		**Proposed**	
	On-Peak	Off-Peak	On-Peak	Off-Peak
Customer Charge ($)	$854.36	$854.36	$1,071.20	$1,071.20
Delivery Charge ($/Therm)	$0.0774	$0.0371	$0.0930	$0.0456
Demand Rate ($/MDGU Therm)	$1.6534	$0.7388	$2.0004	$0.8352
Exh. CMA/JAF-2, Schs. JAF-2-1, at 2, 14; JAF-2-3				

b. Positions of the Parties

i. Attorney General

The Attorney General argues that the Company's proposed customer charge for the extra-large C&I classes (i.e. Rates G/T-43 and G/T- 53) are proposed at a lower percentage of cost-based customer charges than the current customer charges (Attorney General Brief at 134, citing Exh. AG/RSB-1, at 7-8). As such, the Attorney General recommends using the full cost basis of the class with the lower customer charge[213] to provide proper price signals (Attorney General Brief at 134). The Attorney General claims that these customers have the greatest ability to change usage in response to price signals (Attorney General Brief at 134-135). Further, the Attorney General contends that the Company supports moving these customers to a full cost-based customer charge, thus further satisfying the Department's goal of fairness by reducing intra-class subsidies (Attorney General Brief at 135, citing Exh. CMA/JAF-Rebuttal-1,

[213] As previously mentioned, the Company proposes the same base rates for these two customer classes (Exh. CMA/JAF-2, at 36). Based on the Company's initial proposal, rate class G/T-43 has a fully cost-based customer charge of $1,311.04, and rate class G/T-53 has a fully cost-based customer charge of $1,209.36 (Exh. CMA/JAF-2, Sch. JAF-2-2).

at 6-7). Based on these considerations, the Attorney General asserts that the customer charges should be set at the full cost basis of $1,209.36 (Attorney General Reply Brief at 69, citing Exh. AG/RSB-1, at 8).

ii. Company

Bay State argues that its proposed customer charges are reasonable and consistent with Department policy (Company Brief at 211). The Company explains that it proposed a monthly customer charge increase of $216.84 (or approximately 25 percent) above the current rate for Rates G/T-43 and G/T-53 (Company Brief at 211-212). According to Bay State, because the cost study results in the most current ACOSS have increased since the ACOSS performed in D.P.U. 12-25, the customer charge as a percentage of allocated costs have decreased slightly, from 89 percent of cost in D.P.U. 12-25 to 85 percent of cost for Rate G/T-43 & 53 (Company Brief at 212, citing Exh. CMA/JAF-2 at 29-30). However, the Company notes that while it limited its proposed increase to these monthly customer charges to less than the necessary increase to achieve a 100 percent cost-based customer charge, it believes a fully cost-based customer charge for these rate classes would result in appropriate rate design (Company Brief at 212). Therefore, the Company does not oppose the Attorney General's recommendation to increase the customer charge for the extra-large C&I rate classes, Rates G/T-43 and G/T-53 (Company Brief at 211).[214]

[214] Although the Attorney General does not recommend it, the Company noted on brief that it is agreeable to the same increase for Rate G/T-42 and Rate G/T-52 (see Company Brief at 211-212).

c. Analysis and Findings

According to the Company's ACOSS, the embedded customer charge for Rate G/T-43 is $1,311.04 and the embedded customer charge for Rate G/T-53 is $1,209.36 (Exh. CMA/JAF-2, Sch. JAF-2-2). The Department declines to adopt the Attorney General's recommendation to set the customer charge for Rates G/T-43 and G/T-53 at the full cost basis. Based on a review of the embedded costs and the seasonal and annual bill impacts on customers, the Department finds that Rates G/T-43 and G/T-53, designed with a monthly customer charge set at 85 percent of the full cost-based charge resulting from the ACOSS, a flat delivery charge for the peak and off-peak seasons, a demand charge for the peak and off-peak seasons, and combining the revenue responsibility for G/T-43 and G/T-53 such that both rate classes have the same rate charges, satisfies our continuity goal, because it produces bill impacts that are moderate and reasonable, considering the size of the rate increase. In addition, in order to price the peak volumetric and demand charges at a higher rate than the off-peak volumetric and demand charges, the Company is directed to shift revenues such that the same ratio of peak to off-peak volumetric and demand revenue requirement proposed by the Company is maintained, and to collect the remaining revenue responsibility, subject to the 200 percent cap ordered by the Department, above, for the G/T-43 and G/T-53 rate classes from these two charges. The Department directs the Company to set the G/T-43 and G/T-53 charges accordingly.

10. Rate L (Outdoor Gas Lighting)

a. Introduction

Rate L is available to customers for unmetered gas service for a standard outdoor gaslight (Exhs. CMA/JAF -2, at 27; CMA/JAF-3, Sch. JAF-3-1-P at 177-178 (Rev.)

(proposed M.D.P.U. No. 157)). Rate L is open only to customers taking service under this rate as of December 14, 1979 (Exhs. CMA/JAF-2, at 27; CMA/JAF-3, Sch. JAF-3-1-P at 177 (Rev.) (proposed M.D.P.U. No. 157)).[215] The Company originally proposed to increase the monthly customer charge from $2.81 to $3.40 per month per light (Exhs. CMA/JAF-2, at 27). In Bay State's revised rate design, proposed to satisfy the provisions of Section 20, the Company increased the monthly customer charge to $9.24 per month per light (RR-DPU-10, Att. at 1, 13). The Company determined this new rate based on the results of its ACOSS (Exh. CMA/JAF-2, at 27).

b. Analysis and Findings

Because this service is unmetered and based upon the principle of simplicity in rate design, the Department finds the Company's method for determining its proposed rate to be acceptable, subject to the 200 percent cap ordered by the Department, above. Accordingly, the Department directs the Company to set the Rate L monthly customer charge to collect the Rate L revenue responsibility according to Schedule 11, below.

XI. TARIFF CHANGES

A. Introduction

Bay State proposed tariffs include: (1) M.D.P.U. No. 141, the general Terms and Conditions for the Company's distribution and default services; (2) M.D.P.U. No. 142,

215 Bay State notes that there are only five customers remaining on this rate schedule, with test-year gas volumes of 6,256 therms (Exh. CMA/JAF-2, at 27).

Bay State's CGAC; (3) M.D.P.U. No. 143, the Company's LDAC;[216] (4) M.D.P.U. No. 144, Bay State's RDAC; and (5) M.D.P.U. Nos. 145 through 173, which contain individual rate schedules and agreements for interruptible service and for the use of dual-fuel equipment (Exhs. CMA/JAF-3, at 2-4; CMA/JAF-3, Sch. JAF-3-1-P at 1-3 (Rev.)).

On March 15, 2013, Bay State withdrew its Residential and Commercial Energy Conservation Service charge tariff, M.D.P.U. No. 139, in compliance with the Department's Order in Bay State Gas Company, D.P.U. 12-100, at 128 (2013) (Exh. CMA/JAF-3, at 4-5). The Company is not proposing any changes to its distribution and default service Terms and Conditions or its fees listed in its Terms and Conditions (Exh. CMA/JAF-3, at 5-6). No other party addresses the proposed tariff changes.[217]

B. Proposed Tariff Changes

1. Decoupling Tariff

Bay State proposes to modify the existing RDAC by updating the current Benchmark Revenue Per Customer ("BRPC") amounts to reflect its proposed rate design (Exhs. CMA/JAF-3, at 11; CMA/JAF-3, Sch. CMA/JAF-3-1-P at 141 (Rev.); DPU-11-13, Att.). Bay State currently files RDAC adjustments semiannually for the peak and off-peak periods

---

216 The Company's LDAC includes provisions for costs and credits, such as: (i) the environmental remediation expense, (ii) energy efficiency programs, (iii) pension and PBOP, (iv) residential low income assistance, and (v) the TIRF.

217 However, the Attorney General and DOER address the Company's specific proposals to modify its TIRF, which, if allowed, would modify the portion of the Company's LDAC tariff related to the TIRF (see Section IV above).

(Exh. CMA/JAF-3, at 12).[218] The benchmark BRPC is calculated separately for each of the residential classes and on an aggregate basis for all C&I classes by dividing total base revenue requirements by the total number of customers (Exh. CMA/JAF-3, at 12). For purposes of setting the decoupling benchmark, all costs recovered through separate rate mechanisms (e.g., pension and energy efficiency costs) are excluded, since these mechanisms are self-reconciling (Exh. CMA/JAF-3, at 12-13).

The Company's current and proposed BRPCs based on the new rates that it proposes for approval in this proceeding are shown in the following table:

Customer Class Group	Current		Proposed		Percent Increase	
	On-Peak	Off-Peak	On-Peak	Off-Peak	On-Peak	Off-Peak
Residential Non-heating	$122.49	$99.40	$148.48	$117.98	21.22	18.69
Residential Heating	$344.96	$130.21	$386.80	$150.11	12.13	15.28
Commercial and Industrial	$1,479.43	$485.19	$1,679.44	$555.27	13.52	14.44
Source: Exhs. CMA/JAF-3, at 12; CMA/JAF-3, Schs. JAF-3-2 (Rev.), JAF-3-1-P at 141 (Rev.).						

2. <u>Other Proposed Tariff Changes</u>

Bay State proposes to modify: (1) rate schedules with the proposed new rates and rate design, as discussed in Sections X.D, E; (2) the TIRF, as discussed in Section IV; (3) the RDAC, to reflect the updated Benchmark Revenue Per Customer ("BRPC") for each of the three customer class groups, as discussed above; (4) the CGAC, to reflect local production and storage costs, the supply-related bad debt percentage resulting from this proceeding, and a modification to incorporate the non-firm margin sharing arrangement pursuant to the Department's Order in <u>Investigation into Margin Sharing</u>, D.P.U. 10-62-A (2013); and (5) a

---

218 The peak period extends from November through April, and the off-peak period extends from May through October (Exh. CMA/JAF-3, Sch. JAF-3-1-P, at 11-13 (Rev.)).

provision for the use of dual-fuel equipment for updated annual unit long-run marginal cost ("LRMC") components (proposed M.D.P.U. No. 170) (Exh. CMA/JAF-3, at 3-4).

C. Analysis and Findings

1. Decoupling Tariff

Bay State proposed its revenue decoupling mechanism in response to the Department's directive in D.P.U. 07-50-A that all distribution companies were to operate under decoupling plans by year-end 2012. D.P.U. 09-30, at 7-8. The Department approved Bay State's revenue decoupling mechanism in D.P.U. 09-30, at 86-117, and affirmed it with modification in the Company's last base rate case. See D.P.U. 12-25, at 486-490. The Company now proposes to modify its existing decoupling mechanism for updated BRPCs.

As part of the decoupling mechanism approved in D.P.U. 09-30, the Department approved Bay State's peak and off-peak BRPC approach. D.P.U. 09-30, at 88-91. In doing so, the Department found that the BRPC decoupling approach was consistent with the method outlined in D.P.U. 07-50-A at 48-50. D.P.U. 09-30, at 89. Further, the Department concluded that this approach was consistent with the Company's existing method of cost recovery for expenses recovered through the CGAC and would allow for timely inclusion of changes in rates. D.P.U. 09-30, at 91. Finally, the Department found that the Company's approach of combining all C&I customers into a single group and developing one BRPC was an acceptable solution for mitigating the impact of customer migrations to different rate classes. D.P.U. 09-30, at 90-91.

In this case, the Company has proposed the same peak and off-peak BRPC approach to decoupling as previously approved by the Department in D.P.U. 09-30 and D.P.U. 12-25 (Exh. CMA/JAF-3, at 12). Specifically, the Company has calculated the benchmarks separately for each residential rate schedule and, in the aggregate, for the C&I rate schedules by dividing the total base revenue requirements proposed in this case by the total number of customers (Exh. CMA/JAF-3, at 12). No party has objected to the Company's proposed decoupling approach. We find that the Company's proposed BRPC approach is consistent with Department precedent. See D.P.U. 12-25, at 487; D.P.U. 09-30, at 88-91. Accordingly, we approve the Company's peak and off-peak BRPC decoupling approach as proposed.

With respect to the actual benchmark BRPCs proposed in this filing, we note that they are calculated from the revenue requirements proposed by the Company to be collected from each rate class (Exh. CMA/JAF-3, at 12). As noted below in Schedule 1, the Department has approved a different revenue requirement than that proposed by the Company. As such, the Company is directed, in its compliance filing, to file new benchmark BRPCs based on the revenue requirements approved for each rate class in this Order.

2. Other Proposed Tariff Changes

The Company proposes to update in its CGAC tariff the test year amount of local production and storage costs, including liquefied natural gas and liquefied petroleum gas production costs, and the percentage of supply-related bad debt expense percentage (Exhs. CMA/JAF-3, at 3; CMA/MPB-2, Sch. MPB-2-1, at 4). In addition, Bay State proposes revised language regarding margin sharing in sections seven and eight of the CGAC tariff to comply with the Department's directives in D.P.U. 10-62-A (Exh. CMA/JAF-3, at 7).

Further, Bay State proposes to change its tariff provision for the use of dual-fuel equipment to update its factors for the applicable annual unit LRMC components (Exh. CMA/JAF-3, at 3-4). The Company's updated annual unit LRMC is $81.09 per MMBtu when capacity is constrained and $17.96 per MMBtu when capacity is not constrained (Exh. CMA/JAF-3, at 9).

We find that the Company's proposed changes are consistent with Department precedent and that they do not modify the nature of the tariffs approved by the Department in the Company's last base rate case. See D.P.U. 12-25, at 483-484. Accordingly, we approve the changes to the Company's CGAC and the change to the special provision for the use of dual-fuel equipment, subject to the revised revenue requirements determined in the ACOSS to be filed in compliance with the directives in this Order.

XII. SCHEDULES

A. Schedule 1 – Revenue Requirements and Calculation of Revenue Increase

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
COST OF SERVICE				
Total O&M Expense	314,325,289	(141,718)	(2,926,400)	311,257,171
Uncollectible O&M Due to Increase	526,248	(2,801)	(185,982)	337,465
Depreciation	32,246,724	(204,615)	(357,210)	31,684,899
Amortization	3,008,869	(68,085)	(146,476)	2,794,308
Taxes Other Than Income Taxes	18,982,106	(125,809)	(143,428)	18,712,869
Income Taxes	19,705,693	1,007,795	(3,562,810)	17,150,678
Interest on Customer Deposits	10,224	27	0	10,251
Return on Rate Base	42,429,049	(256,703)	(5,471,859)	36,700,488
Gain on Sale of EP&S	0	0	(3,600,623)	(3,600,623)
Total Cost of Service	431,234,202	208,091	(16,394,786)	415,047,506
OPERATING REVENUES				
Operating Revenues	406,336,809	0	0	406,336,809
Revenue Adjustments	(5,173,927)	368,126	(5,767,225)	(10,573,026)
Total Operating Revenues	401,162,882	368,126	(5,767,225)	395,763,783
TOTAL REVENUE DEFICIENCY	**30,071,320**	**(160,035)**	**(10,627,561)**	**19,283,723**

B. Schedule 2 – Operations and Maintenance Expenses

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
Purchased Gas Expense	172,434,441	0	0	172,434,441
Total Adj. to Purchased Gas Expense	10,587,898	0	0	10,587,898
Total Purchased Gas Expense	183,022,339	0	0	183,022,339
Test Year O&M Expense	140,090,455	0	0	140,090,455
ADJUSTMENTS TO O&M EXPENSE:				
2009 Rate Case Amortization	(1,385,083)	0	0	(1,385,083)
Advertising	(203,197)	0	(1,116)	(204,313)
Amortization of Deferred Farm Discount Credits	50,596	0	0	50,596
Automatic Meter Reading Expense	(1,056,258)	0	0	(1,056,258)
Bad Debt Write-offs Included in CGA	(561,057)	0	0	(561,057)
Charitable Contributions	(162,159)	0	0	(162,159)
Company Memberships	7,095	0	(7,095)	0
Corporate Insurance	126,724	630,868	0	757,592
Deferred Compensation Costs	(30,763)	0	0	(30,763)
DPU 12-25 Legal & Other	(1,585,816)	0	0	(1,585,816)
DSM Implementation A/C 6-923-13	(7,536,844)	0	0	(7,536,844)
Employee Expenses	47,905	(874)	(47,873)	(842)
EP&S Labor	0	0	(976,893)	(976,893)
EP&S Materials & Supplies	(1,252,221)	0	(74,618)	(1,326,839)
EP&S Miscellaneous & Benefits	0	0	(455,024)	(455,024)
EP&S Other	0	0	(948,428)	(948,428)
EP&S Outside Services -HVAC	0	0	(73,150)	(73,150)
EP&S Stores and Vehicle Clearing Costs & Other	(92,375)	(11,599)	(166,590)	(270,564)
EP&S Uncollectible Accounts	(311,505)	0	0	(311,505)
ERC Remediation A/C 6-932-03	273,430	0	0	273,430
Impact of New Leases	0	497,893	(2,328)	495,565
Incentive Compensation	(731,395)	0	0	(731,395)
Inflation	0	0	1,584,490	1,584,490
Injuries & Damages	219,498	0	(11,446)	208,052
Labor	906,528	(6,846)	0	899,682
Medical and Dental Insurance	(43,783)	0	0	(43,783)
NIFIT and WOMS Costs to Amortize	(1,008,426)	(530,973)	(379,227)	(1,918,626)
NiSource Corporate Jets	0	0	(77,009)	(77,009)
NiSource Corporate Services Company	(830,157)	(292,387)	(848,129)	(1,970,673)
Normalized Rate Case Expense	448,028	(56,870)	0	391,158
Other Rent and Leases	39,566	0	(39,566)	(0)
Outside Services	310,354	(71,963)	(307,746)	(69,355)
Pension/PBOP A/C 6-926-01	4,090,781	0	0	4,090,781
Postage	43,084	0	0	43,084
Regulatory Amortization A/C 6-928-02	211,759	0	0	211,759
Regulatory Commission Expense	28,867	(63,091)	(2,745)	(36,969)
Rent and Leases - Headquarters Building	(216,803)	(95,484)	0	(312,287)
Thrift Plan	29,270	0	(29,270)	(0)
Unbilled Related to LDAC Expense A/C 6-930-12	476,415	0	0	476,415
Uncollectible Accounts	842,714	0	0	842,714
Utilities and Fuel Used in Company Operations	67,724	(140,392)	(62,637)	(135,305)
Total Other O&M Expenses	(8,787,506)	(141,718)	(2,926,400)	(11,855,623)
Total O&M Expense	**131,302,950**	**(141,718)**	**(2,926,400)**	**128,234,832**
Total Purchased Gas and O&M Expense	**314,325,289**	**(141,718)**	**(2,926,400)**	**311,257,171**

C. Schedule 3 – Depreciation and Amortization Expenses

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
Depreciation Expense	32,246,724	(204,615)	(357,210)	31,684,899
Amortization Expense	3,008,869	(68,085)	(146,476)	2,794,308
Total Depreciation & Amortization Expenses	**35,255,593**	**(272,700)**	**(503,686)**	**34,479,207**

D. Schedule 4 – Rate Base and Return on Rate Base

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
Utility Plant in Service	1,109,328,612	(4,669,467)	(19,253,477)	1,085,405,668
LESS:				
Reserve for Depreciation	461,047,144	(1,831,555)	(10,871,800)	448,343,789
Amortization of Intangible Plant	4,415,837	669,872	(737,451)	4,348,258
Net Utility Plant in Service	643,865,630	(3,507,784)	(7,644,226)	632,713,620
ADDITIONS TO PLANT:				
Heel Gas Inventory	1,992,602	0	0	1,992,602
Cash Working Capital	11,402,843	(24,182)	(1,410,606)	9,968,055
CWC due to Uncollectible on Proposed Revenue	0	0	(46,822)	(46,822)
Total Additions to Plant	13,395,445	(24,182)	(1,457,428)	11,913,835
DEDUCTIONS FROM PLANT:				
Reserve for Deferred Inc. Taxes	170,233,562	(631,367)	(1,294,284)	168,307,911
Contribution in Aid of Construction - Acct 271	3,814,833	0	0	3,814,833
Customer Advances	12,896	0	0	12,896
Customer Deposits	3,661,207	0	0	3,661,207
Unclaimed Funds	114,292	0	0	114,292
Total Deductions from Plant	177,836,790	(631,367)	(1,294,284)	175,911,139
RATE BASE	479,424,285	(2,900,599)	(7,807,370)	468,716,316
COST OF CAPITAL	8.85%	8.85%	7.83%	7.83%
RETURN ON RATE BASE	**42,429,049**	**(256,703)**	**(5,471,859)**	**36,700,488**

E. Schedule 5 – Cost of Capital

	PER COMPANY			
	PRINCIPAL	PERCENTAGE	COST	RATE OF RETURN
Long-Term Debt	$229,000,000	46.32%	5.83%	2.70%
Preferred Stock	$0	0.00%	0.00%	0.00%
Common Equity	$265,412,629	53.68%	11.45%	6.15%
Total Capital	$494,412,629	100.00%		8.85%
Weighted Cost of				
Debt				2.70%
Equity				6.15%
Cost of Capital				8.85%

	COMPANY ADJUSTMENTS			
	PRINCIPAL	PERCENTAGE	COST	RATE OF RETURN
Long-Term Debt	$229,000,000	46.32%	5.83%	2.70%
Preferred Stock	$0	0.00%	0.00%	0.00%
Common Equity	$265,412,629	53.68%	11.45%	6.15%
Total Capital	$494,412,629	100.00%		8.85%
Weighted Cost of				
Debt				2.70%
Equity				6.15%
Cost of Capital				8.85%

	PER ORDER			
	PRINCIPAL	PERCENTAGE	COST	RATE OF RETURN
Long-Term Debt	$229,000,000	46.32%	5.83%	2.70%
Preferred Stock	$0	0.00%	0.00%	0.00%
Common Equity	$265,412,629	53.68%	9.55%	5.13%
Total Capital	$494,412,629	100.00%		7.83%
Weighted Cost of				
Debt				2.70%
Equity				5.13%
Cost of Capital				7.83%

F. Schedule 6 – Cash Working Capital

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
Other O&M Expense	131,302,950	(141,718)	(2,926,400)	128,234,832
LESS uncollectibles included in the CGA	3,023,302	0	0	3,023,302
LESS expenses included in LDAC				
DSM	5,615,953	0	0	5,615,953
Environmental Remediation	2,093,774	0	0	2,093,774
Pension/PBOP	12,375,046	0	0	12,375,046
Regulatory Amortization	225,952	0	0	225,952
Subtotal - O&M Expense	107,968,923	(141,718)	(2,926,400)	104,900,806
Taxes Other than Income	18,982,106	(125,809)	(143,428)	18,712,869
Amount Subject to Cash Working Capital	126,951,029	(267,527)	(3,069,828)	123,613,675
Total Cash Working Capital Allowance*	**11,355,770**	**(23,930)**	**(1,410,606)**	**9,921,234**

* Per Company Adjustment inadvertently omitted total CWC allowance on filed schedules	
**Per Company Composite Total times (32.74/ 366)	8.9450%
*** Per DPU Composite Total times (29.375 / 366)	8.0260%

G. Schedule 7 – Taxes Other Than Income Taxes

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
FICA & Medicare (B)	2,304,147	(477)	0	2,303,670
Federal Unemployment	32,755	0	0	32,755
State Unemployment	187,723	0	0	187,723
Motor Vehicle Excise	5,035	0	0	5,035
Property Tax	15,757,429	(125,332)	(143,428)	15,488,669
Other State *	14,335	0	0	14,335
Other State **	680,682	0	0	680,682
Total Taxes Other Than Income Taxes	**18,982,106**	**(125,809)**	**(143,428)**	**18,712,869**

* Represents state income taxes for income taxes paid to states other than Massachusetts as a result of Bay State's gas stored in states other than Massachusetts and off system sales in states other than Massachusetts (See Exh. DPU-10-1)
** Represents test year expense related to the Company's Sales & Use tax (See Exh. DPU-10-1).

H. Schedule 8 – Income Taxes

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
Rate Base	479,424,285	(2,900,599)	(7,807,370)	468,716,316
Return on Rate Base	42,429,049	(256,703)	(5,471,859)	36,700,488
Less Interest Expense	12,944,456	(78,317)	(210,799)	12,655,340
Add Permanent Tax Difference	375,269	0	0	375,269
Add 2014 Franchise Tax Change	0	(191,108)	15,614	(175,494)
Add Amortization of Deferred Income Taxes Deficiency	(263,604)	0	0	(263,604)
Total Deductions	13,056,121	(269,425)	(195,185)	12,591,511
Taxable Income Base	30,123,466	12,722	(5,276,674)	24,859,515
Gross Up Factor*	1.6454	1.6722	1.6722	1.6722
Taxable Income - Adjustment	49,565,555	829,408	(8,823,869)	41,571,095
Mass Franchise Tax 6.5% / 8% *	3,221,761	809,836	(705,910)	3,325,688
Federal Taxable Income	46,343,794	19,572	(8,117,959)	38,245,407
Federal Income Tax Calculated	16,220,328	6,850	(2,841,286)	13,385,892
Total Income Taxes Calculated	19,442,089	816,687	(3,547,196)	16,711,580
2014 Franchise Tax Change	0	191,108	(15,614)	175,494
Amortization of Deferred Income Taxes Deficiency	263,604	0	0	263,604
Total Income Taxes	**19,705,693**	**1,007,795**	**(3,562,810)**	**17,150,678**

*Pursuant to a MA state franchise tax change

I. Schedule 9 - Revenues

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
OPERATING REVENUES PER BOOKS	406,336,809	0	0	406,336,809
Less Revenue Adjustments:				
LDAC	34,582,313	0	0	34,582,313
CGA	184,983,482	0	0	184,983,482
RDAF	(86,340)	0	0	(86,340)
Total Revenue Adjustments	219,479,455	0	0	219,479,455
Total TY Distribution Base Revenues	186,857,354	95,193	0	186,952,547
Base Revenue Adjustments:				
Off System Sales	(700,676)	0	0	(700,676)
Weather Normalization	10,268,130	0	0	10,268,130
Annualized Revenue Adjustment	11,355,899	0	0	11,355,899
Rental Revenue	(5,630,841)	0	0	(5,630,841)
Guardian Care/Inspections	(7,137,427)	0	0	(7,137,427)
Gain on Sale of EP&S	5,494,292	272,933	(5,767,225)	0
Total Base Revenue Adjustments	13,649,377	272,933	(5,767,225)	8,155,085
Total Adjusted Base Distribution Revenue	200,506,731	368,126	(5,767,225)	195,107,632
Other Operating Revenue Adjustments:				
Residential Assistance Adjustment Factor	706,939	0	0	706,939
Carrying Costs-Pre tax of Rate of Return	(2,120,757)	0	0	(2,120,757)
Production & Storage Revenues	9,251,820	0	0	9,251,820
TIRF Revenue	6,316	0	0	6,316
Decoupling	(13,544,533)	0	0	(13,544,533)
Direct GAF	183,022,339	0	0	183,022,339
Indirect GAF	12,437,880	0	0	12,437,880
Annualized DAF	30,828,751	0	0	30,828,751
Annualized RDAF	11,703,207	0	0	11,703,207
Normalization of GAF Revenue	(9,414,578)	0	0	(9,414,578)
Normalization of DAF Revenue	(10,518,026)	0	0	(10,518,026)
Normalization of RDAF Revenue	(11,703,207)	0	0	(11,703,207)
Total Other Operating Revenue Adjustments	200,656,151	0	0	200,656,151
Adjusted Total Operating Revenues	**401,162,882**	**368,126**	**(5,767,225)**	**395,763,783**

J. Schedule 10

REVENUE REQUIREMENTS AND CALCULATION OF REVENUE INCREASE BY SERVICE

	PER ORDER			AS FILED BY CMA		
	TOTAL COMPANY per Order	DISTRIBUTION SERVICE per Company	GAS SERVICE per Company	TOTAL COMPANY as Filed	DISTRIBUTION SERVICE *	GAS SERVICE
Cost of Gas	183,022,339	0	183,022,339	183,022,339	0	183,022,339
O&M Expense	128,234,832	114,940,294	13,294,538	131,302,949	117,848,071	13,454,878
Operation Expenses	311,257,171	114,940,294	196,316,877	314,325,288	117,848,071	196,477,217
Uncollectibles O&M Due to Increase	337,465	335,515	1,950	526,140	516,962	9,178
Depreciation Expense	31,684,898	31,038,452	646,446	32,246,725	31,599,692	647,033
Amortization Expense	2,794,309	2,610,753	183,556	3,008,870	2,811,225	197,645
Taxes Other Than Income Taxes	18,712,868	18,018,527	694,341	18,982,126	18,289,706	692,420
Income Taxes	17,150,678	16,510,755	639,923	19,705,735	18,999,087	706,648
Interest on Customer Deposits	10,251	10,251	0	10,224	10,224	0
Rate Base	468,716,317	451,450,463	17,265,854	479,424,277	462,271,006	17,153,271
Rate of Return	7.83%	7.83%	7.83%	8.85%	8.85%	8.85%
Return on Rate Base	36,700,488	35,348,571	1,351,916	42,429,048	40,910,984	1,518,064
Cost of Service	418,648,128	218,813,118	199,835,009	431,234,156	230,985,951	200,248,205
Revenues Credited to Cost of Service	(5,132,541)	(4,479,867)	(652,674)	(7,026,220)	(6,373,524)	(652,696)
Total Cost of Service	413,515,587	214,333,251	199,182,335	424,207,936	224,612,427	199,595,509
Operating Revenues - per books	406,336,809	218,549,678	187,787,131	406,336,809	218,549,678	187,787,131
Revenues Transferred to Cost of Service	(5,132,541)	(4,479,867)	(652,674)	(7,026,220)	(6,373,524)	(652,696)
Revenue Adjustments	(6,972,405)	(18,908,873)	11,936,468	(5,173,919)	(17,110,409)	11,936,490
Total Operating Revenues	394,231,863	195,160,938	199,070,925	394,136,670	195,065,745	199,070,925
Revenue Deficiency	19,283,723	19,172,313	111,410	30,071,332	29,546,747	524,585

THIS SCHEDULE IS FOR ILLUSTRATIVE PURPOSES ONLY
NOTE: The distribution service revenue deficiency in Schedule 10 differs from Schedule 11 because the ACOSS model was used to develop this schedule.

K. Schedule 11

For illustrative purposes only

PER ORDER BASE REVENUE INCREASE	$19,175,431
PROPOSED BASE REVENUE INCREASE	$29,546,752

RATE CLASS	TEST YEAR BASE REVENUES (A)	TOTAL TEST YEAR REVENUES (B)	PER ORDER BASE REVENUE AT EROR (C)	PER ORDER REVENUE INCREASE AT EROR (D)	PER ORDER REVENUE INCREASE AT 10% CAP TOTAL REVENUES (E)	PER ORDER REVENUE TO BE REALLOCATED 10% CAP (F)	REVENUES TO BE REALLOCATED (G)	PER ORDER FIRST REVENUE REALLOCATION (H)	REVENUE INCREASE AFTER FIRST REVENUE REALLOCATION (I)	PER ORDER REVENUE TO BE REALLOCATED 200% CAP (J)	PER ORDER SECOND REVENUE REALLOCATION (K)	PER ORDER INCREASE (L)	PER ORDER BASE REVENUE REQUIREMENT (M)	PER ORDER DISTRIBUTION PERCENT INCREASE (N)
RESIDENTIAL														
NONHEAT (R-1 & R-2)	$5,577,193	$8,350,006	$8,490,856	$2,913,663	$835,001	$2,078,662	$0	$0	$835,001	$0	$0	$835,001	$6,412,194	14.97%
HEAT (R-3 & R-4)	$112,758,389	$273,290,100	$122,620,667	$9,862,278	$27,329,010	$0	$122,620,667	$1,382,396	$11,244,674	$0	$324,190	$11,568,864	$124,327,253	10.26%
COMMERCIAL (LLF)														
G/T-40	$14,113,234	$34,179,270	$15,108,495	$995,261	$3,417,927	$0	$15,108,495	$170,330	$1,165,591	$0	$39,944	$1,205,535	$15,318,769	8.54%
G/T-41	$13,760,237	$50,795,038	$15,047,783	$1,287,546	$5,079,504	$0	$15,047,783	$169,645	$1,457,191	$0	$39,784	$1,496,975	$15,257,212	10.88%
G/T-42	$7,541,133	$33,978,859	$8,401,247	$860,114	$3,397,886	$0	$8,401,247	$94,714	$954,828	$0	$22,212	$977,039	$8,518,172	12.96%
G/T-43	$2,760,223	$13,600,286	$3,025,309	$265,086	$1,360,029	$0	$3,025,309	$34,107	$299,193	$0	$7,998	$307,191	$3,067,414	11.13%
COMMERCIAL (HLF)														
G/T-50	$2,556,209	$5,547,216	$2,722,217	$166,008	$554,722	$0	$2,722,217	$30,690	$196,698	$0	$7,197	$203,895	$2,760,104	7.98%
G/T-51	$4,903,083	$17,569,070	$5,496,140	$593,057	$1,756,907	$0	$5,496,140	$61,962	$655,019	$0	$14,531	$669,550	$5,572,633	13.66%
G/T-52	$3,542,909	$15,972,739	$4,008,438	$465,529	$1,597,274	$0	$4,008,438	$45,190	$510,719	$0	$10,598	$521,317	$4,064,226	14.71%
G/T-53	$6,361,604	$34,531,423	$8,115,037	$1,753,433	$3,453,142	$0	$8,115,037	$91,487	$1,844,920	$466,105	$0	$1,378,815	$7,740,419	21.67%
GAS STREET LIGHTS (L)	$169	$3,860	$2,413	$2,244	$386	$1,858	$0	$0	$386	$349	$0	$37	$206	21.62%
SPECIAL CONTRACTS	$3,069,596			$11,213					$11,213			$11,213	$11,213	
TOTAL	$176,943,979	$487,817,868	$193,038,602	$19,175,432	$48,781,787	$2,080,520	$184,545,333	$2,080,520	$19,175,432	$466,454	$466,454	$19,175,432	$193,038,602	10.84%
TOTAL W/OUT														
SPECIAL CONTRACTS	$173,874,383			$19,164,219					$19,164,219			$19,164,219	$193,027,389	

KEY

(A) Exh. CMA/JAF-2, Sch. JAF-2-1, at 3-4, line 75
(B) Exh. CMA/JAF-2, Sch. JAF-2-1, at 5-6, line 134 (Excel version filed in Exh. DPU-4-31, Att. at (a))
(C) Per re-run of ACOSS
(D) Column (C) - Column (A)
(E) Column (B) * 10%
(F) If Column (E) is less than Column (D), then Column (D) - Column (E), if not then zero
(G) If Column (F) is greater than zero, then zero, if not then Column (C)
(H) If Column (G) is zero, then zero. If not, then [Column (G) / total Column (G)] * total Column (F)
(I) If Column (F) = 0, then Column (E) + Column (H). If not, Column (E).
(J) If [Column (I) / Column (A)] is greater than total Column (N), then Column (I) - [Column (A) * (2*Total Column (N)]. If not, then zero.
(K) If Columns (H) & (J) = zero, then zero. If Column (J) = 0, then [Column (G) / (Total Column (G) - G/T-53 Column (G))] * Total Column (J)
(L) Column (I) - Column (J) + Column (K)
(M) Column (L) + Column (A)
(N) Column (L) / Column (A)

NOTE: The distribution service revenue deficiency in Schedule 11 differs from Schedule 10 because the Rate Design model was used to develop this schedule.

XIII. ORDER

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

ORDERED: That tariffs M.D.P.U. Nos. 140 through 173, filed by Bay State Gas Company on April 16, 2013, to become effective on March 1, 2014, are DISALLOWED; and it is

FURTHER ORDERED: That Bay State Gas Company shall file new schedules of rates and charges designed to increase annual gas base rate revenues by $19,283,723; and it is

FURTHER ORDERED: That Bay State Gas Company shall file all rates and charges required by this Order and shall design all rates in compliance with this Order; and it is

FURTHER ORDERED: That Bay State Gas Company shall comply with all other orders and directives contained in this Order; and it is

FURTHER ORDERED: That the new rates shall apply to all gas consumed on or after March 1, 2014, but unless otherwise ordered by the Department, shall not become effective earlier than the seven days after the rates are filed with supporting data demonstrating that such rates comply with this Order.

By Order of the Department,

/s/

Ann G. Berwick, Chair

/s/

Jolette A. Westbrook, Commissioner

/s/

David W. Cash, 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.