



# The Commonwealth of Massachusetts

## DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 10-70

January 31, 2011

Petition of Western Massachusetts Electric Company, pursuant to G.L. c. 164, § 94 and 220 C.M.R. §§ 5.00 et seq. for Approval of a General Increase in Electric Distribution Rates and a Revenue Decoupling Mechanism.

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## I. INTRODUCTION

On July 16, 2010, Western Massachusetts Electric Company (“WMECo” or “Company”) filed a petition with the Department of Public Utilities (“Department”) for an increase in electric distribution rates pursuant to G.L. c. 164, §94. In addition to a base distribution rate increase, WMECo seeks approval of a revenue decoupling plan that includes: (1) a revenue decoupling mechanism; (2) an inflation adjustment clause (“IAC”) to adjust expenses after the midpoint of the rate year; and (3) a capital reliability recovery clause (“CRRC”) to adjust rates to recover costs associated with the Company’s proposed program to make capital investments in its distribution system. The Department docketed this matter as D.P.U. 10-70. It suspended the effective date of the proposed rate increase until February 1, 2011, to investigate the propriety of WMECo’s request.

WMECo is engaged in the transmission and distribution of electric power and serves approximately 210,000 customers in 59 communities in western Massachusetts. WMECo is a wholly-owned subsidiary of Northeast Utilities (“NU”), which is based in Berlin, Connecticut and provides electric and natural gas service to more than two million customers in Massachusetts, Connecticut and New Hampshire. NU operates Connecticut Light and Power Company (“CL&P”) and Yankee Gas Services Company in Connecticut, as well as Public Service Company of New Hampshire (“PSNH”). NU also operates other wholly-owned subsidiaries including Northeast Utilities Services Corporation (“NUSCo”), which provides centralized administrative services to NU affiliates, including WMECo.

The Company last filed a request for a general increase in electric distribution rates in 2006 in D.T.E. 06-55. In that matter, the Department approved a settlement the Company reached with the Attorney General of the Commonwealth of Massachusetts (“Attorney General”) and other parties, including representatives of consumer and business interests. Western Massachusetts Electric Company, D.T.E. 06-55 (2006) (“D.T.E. 06-55” or “D.T.E. 06-55 Settlement”). The Department last conducted a full adjudication of the Company’s request for a general rate in Western Massachusetts Electric Company, D.P.U. 89-255 (1990).

## II. PROCEDURAL HISTORY

On July 16, 2010, the Attorney General filed a notice of intervention pursuant to G.L. c. 12, § 11E. On August 10, 2010, the Department granted<sup>1</sup> the petitions to intervene filed by the Massachusetts Department of Environmental Resources (“DOER”), Environment Northeast (“ENE”), and the Western Massachusetts Industrial Group (“WMIG”). On August 23, 2010, the Department granted the petitions to intervene filed by the Low-Income Weatherization and Fuel Assistance Program Network and the Massachusetts Energy Directors Association (“LII”), the University of Massachusetts Amherst (“UMA”), Solutia, Inc. (“Solutia”) and the City of Easthampton (“Easthampton”). On September 1, 2010, the Department granted the late-filed petition to intervene filed by Local 455, International Brotherhood of Electrical Workers (“IBEW”). On September 15, 2010, the Department granted the petition to intervene filed by the City of Springfield (“Springfield”). D.P.U. 10-70, Hearing Officer Ruling on

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<sup>1</sup> Unless otherwise indicated, the petitions to intervene were approved by stamp-grant.

City of Springfield Petition to Intervene (2010).<sup>2</sup> The Department also granted the petition for limited participant status filed by The Energy Network.

Pursuant to notice duly issued, the Department held three public hearings in the Company's service areas: (1) in Greenfield on August 19, 2010; (2) in Pittsfield on August 24, 2010; and (3) in Springfield on August 26, 2010. During the course of the proceeding, the Department also received written comments from several public officials and a number of WMECo ratepayers.

On July 20, 2010, the Attorney General filed a notice of retention of experts and consultants, pursuant to G.L. c. 12, § 11E(b), as amended by St. 2008, c. 169 ("Green Communities Act"). On August 25, 2010, the Department approved the Attorney General's retention of experts and consultants. D.P.U. 10-70, Order on Notice of Attorney General to Retain Experts and Consultants (2010).

In support of its filing, the Company sponsored the testimony of 14 witnesses: (1) Peter J. Clarke, president and chief operating officer of WMECo; (2) David A. Wrona, manager, system planning for WMECo; (3) Bliss A. Young, director, operations for WMECo; (4) Ronald J. Amen, principal with Concentric Energy Advisors; (5) James D. Simpson, principal with Concentric Energy Advisors; (6) Jeffrey L. Michelson, manager, revenue requirements for NUSCo; (7) George J. Eckenroth, director, corporate financial policy for

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<sup>2</sup> The Ruling states that this proceeding is not the proper forum to resolve the dispute between Springfield and the Company related to overcharges to Springfield prior to the inception of the proceeding. D.P.U. 10-70, Hearing Officer Ruling on City of Springfield Petition to Intervene at 3.



NUSCo; (8) Keith C. Coakley, director, special projects for NUSCo; (9) Karen H. Arendt, manager, Benefits for NUSCo; (10) Dr. Ronald J. White of Foster Associates; (11) Edward A. Davis, manager, pricing strategy and administration for NUSCo; (12) Charles R. Goodwin, director, pricing strategy and administration for NUSCo; (13) David Beber, Jr., manager, income tax for NUSCo; and (14) Robert J. DeAngelo, director, investment management for NU.

The Attorney General sponsored the testimony of seven witnesses:

(1) David E. Dismukes, consulting economist, Acadian Consulting Group; (2) David Effron, consultant; (3) Timothy Newhard, financial analyst, Office of Ratepayer Advocacy, Attorney General; (4) Lee Smith, managing consultant and senior economist, La Capra Associates; (5) J. Randall Woolridge, professor of finance, Goldman Sachs & Co. and Frank P. Smeal Endowed University Fellow in business administration, University Park Campus, Pennsylvania State University; (6) Helmuth W. Schultz, III; senior regulatory analyst, Larkin & Associates; and (7) Richard Hahn, principal consultant, La Capra Associates, Inc.

The City of Easthampton sponsored the testimony of George A. Woodbury, consultant. UMA sponsored the testimony of four witnesses: (1) Patrick Daley, director of physical plant division, UMA; (2) Brian Mckenna, consultant, Clough Harbour & Associates, Inc.; (3) Kevin Fuller, lead electrical engineer, GIE Niagra Energy, Inc.; and (4) Richard A. Baudino, consultant, J. Kennedy and Associates. IBEW sponsored the testimony of Brian Kenney, president, Local 455, IBEW. Solutia sponsored the testimony of two witnesses: (1) Dr. Richard H. Silkman, managing member, Competitive Energy Services,

Inc.; and (2) Christopher M. Schaper, procurement operations manager for Solutia. WMIG sponsored the testimony of Elaine M. Saunders, consultant.

The Department held 21 days of evidentiary hearings between September 27, 2010 and October 29, 2010. IBEW submitted its initial brief on November 18, 2010. The Attorney General, DOER, Springfield, Easthampton, UMA, Solutia, ENE and WMIG submitted initial briefs on November 19, 2010. The Company submitted its initial brief on December 7, 2010. The Attorney General, DOER, Springfield, Easthampton, UMA, Solutia, and WMIG submitted reply briefs on December 14, 2010. The Company submitted its reply brief on December 17, 2010. The evidentiary record consists of approximately 2000 exhibits, including the initial testimony of the Company and intervenors and responses to information requests and record requests issued by parties to the proceeding.

### III. REVENUE DECOUPLING

#### A. Background on Revenue Decoupling

##### 1. D.P.U. 07-50-A

In Investigation into Rate Structures that will Promote Efficient Deployment of Demand Resources, D.P.U. 07-50-A at 32, 81-82 (2008), the Department directed each electric and gas distribution company to propose a full revenue decoupling mechanism in its next base rate proceeding. The Department stated that the objective of decoupling is the “elimination of financial barriers to the full engagement and participation by the Commonwealth’s investor-owned distribution companies in demand-reducing efforts.” D.P.U. 07-50-A at 4. The Department concluded that “a full decoupling mechanism best meets our objectives of:

(1) aligning the financial interests of the companies with policy objectives regarding the efficient deployment of demand resources; and (2) ensuring that the companies are not harmed by decreases in sales associated with any increased use of demand resources.”

D.P.U. 07-50-A at 31-32.

In directing electric and gas distribution companies to adopt full decoupling, the Department acknowledged that it would remove their opportunity to earn additional revenue from growth in sales between base rate proceedings and further acknowledged that such revenue typically funded, among other things, increased operations and maintenance expenses as well as system reliability and capital investment projects. D.P.U. 07-50-A at 48, 87.

Accordingly, the Department stated that it would consider company-specific proposals that account for the effects of increased capital investments and inflation on target revenue.

D.P.U. 07-50-A at 50.

2. D.P.U. 09-30

In Bay State Gas Company, D.P.U. 09-30, at 89 (2009), the Department approved a revenue decoupling mechanism that established the company’s target revenue by using the framework of revenue-per-customer. The Department reaffirmed the same ratemaking standard outlined in D.P.U. 07-50-A at 48-50 and approved the proposed mechanism, which allowed revenue to increase as a result of growth in the number of customers but not as a result of growth in usage per customer. D.P.U. 09-30, at 93-95. The Department also approved Bay State Gas Company’s (“Bay State”) targeted infrastructure replacement factor (“TIRF”), which allows an adjustment to target revenue to provide for the annual recovery of incremental

costs of a program to replace gas distribution lines that are made of non-cathodically protected steel. D.P.U. 09-30, at 119, 134. The Department denied Bay State's request to retain a portion of its pre-existing performance based regulation ("PBR") rate plan in order to adjust its target revenue for the effects of inflation. D.P.U. 09-30, at 22-23, 25.

3. D.P.U. 09-39

In Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, D.P.U. 09-39, at 61-64, 74 (2009), the Department approved a full revenue decoupling mechanism that reconciles target revenue and actual revenue on an annual basis using a uniform kilowatthour ("kWh") surcharge fee or credit. As such, National Grid's actual revenue is reconciled with its target revenue requirement independent of any changes in the number of customers or average customer usage. See D.P.U. 09-39, at 9, 74. In D.P.U. 09-39, at 81-84, the Department also approved a proposed capital investment program ("CapEx"). Unlike Bay State's TIRF, which is a targeted capital investment program, the CapEx is a general capital investment program that is limited to an amount of expenditures equal to National Grid's three-year historical average of capital expenditures (i.e., \$170 million in each year). D.P.U. 09-39, at 82. The Department did not approve National Grid's proposed annual inflation adjustment to its target revenue because National Grid failed to: (1) account for recent and pending initiatives to improve productivity, such as its acquisition of the KeySpan gas distribution companies; and (2) perform its own elasticity and productivity offset assessment and instead, relied on those performed by other utilities. D.P.U. 09-39, at 74, 76-78.

4. D.P.U. 10-55

In Boston Gas Company, Essex Gas Company, and Colonial Gas Company, each d/b/a National Grid, D.P.U. 10-55, at 40, 54 (2010), the Department approved a revenue decoupling mechanism that established its target revenue by using revenue-per-customer. The Department also approved a proposed TIRF, which allows an adjustment to target revenue to provide for the annual recovery of incremental costs of a program to address a high natural gas leak rate. D.P.U. 10-55, at 67-68, 129. The Department did not approve a proposed inflation adjustment on the basis that it: (1) was not necessary in the absence of a PBR plan;<sup>3</sup> and (2) would result in an unreasonably long time period between base rate proceedings. D.P.U. 10-55, at 64-66.

B. Company's Revenue Decoupling Proposal

1. Introduction

WMECo proposes a revenue decoupling mechanism ("RDM") adjustment, M.D.P.U. No. 1050A, that would fully decouple its rates from its sales (Exhs. WM-RJA-1, at 17; WM-CRG-1). To implement full decoupling, the Company would annually reconcile actual billed distribution revenue and a target level of revenue and collect the difference in a

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<sup>3</sup> In approving PBR plans, the Department previously sought to, among other things, establish rates for a minimum period of five years and allowed electric and gas distribution companies inflationary adjustments to all rates and, therefore, all of the companies' underlying costs. See e.g., Incentive Regulation, D.P.U. 94-158, at 45-46, 51-52 (1995); Electric Industry Restructuring, D.T.E. 96-100, at viii, 73-74 (1996). In general, PBR-related inflation adjustments: (1) provided distribution companies with relief from inflationary increases to costs while retaining the incentive to control costs by optimizing operational efficiency; and (2) included ratepayer benefits such as fixed terms and earnings sharing mechanisms. D.P.U. 07-50-A at 49; D.P.U. 10-55, at 65.

kWh charge based on projected sales over the subsequent twelve-month recovery period (Exh. WM-RJA-1, at 17-18). The proposed RDM is accompanied by two other reconciliation factors, which would allow the Company to recover additional costs related to: (1) expenses from a proposed capital investment program; and (2) the effects of inflation on operating expense (Exh. WM-RJA-1, at 17, 20, 25).

2. Annual Target Revenue and Adjustments

a. Introduction

On or before November 1 of each year, WMECo proposes to submit filings in support of its calculation of a target revenue level for the current year and adjustment factors for the following year (Exhs. WM-RJA-1, at 19; WM-RJA-1-4). In all, WMECo proposes three adjustment factors:

1. one to reconcile the difference between actual billed distribution revenue and proposed target revenue for the current year (“RDM adjustment”);
2. one to recover the revenue requirement associated with a proposed capital reliability reconciliation clause (“CRRC adjustment”); and
3. one to account for the effects of inflation on its operations and maintenance (“O&M”) expenses (“inflation adjustment”).

(Exhs. WM-RJA-1, at 18, 20, 25; WM-RJA-1-4; WM-JDS-1, at 20-22). On February 1 of each year, the RDM adjustment, the CRRC adjustment, and the inflation adjustment would all take effect (Exhs. WM-RJA-1, at 19; WM-RJA-1-4). WMECo proposes two caps on its proposed adjustment factors: (1) a cap on the annual RDM adjustment equal to one percent of

its total revenue;<sup>4</sup> and (2) a three percent cap on the annual increase to the target revenue resulting from the combined CRRC and inflation adjustments (Exh. WM-RJA-1, at 28).<sup>5</sup> Any unrecovered revenue in excess of these caps would be deferred for recovery until the next adjustment period with carrying charges at the prime rate as published in the Federal Reserve Statistical Release H15 (519) Selected Interest Rates (Exh. WM-RJA-1, at 19, 28).

b. RDM Adjustment

WMECo proposes to calculate its RDM adjustment by determining the difference between its actual billed revenue and target revenue for each customer class over a twelve-month period, and then dividing this figure by its projected sales over the subsequent recovery period to obtain a cents-per-kWh charge or credit (Exh. WM-RJA-1, at 18).<sup>6</sup> On February 1 of each year, the resulting charge or credit would be applied over the next twelve months (Exh. WM-RJA-1, at 18-19). If, during the course of a year, the Company

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<sup>4</sup> One percent of WMECo's total revenue would be inclusive of its basic service, transmission, and all other revenue (Exh. WM-RJA-1, at 19). In 2009, for example, this cap would have been one percent of \$379,484,535, or approximately \$3.8 million (Exh. AG-WM-5-14, at 2).

<sup>5</sup> The two proposed caps are separate from one another. Therefore the maximum annual increase would be the sum of the two caps.

<sup>6</sup> WMECo notes that the reconciliation calculation will reflect actual distribution revenue for eight months and estimated amounts for four months because it will be filed prior to the end of the full rate year (Exhs. WM-RJA-1, at 19; WM-RJA-1-4). The proposed RDM adjustment filed on November 1 would be based on actual revenue billed from February through September and projected revenue from October through January of the following year (Exh. WM-RJA-1-4). Estimated billed revenue would be replaced and reconciled with actual revenue in the subsequent RDM filing (Exh. WM-RJA-1, at 19).

projects that its over- or under-collection will exceed ten percent, it will file a mid-period adjustment with the Department (Exh. WM-RJA-1, at 20).

c. Capital Reliability Reconciliation Clause

WMECo proposes to annually recover incremental costs related to targeted infrastructure reliability programs that were initiated in calendar year 2010 (Exh. WM-RJA-1, at 20, 23). The total cost of the proposed ten-year capital investment program would be approximately \$289 million, or approximately \$28.9 million per year (Exh. WM-DFW-1-Rev.). This expenditure level represents an increase of \$161 million over ten years, which is an average annual increase of \$16.1 million above the \$12.2 million test year level of spending for similar project categories (Exh. WM-DFW-1-Rev.).

The Company identifies three types of infrastructure reliability programs to be included in the proposed CRRC: (1) replacement of aging infrastructure; (2) storm hardening;<sup>7</sup> and (3) distribution automation (Exh. WM-RJA-1, at 22). The replacement of aging infrastructure program is the largest of the three types of programs, with a proposed budget of \$221.8 million over ten years (Exh. WM-DFW-1-Rev.). Approximately \$97.7 million of this

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<sup>7</sup> The Company's storm hardening program consists of various initiatives intended to improve the reliability of the Company's under-performing overhead circuits (Exh. WM-DFW-1, at 38). The initiatives within the program are: (1) enhanced tree trimming and hazard tree removal; (2) circuit backbone hardening, reconductoring, and relocation; (3) automatic backbone sectionalizing; (4) lateral sectionalizing; and (5) circuit ties (Exh. WM-DFW-1, at 41-45).



cost would be derived from various existing infrastructure replacement programs<sup>8</sup> (Exhs. WM-DFW-1-Rev.). However, the initiative also includes various new programs, the largest of which are the proactive replacement of all overhead wire smaller than 1/0 gauge and the proactive replacement of all 15 kilovolt (“kV”) and 25 kV paper-insulated lead-covered cable on the Company’s system (Exh. WM-DFW-1-Rev.).<sup>9</sup> The proposed storm hardening program budget of approximately \$31.5 million would include activities such as enhanced tree-trimming, the hardening and rebuilding of distribution circuits, sectionalizing, and installing four proposed circuit ties with a total length of approximately 26 miles (Exhs. WM-DFW-1-Rev.; WM-DFW-Rev. at 45). The proposed distribution automation program budget of approximately \$29.7 million would include activities such as the deployment of distribution automation devices and software to the Company’s 13.8 kV and 23 kV overhead circuit backbones over a six-year period (Exhs. WM-DFW-1-Rev.; WM-DFW-4-Rev.).

If the CRRC were approved by the Department, by July 1 of each year the Company would submit detailed documentation of all allowable CRRC activities conducted in the prior calendar year (Exhs. WM-RJA-1, at 23; WM-RJA-1-4). The revenue requirement associated

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<sup>8</sup> These costs include capitalized labor and payroll-related overheads, materials, vehicles, police services, construction overheads, and various small capital projects (RR-DPU-WM-35; Exh. AG-WM-11-28, Att. at 2).

<sup>9</sup> Other activities within the aging infrastructure initiative are the four kV conversion program, the direct buried cross-linked polyethylene and high molecular weight polyethylene insulated cable injection and replacement program, the polychlorinated transformer replacement program, the live front protector replacement program, and the transformer purchasing program (Exh. WM-DFW-1-Rev.).

with CRRC includable programs would be reflected in an adjustment to the Company's target revenue and would take effect on February 1 of the following year (Exhs. WM-RJA-1, at 17, 19; WM-RJA-1-4). The Company would calculate its revised target revenue to include the sum of depreciation expense, property taxes, and return on the CRRC rate base at the pre-tax return allowed by the Department in this proceeding (Exh. WM-RJA-1, at 22-23). WMECo would then use a rate base allocator, as established by the Department in this rate proceeding, to allocate the incremental CRRC revenue requirement among the rate classes (Exh. WM-RJA-1, at 24). As proposed, the Company would allocate the CRRC revenue requirement to residential customers based on kWh sales and to commercial and industrial customers based on KW demand charges (Exh. WM-RJA-1, at 24). WMECo estimates that if the CRRC is approved, it will incur future O&M costs in an amount equal to approximately ten percent of CRRC expenses, however, the Company will forego any attempt to recover of these costs because it will likely realize some savings from reduced O&M costs as a result of the CRRC program (Exhs. WM-RJA-1, at 24; WM-DFW-Rev, at 9; Tr. 7, at 1221-1223).

d. Inflation Adjustment

WMECo proposes an inflation adjustment mechanism that would allow it to collect additional revenue to offset the effects of inflation on its operating expense on an annual basis (Exhs. WM-RJA-1, at 25; WM-JDS-2, at 3-4). The Company would calculate the annual inflation adjustment by multiplying its baseline operating expenses<sup>10</sup> by an inflation factor,

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<sup>10</sup> As proposed, WMECo's operating expenses will be determined in this rate proceeding and updated annually to account for cumulative inflation adjustments (Exh. WM-RJA-1, at 25-26).

which would be based on the rate of change in the gross domestic product price index (“GDP-PI”) and compounded over the relevant time period (Exh. WM-RJA-1, at 25-26 & n.16).<sup>11</sup> The Company would allocate the net inflation adjustment to each rate class based on the allocation of O&M expenses established in this rate case (Exh. WM-RJA-1, at 26). On November 1 of each year the Company would file the proposed inflation adjustment to the target revenue along with the RDM and CRRC adjustments, and all three adjustments would take effect on February 1 of the following year (Exhs. WM-RJA-1, at 27; WM-RJA-1-4).

To inform the accuracy of its inflation adjustment calculation, WMECo conducted an analysis of the statistical relationship among the GDP-PI, its operating expense, and the operating expenses for 21 electric distribution companies in the Northeast over an eleven-year period from 1999-2009 (Exh. WM-JDS-2, at 1-2).<sup>12</sup> The Company determined that its operating expense increased at 1.6 times the rate of increase in the GDP-PI, slightly below the composite elasticity of 1.8 experienced among the 21 other companies included in the analysis

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<sup>11</sup> As proposed, WMECo’s inflation adjustment factor would be calculated from the midpoint of the rate year based on an inflation evaluation of the prior twelve months ending June 30 (Exh. WM-RJA-1, at 25, 27). The first quarter that would be used to calculate the change in the GDP-PI for the inflation adjustment would be determined by the last quarter of the price index that is used to calculate the pro forma inflation adjustment to the Company’s costs in the current rate case (Exh. WM-RJA-1, at 25, n.16).

<sup>12</sup> The purpose of the study was to determine the relationship between inflation within the overall economy (as measured by the GDP-PI) and the rate of inflation experienced by WMECo and other distribution utilities. The result of the study is an inflation adjustment factor, which is a proxy used in conjunction with the GDP-PI, to determine annual adjustments to the Company’s O&M-based revenue requirement (Exh. WM-JDS-2, at 9-10, 20).

(Exh. WM-JDS-2, at 2-3). The Company's proposed annual inflation adjustment factor is 1.0 (i.e., equal to the GDP-PI), reflecting an implicit "consumer dividend" of 0.6 times the rate of change in the GDP-PI (Exh. WM-JDS-2, at 3).

### 3. Schedule of Filings

As stated above, the Company proposes to make two filings each year (Exhs. WM-RJA-1, at 23-24; WM-RJA-1-4). One filing would be submitted on July 1 of each year, beginning in 2011, and it would include information regarding WMECo's capital expenditures made during the prior calendar year that are eligible for recovery through the CRRC (Exhs. WM-RJA-1, at 23; WM-RJA-1-4). This filing would not include calculations in support of the recovery mechanism (Exhs. WM-RJA-1, at 23-24).

The second filing, which the Company proposes to submit on or before November 1 of each year, beginning in 2011, would include: (1) the proposed CRRC adjustment and supporting calculations; (2) the proposed inflation adjustment based on changes to the GDP-PI from July of the previous year to the end of June of the current year; and (3) the proposed RDM adjustment, which would be based on the revenue reconciliation total over-collection or under-collection for the prior twelve-month period (Exhs. WM-RJA-1-4; WM-RJA-1, at 19).<sup>13</sup> Based on these filings, the Company would revise its target revenue for the following year and

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<sup>13</sup> The proposed RDM adjustment filed on November 1 would be based on actual revenue received from February through September and projected revenue from October through January of the following year (Exh. WM-RJA-1-4). Estimated billed revenue would be reconciled to actual billed revenue in the subsequent RDM filing (Exh. WM-RJA-1, at 19).

all rate adjustments would go into effect on February 1 (see Exhs. WM-RJA-1-4; WM-RJA-1, at 19).

C. Positions of the Parties

1. Attorney General

a. RDM Adjustment

The Attorney General acknowledges that the Company's proposed RDM generally conforms to that approved in D.P.U. 09-39, but urges the Department to be wary of its purported benefits and to be aware of its risks (Attorney General Brief at 7-8). The Attorney General states, however, that if WMECo's proposed RDM is approved, it should be because of the policy positions outlined in D.P.U. 07-50-A and D.P.U. 07-50-B, and not because the RDM provides economic insurance for a regulated utility (Attorney General Brief at 8). The Attorney General contends that if the Department is concerned about the hedge that the Company's RDM will provide against declining economic activity, it should order WMECo to adopt a revenue-per-customer approach (Attorney General Reply Brief at 6).

The Attorney General argues that the Company's proposed RDM will not necessarily result in the promotion of energy efficiency or operational efficiencies (Attorney General Brief at 8). She recommends that the Department continue to evaluate decoupling on an ongoing basis, perhaps concurrently or as a part of the Department's three-year review of energy efficiency program performance (Attorney General Brief at 8, 12; Attorney General Reply Brief at 4, citing Exh. AG-DED at 13). The Attorney General states that the Department's consideration of revenue decoupling is not limited to the finding in D.P.U. 07-50-A, because it

was not a final Order issued in an adjudication (Attorney General Reply Brief at 2, citing D.P.U. 07-50-B at 25).

The Attorney General argues that the Department must consider the revenue decoupling experiences of other states in developing such policy (Attorney General Reply Brief at 2). She asserts that the other states have adopted revenue decoupling in a similar manner and for similar reasons as those advanced by the Department in D.P.U. 07-50-A and subsequent rate Orders: to break the link between sales and revenue in order to remove the disincentive to promote energy efficiency (Attorney General Reply Brief at 2). The Attorney General notes, however, that in other states with fully-decoupled rates there have been instances of overcompensation in which utilities have received more revenue than necessary to reduce or eliminate the perceived disincentive to promoting energy efficiency (Attorney General Brief at 8; Attorney General Reply Brief at 3).<sup>14</sup>

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<sup>14</sup> According to the Attorney General, the Virginia State Corporation Commission raised significant concerns about the cost-effectiveness and ratepayer impacts of its decoupling policy, noting that a gas company's revenue decoupling mechanism would compensate it for energy reductions of approximately ten million Ccfs when the gas company's own estimates showed that its programs would generate less than 116,000 Ccf of energy savings (Attorney General Brief at 9, citing Exh. AG-DED at 9, 18). The Attorney General claims that, based on similar concerns, the Washington Utilities and Transportation Commission ultimately capped any revenue decoupling recoveries at 45 percent of the deferrals and set a sliding scale for those recoveries based on achieved energy efficiency savings (Attorney General Brief at 10, citing Exh. AG-DED at 11). The Washington Utilities and Transportation Commission also declared that decoupling is one method of supporting conservation but alternatives should be sought in order to avoid its inherent complications (Attorney General Reply Brief at 3-4, citing Exh. AG-DED-1, at 11). Finally, the Attorney General asserts that the Idaho Public Utilities Commission rejected an electric company's proposal to make revenue decoupling permanent after the company recovered revenue associated with

According to the Attorney General, revenue decoupling could result in similar overcompensation for WMECo because, for the next few years, lost base revenue resulting from energy efficiency activities is anticipated to account for only 0.31 to 0.56 percent of WMECo's total base revenue (Attorney General Brief at 11, citing Exh. AG-DED at 13). The Attorney General asserts that even the Company's chief executive officer has acknowledged the uncertainty about the effects of the Company's RDM proposal on rates and the timing of future rate cases (Attorney General Brief at 11-12, citing Tr. 1, at 159-161).

b. CRRC Adjustment

The Attorney General opposes the Company's proposed CRRC for several reasons discussed below (Attorney General Brief at 20). In the event that the Department approves the CRRC, the Attorney General recommends certain modifications (Attorney General Brief at 37).

First, the Attorney General asserts that the CRRC mechanism is a departure from standard ratemaking practices pursuant to G.L. c. 164, § 94, and it fails to meet the basic standards for which rate adjustments under formula tariffs may be permissible (Attorney General Brief at 21). The Attorney General argues that rate adjustments under formula tariffs must be for costs that are: (1) volatile; (2) objectively ascertainable; and (3) material (Attorney General Brief at 21, citing Commonwealth Electric Company, Cambridge Electric Light Company, and Boston Edison Company, D.T.E. 03-47-A at 21 (2003)). The Attorney

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156.1 million kWh in lost sales when energy efficiency-related savings totaled only 22 million kWh (Attorney General Brief at 10, citing Exh. AG-DED at 12).

General states that WMECo has presented no evidence that it is experiencing a crisis in its distribution system that merits this type of non-traditional ratemaking (Attorney General Brief at 21).

Second, while the Attorney General agrees that WMECo's system average interruption duration index ("SAIDI") and system average interruption frequency index ("SAIFI") metrics have lagged behind those of other companies, she opposes the adoption of the CRRC as a solution (Attorney General Brief at 23).<sup>15</sup> According to the Attorney General, WMECo's substandard reliability performance is the result of its average duration of outages, and not the total number of outages, which is comparable to a grouping of WMECo's peer utilities that were evaluated by the Attorney General (Attorney General Brief at 24, citing Exh. AG-RSH at 8-10). She argues that the Company's CRRC will not directly address its reliability issues because it proposes to invest much more capital in programs that decrease outage occurrence (e.g., replacement of aging infrastructure) as compared to programs that decrease outage duration (e.g., distribution automation) (Attorney General Brief at 24). The Attorney General also questions whether a 62 percent increase in capital spending is the solution to the Company's reliability problems (Attorney General Brief at 26)

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<sup>15</sup> The Attorney General argues that the Company's reliability performance is better than the Company has characterized (Attorney General Brief at 23, 25). The Attorney General acknowledges that the Company's SAIFI minutes exceeded its benchmark for six of the last nine years, but she points out that abnormal storm events were included in two of the three years in which the Company actually failed the standard (i.e., 2006 and 2008) (Attorney General Brief at 23). She adds that while WMECo's management called the 2008 winter storm a "monstrous regional calamity," nonetheless the Company received an award from the Edison Electric Institute for its emergency response (Attorney General Brief at 25, citing Tr. 7, at 1250).



In addition, the Attorney General argues that the Company has failed to demonstrate that its infrastructure is old as compared to industry standards, stating that the industry-accepted lifespan for distribution equipment is 40 to 50 years (Attorney General Brief at 27, citing Exh. WM-DFW at 3). According to the Attorney General, the Company's evidence regarding the advanced age of its infrastructure is unconvincing, skewed from selective sampling, or irrelevant (Attorney General Brief at 27-29). She further claims that some of the data the Company provided demonstrates that many utility assets last significantly longer than 40 or 50 years (Attorney General Brief at 29-30, citing Exh. AG-7-4, at 15, 27; Tr. 7, at 1111-1113). The Attorney General suggests that the lifespan remaining for most of the Company's assets is consistent with that of its peer utilities (Attorney General Brief at 30, citing Exhs. AG-DED-20; AG-DED at 41).<sup>16</sup> The Attorney General concludes that the age of the Company's infrastructure is not a reason to allow accelerated recovery of the Company's capital investments (Attorney General Brief at 24-25).

Further, the Attorney General contends that the Company has not adequately demonstrated the merits of its proposed CRRC program with a cost-benefit analysis (Attorney General Brief at 31). The Attorney General asserts that the large increase in capital spending proposed through the CRRC is merely a result of management's decision to increase its system investments (Attorney General Brief at 22). She asserts that because the Company would have

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<sup>16</sup> The Attorney General further asserts that the Company's claim is inconsistent with its depreciation study, which proposes to increase the remaining life for three categories of plant and reflects a significant reduction in useful life for only one asset category, meters (Attorney General Brief at 30-31, citing Exhs. WM-REW-2, Statement E; AG-DED at 48; AG-DED-20).

considerable influence over the costs of the CRRC program, such costs would be neither unpredictable nor outside the Company's control (Attorney General Brief at 22). The Attorney General notes that if one of the goals of revenue decoupling is to reduce customers' bills, an increase in distribution rates resulting from the CRRC may be contradictory (Attorney General Brief at 22-23). The Attorney General claims that the CRRC would inappropriately shift almost all management and investment risk from the Company to customers, and that it lacks any penalties or financial consequences if WMECo fails to improve its SAIDI and SAIFI performance (Attorney General Brief at 32). According to the Attorney General, the CRRC is inconsistent with other capital tracker mechanisms approved by the Department because it includes carrying charges, has no fixed time period, and has no proposed cap (Attorney General Brief at 33).<sup>17</sup> In the Attorney General's view, the CRRC is likely to result in financial benefits such as reduced O&M costs, reduced overtime pay, and increased line capacity through which to earn additional revenues, all of which will accrue to the Company and not to ratepayers (Attorney General Brief at 34, citing Exh. WM-DFW at 3; Tr. 10, at 1568).

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<sup>17</sup> Furthermore, the Attorney General claims that the CRRC, like other capital trackers, will create regulatory problems and inefficiencies that favor the utility because the utility always has better information and insight into its operations than regulators and intervenors (Attorney General Brief at 35). She also asserts that other public utilities commissions have rejected capital trackers resembling the CRRC for many of the same reasons she offers, including the failure to quantify benefits for customers, the failure to demonstrate that a tracking mechanism is necessary to make additional capital investments, and the failure to demonstrate that the Company's performance with respect to reliability is a critical problem (Attorney General Brief at 32-33).

If the Department decides to approve the CRRC, the Attorney General recommends that adequate ratepayer protections be imposed (Attorney General Brief at 37, 47).

Specifically, the Attorney General recommends that the Department narrow the scope of the CRRC to ensure that the costs are truly incremental, and limit the Company's cost recovery (Attorney General Brief at 46-47).

To limit the scope of the CRRC, the Attorney General recommends excluding the Small Direct Buried Cable Replacement program and associated costs, because about 20 years ago the Company explicitly decided to significantly decrease its rate of replacing and injecting such cable, which she alleges is causing the Company to seek expedited rate recovery for this program now (Attorney General Brief at 37-38, citing RR-AG-WM-37; Exh. AG-WM-17-17). According to the Attorney General, the Company's sudden need to increase the replacement and injection rates for direct buried cable demonstrates mismanagement of that asset, which should not merit preferential rate treatment (Attorney General Brief at 39). In addition, the Attorney General recommends excluding the Small Overhead Wire Replacement program and associated costs because the Company has not explained its failure to proactively replace any such wire over most of the past decade (Attorney General Brief at 40, citing Exh. DPU-WM-7-13, at 2). Finally, the Attorney General recommends excluding the Paper Insulated Lead Covered Cable Replacement program and associated costs because: (1) the Company has acknowledged that it will replace the cable at a sufficient rate with or without accelerated recovery to comply with expected new regulations from the United States Environmental Protection Agency requiring the removal of such cable; and (2) according to the

Company's own records, much of this cable has not reached the end of its useful life, which means that accelerated cost recovery is neither necessary nor prudent (Attorney General Brief at 42-45, citing Tr. 7, at 1002, 1107-1109; Exh. AG-WM-7-4, at 25).

To ensure that costs of the CRRC program are truly incremental and not redundant to the level of revenues established in base rates, the Attorney General recommends that the Department adopt specific tariff language to address this concern (Attorney General Brief at 46-47).<sup>18</sup> Also, the Attorney General recommends that the Company's annual CRRC filings include copies of its actual accounting manual, standards, and guidance or interpretation related to the definition and classification of costs as incremental (Attorney General Brief at 47).

To appropriately limit the Company's cost recovery, the Attorney General recommends the imposition of certain parameters on the CRRC that exist for other approved capital trackers (Attorney General Brief at 47). Specifically, the Attorney General recommends the following design features: (1) exclusion of carrying charges; (2) limitation of recovery to net incremental investments; (3) limitation in duration to the period between the issuance of the final Order and the Company's next rate case; and (4) imposition of an appropriate recovery cap, similar to the caps imposed on the cost trackers for the capital investment programs of both Bay State and National Grid (Attorney General at 47).

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<sup>18</sup> The Attorney General suggests that the following tariff language be added: "Incremental costs shall mean only those costs directly and completely incurred by, and necessary for, CRRC reliability projects. Incremental costs shall exclude any direct, indirect or allocated costs recoverable or represented in whole or in part in any other rate, charge or tariff" (Attorney General Brief at 46-47).

c. Inflation Adjustment

The Attorney General urges the Department to reject the Company's inflation adjustment proposal because: (1) there is no evidence of benefits to ratepayers; (2) it is likely to lead to inefficiencies associated with cost trackers; (3) the Company's analysis supporting the inflation adjustment is flawed; (4) it is inconsistent with Department precedent; and (5) such cost trackers are selective, nonremedial, unfair, and contrary to the public interest and, if approved, would result in rates that are not fair, nor just and reasonable (Attorney General Brief at 19-20).

First, she argues that an inflation adjustment would have no bearing or effect on the Company's activities related to energy efficiency or renewable energy because the Company receives those costs through special charges and not through base rates (Attorney General Brief at 14, citing Exh. AG-DED-1 at 16).<sup>19</sup> Therefore, she rejects the Company's assertion that the Company's RDM and inflation adjustment must be approved together. The Attorney General claims that the Department's generic Orders did not guarantee inflation adjustment provisions on O&M and did not find such provisions to be a necessary element of revenue decoupling, and subsequent Orders on base rates have denied such provisions (Attorney General Brief at 17, citing D.P.U. 10-55, at 65; D.P.U. 09-39, at 78; Attorney General Reply at 4-5, citing D.P.U. 10-55, at 63; D.P.U. 07-50-A at 50).

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<sup>19</sup> Namely, the Attorney General notes that activities related to energy efficiency or renewable energy are recovered through the System Benefit Charge and Energy Efficiency Recovery Factor (Attorney General Brief at 14, citing AG-DED-1, at 16).

Second, she states that unlike traditional ratemaking that employs regulatory lag, a cost tracker like the proposed inflation adjustment would remove the Company's incentive to contain costs, which can lead to inefficiencies (Attorney General Brief at 14, citing Exh. AG-DED-1 at 17). She claims that, based on the evidence put forth by the Company, it is not certain that there is always a positive correlation between a utility's O&M costs and the GDP-PI (Attorney General Brief at 14-15, 20, citing Exh. AG-DED-12). The Attorney General argues that, relative to its peer utilities, WMECo is by no means a superior performer in terms of keeping O&M costs low and that the Company has various tools at its disposal to control O&M cost escalation (Attorney General Brief at 17-18).

The Attorney General states that the proposed inflation adjustment is a one-sided rent-seeking mechanism that reduces risk to the Company and could provide windfalls to shareholders because it lacks a productivity offset, an earnings sharing adjustment, or any other mechanisms that force the same type of cost-controlling discipline commonly found in competitive markets (Attorney General Brief at 14).

According to the Attorney General, inflation has tempered in recent years, especially for many of the commodities that drive a utility's O&M costs, which makes an inflation tracker unnecessary (Attorney General Brief at 16-17, citing Exh. AG-DED-1, at 23-26).

The Attorney General argues that the Company's regression analysis is flawed because it does not incorporate the superior estimation techniques of panel regression and it inappropriately omits relevant data (Attorney General Brief at 18-19, citing AG-DED-1, at 33; Tr. 1, 177, 187, 189, 209; Tr. 20, at 3019).

2. DOER

a. RDM Adjustment

DOER generally endorses the Company's RDM proposal, arguing that it achieves the Department's objective of fully decoupling sales from revenue, thereby removing a principal disincentive to the adoption of all cost-effective energy efficiency and demand response programs and initiatives (DOER Brief at 2).

DOER opposes, however, the Company's proposal to reconcile its RDM through KW-based demand rates for its general service rates classes (DOER Brief at 2-3). DOER claims that this rate recovery structure is inconsistent with the Department's revenue decoupling rate policy, which states:

In light of these market barriers, the limitations of price signals, and the Department's need to balance the application of various ratemaking principles including cost causation, rate continuity, rate stability, and administrative efficiency, the Department finds that it is appropriate to recover reconciled revenues through a volumetric charge, specifically the energy component of the distribution charge

(DOER Brief at 3, citing D.P.U. 07-50-A at 59). DOER argues that the Company has not provided a rationale for using demand rates to reconcile RDM revenue and that doing so would provide no price signal that would be related to seasonal cost differences, to energy efficiency, or to reduced energy use (DOER Brief at 3, citing Exh. AG-LS at 12). Accordingly, DOER urges the Department to modify this aspect of the RDM proposal and direct the Company to reconcile revenue for all classes on the basis of kWh sales (DOER Brief at 3).

b. CRRC Adjustment

DOER generally endorses the CRRC, but recommends that it be modified to include an appropriate fixed cap on capital spending (net of depreciation) that is lower than WMECo's proposed three percent cap on its combined CRRC and inflation adjustments to the annual target revenue (DOER Brief at 3-4). DOER concedes that, despite an elevated level of investment over the past decade, WMECo seems to be experiencing an uptrend in SAIDI and SAIFI, and outage duration seems to be worse than outage frequency (DOER Brief at 4, citing Exhs. AG-RSH at 3, 9-10; AG-RSH-8). DOER concludes that some level of increased capital investment may be necessary to begin reversing the deteriorating trend (DOER Brief at 4). However, DOER is concerned about the proposed level of investment because it could result in an imbalance of O&M and capital spending, depending on the level of inflationary increases to O&M expense (DOER Brief at 4). DOER asserts that if the Department established a more appropriate cap on the level of CRRC spending, as in D.P.U. 09-39, then the Company would retain full management over its investments and eliminate the otherwise difficult task of delineating between reliability-related investments and other types of investments (DOER Brief at 4-5). Finally, if the CRRC is approved, then DOER requests that the CRRC explicitly allow recovery of any appropriate capital investment associated with the resolution of the issues identified by UMA in this case (DOER Brief at 5).

c. Inflation Adjustment

DOER opposes WMECo's proposed inflation adjustment and recommends that the Department reject it for the same reasons that the Department rejected similar mechanisms



proposed by Bay State Gas and National Grid (DOER Brief at 5, citing D.P.U. 09-39; D.P.U. 09-30). According to DOER, there are likely to be O&M savings associated with the Company's plan to increase capital spending, and the Company has not included an offset to its proposed inflation adjustment to account for such savings (DOER Brief at 5). Consequently, DOER suggests that the inflation adjustment could recover costs that the Company did not incur and that it should be rejected (DOER Brief at 5-6).

### 3. ENE

ENE takes no position on WMECo's proposed CRRC and inflation adjustments but generally endorses the Company's proposed RDM to the extent that it: (1) is consistent with D.P.U. 07-50-A; and (2) will further the goals and mandates of An Act Relative to Green Communities, Acts of 2008, c. 169 ("Green Communities Act"), particularly the accelerated deployment of energy efficiency and demand resources (ENE Brief at 2-5). ENE states that, because the Company's proposed RDM will fully separate its target revenue from all changes in consumption and make the underlying cause of such changes irrelevant, it will eliminate a financial disincentive that poses a powerful barrier to the successful implementation of demand reduction measures and actions (ENE Brief at 5 & n.12, n.13, citing Exhs. RJA-1 at 17; PJC-1, at 6; Tr. 1, at 28). ENE notes that the Department reaffirmed its commitment to full revenue decoupling for Massachusetts electric and natural gas distribution companies with its decisions in D.P.U. 09-30, D.P.U. 09-39, and most recently in D.P.U. 10-55 (ENE Brief at 5).

ENE opposes, however, the Company's proposal to reconcile its target revenue to its actual revenue by using demand charges for C&I customers, stating that this approach does not send the price signal necessary to encourage investment in energy efficiency, nor does it properly leverage a decoupled rate structure (ENE Brief at 5-7; ENE Reply Brief at 2). As a general matter, ENE urges the Department to modify both WMECo's RDM and rate design to ensure that the Company collects revenue adjustments through volumetric charges, which would be more consistent with the goals of D.P.U. 07-50-A and the Department's subsequent decisions in base rate proceedings (ENE Brief at 7-10).

ENE further urges the Department to modify the Company's proposed one percent cap on its annual RDM adjustments to a cap equal to three percent of total revenue, which would be consistent with the Department's decisions in D.P.U. 09-30 and D.P.U. 09-39 (ENE Brief at 10-11). ENE states that a three percent cap is more consistent with the Department's finding that " '[r]evenue decoupling adjustments should be large enough to avoid intergenerational inequity and unfairness in rates but small enough to preserve continuity in rates' " than WMECo's proposed one percent cap (ENE Brief at 10-11, quoting D.P.U. 09-39, at 86).

4. WMIG

a. CRRC Adjustment

WMIG states that the Department should reject the CRRC because the Company has not demonstrated that it faces any extraordinary risk from a failure to recover prudently incurred construction and expansion costs (WMIG Brief at 20). WMIG suggests that the

Company's decoupling mechanism will insulate it from losses due to historical and projected sales erosion, from both energy efficiency programs and otherwise, and that any additional recovery mechanisms are inequitable and run afoul of traditional ratemaking principles (WMIG Brief at 18-19). Furthermore, WMIG argues that approval of the CRRC would not have any bearing on energy efficiency activities, and that the program would unjustifiably shift risk onto ratepayers by abandoning the traditional ratemaking mechanism of regulatory lag (WMIG Brief at 18, 19-21).

b. Inflation Adjustment

WMIG claims that the Department should reject the inflation adjustment because the Company should not be relieved of the ordinary business risk associated with inflation or the pressures of traditional regulatory lag, which encourage efficient behavior from companies (WMIG Brief at 4). According to WMIG, if approved, the Company's RDM will insulate it from losses due to historic and projected sales erosion resulting from energy efficiency programs and other factors, and to add any more recovery mechanisms would be inequitable and run afoul of traditional ratemaking (WMIG Brief at 18). WMIG argues that implementing an inflation adjustment would not have any bearing on energy efficiency activities (WMIG Brief at 18-19). WMIG contends that inflation in the overall economy is relatively low and WMECo's proposed inflation adjustment is unwarranted (WMIG Brief at 19).

5. IBEW

IBEW agrees that WMECo needs additional revenue to support storm hardening and an accelerated replacement of aging infrastructure, though it does not necessarily support every

dollar that the Company has requested (IBEW Brief at 2, citing Exh. IBEW-BK at 4). The IBEW supports WMECo's request for additional revenues insofar as WMECo has demonstrated that those funds are needed to replace aging infrastructure, to harden its system to withstand severe storms, and to automate its system to increase reliability and efficiency (IBEW Brief at 3).

6. UMA

UMA states that WMECo's proposed CRRC should be modified to allocate funds needed to address reliability and service quality concerns in the Amherst, Massachusetts ("Amherst") area (UMA Brief at 2-3, 13). UMA argues that the quality of service it receives from WMECo is unacceptably poor and could become worse as UMA pursues a development initiative that will add significant amounts of load in the coming years (UMA Brief at 3-7). According to UMA, the Company's program would allocate minimal funds to the Amherst area and nothing to the UMA campus (UMA Brief at 3, 11, citing Tr. 10, at 1587, 1589). UMA suggests that, over the next few years, significant upgrades are need at the Podick and Amherst substations, in addition to upgrades on a pair of under-performing circuits (UMA Brief at 8-11). According to UMA, these upgrades could readily be incorporated into the Company's proposed CRRC budget (UMA Brief at 12-13).<sup>20</sup>

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<sup>20</sup> UMA states, for example, that it is adversely impacted by the exceptionally poor reliability performance of a specific circuit during storm events, a problem that could be addressed through the storm hardening initiative within the Company's CRRC proposal (UMA Brief at 13).

7. Company

a. RDM Adjustment

WMECo states that its decoupling proposal, which will sever the link between electricity sales and the Company's revenue, is consistent with the Department's directives in D.P.U. 07-50-A (2008) and with the proposals approved by the Department in three recent distribution base rate decisions (Company Brief at 15, citing D.P.U. 10-55; D.P.U. 09-39; D.P.U. 09-30). The Company states that it has shown a strong commitment to energy efficiency and that its proposal will facilitate its efforts to triple its energy efficiency investments over the coming years as part of its three-year energy efficiency plan (Company Brief at 16-17, citing Exh. AG-5-12; Tr. 1, at 21). Furthermore, WMECo argues that its three-part decoupling proposal effectively balances the interests of ratepayers and shareholders (Company Brief at 1).

WMECo claims that the regulatory proceedings of other jurisdictions on decoupling cited by the Attorney General are irrelevant and do not constitute reliable evidence (Company Brief at 18, citing Attorney General Brief at 8-12). WMECo explains that revenue decoupling in other states is often significantly different in terms of scope and regulatory context, whereas the Department already has well-developed standards (Company Brief at 18-19). According to WMECo, the decisions that the Attorney General cites from other jurisdictions involve partial decoupling, with revenue decoupling only for changes in sales levels caused by energy

efficiency (Company Brief at 19).<sup>21</sup> The Company asserts that the Attorney General's references ignore the Department's adoption of full decoupling, which means that a revenue decoupling mechanism recovers lost revenue resulting from all changes in consumption regardless of the cause (Company Brief at 19, citing D.P.U. 09-39, at 63).

WMECo argues the Attorney General's recommendation to initiate a multi-faceted policy evaluation of decoupling is unnecessary because the Department has already completed its policy review of decoupling in D.P.U. 07-50-A (Company Brief at 18, citing Attorney General Brief at 7). The Company refutes the Attorney General's argument that, if its revenue decoupling proposal is approved by the Department, then the timing of future base rate proceedings will be uncertain (Company Brief at 19, citing Attorney General Brief at 12). The Company claims that it hopes and intends that the decoupling mechanism will necessitate a base rate proceeding approximately every five years (Company Brief at 19-20, citing Tr. 1, at 159-161). The Company states that its proposed one percent cap on the annual RDM reconciliation is designed to avoid dramatic changes in rates in any given year due to extreme changes in circumstances (Company Brief at 18).

b. CRRC Adjustment

WMECo states that the CRRC will employ a comprehensive planning approach by making investments to address targeted areas of concern before emergency situations develop

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<sup>21</sup> WMECo notes that in one case cited by the Attorney General, the Public Utilities Commission in Washington State approved partial decoupling, in which annual sales are normalized for the effects of weather (Company Reply Brief at 2, citing Attorney General Reply Brief at 3-4).

(Company Brief at 21). As such, WMECo claims that the CRRC will increase the efficiency of infrastructure replacement and reduce the cost of unplanned failures and outages (Company Brief at 21). According to WMECo, by approving capital tracker mechanisms along with revenue decoupling mechanisms in prior proceedings, the Department has acknowledged the public safety and reliability concerns resulting from aging infrastructure (Company Brief at 35, citing D.P.U. 10-55, at 119-120; D.P.U. 09-30, at 129, 133-134). WMECo asserts that despite an increase in its capital spending, its reliability performance as measured by its SAIDI and SAIFI metrics has worsened over the past ten years (Company Brief at 21, 39, citing Exhs. WM-DFW-REB at 4-5, 22; DPU-7-13; WM-DFW-1-Rev.).<sup>22</sup> The Company refutes the Attorney General's claim that WMECo's poor SAIDI and SAIFI performance have been skewed by extraordinary events, contending that abnormal storm events are excluded from its reliability metrics (Company Brief at 39-40, citing Attorney General Brief at 23). WMECo proposes to track the effects of the CRRC by monitoring future SAIDI and SAIFI performance and comparing it to current projected trends of SAIDI and SAIFI performance (Company Brief at 31, 44).<sup>23</sup> WMECo rejects the Attorney General's suggestion that the CRRC should include

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<sup>22</sup> The Company also states that capital spending comparisons with other utilities may be misleading because WMECo operates a predominately rural distribution system (Company Brief at 41).

<sup>23</sup> The Company states that reliability performance data will be included in its CRRC filings and if performance worsens beyond the projected trend line, then the Company will take corrective action (Company Brief at 31). The Company notes, however, that when considering reliability performance metrics, it will also be necessary to normalize the data to account for the impact of storms (Company Brief at 32, citing RR-DPU-WM-28). The Company suggests various additional metrics to evaluate the

penalties for falling short of its defined SAIDI and SAIFI goals, arguing that the Company is already subject to penalties for failure to meet the Department's service quality standards, established pursuant to G.L. c. 164, § 1E (Company Brief at 44, citing Attorney General Brief at 32).

The Company asserts that, when the Department approved the Company's capital projects spending list ("CPSL") provision in the Company's prior rate settlement, D.P.U. 06-55, the Department recognized the need for recovery of targeted capital investments beyond what is allowed in traditional base rate proceeding (Company Brief at 38). WMECo refutes the Attorney General's claim that it has not quantified the costs and benefits of the CRRC (Company Brief at 39, 41-42, citing Attorney General Brief at 23, 31). WMECo insists that it has provided extensive and detailed plans, schedules and budgets for the work required under the CRRC program (Company Brief at 36, 39, 42, citing Exhs. WM-DFW-1; DPU-7-2; RR-DPU-WM-23). The Company states it manages its infrastructure replacements programs like its direct buried cable replacement and injection program prudently, some of which continue for decades, but that it has limited capital and must invest on a schedule consistent with the best and most current information available (Company Brief at 46-47; Company Reply Brief at 6). WMECo states that decoupling will remove the Company's ability to increase its revenue from sales growth, and without the CRRC, reliability will continue to deteriorate (Company Brief at 32, 36).

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effectiveness of the programs that it maintains are unlikely to result in direct improvements to SAIDI and SAIFI performance (Company Brief at 32).



WMECo asserts that the budget for the CRRC has been defined for a ten-year period, and that it expects the Department to review the CRRC program both through its annual filings and at the time of the Company's next rate case (Company Brief at 35, 43; Company Reply Brief at 5). WMECo claims that the annual CRRC review process will permit a higher level of scrutiny of capital investments than would be undertaken within a complex general base rate proceeding (Company Brief at 45). WMECo states that based on its proposal to submit its CRRC filings on July 1 of each year, the schedule will give the Department and interested parties seven months to review the reasonableness and prudence of CRRC investments made over the prior year, which the Company believes is a sufficient period of time to conduct a thorough regulatory review (Company Brief at 34-35).<sup>24</sup>

WMECo argues that the CRRC recovers only incremental capital costs as a component of decoupling, and does not replace traditional ratemaking for other types of capital investments necessary to operate WMECo's distribution system (Company Brief at 32-33). WMECo contends that it will continue to spend additional capital for normal business operations and that such capital spending will exceed the annual depreciation expense allowed in its new base rates (Company Brief at 48, citing Tr. 11, at 1770-1772). WMECo asserts that it will have sufficient controls and tracking processes in place to ensure that only legitimate

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<sup>24</sup> According to the Company, the recovery period for the CRRC preserves the regulatory lag inherent in the traditional ratemaking paradigm (Company Brief at 45). The Company explains that CRRC costs incurred in January 1, 2010, would begin to be recovered on February 1, 2012, which would be 25 months after they are incurred, during which time the Company will forgo any carrying charge (Company Brief at 44-45, citing Exh. WM-JLM, at 70).

incremental CRRC costs are added to the Company's target revenue (Company Brief at 48-49, citing Tr. 11, at 1769-1772; RR-AG-WM-50).

WMECo rejects the Attorney General's characterization of the CRRC as a formula rate, arguing that it meets the Department's standards for a capital recovery mechanism as a part of a revenue decoupling plan (Company Brief at 38-39, citing Attorney General Brief at 21; Company Reply Brief at 4).

WMECo addresses DOER's recommendation to establish a fixed capital spending cap, arguing that it would unreasonably restrict necessary CRRC-includable programs and that the Company's proposed three percent cap on the CRRC and the inflation adjustment already provides a mechanism by which to limit the bill impacts of ratepayers (Company Brief at 49, citing DOER Brief at 4). To provide assurance that the Company does not have the incentive to over-invest in its capital program, WMECo states that it is amenable to an overall earnings sharing mechanism of 50 percent to customers and 50 percent to shareholders, beginning at two percent over or under the allowed distribution return to equity granted in this proceeding (Company Brief at 34, 43, citing Exh. WM-PJC-Rebuttal at 4).

WMECo also opposes UMA's proposal that it modify the CRRC budget to specifically address reliability upgrades in the Amherst area (Company Brief at 50-51, citing UMA Brief at 11-13). WMECo contends that reliability is not comparatively worse in the Amherst area than in other areas of the Company's service territory (Company Brief at 50-51, citing Exhs. UMA-WM-4-17; WM-DFW-Rebuttal at 23). Furthermore, the Company claims that it

would be inappropriate to use a broad rate recovery mechanism to collect customer-specific load-growth costs that would otherwise be paid in part by UMA (Company Brief at 50-51).

c. Inflation Adjustment

WMECo claims that revenue decoupling will preclude it from earning additional revenue from growth in the number of customers or in overall sales, and that without an inflation adjustment the Company would have to file rate cases frequently, which is both costly and inefficient (Company Brief at 58-59; Company Reply Brief at 8). WMECo maintains that the inflation adjustment, in combination with its proposed RDM and CRRC, will remove the overall financial disincentive presently in effect for the Company to pursue its energy efficiency and reliability investment programs (Company Brief at 61, citing Exhs. AG-WM-21-1; WM-RJA-Rebuttal at 12). WMECo argues that its inflation adjustment proposal is consistent with D.P.U. 07-50-A and that it does not suffer from the deficiencies identified by the Department in its denials of similar proposals because, among other things, the Company has supported the inflation adjustment factor with its own comprehensive statistical analysis (Company Brief at 56-57; Company Reply Brief at 8).<sup>25</sup>

According to WMECo, its statistical analysis demonstrates a strong correlation between inflation, as measured by the GDP-PI, and the O&M expenditures for 21 electric distribution companies in the United States (Company Brief at 54, 57). The Company contends that the

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<sup>25</sup> According to WMECo, the Department has previously rejected an inflation adjustment proposed by National Grid for its electric distribution companies, because the company failed to conduct its own inflation study, and in light of the fact that cost savings from the merger of National Grid with KeySpan were likely to exceed the effects of inflation on O&M costs (Company Brief at 56 & n.19, citing D.P.U. 09-39, at 76-78).

implied consumer dividend of 0.6 within its proposed inflation adjustment represents approximately 38 percent of expected increases in inflation adjustable expense, which means that the Company is not likely to be fully compensated for inflation-related cost increases (Company Brief at 55). WMECo alleges that there are limited opportunities remaining for it to improve productivity, but that the consumer dividend will preserve the Company's incentive to control expenses (Company Brief at 55, citing Exhs. WM-PJC at 15; WM-KHA at 3-4, 6-7, 11; AG-1-42-2). The Company claims that even with the inflation adjustment, the Company will still experience earnings attrition as a result of inflation, which will likely require it to seek relief through future base rate proceedings (Company Brief at 56, citing Exhs. WM-RJA-8-Rev.; WM-JDS-2, at 21-22; Tr. 2, at 289).

The Company refutes the Attorney General's assertion that the inflation adjustment is unnecessary because overall inflation has tempered (Company Brief at 63, citing Attorney General Brief at 16). The Company claims instead that costs for many of the items that contribute to its expenses have exceeded the overall rate of inflation, including labor, materials, commodity costs and property taxes (Company Brief at 63, citing Exh. WM-PJC-Rebuttal at 6). The Company asserts that its analysis is sufficiently robust, is supported by pooled panel regression analysis,<sup>26</sup> and is consistent with the Attorney General's

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<sup>26</sup> Panel regression analysis incorporates data sets constructed from repeated cross sections of data over time, thereby increasing the number of observations and decreasing the standard of error, all else being equal (Exhs. WM-JDS-Rebuttal at 5, n.2; AG-DED-1, at 33).

own analysis (Company Brief at 64, citing Exhs. WM-JDS-Rebuttal at 7, 11-16; WM-JDS-1-Rebuttal; WM-JDS-3-Rebuttal; WM-JDS-4-Rebuttal; Tr. 20, at 3001).

In response to DOER's criticisms of the inflation adjustment, the Company states that the mechanism would not collect expenses related to the proposed CRRC programs and that any O&M savings in excess of costs related to the CRRC programs would be reported and adjusted in future base rate proceedings (Company Brief at 65, citing DOER Brief at 5). In response to WMIG's criticisms of the inflation adjustment, WMECo states that the mechanism is not a capital tracker and that it would be monitored by the Department in WMECo's annual filings (Company Brief at 65, citing WMIG Brief at 4). Finally, WMECo asserts that it would accept a reasonably designed earnings sharing mechanism as part of its decoupling plan (Company Brief at 58, 62, citing Exh. WM-PJC-Rebuttal at 4).

D. Analysis and Findings

1. RDM Adjustment

a. Introduction

The Department has affirmed its authority to adopt decoupled rates as the model for all future ratemaking proceedings, relying upon our delegated authority under G.L. c. 164, § 94 to prescribe the rates and prices that utilities may charge. D.P.U. 07-50-B at 26, citing Boston Edison Co. v. City of Boston, 390 Mass. 772, 779 (1984). In determining the propriety of such rates, prices and charges, the Massachusetts Supreme Judicial Court has affirmed that the Department must find that they are just and reasonable. See Attorney General v. Dep't of

Telecomm. and Energy, 438 Mass. 256, 264 n.13 (2002); Attorney General v. Dep't of Pub. Utils., 392 Mass. 262, 265 (1984).

In D.P.U. 07-50-A at 24, the Department stated that promoting the implementation of all cost-effective demand resources is a top priority. The Department stressed that, in order to realize the full potential of demand resources, it is essential to leverage the distribution companies' relationships with customers as well as with any other entities that will be engaged in the development and deployment of such demand resources. D.P.U. 07-50-A at 24-25. In considering the various ratemaking alternatives that would promote the implementation of all cost-effective demand resources, the Department concluded that a full decoupling mechanism best meets the objectives of: (1) aligning the financial interests of the companies with policy objectives regarding the efficient deployment of demand resources; and (2) ensuring that the companies are not harmed by decreases in sales associated with any increased use of demand resources. D.P.U. 07-50-A at 31-32. The Department noted that the conclusions reached in D.P.U. 07-50-A represented a general statement of policy, and that issues such as the equity and appropriateness of specific cost-allocations and revenue recovery would be investigated and addressed based on the evidentiary record in the adjudication of a distribution company's individual proposal to decouple rates. D.P.U. 07-50-B at 28-29.

b. Full Revenue Decoupling

WMECo has proposed a full revenue decoupling mechanism, whereby actual billed revenue would be reconciled with the Company's target revenue on an annual basis.

WMECo's RDM proposal would hold it harmless from losses in sales, regardless of their

origin. The Attorney General suggests that WMECo's RDM proposal could provide the Company with more revenue than is necessary to reduce or eliminate any financial disincentive to promote energy efficiency and that, if the Department is concerned about declining sales, a revenue-per-customer model may be preferable. Under a revenue-per-customer model, the Company would bear the financial risk associated with a reduction in the number of customers but would be kept whole in the event of a decrease in usage per customer. The Department endorsed a revenue-per-customer approach in D.P.U. 07-50-A, but acknowledged that the model may not address a company's need for additional revenue in order to support its distribution system, and therefore, that it would consider alternative proposals.

D.P.U. 07-50-A at 48-50. We have also stated that we must evaluate the appropriateness of each decoupling mechanism on a case-by-case basis, taking into consideration all aspects of the proposal and any relevant circumstances. D.P.U. 07-50-A at 50. Since then, we approved revenue-per-customer decoupling mechanisms for Bay State Gas in D.P.U. 09-30 and for National Grid (Gas) in D.P.U. 10-55, at 40. The Department approved a total revenue approach, similar to WMECo's proposal, for National Grid (Electric) in D.P.U. 09-39, at 89.

WMECo acknowledges that difficult economic conditions in its service territory have severely affected its ability to earn its authorized rate of return in recent years (Exh. WM-RJA-1, at 14). Over a 51-month period between December 2005 and March 2010, WMECo experienced a steady decline in electricity sales that amounted to approximately eleven percent (Exh. WM-RJA-1, at 14). The decline was largely due to a drop in the number of industrial customer accounts from 894 in 2005, to 692 in 2009 (Exhs. AG-WM-5-10;

AG-WM-5-12). The Company's RDM proposal will shift the financial risk of changes in sales from its shareholders to its ratepayers because changes in the Company's revenue will be reconciled for changes in sales due to weather and economic activity as well as to conservation and demand resources. However, the Department must consider the financial risks associated with the Company's RDM and the risks attributable to rising commodity costs, along with the reality of a carbon-constrained economy and our policy goal of removing barriers to the full implementation of demand resources. See, e.g., D.P.U. 07-50, at 2; D.P.U. 07-50-A at 2; D.P.U. 10-54, at 108. We find that the Company's RDM appropriately balances these risks and that it is consistent with the Commonwealth's commitment to eliminate the financial barriers that prevent the full engagement and participation of gas and electric distribution companies in efforts to reduce energy demand. Therefore, we approve the Company's proposal to fully decouple its revenue from its sales but we will factor in the shifting of risk inherent in the mechanism as we consider the Company's other proposals for the CRRC, an inflation adjustment, and its return on equity ("ROE").

c. Three-Year Review Process and Oversight of RDM Adjustments

The Attorney General encourages the Department to conduct a multi-faceted review of the Company's decoupling policy, perhaps alongside the Department's evaluation of the Company's three-year energy efficiency plans. We find it unnecessary to mandate a formal three-year review of the Company's RDM proposal at this time. However, we do find that the Company's annual decoupling filings should be modified to include additional information that may be helpful to the Department and to any interested parties that wish to monitor the



Company's RDM on a year-to-year basis. As such, we direct the Company to amend its annual RDM filings to include for residential, commercial, industrial, and street lighting customers: (1) monthly customer counts; (2) monthly kWh sales; (3) weather normalized monthly kWh sales; (4) lost base revenue from energy efficiency programs for the most recent calendar year available; and (5) forecasted sales for the next two years.

d. Reconciliation of the RDM Using Demand-Based Rates

DOER and ENE argue that the Company's proposal to recover the difference between actual revenue and target revenue using demand charges (i.e., KW-based rather than kWh-based) for the C&I rate classes does not provide the proper price signal necessary to encourage energy efficiency and investment in demand resources. Each recommends that the Department require the reconciliation of WMECo's RDM adjustment based on energy (i.e., kWh charges) sales alone.

The Department has found that it is appropriate to recover reconciled revenues through the energy component of the distribution charge in order to provide incentives to customers to reduce consumption and to balance the application of various ratemaking principles including cost causation, rate continuity, rate stability, and administrative efficiency. D.P.U. 07-50-A at 59. We find that those same principles apply here. Specifically, we find that a single RDM reconciliation factor for all of the Company's customers based on kWh sales is both administratively efficient and consistent with the Commonwealth's efforts to encourage conservation and the deployment of demand resources. We direct the Company to modify its

RDM tariff so that annual RDM reconciliations are allocated amongst all rate classes on a uniform kWh charge.

e. Cap on Annual Adjustments

ENE argues that the Company's proposal for a one percent cap on annual RDM reconciliations should be increased to three percent to be consistent with the Department's decisions in D.P.U. 09-30 and D.P.U. 09-39 and to limit the potential for intergenerational inequities. The Department has previously stated that revenue decoupling adjustments should be large enough to avoid intergenerational inequity and unfairness in rates but small enough to preserve continuity in rates. D.P.U. 09-39, at 87. We must always be mindful of the impact that changes in rates may have on customer bills, especially in service territories where difficult economic circumstances may make customers particularly prone to the adverse impact of large rate increases. The sole purpose of WMECo's proposed RDM cap is to limit large annual changes in rates and to avoid "rate shock" for customers. We find that this is appropriate and therefore, we reject ENE's proposal to increase the cap on annual RDM reconciliations. Additionally, as we stated in D.P.U. 09-30, at 117, and in D.P.U. 09-39, at 88, the Department finds that it is appropriate to continually evaluate and monitor changes in the market that could violate our existing ratemaking goals and render this cap inappropriate. Accordingly, the Department may review and modify such a cap, as necessary, over the course of the Company's revenue decoupling adjustment filings.

f. Conclusion

We find that the Company's RDM will effectively sever the link between revenue and sales because it will reconcile the Company's target revenue with its actual billed revenue on an annual basis. Furthermore, we find that the Company's RDM is consistent with the Department's directives in D.P.U. 07-50-A and D.P.U. 07-50-B.

The proposed full decoupling mechanism appropriately aligns the financial interests of the Company with the efficient deployment of demand resources and will ensure that the Company is not harmed by decreases in sales associated with an increased use of demand resources. Further, we find that operation of the Company's RDM, as modified to include annual reporting requirements and a kWh-based reconciliation charge for all customer classes, will result in just and reasonable rates. Accordingly, the Company's proposed revenue decoupling mechanism, as modified herein, is approved. We will address the Company's proposed CRRC and inflation adjustment in the following sections.

2. CRRC Adjustment

WMECo's proposed CRRC adjustment mechanism would allow the Company to adjust its annual target revenue to recover the costs of the capital investment program. The adjustment would be calculated as the sum of the incremental capital costs, depreciation expense, property taxes, and a return on the CRRC rate base at the pre-tax return allowed in this proceeding. WMECo states that because it will have decoupled rates, without the CRRC it will not have the opportunity to use increased revenue from sales growth to fund its reliability program, which may preclude it from making the necessary investments in its infrastructure to

prevent the further decline of reliability and service quality (Company Brief at 32, 36). The Attorney General contends that the Company has not demonstrated the need for or the appropriateness of the CRRC and that it would unfairly shift risk to the Company's customers (Attorney General Brief at 21-22, 24-25, 27, 32-36).

In D.P.U. 07-50-A, the Department recognized that revenue decoupling would, all other things being equal, remove the opportunity for companies to earn additional revenue from sales growth between rate cases and that such additional revenue was used to pay for, among other things, increasing O&M costs as well as costs related to system reliability and capital expansion projects. D.P.U. 07-50-A at 48. The Department stated that it would consider company-specific proposals that adjust target revenue to account for capital spending and inflation, and that a company would bear the burden to demonstrate the reasonableness of its proposal. D.P.U. 07-50-A at 50. After removing the effects of weather from its sales, however, WMECo has not realized sales growth in recent years, and its forecasts do not create an expectation of sales growth for the next few years (Exhs. WM-RJA-1, at 14; WM-RJA-1-1; AG-WM-5-4; AG-WM-5-12). Thus, it is not apparent that revenue decoupling will remove WMECo's opportunity to earn additional revenue between this base rate proceeding and the next one.

One of the Department's objectives in establishing a decoupling mechanism is to better align distribution companies' revenues with their costs. D.P.U. 07-50-A at 11. The Department typically considers reconciling tariffs such as the CRRC under circumstances in which a company's operating costs are under pressure due to significant volatility as a result of

circumstances outside its control, such as fuel costs. Consumers Org. for Fair Energy Equal. v. Dep't of Pub. Utils., 368 Mass. 599, 601-608 (1975). Therefore, as the Department examines the Company's CRRC we must give careful consideration to the formation of any new fully reconciling cost mechanism. D.P.U. 10-55, at n.43. The Department must closely examine how each mechanism achieves its intended goals and how the implementation of each mechanism impacts rates and a company's financial well being before considering the adoption of reconciling mechanisms. D.P.U. 10-55, at 66, citing D.P.U. 07-50-A at 50. Specific criteria the Department considers when determining whether to allow a new fully reconciling mechanism include whether the costs at issue are: (1) volatile in nature; (2) large in magnitude; (3) neutral to fluctuations in sales; and (4) beyond the company's control. D.P.U. 10-55, at n.43, citing Bay State Gas Company, D.T.E. 05-27, at 183-186 (2005); Boston Edison Company, Cambridge Electric Light Company, and Commonwealth Electric Company, D.T.E. 03-47-A, at 25-28, 36-37 (2003); Eastern Enterprises and Essex County Gas Company, D.T.E. 98-27, at 6, 28 (September 17, 1998). The Department has previously allowed reconciling tariffs such as the CRRC in cases in which a distribution company has adequately demonstrated the need to recover between rate cases incremental costs associated with Department approved capital expenditure programs. D.P.U. 09-30, at 133-134; D.P.U. 10-55, at 121-122, 132-133; D.P.U. 09-39, 79-80, 82.

We recognize that the Company's SAIDI and SAIFI performance has generally deteriorated in recent years, and that the Company failed to meet the Department's service quality standards in 2008 and 2009 (Exhs. AG-11-1; AG-11-21; WM-DFW at 2). Service

Quality, D.P.U. 09-18/19/20/23, at 4 (2011); Service Quality, D.P.U. 10-SQ-10/11/12/13/14, at 4 (2011). The Company's response to this trend is the CRRC, a three-pronged capital spending program consisting of the replacement of aging infrastructure, storm hardening, and distribution automation (Exh. WM-DFW at 2). There are inconsistencies, however, between the structure of many of the programs included in the proposed CRRC and the overall goal of the program as stated by the Company. The Company estimates that, at the conclusion of the ten-year CRRC program, its storm hardening (without circuit ties) and distribution automation initiatives alone will achieve approximately 76 percent of the SAIDI benefits and 81 percent of the SAIFI benefits of the entire CRRC program (see, e.g., RR-DPU-WM-23, at 2). The estimated cost of these components is \$46 million, which is approximately 16 percent of the \$289 million CRRC program budget (see, e.g., Exh. WM-DFW-1-Rev.). While the Company states that a key objective of the program is to improve service quality, based on the evidence provided by the Company, we are not persuaded that many of the more capital-intensive programs in the CRRC will have a significant effect on the Company's SAIDI and SAIFI performance or on overall reliability (RR-DPU-WM-29). This inconsistency between the purpose of the CRRC and its predicted effects requires us to inquire further into the urgency of the Company's demand for additional capital and the need for its proposed reconciling mechanism.

Approximately \$64 million of the \$124 million proposed budget for CRRC initiatives to replace aging infrastructure will be dedicated to the proactive replacement of overhead wire, a program that will provide less than seven percent of the SAIDI and SAIFI benefits expected

from the entire CRRC program over a ten-year period (see, e.g., Exh. WM-DFW-1-Rev.; RR-DPU-WM-23, at 2). The Company proposes to replace hundreds of miles of its oldest small gauge wire through this program, but the record indicates that the Company has not yet identified the oldest segments of overhead wire that it will replace, it does not have an accurate method for identifying this wire, nor has it demonstrated that its older wire has experienced a disproportionately high rate of failure (Exhs. WM-DFW-1-Rev.; DPU-WM-8-9; Tr. 7, at 1192-1203; RR-DPU-WM-21). Based on the inadequate design of the overhead wire replacement program and its minimal contribution to reducing SAIDI and SAIFI metrics in comparison to the expenditures, we find that this program does not warrant inclusion in the CRRC, in which recovery of investments would occur outside of a base rate proceeding.

Overall, many initiatives within the Company's CRRC proposal, and particularly within the aging infrastructure initiative, are for activities that have received either little or no funding by the Company over the past ten years, which casts doubt on the Company's argument that these activities represent urgent and ongoing priorities (Exh. DPU-WM-7-13).<sup>27</sup> Although the Company claims that a key objective of the CRRC program is to make additional capital available in order to replace the Company's aging infrastructure, we find that the Company has failed to demonstrate that it is necessary and in the best interests of ratepayers.

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<sup>27</sup> In the nine years prior to the Company's test year, WMECo made no investments in the overhead wire replacement program, the live front protector replacement program and the transformer replacement program (Exh. DPU-WM-7-13). It made minimal investments in many of the other program categories (Exh. DPU-WM-7-13). The CRRC would increase the average annual budget for many of these programs by at least a factor of ten (Exhs. DPU-WM-7-13; WM-DFW-1-Rev.)

Under traditional ratemaking mechanisms, a distribution company does not earn a return of (through depreciation expense) nor return on (through return on equity) the capital expenditures that it makes after the test year. See, e.g., D.P.U. 09-39, at 80. By and large, traditional ratemaking policies provide distribution companies with the appropriate incentive to make necessary infrastructure investments in a way that is efficient and equitable for both shareholders and ratepayers. D.P.U. 09-39, at 80-81. During its subsequent base rate proceeding, a company may include new capital expenditures in its rate base and once the base rates approved by the Department have taken effect, then the company begins to recover a return of and on its expenditures. D.P.U. 09-39, at 80. The delay in recovery between the time that a company incurs capital expenditures and the time that it recovers a return of and on such expenditures in its base rates is referred to as regulatory lag. D.P.U. 09-39, at 80. The Department has found that regulatory lag provides an incentive for companies to control costs and to invest in capital wisely. D.P.U. 09-39, at 80.

We make no determination here regarding the optimal level of capital investments that the Company should make to ensure safe and reliable service to its customers. We expect that gas and electric distribution companies will make all necessary capital investments to ensure safe and reliable service for their customers. Also, we acknowledge that many of the activities proposed by the Company as part of the CRRC may have merit. The Company has failed to demonstrate, however, that there are extraordinary circumstances, by virtue of decoupling, price volatility, effect on earnings, or any other cost driver that precludes it from acquiring the capital necessary to make required investments in its infrastructure. We find that the Company



has not demonstrated that an additional reconciliation mechanism is warranted or that it is in the best interests of ratepayers. As a result, we decline to approve the Company's proposed CRRC adjustment to its target revenue.<sup>28</sup>

### 3. Inflation Adjustment

WMECo's proposed inflation adjustment would allow it to make annual adjustments to its target revenue to account for changes in inflation in the overall economy, as measured by the GDP-PI (Exhs. WM-RJA-1, at 25-26; WM-JDS-2, at 3). The Company proposed an annual increase that would be exactly equal to the increase in the GDP-PI. Specifically, WMECo proposed an inflation adjustment factor of 1.6, minus an implied consumer dividend of 0.6, for a resulting inflation adjustment factor of 1.0 (Exh. WM-JDS-2, at 3, 20). The Company argues that an inflation adjustment is a necessary component of a sustainable decoupling proposal because, in the absence of any opportunity to earn revenue between rate cases from growth in the number of customers or sales, an inflation adjustment provides relief from inflationary pressure. The Attorney General counters that inflation adjustment mechanisms are inequitable, result in inefficient management of costs, and have been rejected in all recent revenue decoupling decisions.

In D.P.U. 07-50-A, at 48, the Department acknowledged that revenue decoupling would remove the opportunity to earn additional revenue between rate cases from growth in

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<sup>28</sup> Accordingly, we will not address UMA's proposal to allocate specific portions of the CRRC budget to UMA and the Amherst area. As provided in Section XV of this Order, the Department has established specific reporting and planning requirements for WMECo to address UMA's service issues.

sales and customers, and that such revenue was traditionally used to pay for, among other things, increasing O&M costs as well as system reliability and capital expansion projects. Further, the Department recognized that changes in a distribution company's costs could arise from inflationary pressures on the prices of the goods and services it uses. D.P.U. 07-50-A at 49. The Department concluded that it would consider company-specific proposals that adjust a company's target revenue to account for inflation and that a company would bear the burden of demonstrating the reasonableness of its proposal. D.P.U. 07-50-A at 50. Here, we must determine whether WMECo's proposed inflation adjustment should be approved, based on its specific circumstances. As an initial matter, the level of inflation in the overall economy has been relatively low, growing at approximately two percent per year over the past ten years (Exhs. AG-DED-2; AG-DED-3). An inflation adjustment may only be necessary during periods of high inflation, where it represents a significant cost that a distribution company has a limited ability to manage. D.P.U. 10-55, at 65. In the current era of low inflation, however, it is not justified. We find that the Company's allowed ROE provides it with a reasonable means of compensation for assuming the normal business risk of inflation.

In addition, the Company's inflation adjustment proposal does not comply with the minimum standards that the Department identified for considering a company-specific inflation proposal. While inflation adjustment mechanisms may be necessary with decoupling to compensate companies for eliminating the opportunity for increased revenue from growth in sales between rate cases, WMECo has experienced declines in sales and the number of customers over the past few years (Exh. AG-WM-5-10). From 2004 to 2009, the number of

commercial customers in the Company's service territory decreased by 12.3 percent and the number of industrial customers decreased by 22.5 percent (Exh. AG-WM-5-10). Over that same period, the Company's weather normalized sales declined by approximately ten percent (Exhs. AG-WM-5-12; WM-RJA-1-1).<sup>29</sup> Furthermore, WMECo's forecasts show continued loss of sales in future years, primarily due to a continued reduction in the number of industrial customers that outweighs increases in the number of residential customers (Exhs. AG-WM-5-4; AG-WM-5-10; AG-WM-5-12).<sup>30</sup> The Company's basic RDM mechanism will insulate it from declining sales, regardless of the reason for the decline. As designed, the RDM will likely provide the Company with more capital than it would otherwise have, and such funds can be used to offset the effects of inflation and to invest in capital infrastructure. Given these factors, the Department must determine whether there is a need for an inflation adjustment mechanism independent of decoupling and whether it appropriately balances the interests of ratepayers and shareholders. We find that the Company's proposed inflation adjustment does not strike an appropriate balance and it is inconsistent with Department precedent, and is thus unwarranted.

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<sup>29</sup> From 2004 to 2009, WMECo's weather-adjusted commercial and industrial sales declined by six percent and 27 percent, respectively (Exh. AG-WM-5-12).

<sup>30</sup> WMECo relies on several regression models to develop its sales forecasts, reflecting economic and demographic conditions (Exh. AG-WM-5-11). Key economic drivers used by WMECo include real average personal income per household for residential forecasts, service-producing employment for commercial forecasts, and manufacturing employment for industrial forecasts (Exh. AG-WM-5-11). The accuracy of the Company's billed revenue forecasts has varied from year to year (RR-DPU-WM-47).

Because the Company may file for rate relief as it deems necessary pursuant to G.L. c. 164, § 94, it can address increased costs such as those caused by inflation by petitioning the Department to establish new rates. In a base rate proceeding, the Department and intervenors will have the opportunity to examine not only inflationary effects on costs but also the Company's level of other costs, capital investments, ROE, allocations of costs to rate classes, and rate design. While the ostensible purpose of an inflation adjustment mechanism is to ensure that a company can cope with inflationary pressure on its costs, such mechanisms also inevitably prolong the period of time between rate cases, which creates a risk that rates will not remain just and reasonable. Because of the complexity of revenue decoupling, ongoing rate design issues (as discussed in detail in later sections of this Order), and the need to appropriately balance the interests of ratepayers and shareholders in accordance with changing circumstances, we find no justification to approve an inflation adjustment mechanism that would potentially and unnecessarily prolong the period of time until the Company's next rate case filing. Accordingly, WMECo's proposal to include an inflation adjustment to its annual target revenue is denied.

#### 4. Tariffs and Filings

The Department has determined that the Company's revenue decoupling mechanism, as modified to include reporting requirements and a reconciliation adjustment based on kWh sales for all customers, will result in just and reasonable rates. Accordingly, we direct the Company in its compliance filing to revise its decoupling tariff, M.D.P.U. No. 1050A at 4, to:

(1) include the reporting requirements identified by the Department in Section III.D.1.c.,

above; (2) state that all adjustments to rates from the RDM reconciliation will be collected on the basis of kWh sales; (3) remove all references to the CRRC, including the table of RDM allocation factors; (4) remove all references to the inflation adjustment mechanism; (5) remove the values associated with the CRRC and the inflation adjustment mechanism, including but not limited to the rate formula on page 2; and (6) make any other changes necessary to comply with this Order.

#### IV. RATE BASE

##### A. Introduction

WMECo reported a pro-forma test year total utility plant in service of \$656,136,785 (Exhs. WM-JLM B-1.0; WM-JLM B-2.0). The Company reduced the test year total plant in service by \$184,026,549 to account for accumulated depreciation, resulting in a net utility plant in service of \$472,110,236 (Exhs. WM-JLM B-1.0; WM-JLM B-3.0). WMECo further reduced the net utility plant in service by the following amounts: (1) \$113,597,594 for deferred income taxes; (2) \$1,616,328 for customer deposits; (3) \$515,520 for customer advances; (4) \$425,736 for unclaimed funds; and (5) \$3,075 for unamortized pre-1971 investment tax credits (Exh. WM-JLM B-1.0). Finally, the Company added the following amounts: (1) \$2,968,705 for materials and supplies, excluding fuel; (2) \$9,693,000 for cash working capital; and (3) \$13,015,944 in storm reserves (Exh. WM-JLM B-1.0). Based on these adjustments, the Company determined that its total rate base was \$381,629,632 (Exh. WM-JLM B-1.0).

B. Plant Additions

1. Introduction

As part of its initial filing, WMECo provided a list of 35 capital projects of \$250,000 or more that were completed between January 1, 2006, and December 31, 2009 (Exhs. WM-JLM at 61-62; WM-JLM WP B-2.1, at 1-2). For each of these projects, the Company provided (1) the project number, (2) project title, (3) a brief description of the project, (4) the completed project cost, (5) the approved cost estimate, (6) the variance from the approved project amount, and (7) the variance percentage (Exh. WM-JLM WP B-2.1, at 1-4). The Company provided this same information for capital projects completed under blanket and annual authorizations over the years 2006 through 2009 (Exh. WM-JLM WP B-2.1, at 3-4).<sup>31</sup> During the proceedings, the Company also provided the capital authorizations and closing reports for 51 projects costing between \$50,000 and \$250,000 that were completed between January 1, 2006, and December 31, 2009 (Exhs. AG-1-19, Atts. Bulk A and Bulk B; AG-1-19 (Supps. A through M)).

2. Position of the Company

WMECo contends that it has demonstrated that its capital expenditures were prudent, that it has controlled costs, and that its plant additions are used and useful, providing service to customers in accordance with the Department's standard of review (Company Brief at 70-71, citing Fitchburg Gas and Electric Light Company, D.T.E. 98-51, at 9 (1998); Boston Gas Company, D.P.U. 96-50 (Phase I), at 15 (1996) Western Massachusetts Electric Company,

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<sup>31</sup> Blanket authorizations are associated with multi-year capital projects (Tr. 3, at 546-548).

D.P.U. 85-270, at 20, 25-27 (1986); Massachusetts-American Water Company, D.P.U. 95-118, at 39-40 (1996); Massachusetts Electric Company, D.P.U. 95-40, at 7 (1995); Boston Gas Company, D.P.U. 93-60, at 26 (1993); Fitchburg Gas and Electric Light Company, D.P.U. 84-145-A at 26 (1985)). WMECo states that because no party has taken issue with the Company's proposed plant additions, the Department should approve the plant additions set forth in the Company's initial filing (Company Brief at 71, citing Exh. WM-JLM B-2.1).

### 3. Analysis and Findings

The Department's standard of review for plant additions is that the expenditures must be prudently incurred and the resulting plant must be used and useful to customers. Western Massachusetts Electric Company, D.P.U. 85-270, at 20, 25-27 (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 earn 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 should have known at that time, were reasonable and prudent in light of the extant circumstances. Boston Gas Company, D.P.U. 93-60, at 24 (1993). 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. Dep't of Pub. Utils., 390 Mass. 208, 229 (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; Boston Edison Company, D.P.U. 906, at 165 (1982). 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 should have been known at the time.

Massachusetts-American Water Company, D.P.U. 95-118, at 40 (1996), citing D.P.U. 93-60, at 35; Fitchburg Gas and Electric Light Company, D.P.U. 84-145-A at 26 (1985).

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), citing D.P.U. 93-60, at 26 (1993); (1993); Mass. Elec. Co. v. Dep't of Pub. Utils., 376 Mass. 294, 304 (1978); Metro. Dist. Comm. v. Dep't of Pub. Utils., 352 Mass. 18, 24 (1967). 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.



Between 2006 and 2009, WMECo completed 71 projects with a total cost in excess of \$50,000, including 35 projects with a total cost in excess of \$250,000 (Exhs. WM-JLM WP B-2.1, at 1-2; AG-1-19, Bulk B at 1-392). Those projects that exceeded \$250,000 represented 93.7 percent of total in-service plant additions made between 2006 and 2009, all of which were completed at or below the total cost that was originally estimated (Exh. WM-JLM WP B-2.1, at 1-2).

The Department has reviewed the supporting documentation, including the Company's capital budgets and authorization process (Exhs. WM-JLM WP-B 2.1; WM-JLM, App. 1; AG-1-19; AG- 1-19, Apps. A through M). Based on our review of this data and supporting documentation, the Department finds that the Company has provided sufficient and reviewable evidence to demonstrate that it has controlled costs, that there were no cost overruns, and that the project expenditures were prudent (Exh. WM-JLM, App. 1; Tr. 3, at 546-548). The Department's review of the supporting documentation also leads us to conclude that the Company acted prudently in estimating the costs associated with these projects, and promptly revised the estimates as necessary (Exh. WM-JLM, App. 1). Furthermore, we note that the plant that the Company has proposed for inclusion in rate base is currently in service, and is used and useful (Exh. WM-JLM WP-B 2.1). Accordingly, we will allow the cost of these projects to be included in rate base.

C. Booking Adjustments

1. Introduction

As of the end of the test year, the Company reported a total balance of \$11,657,139 in Account 373 (Street Lighting and Signal Systems) (Exh. WM -JLM B-2.1). The Company has proposed to increase its test year-end Account 373 balance by \$1,844,000, with a corresponding increase to its depreciation reserve of \$1,844,000 (Exhs. WM-JLM B-2.1, at 1; WM-JLM B-3.1). According to WMECo, although the Company had sold the associated streetlighting equipment in February of 2008, an additional retirement work order was inadvertently created in December of 2009 (Exh. AG-25-13). The resulting overretirement of streetlighting assets was corrected in January of 2010 (Exh. AG-25-13).

Similarly, WMECo has proposed to increase its test year-end general plant balance by \$1,502,098 booked to Accounts 391 (Office Furniture and Equipment), Account 393 (Stores Equipment), Account 397 (Communications Equipment), and Account 398 (Miscellaneous Equipment) (Exh. WM-JLM B-2.1). The Company has proposed a corresponding increase of \$3,177,148 to the accumulated depreciation associated with each of these accounts (Exh. WM-JLM B-3.1).<sup>32</sup> According to WMECo, the Company had inadvertently retired these assets during the years 2006 through 2009 using amortization periods ranging from 15 to 20 years, rather than the authorized amortization period of 25 years (Exhs. AG-25-14;

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<sup>32</sup> The Company proposed the following reductions to accumulated depreciation associated with general plant: (1) \$458,516 for Account 391 plant; (2) \$204,699 for Account 393 plant; (3) \$613,465 for Account 397 plant; and (4) \$38,365 for Account 398 plant (Exh. WM- JLM B-2.1).

AG-25-15). As a result, the Company stated that it experienced premature retirements in these accounts (Exhs. AG-25-14; AG-25-15).

## 2. Analysis and Findings

Utility companies have an ongoing obligation to ensure that their accounting records are accurate, and to correct any errors that are found. Boston Edison Company, D.T.E. 97-95, at 78 (2001). When accounting errors have been identified, the Department has directed those companies to make the appropriate corrections. Boston Edison Company, D.T.E. 97-95, at 92-93 (2001); Colonial Gas Company, D.T.E. 98-128, at 49 n.33 (1999); Assabet Water Company, D.P.U. 95-92, at 5-9 (1996); Witches Brook Water Company, D.P.U. 92-226, at 14 (1993).

The erroneous retirement work order issued on the Company's streetlighting equipment in late 2009 resulted in an understatement of streetlighting plant (Exh. AG-25-13). Turning to WMECo's proposed general plant and depreciation reserve adjustments, the Company's currently-approved depreciation accrual rate for Accounts 391, 392, 393, 394, 395, 396, 397, and 398 is 4.0 percent, which equates to a depreciable life of 25 years (Exh. WM-REW-2, Statement A, at 14). There is no evidence that WMECo intentionally applied higher accrual rates to these accounts than those authorized. Cf. Commonwealth Gas Company, D.P.U. 87-122, at 5-8 (1987) (company's voluntary decision to apply higher depreciation accrual rates than those approved by Department in earlier proceeding did not warrant retroactive correction of depreciation reserve). The Department finds that WMECo has appropriately adjusted its books to correct for the double-booking of streetlight asset sales and

incorrect depreciation accrual rates applied to general plant. Therefore, the Department approves the Company's proposed plant and depreciation reserve adjustments.

D. Joint Pole Agreement

1. Introduction

WMECo and Verizon New England, Inc. ("Verizon")<sup>33</sup> are signatories to a 1993 joint ownership agreement ("JOA") that sets forth the operating procedures for the sharing of expenses associated with jointly-owned poles, including installation, relocation, tree trimming, and heavy storm work (Exh. AG-3-13, Att. at 1-2; Tr. 11, at 1789-1790). Under the JOA, the Company and Verizon are deemed solely responsible for setting and replacing poles within specific geographic boundaries ("maintenance areas") (Exh. AG-3-13, Att. at 28-33; Tr. 11, at 1789). Each month, the parties bill each other for poles that each has set in its respective custodial areas (Tr. 11, at 1789-1790; Tr. 14, at 2352-2353; RR-AG-75).<sup>34</sup> The JOA specifies a flat rate of \$325 for a new pole, with replacement poles billed at flat rates of \$253.50 for installation and \$71.50 for removal (Exh. AG-3-13, Att. at 38; RR-AG-75).<sup>35</sup> The billed parties review the charges to ensure their accuracy and perform field inspections to confirm that billed poles actually have been set (RR-AG-75). Following the parties' verification process, the bills are netted against each other and the entity that owes more for any particular

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<sup>33</sup> Verizon provides regulated wireline telecommunications service within New England.

<sup>34</sup> The JOA requires WMECo to bill Verizon within 60 days of the completion of any work done (Exh. AG-3-13, Att. at 7).

<sup>35</sup> If a signatory requires a pole with additional height, an extra charge of \$100 is imposed (RR-AG-75).

month pays the net difference (RR-AG-75). During the test year, the Company reported that the transactions pursuant to the JOA resulted in a net expense to WMECo of \$20,000 (Tr. 11, at 1795; Tr. 14, at 2353).

Pursuant to the JOA, the party deemed to be custodian of a particular pole is responsible for its replacement (Exh. AG-3-13, Att. at 28-33). Since at least 2007, however, both companies have terminated the practice of intercompany billing for poles set during major storms, in recognition of the fact that during storm restoration, poles are set by each company as needed without regard to custodial areas (RR-AG-75; RR-AG-79).

2. Positions of the Parties

a. Attorney General

The Attorney General claims that WMECo has failed to enforce the terms of the JOA, thereby exposing its customers to the risk of higher expense levels in rates (Attorney General Brief at 116). By way of example, the Attorney General claims that WMECo's test year cost of service does not incorporate any sharing of tree trimming expenses with Verizon, despite the JOA's cost-sharing arrangement that obligates Verizon to pay for: (1) 25 percent of joint preventative maintenance; (2) 40 percent of line extensions; and (3) 50 percent of both tree topping and heavy storm work (with a three-way split for tree removal involving a third party) (Attorney General Brief at 119, citing Exh. AG-3-13, Att. at 42; Tr. 6, at 1016). The Attorney General also argues that the Company did not provide a detailed analysis of all the monthly transactions pursuant to the JOA for the test year and how these transactions affected the Company's books (Attorney General Brief at 118, citing RR-AG-74; RR-AG-75).

The Attorney General criticizes WMECo for ceasing to apply the JOA's billing procedures for restoration work associated with major storms. She challenges the Company's assumption that billings from Verizon will "likely" result in an offsetting of costs that results in no net change in the Company's expense (Attorney General Brief at 117, citing RR-AG-79). She reasons that the Company's underlying assumption is unrealistic that a storm will affect custodial areas uniformly, and thus affect an equal number of poles within custodial areas (Attorney General Brief at 117). Furthermore, the Attorney General points out that because the JOA's pole costs also are billed to developers, municipalities, and other third parties, there is no "offsetting" bill from Verizon against which pole costs can be charged, thereby increasing overall expenses borne by WMECo's customers (Attorney General Brief at 120). The Attorney General asserts that under the Company's interpretation of the JOA, WMECo could bill Verizon for these pole costs after the issuance of this Order, and thus allow shareholders to reap all of the benefit at the expense of customers (Attorney General Reply Brief at 30-31).

The Attorney General also faults the Company for what she considers to be outdated pole costs under the JOA (Attorney General Brief at 119). According to the Attorney General, the pole costs used in the JOA date back to 1993 (Attorney General Reply Brief at 31). Despite the length of time that has elapsed since the initiation of the JOA, the Attorney General contends that the Company has failed to perform any analysis to determine the current relative ownership of poles between itself and Verizon, and has failed to substantiate the underlying assumptions behind its current billing practice (Attorney General Brief at 119-120; Attorney

General Reply Brief at 31). Furthermore, the Attorney General maintains that given the Company's current pole practices, WMECo has made it impossible to collect the type of data that would be necessary to review the Company's current pole costs (Attorney General Reply Brief at 31).

The Attorney General contends that WMECo has demonstrated imprudence in its failure to adhere to the terms of the JOA and to provide a complete explanation of the operation of the agreement. The Attorney General asserts that the Company's ratepayers should not pay for any expense in the cost of service or through a storm fund that the Company could have recovered from third parties (Attorney General Brief at 120). The Attorney General argues that the Department should make an appropriate reduction to the Company's ROE based on the evidence in this proceeding that the Company did not comply with the provisions in the JOA governing pole replacements during storm events (Attorney General Brief at 120, citing Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25 (2002); Attorney General Reply Brief at 31-32). Additionally, the Attorney General proposes that the Department reduce the Company's rate base by Verizon's share of the costs of poles that the Company placed in service during the test year, as determined by the JOA (Attorney General Brief at 121).<sup>36</sup>

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<sup>36</sup> During the test year, the Company's gross investment in Account 364 – Poles, Towers, and Fixtures increased by \$829,357 (Exh. AG-1-2 (8) at 206).

b. Company

WMECo argues that its current arrangement with Verizon provides the most cooperative and cost-effective approach to deal with restoration of service during major storms (Company Brief at 110-111; Company Reply Brief at 22). WMECo states that during major storms, the efforts of both the Company and Verizon are devoted to service restoration, and that it would be inappropriate to delay restoration efforts to discuss intercompany billing issues (Company Brief at 111; Company Reply Brief at 22). The Company maintains that the Attorney General's suggestion that WMECo and Verizon can easily meet after the storm restoration work is completed to work out intercompany billing issues is impractical because of the intense level of activity and number of crews involved in service restoration (Company Reply Brief at 22). WMECo points out that this practice is similar to that used for tree trimming during major storms, which it argues benefits both the Company and Verizon (Company Brief at 111, citing Tr. 11, at 1969-1970).

The Company defends the use of the current pole costs fixed under the JOA, arguing that the Attorney General has failed to point to any evidence to support her assertion that the 1993 rates are outdated (Company Brief at 112). The Company further maintains that increasing the 1993 pole rates would result in little net difference in costs, reasoning that offsetting pole costs are roughly equal for both WMECo and Verizon (Company Brief at 112).

WMECo argues that the Attorney General's allegation that the Company has not properly managed the JOA is unsupported by any record evidence in this case (Company Brief at 113; Company Reply Brief at 22). The Company also argues that the record is devoid of



any evidentiary basis on how to compute the Attorney General's proposed rate base adjustment (Company Brief at 112). The Company further reasons that because pole installation costs are netted out monthly, any resulting rate base adjustment may be as low as \$20,000, either as an addition or reduction (Company Brief at 112). Consequently, WMECo argues that the Attorney General's claim of "poor management" is unfounded and should be dismissed (Company Brief at 113; Company Reply Brief at 22).

### 3. Analysis and Findings

As a general matter, the Company is obligated to demonstrate that it is not seeking to recover any costs from its customers that should be paid instead by Verizon under the JOA. Massachusetts Electric Company/Nantucket Electric Company, D.P.U. 09-39, at 212-213 (2009). Concerning the issue of costs that should be shared with Verizon, the JOA specifies that the various cost sharing arrangements apply "[w]hen it is agreed that both parties will benefit from Joint Tree Trimming" (Exh. AG-3-13, at 42). However, Verizon's equipment is less susceptible to tree damage than electric distribution lines (Tr. 11, at 1966-1967).<sup>37</sup> Thus, the apportionment of costs provided for in the JOA is not as automatic as posited by the Attorney General. Moreover, the Company has sent a statement to Verizon requesting reimbursement for \$267,649 in tree-related work associated with the December 2008 ice storm; in turn, Verizon has requested reimbursement of \$80,417 for similar expenses

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<sup>37</sup> Electric power distribution lines and associated equipment are mounted at the top of the pole for safety reasons. Communications cables are attached below the electric power lines in the communications space. This locational difference accounts for the degree of susceptibility from tree damage.

(RR-DPU-34).<sup>38</sup> On this basis, the Department finds insufficient evidence to support the Attorney General's contention that WMECo is failing to adhere to the cost-sharing provisions of the JOA.

Concerning WMECo's suspension of intercompany billing for pole replacements associated with major storms, the Company defends this policy as a means of expediting service restoration. While we acknowledge the Company's expressed intent to restore service as quickly as possible, any company seeking to recover its capital additions, including pole replacements associated with a major storm, needs to maintain a complete record of those additions. 220 C.M.R. § 51.01(1); 18 C.F.R. Pt. 101, Uniform System of Accounts Prescribed for Public Utilities and Licenses Subject to the Provisions of the Federal Power Act, General Instructions, Sec. 2A. Moreover, while we accept the premise that it may be impractical to engage in intercompany billing during major storm restoration efforts, there is nothing to prevent either the Company or Verizon from reviewing those intercompany billings after the fact. The Department finds that the intercompany billing is a necessary means of accounting and recordkeeping, and we direct WMECo to resume its previous practice of intercompany billing.

We now turn to the Attorney General's argument that WMECo's rate base and ROE should be reduced for the Company's failure to adhere to the JOA. As an initial matter, although the Department has cautioned WMECo about its handling of intercompany billings

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<sup>38</sup> To date, neither the Company nor Verizon has issued actual bills, because both companies are continuing to verify the detail information (RR-DPU-34).

arising from major storm restoration efforts, we find that the Company's actions here do not rise to a level that warrants an ROE adjustment. Therefore, the Department declines to reduce the Company's rate base or allowed ROE based on WMECo's practices under the JOA.

E. Cash Working Capital

1. Introduction

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. Department policy permits a company to be reimbursed for costs associated with the use of its funds for the interest expense incurred on borrowing. Boston Gas Company, D.P.U. 96-50 (Phase 1) at 26 (1996), citing Western Massachusetts Electric Company, D.P.U. 87-260, at 22-23 (1988). This reimbursement is accomplished by adding a working capital component to the rate base computation.

Cash working capital needs have been determined through either the use of 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, citing D.P.U. 88-67 (Phase I) at 35. The Department, however, has expressed concern that the 45-day convention first developed in the early part of the 20<sup>th</sup> century no longer provides a reliable measure of a utility's working capital requirements. D.T.E. 03-40, at 92, citing D.T.E. 98-51, at 15; D.P.U. 96-50 (Phase I) at 27. Therefore, the Department requires each gas and electric distribution company to either: (1) conduct a lead-lag study where

cost-effective; or (2) propose a reasonable alternative to a lead-lag study to develop a different interval. D.T.E. 03-40, at 92; D.T.E. 02-24/25, at 57.

WMECo conducted a lead-lag study to determine the net lag days associated with purchased power and other operating expenses (Exh. WM-JLM S-1.0). The Company's lead-lag study compares the timing difference between (1) the receipt of service by customers and their subsequent payment for these services ("revenue lag"), and (2) the timing difference between the incurrence of costs by the Company and their subsequent payment ("expense lead") (Exh. WM-JLM S-1.0). The lead-lag study includes those rate elements for which there is no separate cash working capital allowance, such as basic service, transition charges, conservation charges, and renewable charges (Tr. 2, at 314).

To determine its proposed cash working capital allowance, the Company first identified the following expense categories: (1) payroll expense; (2) payroll deductions; (3) basic service expense; (4) transition costs; (5) transmission costs; (6) conservation expenses; (7) renewables costs; and (8) other O&M expense (Exh. WM-JLM S-1.0). The Company also categorized its various taxes as follows: (1) local property taxes; (2) federal unemployment taxes; (3) Massachusetts unemployment taxes; (4) Federal Insurance Contributions Act ("FICA") taxes; (5) Medicare taxes; (6) Massachusetts Universal Health taxes; (7) federal income taxes; and (8) Massachusetts franchise taxes (Exh. WM-JLM S-1.0; Tr. 2, at 313).

Next, WMECo computed the revenue lag by performing a statistical analysis on 827 customer accounts using stratified random sampling techniques, stratified by consumption (Exhs. WM-JLM at 60; WM-JLM-S-1.0, at 1; Tr. 3, at 560). Based on the results of this

statistical analysis, WMECo concluded that the appropriate revenue lag was 43.33 days (Exhs. WM-JLM at 60; WM-JLM-S-1.0A at 1-3).<sup>39</sup>

The Company then calculated an expense lag for each expense category identified above by analyzing the number of days from the midpoint of the month during which the particular expense by category was incurred and the Company's own payments to suppliers (Exh. WM-JLM S-1.0 C - S-1.0 N). Based on the results of this analysis, WMECo concluded that the appropriate expense lead ranged between a negative 15.91 days and a positive 74.72 days, depending upon the particular expense (Exh. WM-JLMS-1.0). The net difference between the revenue lags and the expense leads, weighted by the total pro forma expense by category, produced a total cash working capital balance of \$10,030,000 (Exh. WM-JLM S-1.0, at 1).

As a last step, the Company deducted \$337,000 from its pro forma cash working capital balance, representing the working capital included in costs associated with the securitization of WMECo's transition charge pursuant to Western Massachusetts Electric Company, D.T.E. 00-40 (2001) and Western Massachusetts Electric Company, D.T.E. 02-20 (2002) (Exhs. WM-JLM S-1.0; WM-JLM-REB at 14; Tr. 2, at 315).<sup>40</sup> After making this adjustment,

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<sup>39</sup> According to the Company, the revenue lag has increased since WMECo's previous rate settlement in D.P.U. 06-55, primarily because of an increase in the number of accounts in arrears (Tr. 2, at 317-318).

<sup>40</sup> According to WMECo, its other transition charge components, such as nuclear decommissioning costs and stranded purchased power contract costs, do not have separate cash working capital components (Exh. WM-JLM-REB at 14).

the Company concluded that its net lag factor was 10.03 days, representing a cash working capital requirement of \$9,693,000 (Exh. WM-JLM-S-1.0 at 1; Tr. 2, at 315; Tr. 3, at 557).<sup>41</sup>

2. Positions of the Parties

a. Attorney General

The Attorney General contends that the total expense figure employed by the Company to calculate its cash working capital requirement is overstated by uncollectible expense and transition costs (Attorney General Brief at 48-49, citing Exh. AG-DJE at 14-15). The Attorney General asserts that because uncollectible expenses are “non-cash expenses,” the Department should exclude them from the calculation of cash working capital, thus reducing the Company’s cash working capital allowance by \$241,000 (Attorney General Brief at 48, citing Exh. AG-DJE at 14).

The Attorney General also argues that WMECo has inappropriately included \$1,386,000 in cash working capital associated with transition costs in its lead-lag study (Attorney General Brief at 49-50, citing Exhs. AG-DJE at 15; AG-DJE Sch. 4 (Rev.)). According to the Attorney General, to the extent that there is a cash working capital requirement associated with transition costs, then that cash working capital requirement is already a component of the transition charge calculation (Exh. AG-DGE at 15; Attorney

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<sup>41</sup> The Company’s prefiled testimony references a net lag factor of 9.94 days (Exh. WM-JLM at 60). The Company stated that the correct net lag factor was the 10.03 days as provided in the supporting schedules (Tr. 3, at 555-556).

General Brief at 49-50).<sup>42</sup> In support of her position, the Attorney General contends that the Company's Securitization Rate Reduction Bond Payment accounts for approximately \$19.2 million of the estimated \$21.8 million in total transition costs incurred during 2010 (Exh. AG-DJE at 15). The Attorney General maintains that, because the Company's transition cost filing submitted in D.P.U. 09-115 includes carrying charges on the cash working capital requirement associated with the Securitization Rate Reduction Bond Payment, including a cash working capital allowance for transition costs as part of distribution rates would constitute double-recovery (Exh. AG-DJE at 15).

The Attorney General maintains that even if the Company's non-securitization transition costs do not include a cash working capital allowance, the fact that WMECo's purchased power cash working capital factor is represented by a negative lag means that the Company's nuclear decommissioning costs are the only expense item for which WMECo can claim to have no associated cash working capital allowance (Attorney General Brief at 50, citing Tr. 19, at 2879-2880; Attorney General Reply Brief at 16). However, the Attorney General argues that WMECo's cash working capital allowance for nuclear decommissioning expense relies on what she considers to be an unsupported proxy number based on the calculation of the Company's other O&M lags (Attorney General Brief at 50, citing Tr. 19, at 2883).

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<sup>42</sup> The Attorney General distinguishes this case from Massachusetts Electric Company/Nantucket Electric Company, D.P.U. 09-39 (2009), where the Department did allow the inclusion of cash working capital related to transition charges. The Attorney General reasons that, unlike the situation in D.P.U. 09-39, WMECo does not remit transition charge payments to a generation and transmission affiliate prior to receiving payment from customers, hence making any lag factor irrelevant (Attorney General Brief at 49, citing Exh. AG-DJE at 15-16).

The Attorney General asserts that the Company's revised calculation of transition-related cash working capital requirements provided on brief is an inappropriate attempt to offer a new method of calculating transition cost cash working capital (Attorney General Reply Brief at 15-16). The Attorney General contends that the Company's new method offers no improvement on its current method (Attorney General Reply Brief at 16).

b. Company

WMECo contests the Attorney General's proposed adjustment related to transition charges. The Company argues that, even if one were to accept the Attorney General's assumption that a portion of transition charge-related cash working capital needs is recovered through the transition charge, there is no basis for removing all of the Company's transition costs from the cash working capital calculation (Company Brief at 74). According to WMECo, there is no evidence that the remaining non-securitized transition costs consist of nuclear decommissioning and independent power producer costs (Company Reply Brief at 10-11). Rather, WMECo contends that it has other transition-related costs, as well as various non-distribution costs, that may properly be included in the cash working capital allowance (Company Reply Brief at 10-11, citing D.P.U. 09-39, at 110-115 (2009)).

The Company contends that the evidence in this proceeding supports a conclusion that the Company's total transition costs are \$34,102,000 (Company Brief at 74, citing Exh. WM-JLM-S 1.0, line 24). The Company further argues that, after subtracting what the Attorney General represents to be the portion of transition costs covered by securitization bonds of \$19,200,000, the difference of \$14,902,000 must be included in the cash working



capital calculation (Company Brief at 74, citing Exh. AG-DJE at 15, line 8). WMECo maintains that the \$14,902,000 in transition costs translates into a cost of \$41,000 per day and equates to a net lag factor of 18.98 days, thereby producing a working capital requirement of \$774,000 (Company Brief at 75, citing Exh. WM-JLM -S -1.0, at 1). The Company thus concludes that the appropriate cash working capital allowance associated with its non-securitization related transition costs is \$774,000, and that the Company's cash working capital request should be approved with this adjustment (Company Brief at 75; Company Reply Brief at 10).

### 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 allowance for the use of its funds. See Western Massachusetts Electric Company, D.P.U. 87-260, at 22-23 (1988). In its initial filing, WMECo reports that the net lags associated with its lead-lag study was 10.03 days (Exh. WM-JLM S-1.0, at 1). This lag produces a lower allowance requirement than the Department's 45-day convention. Moreover, the Company conducted its lead-lag study using NUSCo personnel (Tr. 3, at 558-559). In view of the resulting reduction in cash working capital needs versus the expected cost of an in-house lead-lag study, the Department finds that the Company's decision to perform a lead-lag study was cost-effective. Boston Gas Company/Colonial Gas Company/Essex Gas Company, D.P.U. 10-55, at 202 (2010).

Concerning the lead-lag study itself, the Department has reviewed the study, including the underlying calculations and assumptions. The Company has included basic service costs in its cash working capital requirement to develop a composite cash working capital factor (Exh. WM-JLM S-1.0). Separate cash working capital factors for commodity-related expenses are more efficient. Separate calculations would ensure against any overlap between commodity-related working capital and other working capital, as well as reduce the probability of errors in the compliance filing. Finally, separate cash working capital computations would be consistent with how the Department has historically treated cash working capital allowances. New England Gas Company, D.P.U. 08-35, at 35 (2009), citing Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25, at 51(2002); Boston Gas Company, D.P.U. 88-67 (Phase I) at 40-43 (1988). Therefore, the Department will determine the appropriate cash working capital components and amounts to be used in the Company's compliance filing.

As noted above, the Company calculated a revenue lag of 43.33 days using a consumption-stratified sample of 827 customer accounts (Exh. WM-JLM S-1.0A at 1-3). Of these, 54 represent protected residential accounts (RR-DPU-37). The Company states that if there were a mechanism for the recovery of the \$9.0 million in uncollectibles associated with protected accounts, it would be possible to reduce the Company's cash working capital requirement (Tr. 2, at 326-327; Company Brief at 74). Because the Department has provided a recovery mechanism for WMECo's protected accounts in Section VIII, below, we find that the 43.33-day revenue lag produced by the Company's lead-lag study overstates the cash

working capital requirement. WMECo reports that, if the 54 protected residential customer accounts were removed from the stratified sample, the revenue lag would be reduced from 43.33 days to 41.02 days (RR-DPU-37). The Department finds that the 41.02-day revenue lag provided in the Company's response to Record Request DPU-37 is a reasonable representation of the Company's revenue lag.

In order to derive the appropriate cash working capital lead-lag factors for basic service and O&M expense, the Department has made two adjustments to the lead-lag study provided in Exhibit WM-JLM S. First, the Department has substituted a 41.02-day revenue lag for the Company's proposed 43.33-day revenue lag. Second, the Department has separated basic service expenses from the lead-lag study. Based on these adjustments, the Department calculates a net lag of negative 3.43 days for basic service and a net lag of 18.98 days for distribution-related expense. Therefore, the Department will apply a net lag of 18.98 days to the Company's distribution expense as determined below.

Concerning the level of expense to which the revised lead-lag factor will be applied, the Attorney General seeks to exclude \$241,000 in cash working capital associated with uncollectible expense, as well as \$1,386,000 in cash working capital associated with transition charges (Attorney General Brief at 48-50). Concerning the Attorney General's argument that WMECo has improperly included uncollectible expense in its cash working capital allowance, the Company's lead-lag study determined the lead days associated with "Other O&M" expense by extracting invoice information from its Material Inventory Management System ("MIMS"), and concluded that the net lag factor for this expense component was 18.88 days

(Exhs. WM-JLM S-1.0 G at 1; WM-JLM S-1.0). It is axiomatic that uncollectible expense is not the type of cost for which a MIMS invoice can be generated. However, WMECo applied the 18.88-day net lag factor derived for “Other O&M” expense to \$35,695,000 in expenses, including \$4,658,000 in uncollectible expense (Exhs WM-JLM S-1.0; AG-DJE at 14, Sch. DJE-4 (rev.)). The Company does not contest the Attorney General on this point, even though it had the opportunity to do so during evidentiary hearings and on brief. Therefore, the Department finds that the Company’s uncollectible expense has been inappropriately factored into the cash working capital allowance. Accordingly, the Department will exclude uncollectible expense from WMECo’s cash working capital allowance, as shown in Schedule 6 of this Order.

We now turn to the issue of WMECo’s inclusion of transition costs in its cash working capital allowance. The payment lags at issue here are those incurred by the Company, and cover the period between WMECo’s payment of a transition obligation and the reimbursement of those expenses from its own customers. Notwithstanding the Attorney General’s arguments concerning the Company’s securitization-related cash working capital, there is no evidence that WMECo’s other transition charges include a cash working capital component (Exh. WM-JLM-REB at 14; Tr. 2, at 314). Thus, to the extent that WMECo’s transition obligations do not make provision for cash working capital allowances, it is necessary to include transition-related costs in the cash working capital allowance in order to ensure that the Company is appropriately compensated for the costs it incurs in providing service to its customers. Massachusetts Electric Company/Nantucket Electric Company, D.P.U. 09-39,

at 114-115 (2009). Therefore, the Department declines to reduce the Company's cash working capital allowance for non-securitization-related transition expenses.

Application of the distribution-related lead-lag factor derived above of 18.98 days to the level of O&M expense authorized by this Order, less \$337,000 in cash working capital being recovered through securitization, produces a cash working capital allowance of \$ 8,964,038 for the Company. The derivation of this cash working capital allowance is provided in Schedule 6 of this Order.

F. Accumulated Deferred Income Taxes

1. Introduction

Deferred income taxes arise because of differences between the tax and book treatment of certain transactions, including the use of accelerated depreciation and the treatment of certain operating expenses for income tax purposes. Fitchburg Gas and Electric Light Company, D.T.E. 99-118, at 33 (2001), citing Essex County Gas Company, D.P.U. 87-59, at 27 (1987). As of the end of the test year, WMECo reported a total accumulated deferred federal and state income tax balance of \$132,943,181, consisting of \$24,451,091 in deferred income taxes related to Financial Accounting Standards Number 109 ("FAS 109") and \$108,492,090 in non-FAS 109 deferred income taxes (Exh. WM-JLM B-5.0; WM-JLM B-6.0).<sup>43</sup> The Company first subtracted from its test year-end deferred income tax balance the \$24,451,091 in deferred income taxes associated with FAS 109, resulting in a balance of

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<sup>43</sup> FAS 109 is the former accounting description of the rules used for the treatment of income taxes, and includes the treatment of temporary book-tax timing differences (Tr. 12, at 2051-2052).

\$108,492,090 (Exh. WM-JML B-5.0). The Company then increased the \$108,492,090 deferred income tax balance by \$5,105,504 for deferred taxes related to its storm reserve, thereby producing a proposed deferred income tax balance of \$113,597,594 (Exhs. WM-JLM at 61; WM-JLM B-5.0; RR-AG-22).

While most of the excluded FAS 109-related deferred income taxes are associated with securitized assets and pension and post-retirement benefits other than pension obligations, the excluded amount also includes \$9,200,846 in deferred income taxes associated with what WMECo characterized as “various deferrals.” Specifically, the Company excluded the following deferred income taxes: (1) \$347,395 in deferred farm credits; (2) \$164,679 related to losses associated with bond redemption; (3) \$523,603 related to low-income discount recovery; (4) \$468,277 in deferred NU Start Program ( “NU Start”) costs; (5) \$391,305 in reserve book capitalization/amortization of intangibles; (6) \$7,506,899 in deferred storm reserves; and (7) \$658,270 in miscellaneous items (Exh. AG-1-2(8), at 450.1; Tr. 6, at 964-972).<sup>44</sup>

## 2. Positions of the Parties

### a. Attorney General

The Attorney General argues that WMECo has inappropriately removed deferred expense items from its test year-end balance of accumulated deferred taxes (Attorney General

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<sup>44</sup> Exhibit AG-1-2(8), at 450.1 indicates a deferred storm reserve of \$7,506,899; the Company explains that the difference between this amount and the \$5,105,504 proposed for inclusion in rate base is attributed to the tax effects of actual 2010 storm costs and 2010 storm funding, as well as the effects of these adjustments on the Company’s return (RR-AG-22).

Brief at 51). The Attorney General states that, notwithstanding the Company's efforts to distinguish deferred income taxes associated with its distribution operations, well-established Department precedent considers test year-end deferred income tax balances, regardless of their source, to be a cost-free source of funds to be deducted from rate base to the extent that they are not incorporated in other rate mechanisms (Attorney General Brief at 51, citing Essex County Gas Company, D.P.U. 87-59, at 29 (1987); AT&T Communications of New England, D.P.U. 85-137, at 31 (1985); Boston Edison Company, D.P.U. 1350, at 42-43 (1983); Attorney General Reply Brief at 16). The Attorney General also maintains that the Department has found that the accumulated deferred income taxes associated with deferred expenses should be included in the determination of rate base (Attorney General Brief at 51-52, citing Western Massachusetts Electric Company, D.P.U. 89-255, at 13-14, 18; Western Massachusetts Electric Company, D.P.U. 88-250, at 9-13 (1989)). Notwithstanding the changes that have occurred in the utility industry since the divestiture of generation facilities, the Attorney General argues that this environment does not affect either the underlying ratemaking concepts or application of Department precedent governing the treatment of deferred income tax balances (Attorney General Reply Brief at 17).

Therefore, the Attorney General proposes that the Department order the Company to include all balances of deferred income taxes associated with distribution service including (1) farm credits; (2) losses on bond redemption; (3) low-income discount recovery; (4) NU Start Program costs; (5) reserve book capitalization/amortization of intangibles;

(6) total storm reserve; and (7) miscellaneous items (Attorney General Brief at 52; Attorney General Reply Brief at 17).

b. Company

WMECo maintains that the Attorney General's proposal regarding deferred income taxes ignores Department precedent (Company Brief at 76-77; Company Reply Brief at 11-12). According to the Company, the Department's general policy with respect to deferred income taxes is to follow the principle that recovery of tax benefits and losses should be matched to the underlying expense which generated the tax effects (Company Reply Brief at 11-12, citing Commonwealth Electric Company, D.P.U. 89-113/90-331/91-80 (Phase I) (1991)). WMECo maintains that the Attorney General relies on cases on brief that are inapposite to the present situation, because these cases were decided prior to restructuring and the advent of the various reconciliation mechanisms (Company Brief at 77).

The Company justifies its exclusion of deferred income taxes associated with farm credits, loss on bond redemption, low-income discount recovery, NU Start, reserve book capitalization/amortization of intangibles, storm reserve and miscellaneous items on the basis that these items relate to deferrals that are not included in rate base (Company Brief at 75-76, citing Tr. 6, at 965). According to WMECo, to the extent that deferrals are not included in rate base, their associated deferred income taxes must also be excluded from rate base (Company Brief at 75-76).

Moreover, the Company asserts that, to the extent it is recovering a return on a particular deferred asset, that return is only equal to the customer deposit rate or prime interest



rate, rather than WMECo's weighted cost of capital (Company Brief at 76). The Company contends that if the assets were earning a return equal to WMECo's cost of capital, then it would be appropriate to credit the associated deferred income taxes against rate base (Company Brief at 76). However, WMECo claims that because the returns on those assets that are earning returns are lower than the weighted cost of capital, crediting the associated deferred income taxes against rate base would create a mismatch of rate base components and thus be inappropriate (Company Brief at 76; Company Reply Brief at 12). The Company contends that the Department has already considered this issue in a reconciliation proceeding, in which the Department rejected the Attorney General's proposal to calculate carrying costs net of deferred income taxes (Company Brief at 77, citing Western Massachusetts Electric Company, D.T.E./D.P.U. 06-35-A/06-105-B/07-11-A (2008)).

### 3. 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); AT&T Communications of New England, D.P.U. 85-137, at 31 (1985); 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. Boston Gas Company/Colonial Gas Company/Essex Gas Company, D.P.U. 10-55, at 209-211 (2010) (contributions in aid of construction); Massachusetts Electric Company/Nantucket Electric Company, D.P.U. 09-39, at 118-119 (2009) (FAS 109 obligations and plant recovered via separate surcharge); Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25, at 62 (2002) (energy supply costs); Commonwealth Electric Company, D.P.U. 89-114/90-331/91-80 (Phase One) at 24-30 (1991) (Pilgrim litigation expenses); Western Massachusetts Electric Company, D.P.U. 89-255, at 18 (1990) (cancelled plant); Boston Edison Company, D.P.U. 160, at 11 (1980) (retired plant); Boston Edison Company, D.P.U. 19991, at 20 (1979) (federal versus Department AFUDC differences).

In this proceeding, the Company excluded from its accumulated deferred income tax balance the amount of \$24,451,091 in deferred income taxes associated with FAS 109 from its accumulated deferred income tax balance, and represented that their exclusion had no net effect on rate base (Exh. WM-JLM B-6.0). The Company further represents that the deferred income taxes proposed for exclusion, but contested by the Attorney General, are associated with deferrals that are not included in rate base (Tr. 6, at 965-973). While the Department has previously eliminated the effects of FAS 109 on companies' deferred income tax balances, this was done in order to remove negative balances where their inclusion would have denied ratepayers the benefits of deferred income taxes. Massachusetts Electric Company/Nantucket Electric Company, D.P.U. 09-39, at 118 (2009). Notwithstanding the changes that have occurred in the utility industry since the divestiture of generation facilities or the advent of

various reconciling mechanisms, there is no difference post-divestiture in either the underlying ratemaking concepts or application of Department precedent governing the treatment of deferred income tax balances. When these non-generation-related deferred income taxes are not addressed through separate reconciling mechanisms, such as the pension/post-retirement benefits other than pension clause, the Department's policy with respect to deferred income taxes remains in effect. See Western Massachusetts Electric Company, D.P.U. 89-255, at 13-14 (1989); Western Massachusetts Electric Company, D.P.U. 88-250, at 9-13 (1989); Western Massachusetts Electric Company, D.P.U. 18731, at 34 (1977). Based on this analysis, the Department finds that the Company has understated its deferred income taxes. Therefore, Department finds that the deferred income taxes associated with: (1) farm credits; (2) losses on bond redemption; (3) low- income discount recovery; (4) NU Start Program costs; (5) reserve book capitalization/amortization; and (6) miscellaneous items will be included in the Company's accumulated deferred income tax balance. Accordingly, the Department will increase the Company's proposed deferred income tax reserve by \$2,553,529.

Concerning the Attorney General's proposal to include \$5,515,937 in deferred income taxes associated with WMECo's storm reserve, the Company has specifically proposed to include \$5,925,970 in deferred income taxes associated with its storm reserve in rate base (Exhs. WM-JLM B-5.0, at 1; WM-JLM Sch. 4 (Rev.)). However, the Department has excluded the associated \$15,107,636 in deferred storm expense from rate base (see Section V.G.3, below). Consistent with this exclusion, the Department will exclude the associated deferred income taxes of \$5,925,970 as an offset to WMECo's rate base. Western

Massachusetts Electric Company, D.P.U. 89-255, at 20 (1990); Boston Edison Company, D.P.U. 160, at 11 (1980).

The net effect of these two adjustments results in a decrease to the Company's deferred income tax reserve of \$3,372,441. Accordingly, the Department will decrease the Company's deferred income tax reserve by \$3,372,441.

G. Storm Reserve

1. Introduction

WMECo proposes to include in rate base \$15,107,636 representing the balance in its storm reserve (Exh. WM-JLM at 61, Sch. 4 (Revised)). The Company partially offset this amount by including \$5,925,970 in associated deferred income taxes as an offset to rate base (Exh. WM-JLM at 61, Sch. 4 (Revised)).

2. Positions of the Parties

a. Attorney General

The Attorney General opposes the inclusion of WMECo's storm reserve in rate base. The Attorney General argues that the Company's proposal is inconsistent with the D.P.U. 06-55 Settlement, where carrying charges were set at the customer deposit rate (Attorney General Brief at 109, citing Exh. AG-1, § 2.12). She characterizes the Company's attempt to use the Department's decision in D.P.U. 09-39 to justify a change in the calculation method approved in the D.P.U. 06-55 Settlement as "akin to changing the rules of a game during a game" (Attorney General Reply Brief at 62). She contends that if the Department does decide that rate base inclusion of the Company's storm fund is appropriate, then the appropriate balance to use would be equal to the average of the beginning balance proposed by

the Company and the ending balance after one year's amortization as provided for in this Order (Attorney General Brief at 109-110; Attorney General Reply Brief at 63).

b. Company

The Company contends that the inclusion of its storm reserve in rate base is consistent with the Department's findings in D.P.U. 09-39 that the weighted cost of capital is the appropriate carrying charge for storm reserves (Company Brief at 175, citing Massachusetts Electric Company/Nantucket Electric Company, D.P.U. 09-39 (2009)). In the alternative, the Company proposes that the storm fund deficit and associated carrying charges be recovered through a separate surcharge, as had been done in D.P.U. 09-39 (Company Brief at 175, citing Exh.WM-JLM-REB at 17).

3. Analysis and Findings

The Department has permitted WMECo to apply a carrying charge to its storm reserve equal to the customer deposit rate. Section VI.C.6, below. Because items included in rate base earn a return at a company's weighted cost of capital, including the Company's storm fund in rate base in addition to allowing a return at the customer deposit rate would result in an overcollection of carrying charges on the Company's storm reserve. Therefore, the Department disallows the Company's proposal to include the storm fund in rate base. Accordingly, the Company's proposed rate base will be reduced by \$15,107,636.<sup>45</sup>

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<sup>45</sup> Consistent with this treatment, the Department has removed the Company's deferred income taxes associated with the storm fund from the rate base offset. See Section V.F.3, above.

V. 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 employee compensation decisions result in a minimization of unit labor costs. Boston Gas Company/Colonial Gas Company/Essex Gas Company, D.P.U. 10-55, at 234 (2010); Boston Gas Company, D.P.U. 96-50 (Phase I) at 47(1996); Cambridge Electric Light Company, D.P.U. 92-250, at 55 (1993). This approach 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, will appropriately be 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 so as to enable a determination of reasonableness by the Department. D.P.U. 96-50 (Phase I) at 47. The Department evaluates the per employee compensation levels, both current and proposed, relative to the 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 (1992), at 103; Massachusetts Electric Company, D.P.U. 92-78, at 25-26 (1992).

Pursuant to WMECo's employee compensation program, all employees receive base wages or salary and are eligible for annual incentive payments (Exh. WM-KCC, at 2). Employees may be eligible for premium pay such as overtime as determined by union contracts, Department of Labor regulations, or Company policy (Exh. WM-KCC at 2). Remaining costs relate to employee benefits, including healthcare, 401(k) savings, long-term disability, workers' compensation, and a supplemental executive retirement program (Exh. WM-JLM at 36-37).

## 2. Union Wage Increases

### a. Introduction

During the test year, the Company booked \$10,017,579 in payroll expense for union personnel, including base wages and overtime (Exh. WM-JLM C-3.11). Of that amount, \$9,921,346 was directly incurred by WMECo and \$96,233 was allocated to WMECo by NUSCo (Exh. WM-JLM C-3.11). The Company proposes to increase its union payroll expense by \$265,697, including \$262,371 for its direct employees and an allocation from NUSCo of \$3,326 (Exh. DPU-3-6-SP01, at 3-4).<sup>46</sup> The proposed adjustments are attributable to: (1) increased staffing levels or promotions of employees to higher level jobs, and turnover;

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<sup>46</sup> The Company initially proposed a \$278,817 increase to its union payroll expense including an increase for its direct employees of \$275,491 (Exh. DPU-3-6-SP01). WMECo subsequently made a supplemental filing to its union payroll expenses to include the effects of its union contract (Exh. DPU-3-6-SP01). As a result of this new contract, union payroll expense was decreased by \$13,120 (Exh. DPU-3-6-SP01).

(2) wage and salary increases that have been implemented since the test year; and (3) union step rate increases or other wage and salary increases in 2010 (Exh. WM-KCC at 2-3).

b. Positions of the Parties

The Company maintains that it has demonstrated that its union payroll costs were determined as a result of collective bargaining (Company Brief at 83-84; Exhs. WM-JLM at 33-34; WM-KCC at 3; DPU-3-6, (Supp.)). In addition, the Company contends that under the union contract, it was able to implement cost-sharing mechanisms (Company Brief at 82, citing Exh. AG-1-42-SP01; AG-23-4; RR-AG-14; see also Tr. 5, at 788).

The Company notes that no party took issue with the Company's union payroll calculations (Company Brief at 84). Accordingly, the Company concludes that it has made all necessary demonstrations pertaining to union payroll costs, thus warranting approval of its proposed adjustment (Company Brief at 83-84).

No other party commented on the Company's proposed increase to union payroll expense.

c. 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; (2) the proposed increase must be known and measurable (i.e., based on signed contracts between the union and the company); and (3) the proposed increase must be reasonable. Boston Gas Company, D.P.U. 96-50 (Phase I) at 43; D.P.U. 95-40, at 20; D.P.U. 92-250, at 35; D.P.U. 86-280 A at 74.



All union payroll rates will be in effect prior to August 1, 2011, the midpoint of the first twelve months after the rate increase (Exhs. WM-JLM at 35; DPU-3-6, (Supp.)). Further, as the rate increases are based on signed contracts, the Department finds that they are known and measurable (Exhs. WM-KCC at 3; DPU-3-6 (Supp.)).

To assist in the determination of the reasonableness of the union wage increases, the Company participates in salary surveys of comparable companies conducted by a number of third-party consultants (Exhs. WM-KCC at 3; WM-KCC-3; WM-KCC-4; Tr.5, at 889-890). These survey results demonstrate that WMECo's pay scale and level of increases are consistent with the market as a whole (Exhs. WM-KCC at 4; WM-KCC-3; WM-KCC-4; Tr. 5, at 889-890). Accordingly, the Department finds that the Company has demonstrated the reasonableness of its union pay increases.

Having found the Company's proposed union wage increase adjustment (1) takes effect prior to the midpoint of the first twelve months from the date of Order, (2) is known and measurable, and (3) is reasonable, the proposed adjustment is allowed. Accordingly the Company's test-year cost of service will be increased by \$574,278.

### 3. Non-Union Wage Increases

#### a. Introduction

During the test year, the Company booked \$16,242,697 in payroll expense for non-union personnel, including base wages and overtime (Exh. WM-JLM C-3.11). Of that amount, \$5,426,381 was directly incurred by WMECo and \$10,816,316 was allocated to WMECo by NUSCo (Exh. WM-JLM C-3.11). The Company proposes to increase its non-

union payroll expense by \$870,138, including increases for its local non-union employees of \$277,824 and an allocation from NUSCo of \$592,314 (Exh. WM-JLM C-3.11). The proposed adjustments are attributable to: (1) increased staffing levels or promotions of employees to higher level jobs, and turnover; (2) wage and salary increases that have been implemented since the test year; and (3) wage and salary increases in 2010 and 2011 (Exh. WM-KCC at 3).

b. Positions of the Parties

The Company contends that pay ranges for non-union employees are determined through an ongoing evaluation process comparing Company job responsibilities to jobs at other employers in the utility industry and other comparable industries (Company Brief at 81-82, citing Exh. WM-KCC at 2). The Company states that to support this evaluative process it participates in salary surveys conducted by a number of third-party consultants (Company Brief at 81-82, citing Exh. WM-KCC at 2). According to the Company, its compensation programs are designed to support higher pay increases for higher performing employees, as determined through the Company's performance appraisal process (Company Brief at 81-82, citing Exh. WM-KCC at 2).

The Company maintains that it has demonstrated that, including the increase for 2010, its non-union compensation levels are within the average compensation ranges of comparable positions in the region (Company Brief at 83). Accordingly, the Company concludes that it has made the required demonstrations pertaining to non-union payroll costs, thus warranting approval of its proposed adjustment (Company Brief at 83-84). No other party commented on the Company's proposed increase to non-union payroll expense.

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, the Company must demonstrate that such increases are known and measurable and also 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 may occur 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. 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 six months after the date of the Department's Order may be included in rates. D.P.U. 85-266 A/271-A at 107.

WMECo has provided sufficient evidence to demonstrate that it has granted a non-union wage increase in March 2010 and that it has expressly committed to granting a three percent non-union wage increase effective March 2011 (Exhs. WM-KCC-5; WM-KCC-6). Accordingly, we find that the Company's proposed adjustments are known and measurable and include only those increases that have been or will be granted no later than six months after the date of this Order.

In support of the historical correlation between union and non-union wage increases, the Company provided a comparative analysis of union and non-union wage increases between 2000 and 2010 (Exh. WM-KCC-5). Between 2000 and 2010, the average wage increase for

(1) non-union exempt employees was 3.12 percent; (2) non-union, non-exempt employees was 3.27 percent, and (3) union employees was 3.48 percent (Exh. WM-KCC-5). Therefore, the Department finds that a sufficient correlation exists between union and non-union wage increases. D.P.U. 09-30, at 189; D.P.U. 07-71, at 76; D.P.U. 87-59-A at 18.

With respect to a demonstration of the reasonableness of the proposed non-union salary increase, the Company participates in annual salary surveys conducted by third-party consultants (Exhs. WM-KCC at 2; WM-KCC-7; AG-2-49, at 1). The Company has demonstrated that its non-union compensation levels are within the average compensation ranges of comparable positions in the Northeast industrial sector (Exhs. WM-KCC at 2; WM-KCC-7; AG-2-49 at 1). The Department finds that the Company's review of industry compensation data is sufficient to confirm the reasonableness of its non-union wage increases. See D.P.U. 10-55, at 245; D.P.U. 05-27, at 109; D.T.E. 02-24/25, at 94. Therefore, the Department approves WMECo's proposed adjustment of \$1,161,618 to test year cost of service for its non-union wage increases.

4. Incentive Compensation

a. Introduction

As a component of total compensation, employees of WMECo and its affiliate NUSCo are eligible to participate in an annual employee incentive program (i.e., Northeast Utilities Incentive Plan) (Exh. AG-2-51). In order for employees to receive incentive awards under the plan, a threshold corporate net income goal first must be met (Exh. AG-2-52). Once this financial threshold is met, incentives are paid based on the achievement of several factors in

the areas of (1) individual and departmental performance goals; and (2) overall Company financial performance (Exh. WM-JLM at 35). Incentive program goals vary by employee classification. For example, 40 percent of the incentive program goals for WMECo's president and chief operating officer are tied to financial performance (Exh. AG-2-52, at 22-23). On average, approximately 25 percent of the incentive compensation plan is dedicated to the achievement of financial goals (Exh. AG-2-51, at 25-26 Tr. 5, at 844-845).

During the test year, the Company booked \$1,408,853 in incentive pay (Exh. WM-JLM C-3.12). WMECo proposes a number of pro forma adjustments to increase this amount totaling \$88,933 (Exhs. WM-JLM at 36; WM-JLM WP C-3.12, at 1). Incentive payments are based on a percentage of employee base compensation (Exh. AG-2-51, at 34). The Company proposes a further pro forma adjustment to incentive pay of \$110,237 to reflect increases to employee base salaries (Exhs. WM-JLM at 36; JLM C-3.11; JLM WP C-3.12, at 1). WMECo initially proposed a total adjustment of \$199,170, representing a total employee incentive compensation expense of \$1,608,023 (Exhs. WM-JLM at 36; JLM C-3.12). WMECo subsequently revised its total employee incentive compensation to \$1,607,274 (Exhs. WM-JLM WP C-3.0, at 1 (January 5, 2011 update); DPU-3-7-SP01 at 1).

b. Positions of the Parties

i. Attorney General

The Attorney General argues that because shareholders are the primary beneficiaries of increased earnings, shareholders and not ratepayers should bear the cost of incentive compensation related to Company earnings (Attorney General Brief at 56). Accordingly, the

Attorney General recommends that any incentive compensation based on the attainment of financial goals, such as earnings targets or return on equity, should not be included in the revenue requirement recovered from ratepayers (Attorney General Brief at 56).

In support of her position, the Attorney General relies on the Department's standards for the recovery of incentive compensation from ratepayers which require that incentive payments must be both reasonable in amount and encourage good employee performance that benefits ratepayers (Attorney General Brief at 56, citing Boston Gas Company, D.P.U. 10-55, at 250; Boston Gas Company, D.P.U. 93-60, at 99; Massachusetts Electric Company, D.P.U. 89-194/195, at 34; Fitchburg Gas and Electric Light Company, D.P.U. 07-71, at 82-83). The Attorney General notes that the Department recently clarified that companies must be prepared to demonstrate direct ratepayer benefit from the use of financial metrics as a direct component of an incentive compensation award (Attorney General Brief at 57-58, citing Boston Gas Company, D.P.U. 10-55, at 254). The Attorney General claims the Company, nonetheless, did not analyze or attempt to quantify any direct benefits to ratepayers from the use of financial metrics in its incentive compensation plan (Attorney General Brief at 58). Instead, the Attorney General argues that WMECo relied on "vague statements" that financial goals provide long-term benefits to ratepayers (Attorney General Brief at 58, citing Exh. WM-KCC at 7). Further, with respect to lower-level exempt employees, the Attorney General contends that the Company cited only an indirect linkage between employee performance and the attainment of financial goals (e.g., efficiency measures that might result in lower O&M expense) (Attorney General Brief at 58-59, citing Exh. Tr. 5, at 847). The Attorney General

argues that such a tenuous link between these employees' actual effect on the financial health of NU cannot be considered a direct benefit for ratepayers (Attorney General Brief at 59). The Attorney General argues that because the Company has failed to carry its burden of proof that the achievement of financial goals will result in direct benefit to ratepayers, the Department must disallow recovery of the portion of the Company's incentive compensation related to the achievement of financial goals (i.e., \$804,012) (Attorney General Brief at 59, citing Exh. WM-JLM-C-3.12, at 1).

The Attorney General also argues that the Department should disallow WMECo's proposed pro forma adjustment to recognize the effect of pay increases on incentive compensation expense (Attorney General Brief at 60). The Attorney General argues that if the increases in incentive compensation are automatic, employees have no actual incentive to achieve the stated goals (Attorney General Brief at 60). Further, the Attorney General contends that the Company has not established that the increase in incentive compensation is known with any reasonable degree of certainty. Accordingly, the Attorney General recommends that the Company's pro forma increase to incentive compensation should be eliminated and that the Company's proposed cost of service be reduced by \$110,000 (Attorney General Brief at 60; Attorney General Reply Brief at 32).

Finally, the Attorney General contends that WMECo has failed to demonstrate that it has appropriately capitalized a portion of its incentive compensation as required by Department precedent (Attorney General Reply Brief at 33). The Attorney General states that while the record indicates that monthly credits were made to Account 922, the Company failed to

establish what those credits were for (Attorney General Reply Brief at 33, citing Exh. AG-1-57). Further, the Attorney General claims that while the total of credits to Account 922 for the test year were \$857,030, the amount of payroll capitalized during the test year was more than \$11 million, which demonstrates that, using the Company's capitalization rate of 42.51 percent, the total of credits to Account 922 is not accurate (Attorney General Reply Brief at 33, citing Exh. AG-1-40, at 2).<sup>47</sup> Accordingly, the Attorney General argues that the Department should capitalize a portion of the Company's incentive compensation, resulting in a reduction to WMECo's proposed cost of service of \$683,571 (Attorney General Brief at 61; Attorney General Reply Brief at 33).

ii. Company

The Company argues that its incentive compensation plan meets the Department's standards for ratepayer recovery as its incentives are reasonable in amount and the plan is reasonably designed to encourage good employee performance that provides benefits to ratepayers (Company Brief at 85). First, the Company asserts that various compensation studies demonstrate that its incentive payments are reasonable in amount and are necessary in order for the Company to compete with other utilities and industry for quality employees (Company Brief at 85, citing Exhs. WM-KCC at 6; AG-33-29).

Second, the Company claims that its incentive plan is reasonable in design (Company Brief at 85-86). Under WMECo's incentive compensation program, a consolidated adjusted net income goal must be met before any incentive compensation is awarded (Company Brief

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<sup>47</sup> The Company's capital percentage rate is 42.51 percent (Exh. AG-1-40, at 2).



at 86, citing Exhs. AG-2-52; AG-24-9). The Company contends that the Department has examined incentive plans with a financial metric threshold factor and has found that such features are not an absolute bar to recovering incentive expenses (Company Brief at 86, citing. D.P.U. 09-39, at 141).

The Company argues that once the net income goal is met its incentive awards are not tied exclusively to financial performance but also are based on the job performance of the individual employee (Company Brief at 86). WMECo contends that its individual job performance goals benefit ratepayers directly in the areas of reliability, operational efficiency and safety while its financial performance goals provide longer-term benefit to customers (Company Brief at 86, citing Exh. WM-KCC at 7).

The Company refutes the Attorney General's criticism that it has not complied with the new standard articulated in D.P.U. 10-55 requiring that, going forward, if companies want to use the a financial goals measure as a direct component of their incentive compensation program design, they must be prepared to demonstrate direct ratepayer benefits (Company Brief at 87-88, citing, D.P.U. 10-55, at 253-254). The Company asserts that it is not appropriate to apply this new standard to WMECo retroactively (Company Brief at 88, citing New England Tel. and Tel. Co. v. Dep't of Pub. Utils., 371 Mass. 67, 84 (1976); Boston Gas Co. v. Dep't of Pub. Utils., 405 Mass. 115 (1989)). The Company claims that it fully complied with the Department's standards regarding incentive compensation as of the date of its filing and the Department provided no notice of any other standard prior to the conclusion of hearings and the beginning of the briefing period in this case (Company Brief at 88).

Nevertheless, the Company asserts that its incentive compensation program meets the requirements set forth in D.P.U. 10-55 (Company Brief at 88). The Company maintains that, consistent with the requirements of D.P.U. 10-55, financial performance is a threshold determinant of its incentive compensation plan (Company Brief at 88-89, citing D.P.U. 10-55, at 252). Where the achievement of financial goals is also a direct component of its incentive compensation plan, the Company argues that it has shown that achievement of such goals will provide direct benefits to customers in areas such as budget reduction and containment (Company Brief at 89, citing Exhs. WM-KCC at 6-8; AG-2-52; Tr. 5, at 844-847).

Next, the Company refutes the Attorney General's claim that \$110,000 in incentive compensation should be eliminated from the cost of service because the Company has adjusted incentive compensation based on its proposed adjustments to payroll expense (Company Brief at 90, citing Exh. WM-JLM C-3.12).<sup>48</sup> The Company states that incentive compensation is a key element in ensuring that WMECo can recruit and retain the employees needed to provide the services that customers require (Company Brief at 90, citing Exhs. WM-KCC at 6-7; WM-JLM-REB at 3). The Company asserts that it will continue to pay incentive compensation and, based on historical experience, the amount will continue to be tied to the level of base wages (Company Brief at 90).

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<sup>48</sup> The Company states that Attorney General's use of a 7.36 percent adjustment in base payroll expense is misleading because it is not a one-year increase but rather accounts for increases from the midpoint of 2009 through the midpoint of the rate year (Company Brief at 90 n.29, citing Exh. WM-JLM at 34). In addition, the Company states that it has updated this 7.36 percent figure for increases to employee base salaries to 7.31 percent (Company Brief at 90, citing Exh. DPU-3-7-SP1).

Finally, the Company disputes the Attorney General's contention that it has failed to appropriately capitalize a portion of its employee incentive costs (Company Brief at 90-91, citing Attorney General Brief at 60-61). The Company maintains that the Attorney General overlooked a key exhibit showing that the appropriate costs were capitalized (Company Brief at 91). Specifically, the Company contends that all salaries and expenses of certain administrative personnel whose functions involve activities of a capital nature are initially charged to Accounts 920 and 921 and are subsequently capitalized (Company Brief at 91, citing Exh. AG-1-57, at 1). The Company argues that at the end of each month, those salaries and expenses to be capitalized are credited to Account 922 with an offsetting debit to Account 107 (Construction Work in Progress) (Company Brief at 91, citing Exh. AG-1-57, at 2). Likewise, the Company argues that the Attorney General ignores evidence that an appropriate portion of employee incentives has been capitalized, as demonstrated by WMECo's workpapers (Company Brief at 91, citing Exh. WM-JLM WP C-3.12, at 1, column E).

c. Analysis and Findings

The Department has traditionally allowed incentive compensation expenses (i.e., bonuses) to be included in utilities' cost of service so long as they are (1) reasonable in amount, and (2) the incentive plans are reasonably designed to encourage good employee performance. National Grid, D.P.U. 10-55, at 250 (2010); Fitchburg Gas and Electric Light Company, D.P.U. 07-71, at 82-83 (2008); Massachusetts Electric Company, D.P.U. 89-194/195, at 34 (1990). For an incentive plan to be reasonable in design, it must

both encourage good employee performance and result in benefits to ratepayers. Boston Gas Company, D.P.U. 93-60, at 99 (1993).

WMECo offers an incentive compensation plan for all employees (Exh. AG-2-51). Once the achievement of a corporate financial threshold goal is met, payment of incentive compensation is based in part on the achievement of personal/departmental goals and in part on the achievement of financial goals (Exh. WM-JLM at 35).

With respect to the reasonableness of the Company's total incentive compensation expenses, the Attorney General argues that WMECo should not be permitted to adjust its test year incentive compensation expense based on its proposed adjustments to its payroll expense (Attorney General Reply Brief at 32). The Attorney General opines that if an increase in incentive compensation is automatic, employees will have no real incentive to achieve their performance goals (Attorney General Brief at 60; Attorney General Reply Brief at 32). Incentive payouts are based on a percentage of employees' base pay and vary based on job classification (Exh. AG-2-51, at 34). As base salaries increase, incentive payouts increase; however, employees must meet all applicable performance goals to earn incentives. WMECo has conducted an analysis of salaries and target total compensation, including incentive compensation, compared to the market (Exhs. AG-2-45 SP01; AG-2-45(CONFIDENTIAL) ; AG-2-46 (CONFIDENTIAL); AG-36-16 (CONFIDENTIAL); AG-36-18 (CONFIDENTIAL); AG-36-20 (CONFIDENTIAL); AG-36-21 (CONFIDENTIAL)). The Department finds that, based on the results of these studies, WMECo has demonstrated that its total incentive compensation costs, including the proposed adjustments, are reasonable.

With respect to the design of the incentive compensation plan, we find that the plan encourages good employee performance directly by rewarding employees for achieving personal/departmental goals and also by contributing to the financial success of WMECo (Exhs. WM-KCC, at 6-7; AG-2-52, at 1). Further, with the caveats discussed below, the Department finds that the incentive plan is reasonably designed to provide benefits to ratepayers.

A large percentage of the Company's incentive pay program is tied to meeting personal and departmental performance objectives (Exh. AG-2-52). Such performance objectives are related to safety, reliability, and customer satisfaction and, therefore, are directly aligned with the interests of ratepayers (Exhs. WM-KCC at 7; AG-2-52, at 1). A significant percentage of incentive pay, however, is tied to meeting financial performance objectives (Tr. 5, at 844-845; Exh. AG-2-51, at 25-26). Financial performance objectives are tied to WMECo's revenues and costs and, therefore, directly benefit shareholder interests. The Department has found that benefits to ratepayers of meeting such financial targets is unclear. See e.g., D.P.U. 10-55, at 252.

Financial performance has been a threshold determinant in incentive compensation plans approved by the Department. See D.P.U. 08-35, at 97-98; D.P.U. 02-24/25, at 101; D.P.U. 89-194/195, at 34. In these cases, once the financial performance threshold was met, job performance standards designed to encourage good employee performance were the basis for determining individual incentive compensation. D.P.U. 08-35, at 97-98; D.P.U. 02-24/25, at 101; D.P.U. 89-194/195, at 34.

Financial performance is both a threshold determinant and a significant component of the formulas used to determine individual incentive compensation for employees in WMECo's incentive compensation plan. Accordingly, the Attorney General argues that the incentive compensation plan is not reasonable in design because the attainment of financial targets such as earnings is not a customer-oriented goal (Attorney General Brief at 56, 58-59).

As noted above, the attainment of financial targets has a primary and direct shareholder benefit and, therefore, we are concerned that these goals comprise such a large percentage of WMECo's incentive compensation plan design. Nonetheless, the Department has recently approved similar incentive compensation structures in D.P.U. 09-39, at 142, and D.P.U. 10-55, at 253, finding that the indirect benefit to ratepayers, although not clearly defined, is manifested in lower operating and capital costs. For these same reasons, we find that the overall design of WMECo's incentive compensation plan is reasonable here.

Having found that WMECo's incentive compensation costs are reasonable in amount and that its incentive compensation plan is reasonable in design, the Department will permit the inclusion of WMECo's proposed incentive compensation cost in its cost of service.

The Department recently offered guidance on the use of financial targets in incentive plans and the burden required to justify the recovery of such costs in rates. D.P.U. 10-55, at 253-254. We will not apply this standard of proof to WMECo because the Department's Order in D.P.U. 10-55 issued after the evidentiary record closed in this case. However, going forward, where companies such as WMECo seek to include financial goals as a component of incentive compensation program design, the Department expects to see the attainment of such

goals applied only as a threshold component of the plan. Companies that nonetheless seek to maintain financial metrics as a component of the formula used to determine individual incentive compensation must be prepared to demonstrate direct ratepayer benefit from the attainment of these goals or risk disallowance of the related incentive compensation costs.

D.P.U. 10-55, at 253-254.<sup>49</sup>

The Department has previously recognized incentive compensation as an employee benefit and, as such, has found that a portion of this expense should be capitalized. See New England Gas Company, D.P.U. 08-35, at 103 (2009); D.T.E. 03-40, at 119. The appropriate capitalization ratio must be consistent with the capitalization ratio applied to other employee benefits. See New England Gas Company, D.P.U. 08-35, at 103, 105 (2009). The Attorney General argues that the Company has failed to demonstrate that it properly capitalized any of its incentive compensation (Exh. WM-JLM-C-3.12; AG-1-40 at 3-4; Attorney General Brief at 61). The Company includes all employee incentive costs in its pro forma cost of service in the amount of \$1,608,023 (Exh. WM-JLM-C-3.12).

The burden to demonstrate that incentive compensation expense has been appropriately capitalized lies with the Company. The Company claims that all salaries and expenses of

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<sup>49</sup> WMECo suggests that its current incentive compensation plan meets the requirements set forth in D.P.U. 10-55 in that the achievement of financial goals will provide benefits to customers in areas such as budget reduction and containment, thereby lowering ratepayers' costs (Company Brief at 89). We caution, however, that if the Company wishes to recover costs from ratepayers related to the achievement of financial metrics as a direct component of a future incentive compensation plan, it must be prepared to provide actual evidence of direct ratepayer benefit from the attainment of these goals. Mere allegations of benefit without proof are insufficient.

administrative personnel involved in activities of a capital nature are capitalized and initially charged to Account 920 and Account 921, and then are credited to Account 922 with the offsetting debit to construction work in progress (Company Brief at 91, citing AG-1-57 at 1-2). However, the evidence presented merely denotes “920.00” without further explanation (Exhs. WM-JLM-C-3.12; AG-1-57, at 1-2). By itself, a reference to Account 920 in this exhibit is insufficient to demonstrate that the account has been capitalized. Further, the Company has failed to present evidence to demonstrate that the appropriate credits have been made to Account 922. Accordingly, the Department finds that the evidence presented is inadequate to demonstrate that the Company properly capitalized its incentive compensation expense (Exhs. AG-1-57, at 3; WM-JLM-D1.0).

In determining the appropriate amount of incentive compensation to be capitalized, the Attorney General suggests that the Department should apply a capitalization ratio of 42.51 percent, which is WMECo’s 2009 payroll capitalization ratio (Attorney General Brief at 61, citing Exh. AG-1-40, at 2). However, the Company books incentive costs both directly from WMECo as well as an allocation from NUSCo (Exhs. WM-JLM at 36; WM-JLM WP C-3.12, at 1). Accordingly, the Department finds the appropriate capitalization ratio to apply to incentive compensation is 39.8 percent, which is the blended WMECo-NUSCo capitalization ratio for 2009 (Exhs. AG-1-40, at 3).

Above, the Department approved an incentive compensation expense of \$1,607,274 (Exh. WM-JLM C-3.12). Applying a capitalization rate of 39.8 percent to this amount, the Department calculates the Company’s capitalized incentive compensation to be \$639,874 (i.e.,



$\$1,607,724 \times 0.398 = \$639,874$ ). Application of this same capitalization ratio to the Company's test year incentive compensation expense of \$1,408,853 results in a test year O&M expense level of \$848,130. These capitalization amounts, applied to their respective test year and proforma incentive compensation expense of \$1,408,853 and \$1,607,724, results in a difference of \$119,449 between the test year and pro forma incentive compensation levels booked to O&M expense. Accordingly, the Department will reduce the Company's proposed cost of service by \$79,721.

5. Payroll Taxes

a. Introduction

Payroll taxes include contributions under FICA for Social Security and Medicare, federal unemployment taxes, state unemployment taxes, and Massachusetts' Universal Health tax (Exhs. WM-JLM at 56-57; WM-JLM C-3.20; WP-JLM C-3.20, (a), (b), (c), (d), and (e)). Payroll taxes increase as a company's payroll increases, typically due to (1) a change in employee numbers; and/or (2) a change in earnings by the employee. In addition, changes in the tax rate will also affect payroll taxes.

WMECo initially proposed a total pro forma increase of \$170,505 to its cost of service for employee related taxes based on the percentage increase in salaries and wages that it has proposed in this case (Exhs. WM-JLM C-3.20, and WP-JLM C-3.20, (a), (b), (c), (d), and (e)).

b. Positions of the Parties

The Attorney General points out that the Company has incorrectly calculated its proposed payroll tax expense (Attorney General Brief at 83). According to the Attorney General, the maximum salary subject to FICA taxes is \$106,800 (Attorney General Brief at 84, citing Tr. 13, at 2019-20920). The Attorney General also notes that state and federal unemployment taxes, as well as the Massachusetts Universal Health tax, do not apply to any salaries above \$7,000 for federal unemployment taxes, and any salaries above \$14,000 for state unemployment or universal health taxes (Attorney General Brief at 84), citing RR-AG-61; RR-AG-62). Because the Attorney General reasons that managers' salaries represent approximately ten percent of total compensation in excess of the \$106,800 cap, she recommends that the Company's proposed FICA tax be reduced by at least ten percent, and that no unemployment or health care tax increase be included in cost of service (Attorney General Brief at 84, citing Exhs. AG-1-36; WM-JLM C-3.11).

The Company concurs with the Attorney General's analysis (Company Brief at 145). The Company proposes to make the necessary adjustment to its proposed cost of service as part of the compliance filing in this case (Company Brief at 145).

c. Analysis and Findings

Payroll tax will not increase proportionally with payroll in three areas. First, Social Security is not currently assessed on the amount of an employee's salary in excess of \$106,800 (Tr. 12, at 2019-2020). To the extent that an employee's salary exceeds that amount, there would be no additional tax. Second, federal and state unemployment tax is capped at the first

\$7,000 of salary for federal taxes and \$14,000 of salary for state taxes (RR-AG-61). Finally, the Commonwealth's Universal Health tax is applied only to the first \$14,000 of an employee's wages (RR-AG-62).

In recognition of these payroll tax limits, the Department will adjust WMECo's proposed cost of service for employee-related taxes. However, rather than making any revenue requirement calculation as part of a compliance filing, the Department will make this calculation as part of this Order. The Department finds that the appropriate increase to the Company's test year cost of service is \$64,238, rather than the \$170,505 offered by the Company. To arrive at this amount, the Department multiplied the amount of payroll for WMECo and NUSCo below the \$106,800 Social Security earnings cap (i.e., \$ 483,468) by the payroll tax of 6.2 percent, resulting in an increase to test year cost of service of \$29,975 for FICA expense (Exh. WM-JLM C-3.20; Tr. 12, at 2019-2020; AG-1-36). This amount was added to the Company's proposed Medicare pro forma adjustment of \$34,263 (Exh. WM-JLM C-3.20). Because of the aforementioned caps, no adjustments are warranted to the test year for federal and state unemployment taxes or the Universal Health tax. Accordingly, the Company's proposed cost of service will be reduced by \$106,267.

B. Workers' Compensation

1. Introduction

The Company funds workers' compensation in two ways: (1) a self-insured reserve account; and (2) an insurance policy (Exhs. WM-JLM at 37; AG-1-63). WMECo self insures

the first \$500,000 per accident through its reserve account and receives reimbursement through its insurance policy for claims in excess of \$500,000 (Exh. AG-1-63).

During the test year, the Company reported a total workers' compensation expense of negative \$574,216 comprising: (1) total direct WMECo expense of negative \$1,014,414, less \$403,737 in capitalized expense, for a net expense of negative \$610,677; and (2) total NUSCo-related expense of \$38,592, less \$2,130 in capitalized expense, for a net expense of \$36,462 (Exh. WM-JLM WP C-3.13c at 3). The Company proposed an increase of \$917,803 to workers' compensation expense comprising: (1) an increase of \$1,543,864, less \$614,458 in capitalized expense, for a net expense of \$929,406 directly incurred by WMECo; and (2) a decrease of \$12,281, less \$678 in capitalized expense, for a net expense of negative \$11,603 representing the share of NUSCo expense allocated to WMECo (Exh. WM-JLM WP C-3.13c at 3).

The increase proposed by the Company for WMECo's directly incurred costs is a result of a one-time credit of \$1,543,864 to the Company's reserve for the receipt of proceeds from an insurance carrier for past claims (Exhs. WM-JLM at 37; WM-JLM WP C-3.13c at 3). The decrease of \$12,281 for the share of NUSCo's expense allocated to WMECo represents an increase to NUSCo's reserve funding (Exhs. WM-JLM at 37-38; WM-JLM WP C-3.13c at 3). When the Company's proposed increase of \$917,803 is applied to the test year expense of negative \$574,216, it results in a test year pro forma workers' compensation expense of \$343,587 (Exh. WM- JLM WP C-3.13c at 3).

2. Positions of the Parties

a. Attorney General

The Attorney General argues that WMECo should be required to return to customers the insurance proceeds associated with past workers' compensation insurance claims against its insurer (Attorney General Brief at 75-76). The Attorney General maintains that, instead, WMECo proposes an adjustment of \$1,543,864 to remove the insurance proceeds credit from its test year cost of service workers' compensation proceeds (Attorney General Brief at 75-76; Attorney General Reply Brief at 40). According to the Attorney General, this adjustment allows the Company's shareholders to unjustly profit from a windfall of insurance proceeds during the test year related to prior years' claims at the expense of customers (Attorney General Brief at 76; Attorney General Reply Brief at 40-41).

Specifically, the Attorney General claims that utilities routinely charge the cost of workers' compensation insurance to their customers through the cost of service that the Department uses to set base distribution rates (Attorney General Brief at 76, citing New England Gas Company, D.P.U. 08-35, at 103-105 (2009)). Therefore, the Attorney General reasons that customers, not shareholders, are burdened with the costs of the workers' compensation insurance expense (Attorney General Brief at 76). In particular, the Attorney General maintains that the Company included workers' compensation costs in its cost of service used to set rates not only in this case but also in its previous rate case (Attorney General Brief at 76, citing Exh. WM-JLM WP C-3.13c; Tr. 6, at 1025-1026; Western Massachusetts Electric Company, D.P.U. 06-55 (2006)). Accordingly, the Attorney General

asserts that to be consistent with Department precedent, the proceeds from any claims covered under WMECo's workers' compensation insurance policies should be returned to customers (Attorney General Brief at 76, citing Western Massachusetts Electric Company, D.P.U. 87-260, at 36-39 (1988); Attorney General Reply Brief at 40-41, citing Exh. AG-1-63, at 3).

Further, the Attorney General maintains that the Company itself has acknowledged that, on a going forward basis, the accrual for workers' compensation claims should recognize that the expected workers' compensation claims payouts will be lower in the future (Attorney General Reply Brief at 41, citing Company Brief at 93-97). Nonetheless, the Attorney General argues that WMECo's recognition of lower future accruals does not compensate customers for the over-accruals in prior years and the Company must compensate its customers for these past over-accruals (Attorney General Reply Brief at 41).

For these reasons, the Attorney General recommends that the Department require WMECo to return the workers' compensation insurance proceeds to ratepayers by amortizing the \$1,543,864 in credits received over five years and reducing the cost of service by \$308,773 (i.e., \$1,543,864 divided by five) (Attorney General Brief at 76, citing Exh. WM-JLM at 37-38; Attorney General Reply Brief at 41).

Alternately, the Attorney General proposes that if the Department finds that shareholders and not customers should benefit from the proceeds from the workers' compensation insurance policy, all workers' compensation insurance costs should be removed from WMECo's cost of service so that shareholders will properly bear the costs of those policies (Attorney General Reply Brief at 41 n.15). According to the Attorney General, this

scenario would result in a reduction of \$343,587 to the Company's cost of service (Attorney General Reply Brief at 41 n.15, citing Exh. WM-JLM C-3.13c).

With respect to WMECo's self-insured workers' compensation reserve, the Attorney General argues that the Department should reduce the Company's workers' compensation insurance deductible accrual because WMECo has been systematically over-accruing for the deductible on its workers' compensation insurance (Attorney General Brief at 77; Attorney General Reply Brief at 41). In support of her contention, the Attorney General notes that while the Company accrued \$537,432 in worker's compensation expense during the test year, WMECo paid out less than one-half of this amount through its deductible after taking into account reimbursements (Attorney General Brief at 77, citing Exh. AG-1-63, at 3). The Attorney General further asserts that from 2005 through 2009, the Company paid out an average of \$501,480 in claims, while receiving an average of \$369,898 in reimbursements, thus leaving the Company with a reserve of \$1,525,187 at the end of the test year (Attorney General Brief at 78, citing Exh. AG-1-63, at 3). The Attorney General argues that the Company's \$1,525,187 reserve represents more than ten years of annual claims net of reimbursements (Attorney General Brief at 78-79, citing Exh. AG-1-63, at 3; Attorney General Reply Brief at 41). The Attorney General contends that, contrary to the Company's assertions, there is no record evidence to support a finding that WMECo's actuaries established the annual accrual amount (Attorney General Reply Brief at 42). Thus, the Attorney General concludes that the Department should eliminate the Company's workers' compensation deductible accrual

from cost of service or, in the alternative, reduce the Company's cost of service by \$405,849 to reflect the average annual net charges after reimbursements (Attorney General Brief at 79).

b. Company

With respect to the treatment of the one-time insurance credit of \$1,543,864, the Company asserts that the Attorney General's reliance on D.P.U. 87-260 is misplaced (Company Brief at 95-96). The Company states that the current situation is distinguishable from D.P.U. 87-260 because it involves a one-time credit received from an insurance carrier during the test year that was based on a 1979 claim (Company Brief at 96, citing Exh. AG-25-2). The Company explains that the insurance carrier covering the excess amount over WMECo's self-insurance went into receivership but ultimately paid a court-ordered reimbursement to the Company during the test year on a claim that WMECo already had paid from its workers' compensation reserve (Company Brief at 96, citing Exh. AG-25-2).

The Company asserts that the funds it received for the 1979 claim have been credited to customers through the Company's workers' compensation reserve (Company Brief at 96-97, citing Exhs. AG-1-61, at 3; WM-JLM at 37; Tr. 6, at 1026, 1029-1030). The Company also claims that, as a result of the receipt of these funds, its actuaries have recommended that WMECo's reserve level be reduced and the reserve level of NUSCo associated with the Company's share of workers' compensation obligations be increased, resulting in a net reduction in WMECo's workers' compensation reserve (Company Brief at 96, citing Exh. WM-JLM, at 37). Accordingly, the Company asserts that customers received credit for



the workers' compensation payments at issue here by virtue of the credit to its reserve (Company Brief at 97).

With regard to the appropriate level of WMECo's self-insurance reserve, the Company maintains that the Attorney General's proposed reduction to the workers' compensation reserve accrual is overly simplistic and at odds with the recommendation of WMECo's actuaries (Company Brief at 97-98, citing Exhs. WM-JLM, at 37; AG-1-63, at 1-2; DPU-3-9, at 16; DPU-3-19, at 17). The Company argues the Attorney General's judgment as to the appropriate reserve amounts should not be substituted for the expert opinion presented by WMECo (Company Brief at 98).

The Company also asserts that, based on the Attorney General's own calculations, the reserve balance was reduced by more than \$1.3 million in 2009 (Company Brief at 98, citing Attorney General Brief at 78). WMECo asserts that at this level of reduction, the reserve amount will be depleted in just over a year, even with the current accrual level (Company Brief at 98). The Company states that it must maintain a reserve level adequate to cover possible claims and that its reserve level is fully supported by its external consultants (Company Brief at 98; Company Reply Brief at 18).

### 3. Analysis and Findings

WMECo is obligated to pay workers' compensation benefits for employees due to job-related injuries or illness. WMECo has chosen to self-insure a portion of its worker compensation costs (Exhs. WM-JLM at 37; AG-1-63). The Department has found that, in appropriate circumstances, implementing a self-insurance program is a reasonable and effective

approach to reducing costs. D.P.U. 10-55, at 256; Bay State Gas Company, D.P.U. 92-111, at 110 (1992).

We first consider the appropriateness of the Company's proposed credit of \$1,543,864 to its reserve, which represents the receipt of proceeds for past claims. The Attorney General asserts Department precedent requires that proceeds from the prior workers' compensation claim be returned to ratepayers (Attorney General Brief at 75-76, citing D.P.U. 87-260, at 36-39). In D.P.U. 87-260, at 38, the Department required premiums paid and included in cost of service to be offset by a policyholder distribution. Here, the proposed credit is a reimbursement related to a workers' compensation claim that was previously paid by WMECo beginning in 1979. The insurance reimbursement was delayed until the test year due to the bankruptcy of the insurance carrier and its subsequent receivership (Exh. WM-JLM at 37; Tr. 6, at 1026). The record demonstrates that these insurance proceeds were previously credited to customers through the reserve fund and no further credit to ratepayers is required (Exh. WM-JLM at 37; Tr. 6, at 1026-1027). Credits to the reserve fund reduce the amounts that would have to be booked to the reserve. Thus, we determine that the Company has appropriately applied a one-time credit to its reserve.

The Attorney General also questions the appropriate level of monies to maintain in the reserve account (Attorney General Brief at 77-79). The Attorney General argues, without any expert testimony or evidentiary support, that the Company's reserve fund is excessive. WMECo has demonstrated, however, that it relied on the recommendations of its actuaries in determining the reserve level that is adequate to cover the cost of workers' compensation

claims (Exhs. WM-JLM at 37; AG-1-63; DPU-3-9, at 16). Based on this evidence, we accept the reserve fund as established by WMECo.

For the reasons discussed above, we find that WMECo's proposed adjustments to workers' compensation expense are consistent with Department precedent and, therefore, accept the Company's pro forma workers' compensation expense of \$343,587.

C. Bad Debt

1. Introduction

The Company proposes to include \$4,658,149 in its revenue requirement for bad debt expense, a pro forma adjustment of (\$745,154) from the test year amount of \$5,403,303 (Exh. WM-JLM C-3.9). The Company calculated the \$4,658,149 amount by first determining the three-year average of net write-offs as a percentage of total billed retail revenue, multiplying that percentage by the test year billed revenue, and then subtracting from the product the revenue collected in basic service rates for 2009 supply-related bad debt (Exhs. WM-JLM at 22; WM-JLM CP C-3.9). In addition, the Company has included an adjustment of \$457,955 to account for the bad debt expense associated with the proposed revenue increase in this case (Exh. WM-JLM A-3.0, at 2). Finally, the Company proposes to recover its actual basic service related bad debt expense through its basic service rates (Exh. WM-JLM at 23, citing D.P.U. 09-39, at 318-319).

For ratemaking purposes, the Department allows companies to include a representative level of uncollectible revenues as an expense in the cost of service (i.e., amounts owed by customers for utility service but unable to be collected). D.P.U. 09-39, at 164; D.P.U. 09-30,

at 247; D.P.U. 96-50 (Phase 1) at 70-71, citing D.P.U. 89-114/90-331/91-80 (Phase One) at 137-140. To determine the amount of any adjustment for uncollectible accounts or bad debt expense, a company performs a calculation that includes determining the average of the most recent consecutive three years' net-write offs as a percentage of adjusted test year revenues, i.e., the uncollectible ratio. See D.P.U. 89-114/90-331/91-80 (Phase One) at 137-140. To arrive at the bad debt expense includable in the cost of service, this uncollectible ratio is then multiplied by test year distribution-related retail billed revenues, adjusted for any distribution revenue increase or decrease that is approved in the current rate case. See Fitchburg Gas and Electric Light Company, D.P.U. 07-71, at 106-109. When a company is allowed dollar-for-dollar recovery of basic service bad debt expense through a fully reconciling recovery mechanism (e.g., basic service adjustment clause), the appropriate method to calculate bad debt expense pertaining to distribution service is to remove all revenues relating to basic service from the company's bad debt calculation. See D.P.U. 07-71, at 106-109 (2008).

In its initial filing, the Company did not calculate its bad debt expense in accordance with the Department's approved method. In its calculation, the Company included revenues associated with both basic service and distribution service (Exh. WM-JLM WP C-3.9, at 2). As a result of applying the three-year historic average of net write-offs to a level of revenues that included both basic service and distribution service revenues, the Company calculated an uncollectible ratio factor of 1.6614 percent (Exh. WM-JLM WP C-3.9, at 2). The Company subsequently recalculated the bad debt expense, omitting the basic service revenues. The recalculation resulted in an uncollectible ratio factor of 1.2584 (RR-DPU-06). Applying the

uncollectible ratio of 1.2584 to test year billed revenues results in an uncollectible expense of \$2,486,513 (RR-DPU-06). The Company included the corrected amount in its revised cost of service schedules filed on January 6, 2011 (RR-DPU-06).

## 2. Analysis and Findings

We find that the Company's revised method of calculation used in Record Request DPU-06 is consistent with Department precedent. See D.P.U. 07-71, at 106-109; D.P.U. 96-50 (Phase I) at 70-71. The Department, therefore, approves the application of an uncollectible ratio of 1.2584 percent applied to the test year billed distribution revenue of \$197,599,216, to determine a bad debt expense of \$2,486,513 (RR-DPU-6). Thus, the Company appropriately reduced its test year level of uncollectible expense of \$5,403,303 by \$2,916,790 (RR-DPU-6).

In addition, the Company proposed a \$457,955 pro forma adjustment to test year expenses to account for the bad debt expense associated with its requested revenue increase (Exh. WM-JLM A-3.0). The calculation of this pro forma adjustment is based upon an uncollectible expense ratio of 1.6614 percent. As discussed above, the uncollectible expense ratio was calculated incorrectly and later corrected in response to Record Request DPU-6. The correct uncollectible expense ratio is 1.2584 percent (RR-DPU-6). Applying the corrected uncollectible ratio to the revenue increase approved in this case results in a pro forma adjustment of \$211,441, a decrease of \$246,514 from the \$457,955 proposed by the Company.

Finally, the Company proposes to recover its actual commodity-related bad debt expense on a reconciling basis through basic service rates (Exh. WM-JLM, at 23). The

Department has stated that, in principle, all costs of providing basic service should be unbundled and included in the rates paid by customers receiving basic service so as not to act as a barrier to competition. Pricing and Procurement of Default Service, D.T.E. 99-60-A at 4-5 (2000); Procurement of Default Service, D.T.E. 02-40-B at 8-9 (2003). Further, the Department has determined that bad debt expense shall be included in the price of basic service. D.T.E. 02-40-B at 17; Costs To Be Included in Default Service, D.T.E. 03-88, at 3 (2003); D.T.E. 03-88A-F at 5 (2005). Therefore, we find it appropriate for the Company to recover bad debt expense associated with basic service through basic service rates.

D. Inflation Allowance

1. Introduction

The Company proposed an inflation adjustment of \$296,359 (Exhs. WM-JLM C-3.0, at 1; WM-JLM C-WP 3.14).<sup>50</sup> The Company used the GDP-PI to calculate the rates of inflation from the midpoint of 2009 to the midpoint of 2010, and from the midpoint of 2010 to the midpoint of 2011 (Exhs. WM-JLM at 39-40; DPU-5-29). The Company then applied the 2009-2010 rate of inflation to the residual test year O&M expense and increased this amount by the 2010-2011 rate of inflation (Exh. WM-JLM C-WP 3.14; DPU-5-29). The result is a compounded rate of inflation from the midpoint of 2009 to the midpoint of 2011 of

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<sup>50</sup> In Exhibit WM-JLM at 40, the Company states that the inflation adjustments are summarized in Exhibit WM-JLM C 3.13. The adjustments are actually summarized in Exhibit WM-JLM C-3.14.

2.6153 percent applied to a test year residual O&M expense of \$11,331,736, for an inflation adjustment of \$296,359 (Exh. WM-JLM C-3.14).<sup>51</sup>

## 2. 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. 05-27, at 203; D.T.E. 02-24/25, at 184; D.T.E. 01-56, at 71; D.T.E. 98-51, at 100; D.P.U. 96-50 (Phase I) at 112; D.P.U. 95-40, at 64. The inflation allowance is intended to adjust certain O&M expenses for inflation, where the expenses are heterogenous in nature and include no single expense large enough to warrant specific focus and effort in adjusting. D.P.U. 1720, at 19; D.P.U. 956, at 40. The Department permits utilities to increase their test year residual O&M expense by the projected GDP-PI 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. 92-250, at 97. 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. 96-50 (Phase I) at 113.

WMECo has implemented the following cost containment measures. In 2007, the Company negotiated a three-year agreement with its pharmacy benefits manager that resulted in savings of approximately \$1.1 million annually for NU, of which approximately \$94,500 was an annual savings to WMECo (Exhs. WM-KHA at 3; DPU-3-10). In addition, the Company has instituted a program requiring employees to utilize lower cost generic drugs

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<sup>51</sup>  $\$296,359/\$11,331,736 = 2.6153$  percent.

(Step Therapy) with an estimated savings to WMECo of \$64,000 (Exhs. WM-KHA at 3-4; DPU-3-11; DPU-8-17). The Company uses a comprehensive disease management program for chronic disease conditions that has resulted in net savings to NU of \$1,401,201, of which WMECo would be allocated approximately 8.5 percent (Exhs. WM-KHA at 3; AG-2-32). NU employs an employee wellness program (WellAware), in which WMECo employees have a 59 percent participation rate, to encourage employees and their spouses to improve their overall health and well being (Exh. WM-KHA at 5-6). Towers Perrin, an employee benefits consulting firm, has estimated a 160 percent return on investment in the program (Exh. AG-2-36). Additionally, the Company has capped the amount of annual premiums it will pay for medical coverage at \$6,101 per retiree under the age of 65, and \$2,166 per retiree over the age of 65 (Exh. WM-KHA at 7). The Company has introduced several initiatives to reduce retirement benefits including a reduction in eligibility for Company paid life insurance and the introduction of the K-Vantage plan<sup>52</sup> and Retiree Medical Savings Accounts to migrate employees out of the Company's pension plan and into 401(k) accounts (Exh. WM-KHA at 8-11). In 2009, WMECo delayed its merit review cycle by four months and excluded managers, directors and officers from the merit adjustment process (Exh. WM-KCC at 6). Pay delays and exclusions resulted in an estimated test year savings of \$94,245 and an estimated annual future savings of \$35,000 (Exh. AG-2-50). Additionally, the Company

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<sup>52</sup> The K-Vantage plan is an enhanced 401(k) benefit, under which the Company makes contributions to the employees defined contribution account equal to a percentage of the employees covered pay (Exh. WM-KHA at 8-9).



altered its work practices and now responds to non-outage, non-safety related calls only during daytime hours (Exh. WM-PJC at 15). Accordingly, we find that the Company has taken cost containment measures and is eligible to include an inflation adjustment to residual O&M expenses in base rates.

WMECo's inflation calculation provides for separate residual O&M factors for mid-2010 and mid-2011. The Department finds that the Company's compounding method is inconsistent with precedent. The Department has recalculated the inflation factor based on updated GDP-PI indices, and finds that inflation rate from the midpoint of 2009 to the midpoint of 2011 of 2.644 percent.<sup>53</sup> Accordingly, the Department will use an inflation factor of 2.644 percent to determine WMECo's inflation allowance.

If an O&M expense has been adjusted or disallowed by the Department for ratemaking purposes, so that the expense is representative of costs to be incurred in the year following new rates, the expense is also removed in its entirety from the inflation allowance. D.T.E. 05-27, at 204; D.T.E. 02-24/25, at 184; D.P.U. 87-122, at 82. WMECo has adjusted its test year O&M expense for a variety of items because these expenses have been either adjusted for ratemaking purposes or are recovered through other mechanisms (Exhs. WM-JLM WP C-3.0, at 1; WM-JLM WP-C-3.14, at 1). In addition, the Department has adjusted the Company's O&M expense for manufactured gas remediation expense and shareholder services, and has

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<sup>53</sup> The June 2009 GDP-PI was 1.097 and the forecast June 2011 GDP-PI is 1.126 (Exh. DPU-5-29). Consequently, the inflation factor from the midpoint of the test year to the midpoint of the first twelve months after the date of this Order is equal to:

$(1.126 - 1.097)/1.097 = 2.644 \text{ percent.}$

treated the Company's rate case expense as an O&M expense adjustment rather than as an amortization. See Sections V.H, V.I. and V.J. Therefore, we have removed the Company's test year expense associated with these items, totaling \$338,535, from the residual O&M expense.<sup>54</sup> As shown on Table 1, the approved inflation allowance for WMECo is \$290,660. Accordingly, the Department will reduce the Company's proposed cost of service by \$5,699.

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<sup>54</sup> Representing the sum of \$251,064 in manufactured gas plant remediation expense, \$24,969 in shareholder services, and \$62,502 in rate case expense.

**TABLE 1**

<b>Test Year O&amp;M Expense Per Books</b>	<b>\$57,199,116</b>
<b>Less:</b>	
Computer Services	\$1,852,835
Facilities Operation	586,367
Field Operations	2,407,702
Insurance	198,561
Regulatory	538,467
Rent	1,975,567
Uncollectibles	5,403,303
Vehicles	2,064,793
Payroll	25,660,216
Payroll Incentive	1,408,853
Employee Benefits	3,770,716
	<hr/> 45,867,380
 O&M Expenses Subject to Inflation per Company	 \$11,331,736
 Less Department Adjustments:	
 MGP Remediation Expense	 \$251,064
Shareholder Services	24,969
Rate Case Expense	62,502
Department Sub-total	<hr/> \$338,535
 Residual O&M Expense	 \$10,993,201
 Projected Inflation Rate	 <hr/> 2.6440%
 <b>Inflation Allowance</b>	 \$290,660
 <b>Company Proposal</b>	 <hr/> \$296,359
 <b>Difference</b>	 (\$5,699)

E. Depreciation Expense

1. Introduction

During the test year, WMECo booked \$19,216,068 in depreciation expense (Exh. WM-JLM WP C-3.0). The Company proposes to increase its depreciation expense by \$1,623,673 based on the application of new accrual rates to its pro forma plant in service (Exh. WM-JLM WP C-3.15, at 1). The Company based its proposed accrual rates on a depreciation study performed in 2010 that recommended a composite accrual rate of 3.06 percent, representing an increase from the 2.85 percent currently in place (Exh. WM-REW-2, at 3).<sup>55</sup>

The Company's 2010 depreciation study was based on plant data for the year ending December 31, 2009, and also relied on parameters estimated in a depreciation study that was conducted in 2006 (Exh. WM-REW-2, at 3). The data used to conduct the 2009 depreciation study included: (1) data used to conduct the 1996 study; and (2) 1970-2009 plant and reserve activity for WMECo (Exh. WM-REW-2, at 6). As a check on the accuracy and completeness of the assembled data base, the Company compared beginning plant balances, additions, retirements, transfers and adjustments, and the ending plant balances derived for each year, to the official plant records of the Company (Exh. WM-REW-2, at 6).

The Company's depreciation study relies on the life analysis and life estimation methods that together represent a two-step procedure for estimating the mortality

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<sup>55</sup> Of the 21 property accounts examined in the depreciation study, the Company proposed to increase the accrual rates for eleven accounts and decrease the accrual rates for the remaining ten accounts (Exh. WM-REW-2, at 3).

characteristics of a plant category (Exh. WM-REM-2, at 6). The first step (i.e., life analysis) is largely mechanical and primarily concerned with history (Exh. WM-REW-2, at 6).

Statistical techniques are used in this step to obtain a mathematical description of the forces of retirement acting upon a plant category and an estimate of the projection life of the account (Exh. WM-REW-2, at 6). Mathematical expressions used to describe these life characteristics are known as survival functions or survivor curves, and are referred to as Iowa curves (Exh. WM-REW-2, at 6,7,8).<sup>56</sup> The second step, (i.e., life estimation) predicts the expected remaining life of property units still exposed to the forces of retirement (Exh. WM-REW-2, at 7). In this step, the results of life analysis are blended with informed judgment to obtain an appropriate projection service life (Exh. WM-REW-2, at 7).

In addition to service life determinations, depreciation accrual rates also take into consideration future salvage associated with those assets that eventually will be retired (Exh. WM-REW-2, at 9). To ascertain net salvage values, the Company relied on the five-year moving averages of the ratio of realized salvage and cost of removal to the associated retirements to: (1) estimate realized net salvage rates; (2) detect the emergence of historical trends; and (3) establish a basis for estimating future net salvage rates (Exh. WM-REW-2, at 9). WMECo estimated the average net salvage rate for an account using direct dollar

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<sup>56</sup> Iowa curves are frequency distribution curves initially developed at the Iowa State College Engineering Experiment Station during the 1920s and 1930s; these curves are widely accepted in determining average life frequencies for utility plant. Boston Edison Company/Cambridge Electric Light Company/Commonwealth Electric Company/Canal Electric Company, D.T.E. 06-40, at 66-67 n.44 (2006). Initially, 18 curve types were published in 1935, and four additional survivor curves were identified in 1957. Id.

weighting of historical retirements with the historical net salvage rate, and future retirements (i.e., surviving plant) with the estimated future net salvage rate (Exh. WM-REW-2, at 9, 14, 15).

As part of its depreciation study, WMECo examined the depreciation reserves associated with each of its plant accounts by comparing the theoretical reserve for each account to the actual reserve booked against that account (Exh. WM-REW-2, at 10-11).<sup>57</sup> While differences between the theoretical and recorded reserves will occur in the normal course of adjusting depreciation accrual rates, the Company considers it appropriate to periodically redistribute the recorded reserves among primary accounts in order to correct over- or under-accruals for these accounts (Exh. WM-REW-2, at 16). The Company reported a combined recorded reserve for distribution and general plant of \$172,724,328, representing 27.7 percent of total depreciable plant (Exh. WM-REW-2, at 11, 16). In contrast, WMECo determined that the corresponding computed reserve totaled \$205,428,662, representing 32.9 percent of the depreciable plant investment (Exh. WM-REW-2, at 11, 16). The Company redistributed the actual depreciation reserve among its various plant accounts on a pro rata basis with the percentage determined by the theoretical reserve balances, which produced different reserves for each account while maintaining the same reserve balance for its distribution plant and general plant (Exh. WM-REW-2, at 11, 16). As a result, the measured reserve imbalance of \$32,704,334 would be amortized over the composite weighted-average

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<sup>57</sup> Theoretical reserves measure the implied depreciation reserve assuming that the timing of future retirements and net salvage are exactly in conformance with the results predicted by the selected survivor curve (Exh. WM-REW-2, at 10; Tr. 14, at 2340).

remaining life of each rate category using the depreciation accrual rates developed in the study (Exh. WM-REW-2, at 11).

2. Company

WMECo describes the approach it took to derive its proposed depreciation accrual rates, and states that the depreciation study conforms to long-standing Department precedent (Company Brief at 105-107). The Company contends that the Department should adopt the proposed depreciation accrual rates because they were: (1) developed in accordance with long-standing Department policy; (2) supported in full detail throughout the proceedings, including discovery and evidentiary hearings; and (3) uncontested by any of the parties in this proceeding (Company Brief at 108). No other party submitted a brief on the issue of the Company's proposed depreciation accrual rates.

3. Analysis and Findings

a. Standard of Review

Depreciation expense allows a company to recover its capital investments in a timely and equitable fashion over the service lives of the investments. Fitchburg Gas and Electric Light Company, 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); Boston Edison Company, D.P.U. 1350, at 97 (1983). Depreciation studies rely not only on statistical analysis but also on the judgment and expertise of the preparer. The Department has held that when a witness reaches a conclusion about a depreciation study that is at variance with that witness's engineering and statistical analysis, the Department will not accept such a conclusion absent sufficient justification on the record for

such a departure. Cambridge Electric Light Company, D.P.U. 92-250, at 64 (1992); The Berkshire Gas Company, D.P.U. 905, at 13-15 (1982); Massachusetts Electric Company, D.P.U. 200, at 21 (1980).

The Department recognizes that the determination of depreciation accrual rates requires both statistical analysis and the application of the preparer's judgment and expertise. Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25, at 132 (2002). Because depreciation studies rely by their nature on examining historic performance to assess future events, a degree of subjectivity is inevitable.<sup>58</sup> Nevertheless, the product of a depreciation study consists of specific accrual rates to be applied to specific account balances associated with depreciable property. A mere assertion that judgment and experience warrant a particular conclusion does not constitute evidence. See Eastern Edison Company, D.P.U. 243, at 17 (1980); D.P.U. 200, at 20-21; Lowell Gas Company, D.P.U. 19037/19037-A, at 23 (1977).

It thus follows that the reviewer of a depreciation study must be able to determine, preferably through the direct filing, and at least in the form of comprehensive responses to well-prepared discovery, the reasons why the preparer of the study chose one particular life-span curve or salvage value over another. The Department will continue to look to the expert witness for interpretation of statistical analyses, but will consider other expert testimony and evidence that challenges the preparer's interpretation and expects sufficient justification on

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<sup>58</sup> This is especially relevant in the calculation of net salvage factors where the cost to demolish or retire facilities cannot be established with certainty until the actual event occurs. Cambridge Electric Light Company, D.P.U. 92-250, at 66 (1993); Boston Edison Company, D.P.U. 1720, at 44 (1984); Boston Edison Company, D.P.U. 1350, at 109-110 (1983).



the record for any variances resulting from the engineering and statistical analyses.

Commonwealth Electric Company, D.P.U. 89-114/90-331/91-80 (Phase One) at 54-55 (1991).

To the extent a depreciation study provides a clear and comprehensive explanation of the factors that went into the selection of accrual rates, such an approach will facilitate Department and intervenor review.

b. Account-By-Account Analysis

i. Introduction

None of the parties in this proceeding contested on brief WMECo's proposed depreciation accrual rates. The Department finds that the Company's witness has thoroughly demonstrated his knowledge of depreciation concepts and applications, as well as his ability to apply his judgment and expertise in interpreting the data and statistics derived from this data (Exhs. WM-REW-2, at 9-12; WM-REW-3, at 4-12; Tr. 14, at 2275-2276). The witness also demonstrated his familiarity with the Company's plant and maintenance practices (Tr. 14, at 2316, 2350-2353; RR-AG-73). While the Department has examined each of the proposed accrual rates, for purposes of this Order, we will discuss only those accrual rates where an increase occurred as the result of using either a different survivor curve or a different salvage factor.

ii. Account 361 – Structures and Improvements

The current accrual rate for this account is 1.45 percent (Exhs. WM-REW-2, at 14; DPU-6-9, at 2). The Company proposes to replace the current 60-year R-2 curve<sup>59</sup> with a 65-year S-1.5 curve, and retain the current net salvage factor of negative 15 percent, resulting in a remaining life of 37.89 years and an accrual rate of 1.99 percent (Exhs. WM-REW-2, at 14, 18; WM-REW-3, at 72-73). Although the statistical life analysis through 2005 supported the retention of the current projection life curve, more recent experience indicates that a lower modal symmetrical dispersion is obtained with a 65-year S-1.5 curve (Exh. WM-REW-3, at 72, 85-87; Tr. 14, at 2277-2282). Therefore, the S-1.5 curve provides a better statistical fit than the R-2 curve. The Company's recent net salvage history indicates no gross salvage realized and some removal costs associated with this account (Exh. WM-REW-3, at 72-73, 88).

The Department finds that the Company has properly interpreted the results of its statistical analysis in its selection of a 65-year S-1.5 curve. The Department also finds that the Company has properly interpreted the data and exercised reasoned judgment in its selection of the proposed projection service life and salvage factor. Therefore, the Department accepts the proposed accrual rate for Account 361.

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<sup>59</sup> The projection service life and survivor curve are customarily combined in depreciation studies; for example, a 60-year R-2 curve refers to a projection service life of 60 years combined with an R-2 survivor curve.

iii. Account 362 – Station Equipment

The current accrual rate for this account is 3.02 percent (Exhs. WM-REW-2, at 14; DPU-6-9, at 2). The Company proposes to replace the existing 45-year R-1.5 curve with a 42-year R-1 curve, and retain a net salvage factor of negative 30 percent, resulting in a remaining life of 30.86 years and an accrual rate of 3.23 percent (Exh. WM-REW-2, at 14, 18; WM-REW-3, at 90-91). The statistical service life and graphical analyses for this account support an adjustment to the projection life curve, with the polynomial graduations best described by use of a 42-year R-1 curve (Exh. WM-REW-3, at 90-105; Tr. 14, at 2277). The Company's recent net salvage history indicates no gross salvage realized from retirements, but significant retirement costs associated with this account (Exh. WM-REW-3, at 106).

The Department finds that the Company has properly interpreted the results of its statistical analysis in its selection of a 42-year R-1 curve. The Department also finds that the Company has properly interpreted the data and exercised reasoned judgment in its selection of the proposed projection service life and salvage factor. Therefore, the Department accepts the proposed accrual rate for Account 362.

iv. Account 364 – Poles, Towers and Fixtures

The current accrual rate for this account is 2.36 percent (Exhs. WM-REW-2, at 14; DPU-6-9, at 2). The Company proposes to retain the current 50-year R-1.5 curve, and apply a net salvage factor of negative 40 percent, resulting in a remaining life of 36.07 years and an accrual rate of 3.04 percent (Exhs. WM-REW-2, at 14, 18; WM-REW-3, at 108-109). The Company's recent net salvage history indicates no gross salvage realized from retirements, but

significant retirement costs associated with this account (Exh. WM-REW-3, at 124; Tr. 14, at 2318-2320). In addition, the relatively large removal costs recorded during 2008 and 2009 are primarily the result of delayed postings of projects completed in previous years (Exh. WM-REW-3, at 108).<sup>60</sup>

The Department finds that the Company has properly interpreted the data and exercised reasoned judgment in its selection of the proposed projection service life and salvage factor. Therefore, the Department accepts the proposed accrual rate for Account 365.

v. Account 365 – Overhead Conductors and Devices

The current accrual rate for this account is 3.07 percent (Exhs. WM-REW-2, at 14; DPU-6-9, at 2). The Company proposes to retain the current 45-year R-1.5 curve, and apply a net salvage factor of negative 40 percent, resulting in a remaining life of 32.55 years and an accrual rate of 3.57 percent (Exhs. WM-REW-2, at 14, 18; WM-REW-3, at 90-91). The Company's recent net salvage history indicates no gross salvage realized from retirements, but indicates some retirement costs associated with this account (Exh. WM-REW-3, at 143). The significant removal recorded between 2007 and 2009 is primarily the result of delayed postings of projects completed in previous years (Exh. WM-REW-3, at 126).

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<sup>60</sup> According to the Company, there will frequently be posting delays when closing out completed work orders (Tr. 14, at 2315-2316). In recognition of this inherent delay, depreciation analyses will rely on banding analyses as part of the net salvage analysis (Tr. 14, at 2316).

The Department finds that the Company has properly interpreted the data and exercised reasoned judgment in its selection of the proposed projection service life and salvage factor. Therefore, the Department accepts the proposed accrual rate for Account 362.

vi. Account 370 - Meters

The current accrual rate for this account is 3.20 percent (Exhs. WM-REW-2, at 14; DPU-6-9, at 2). The Company proposes to replace the existing 33-year SC curve with a 23-year L-0.5 curve, and apply a net salvage factor of positive 30 percent, resulting in a remaining life of 16.52 years and an accrual rate of 3.23 percent (Exhs. WM-REW-2, at 18; WM-REW-3, at 207). The progression band analyses for this account indicate steadily declining projection service lives, which are consistent with the decreased service life expected for electronic meters versus older-style electromechanical meters (Exh. WM-REW-3, at 216-221). The Department finds that the Company has properly interpreted the results of its statistical analysis in its selection of a 23-year L-0.5 curve.

The Company's recent net salvage history indicates significant retirements in this account, and an overall salvage factor of 30.8 percent (Exh. WM-REW-3, at 207, 223; Tr. 14, at 2285; RR-DPU-44, Att. at 1-4). Throughout the NU system, meters are initially acquired by Connecticut Light and Power Company ("C&LP") and stored at a central meter shop for sale at cost to all NU affiliates, including the Company (Tr. 14, at 2284-2285). Because the depreciation study treats retired meters as having been sold back to C&LP at cost, gross salvage values increase (Exh. WM-REW-3, at 207; Tr. 14, at 2284-2285). In recognition of

NU's meter accounting practices, the Company determined that an increase in salvage values for Account 370 was justified (Exh. WM-REW-3, at 207).

The Department finds that the Company has properly interpreted the data and exercised reasoned judgment in its selection of the proposed projection service life and salvage factor.

Therefore, the Department accepts the proposed accrual rate for Account 370.

vii. Account 373 – Street Lighting

The current accrual rate for this account is 2.19 percent (Exhs. WM-REW-2, at 14, 18; DPU-6-9, at 2). The Company proposes to replace the existing 30-year O-2 curve with a 30-year O-3 curve, and apply a net salvage factor of negative ten percent, resulting in a remaining life of 29.29 years and an accrual rate of 3.58 percent (Exhs. WM-REW-2, at 14; WM-REW-3, at 239). The proposed 30-year O-3 curve provides a better statistical fit than the O-2 curve (Exh. WM-REW-3, at 250-252). The Company's recent net salvage history indicates an overall salvage factor of negative 5.1 percent (Exh. WM-REW-3, at 239, 253). However, this reported salvage factor has been distorted by the Company's sale of street lighting systems in 2008, where sale proceeds were significantly less than the associated retirements (Exh. WM-REW-3, at 239, 253). Taking these sales into consideration, the Company determined that a net salvage factor of negative 10 percent was appropriate for this account (Exh. WM-REW-3, at 239).

The Department finds that the Company has properly interpreted the results of its statistical analysis in its selection of a 30-year O-3 curve. The Department also finds that the Company has properly interpreted the data and exercised reasoned judgment in its selection of

the proposed projection service life and salvage factor. Therefore, the Department accepts the proposed accrual rate for Account 373.

4. Conclusion

In order to calculate WMECo's annual depreciation expense, the Department has applied the accrual rates approved by this Order to the Company's depreciable plant balances included in rate base. Based on this analysis, the Department finds that the Company's annual depreciation expense is \$20,839,741 (Exh. WM-JLM WP C-3.15, at 1, 2). Accordingly, the Company's test year depreciation expense will be increased by \$1,623,673.

F. NUSCo Depreciation Expense

1. Introduction

During the test year, WMECo booked \$680,604 in depreciation expense associated with information technology equipment owned by NUSCo, but used to provide shared services to NU's affiliates, including the Company (Exhs. WM-JLM at 43; WM JLM-1, at 43). The Company proposes to increase its cost of service by \$50,595 to annualize its allocated share of NUSCo's depreciation expense associated with plant that was in service during the first three months of 2010 (Exhs. WM-JLM at 42; WM-JLM WP C-3.16; AG-6-26).

2. Positions of the Parties

a. Attorney General

The Attorney General argues that the Company's proposed adjustment should not be granted (Attorney General Brief at 121; Attorney General Reply Brief at 33-34). The Attorney General contends that WMECo seeks to include depreciation expense on plant placed into service during 2010, which is ineligible for inclusion under the Department's post-test year

rate base standard (Attorney General Reply Brief at 34-35, citing Massachusetts Electric Company, D.P.U. 92-78, at 5 (1992); Boston Edison Company, D.P.U. 160, Policy Statement of the Commission Concerning the Adoption of Year-End Rate Base (1980)). Moreover, the Attorney General contends that the Company's proposed increase is not based on actual monthly expenses, but rather relies on estimates for ten of the twelve months that make up the Company's proposed adjustment (Attorney General Brief at 121-122). Consequently, the Attorney General concludes that the proposed increase is not known and measurable and, therefore, should be denied (Attorney General Brief at 121-122).

b. Company

WMECo argues that its proposed increase represents a known and measurable change to test year cost of service (Company Brief at 108-109). The Company argues that the Attorney General's contention that the subject assets were not placed into service until 2010 is a "sweeping" statement that is unsupported by the evidence (Company Reply Brief at 13). According to the Company, its proposed adjustment is based on an annualization of actual depreciation expense incurred from January through March of 2010 (Company Brief at 109). WMECo maintains that because its policy is to begin depreciating assets in the month after they are placed into service, the reported depreciation expense for January 2010 can, by definition, only be associated with plant that was placed into service prior to 2010 (Company Reply Brief at 13-14). WMECo contends that, to the extent that there were any NUSCo assets added during 2010, these amounts would be nominal and would in any case represent known and measurable changes to test year cost of service (Company Reply Brief at 14).



### 3. Analysis and Findings

As discussed above, to qualify for inclusion in rates, any payments by a utility to an affiliate must be (1) for activities that specifically benefit the regulated utility and 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 formula that is both cost-effective and nondiscriminatory within both those services specifically rendered to the utility by the affiliate and for general services which may be allocated by the affiliate to all operating affiliates. Hingham Water Company, D.P.U. 88-170, at 21-22 (1989); AT&T Communications of New England, D.P.U. 85-137, at 51-52 (1985).

WMECo's proposed adjustment is based on the annualization of depreciation expense associated with plant investment made by NUSCo during the first quarter of 2010 (Exh. AG-6-26, at 2; Tr. 19, at 2871-2872). Specifically, NUSCo's depreciation expense increased by \$71,275 during February of 2010, and further increased by an estimated \$1,190 during March of 2010 (Exh. AG-6-26, at 2). These additions produce an annualized NUSCo depreciation expense of \$10,439,685, and represent an increase of approximately nine percent to NUSCo's annualized depreciation expense of \$9,643,764 as of January 2010 (Exh. AG-6-26, at 2). Thus, assuming no change in NUSCo's depreciation rates, the changes in these depreciation charges lead to the conclusion that NUSCo's post-test year plant additions also represent approximately nine percent of NUSCo's test year plant in service.<sup>61</sup>

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<sup>61</sup> The Department is satisfied that NUSCo made no post-test year plant additions to these accounts during January 2010.

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 which has a substantial effect on its rate base. Boston Gas Company, D.P.U. 96-50-C at 16-18, 20-21 (1997); Boston Gas Company, D.P.U. 96-50 (Phase I), at 15-16 (1996); Massachusetts-American Water Company, D.P.U. 95-118, at 56, 86 (1996); Western Massachusetts Electric Company, D.P.U. 85-270, at 141 n.21 (1986); Massachusetts-American Water Company, D.P.U. 1700, at 5-6 (1984). Consistent with the Department's policy to exclude a company's post-test year additions to rate base unless such additions are significant, the Department will exclude NUSCo's post-test year plant additions from depreciable plant for purposes of determining the Company's allocated NUSCo depreciation expense.

To determine the level of NUSCo depreciation to be included in WMECo's cost of service, the Department has relied on the Company's allocated portion of the January 2010 balances for Accounts 403.ND, 403.NE, and 403.NF, totaling \$59,811 (Exh. AG-6-26).<sup>62</sup> Annualizing this expense over twelve months produces a pro forma allocated NUSCo depreciation expense of \$717,732. Of this amount, 5.52 percent has been capitalized, which results in a pro forma capitalized amount of \$39,619 (see Exh. AG-6-26, at 2). Therefore, the Department finds that the appropriate level of NUSCo depreciation expense to be included in

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<sup>62</sup> As noted above, the Department is satisfied that the NUSCo plant balance as of January of 2010, as provided in Exhibit AG-6-26, represents NUSCo's plant in service as of the end of 2009.

the Company's cost of service is \$678,112. Accordingly, the Department will reduce WMECo's proposed cost of service by \$53,087.

G. Farm Discounts

1. Introduction

WMECo provides certain customers engaged in agriculture or farming a ten percent reduction in the rates to which such customers would otherwise be subject, pursuant to Section 315 of the Electric Restructuring Act.<sup>63</sup> See 220 C.M.R. § 11.06(a)-(b). Pursuant to the D.T.E. 06-55 Rate Settlement, the Company received approval to amortize its deferred farm credits over a four-year period, effective January 1, 2007 (Exh. AG-1, § 2.16(d)).

In the current proceeding, WMECo states that it had deferred a total of \$483,389 in farm discount credits (Exh. WM-JLM WP C-3.19, at 2). Although the Company began recovering these deferrals on January 1, 2007, in accordance with the terms of the D.T.E. 06-55 Rate Settlement, WMECo states that a deferral balance associated with 2006 remains, because the D.T.E. 06-55 Rate Settlement only provided for the recovery of deferred farm discounts through December 31, 2005, the test year used in D.T.E. 06-55 (Exhs. WM-JLM at 54; WM-JLM WP C-3.19, at 2; AG-1, § 2.16(d)). The Company proposes to recover

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<sup>63</sup> On November 25, 1997, Chapter 164 of the Acts of 1997, entitled "An Act Relative to Restructuring the Electric Utility Industry in the Commonwealth, Regulating the Provision of Electricity and Other Services, and Promoting Enhanced Consumer Protection Therein" ("Act") was signed by the Governor. Section 315 of the Act requires Massachusetts electric and gas distribution companies and municipal lighting plants to provide customers who meet certain eligibility requirements for being engaged in the business of agriculture or farming a ten percent reduction ("Farm Discount") in the rates to which such customers would otherwise be subject. St. 1997, c. 164, § 315.

the remaining \$215,217 in deferred farm discounts over a period of five years (Exh. WM-JLM WP C-3.19, at 2). WMECo also is seeking to apply a carrying charge<sup>64</sup> on the unamortized balance (Exh. WM-JLM WP C-3.19, at 4).

## 2. Position of the Company

WMECo maintains that it only seeks to recover its farm discount deferral over a period of five years, with carrying charges equal to the customer deposit rate (Company Brief at 144). The Company contends that because the Department has previously approved the recovery of deferred farm discounts, and because no party contested WMECo's proposal, the Department should approve the Company's proposed adjustment and amortization (Company Brief at 144, citing Boston Gas Company/Colonial Gas Company/Essex Gas Company, D.P.U. 10-55, at 462 (2010)).

## 3. Analysis and Findings

As noted above, the Company's deferred farm discounts are associated with 2006, the period after the test year applied in the D.T.E. 06-55 Rate Settlement. The Department finds that the Company's deferred farm discount of \$215,217 is eligible for recovery, and that the Company can recover its deferred farm discounts as authorized by 220 C.M.R. § 11.06(a)-(b). See also D.P.U. 09-30, at 263-264; D.T.E. 05-27, at 190-191; D.T.E. 02-24/25, at 203-205.

Concerning the appropriate amortization period, WMECo argues that the amortization period should be five years based on the average frequency of rate cases for the Company

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<sup>64</sup> While WMECo did not explicitly provide a method for computing this carrying charge, Exhibit WM-JLM WP C-3.19, at 4 indicates that the Company is applying a customer deposit rate of 1.207 percent.

(Exh. WM-JLM at 55). Amortization periods are determined based on a case-by-case review of the evidence and underlying facts. Aquarion Water Company of Massachusetts, D.P.U. 08-27, at 99 (2009); Barnstable Water Company, D.P.U. 93-223-B at 14 (1994); Fitchburg Gas and Electric Light Company, D.P.U. 84-145-A at 54 (1985). In determining the proper amortization period, we must balance the interests of the Company and of ratepayers. Barnstable Water Company, D.P.U. 93-223-B at 14 (1994). In setting an amortization period, the Department has considered such factors as the amount under consideration for deferral, the value of such an amount to ratepayers based on certain amortization periods, and the impact of the adjustment on the company's finances and income. Aquarion Water Company of Massachusetts, D.P.U. 08-27, at 99 (2009); Barnstable Water Company, D.P.U. 93-223-B at 14 (1994). Based on these considerations, the Department will amortize WMECo's deferred farm discount over six years, which is consistent with the six-year normalization period approved for the Company's rate case expense. D.P.U. 09-30, at 263-264; D.T.E. 02-24/25, at 204-205.

We now turn to the issue of an appropriate carrying charge. The Company claims that a carrying charge is appropriate because of the dollar magnitude of its combined deferrals. Given the amount of the deferral and the relatively short amortization period, the Department finds it inappropriate to include any carrying charges on the recovery of deferred farm discounts. Accordingly, the Department will not include any carrying charges on WMECo's unamortized farm discounts.

Application of a six-year amortization period to the \$215,217 in deferred farm discounts the Department has approved herein produces an annual amortization expense of \$35,870. Accordingly, the Company's proposed cost of service is reduced by \$7,173, with no carrying charges.

H. Rate Case Expense

1. Introduction

Initially, WMECo estimated that it would incur \$1,377,000 in rate case expense (Exh. WM-JLM WP C-3.19, at 3). The Company's proposed rate case expense includes consultant costs for the preparation of: (1) the proposed decoupling mechanism, including the proposed capital reliability recovery clause and inflation adjustment factor; (2) the depreciation study; and (3) the marginal cost of service study. The Company also included in its proposed rate case expense: (1) the Attorney General's consultant costs as authorized by G.L. c. 12, § 11E(b); and (2) outside legal costs in support of the Company's in-house attorneys (Exhs. WM-JLM at 49; WM-JLM WP C-3.19, at 3). Based on its final update, the Company stated that its total actual rate case expense was \$1,174,956 (RR-AG-4 (January 5, 2011 Update)). This expense consisted of \$945,475 in Company expenses, \$165,550 in Attorney General consultant costs, \$48,727 in hearing transcription fees, and \$15,204 in costs for legal notices (RR-AG-4 (January 5, 2011 Update)).

The Company issued requests for proposals ("RFPs") to provide consulting services related to the following: (1) the proposed decoupling mechanism; (2) the depreciation study; and (3) the marginal cost of service study. The Company also issued an RFP for outside legal

counsel (Exhs. WM-JLM at 49-50; DPU-2-1). The Company did not issue an RFP for the services of an outside attorney who assisted the Company's cost of capital witness (Exhs. WM-JLM at 49-50; DPU-2-11).

WMECo included its rate case expense, as well as the Attorney General's consultant costs, as part of various deferred expenses that the Company proposes to amortize over five years (Exh. WM-JLM WP C-3.19, at 2). Amortizing the rate case expense of \$1,174,956 over five years produces an annual expense of \$234,991.

The Company states that because Paragraph 2.16(d) of the D.T.E. 06-55 Settlement provided for the normalization of rate case expense over a four-year period, the normalization period was scheduled to expire on December 31, 2010 (Exh. DPU-2-12). In recognition of that expiring normalization amount, WMECo removed the \$62,502 test year normalization associated with the D.T.E. 06-55 Settlement from its proposed cost of service (Exhs. WM-JLM WP C-3.19, at 2; DPU-2-12).

## 2. Positions of the Parties

### a. Attorney General

The Attorney General contends that WMECo has failed to justify full recovery of its rate case expense for consultants and outside services (Attorney General Brief at 84-85). As described below, the Attorney General claims that WMECo failed to issue RFPs for some of its rate case expenses and also argues that some of the Company's rate case expenses are unreasonable and were imprudently incurred (Attorney General Brief at 85).

The Attorney General characterizes as illogical WMECo's argument that cost overruns for some rate case services are counterbalanced by cost underruns for other rate case services (Attorney General Reply Brief at 44). Moreover, the Attorney General dismisses the Company's contention that it has kept its rate case expense down through the use of in-house staff and counsel, as WMECo has failed to take into consideration the fact that the direct costs of those analysts and attorneys are already incorporated in the Company's rates (Attorney General Reply Brief at 45 n.17).

Turning to specific elements of WMECo's rate case expense, the Attorney General raises two concerns with respect to the consultant's fees for revenue decoupling services. First, the Attorney General argues that the Company fails to explain how the consultant's bid in response to the RFP was adjusted to arrive at the \$100,000 fee included in the Company's revenue requirement analysis (Attorney General Brief at 86-88).<sup>65</sup> Second, the Attorney General claims that although the consulting services provided would not be unanticipated based on the response to the RFP or extraordinary in light of rate case precedent, the consultant's total billings to the Company were 228 percent higher than the initial estimate submitted by WMECo (Attorney General Brief at 87; Attorney General Reply Brief at 44-45, citing RR-AG-4 (November 29, 2010 update)). The Attorney General accuses the decoupling consultant of having "low-balled" its RFP bid and claims that the subsequent cost increases indicate that this consultant did not present a reasonable budget (Attorney General Brief at 87).

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<sup>65</sup> The consultant's response to the RFP has been accorded confidential treatment; however, its bid was not the same as the \$100,000 amount estimated for its services in the Company's revenue requirement analysis (Exh. DPU-2-1).



The Attorney General also argues that WMECo exercised inadequate control over its decoupling consultant's billings in that the Company never re-evaluated the consultant's RFP cost estimate, requested a price cap, or initiated any cost containment measures (Attorney General Brief at 87, citing Tr. 3, at 411). Consequently, the Attorney General concludes that the Department should limit the Company's recovery of consulting fees for revenue decoupling services to the amounts identified in its response to the RFP (Attorney General Brief at 88; Attorney General Reply Brief at 46).

The Attorney General raises similar concerns with respect to the Company's depreciation consultants. First, the Attorney General argues that the Company has not explained how the depreciation consultant's bid in response to the RFP was adjusted to arrive at the \$168,000 fee included in the Company's revenue requirement analysis (Attorney General Brief at 89).<sup>66</sup> Further, the Attorney General contends that, in view of this consultant's recent experience with a depreciation study performed in conjunction with D.P.U. 09-39, the limited number of information requests addressing depreciation expense, and the fact that no party raised issues on brief with respect to the depreciation study, it is reasonable to expect that the depreciation consultant's final costs should have come in lower than anticipated (Attorney General Brief at 89; Attorney General Reply Brief at 47 n.19). However, the Attorney General maintains that the depreciation consultant increased its cost estimate twice during the

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<sup>66</sup> The depreciation consultant's response to the RFP has been accorded confidential treatment; however, its bid was not the same as the \$168,000 amount estimated for its services as included in the Company's revenue requirement analysis (Exh. DPU-2-1 (Confidential)).

rate proceedings (Attorney General Brief at 89). The Attorney General further contends that despite these “substantial” cost increases, WMECo failed to re-evaluate the depreciation consultant’s RFP cost estimate, request a price cap, or initiate any cost containment measures (Attorney General Brief at 89, citing Tr. 3, at 418-419). Consequently, the Attorney General concludes that the Department should limit the Company’s recovery of depreciation consultant fees to the costs identified in the consultant’s response to the RFP (Attorney General Brief at 89; Attorney General Confidential Brief at 4; Attorney General Reply Brief at 47).

The Attorney General also opposes recovery of the Company’s legal fees related to its cost of capital witness. The Attorney General contends that the Company did not retain this attorney through a competitive bidding process (Attorney General Brief at 89-90). Without a competitive bidding process to evaluate his costs, the Attorney General contends that the Company has failed to demonstrate that his expenses were reasonable and prudent, or indicate that he did not take advantage of his relationship with the Company (Attorney General Brief at 91-92). According to the Attorney General, ratepayers should not be forced to pay the costs of the Company’s “inefficient and unnecessary” use of outside legal services because contracting for additional legal services that can be provided by in-house or retained outside legal counsel is wasteful, inefficient, duplicative, and unnecessary (Attorney General Brief at 93, citing D.P.U. 03-40, at 153; Attorney General Reply Brief at 48).

The Attorney General maintains that, notwithstanding the attorney’s familiarity with cost of capital issues and his long-term working relationships with the Company’s cost of capital witness, there are clear benefits to the use of a competitive bidding process (Attorney

General Reply Brief at 47, citing D.P.U. 07-71, at 108; D.T.E. 03-40, at 148-152). The Attorney General contends that the Company provided no factual or objective basis for concluding that this attorney would be better or more reasonably priced than other outside consultants (Attorney General Brief at 90). The Attorney General further reasons that, if the Company believes that duplicative legal counsel was appropriate, then shareholders should bear the associated expense (Attorney General Brief at 93, citing D.P.U. 10-55, at 343; Attorney General Reply Brief at 48).

Finally, the Attorney General notes that as of October 28, 2010, WMECo's outside counsel had incurred only 21 percent in legal expense, versus its revised estimate of \$754,000 (Attorney General Brief at 93, citing RR-AG-4 (October 28, 2010 update)). The Attorney General urges the Department to ensure that only the actual costs incurred by outside counsel are included in the Company's cost of service, to the extent that such costs are reasonably and prudently incurred (Attorney General Reply Brief at 45, citing D.P.U. 08-35, at 130-131).

b. Company

WMECo contends that its rate case expense is considerably less than the rate case costs incurred by companies in other recent cases before the Department (Company Brief at 129). The Company argues that because it has not adjudicated a rate case in many years, it has had little experience with estimating the costs of litigating a rate case, especially one with issues that it has never addressed before, including decoupling (Company Brief at 129). The Company also maintains that many elements of rate case expense are beyond its control due to the number of intervening parties (Company Brief at 129-130). Specifically, the Company

contends that it cannot predict in advance the parties' particular issues and the associated extent of discovery, intervenor testimony, hearings, and rebuttal testimony (Company Brief at 129-130; Company Reply Brief at 21).

The Company argues that it has made a diligent, if not extraordinary, effort to control rate case expense in this proceeding (Company Brief at 130; Company Reply Brief at 21). WMECo points out that most of its witnesses were internal Company personnel, including its cost of capital witness (Company Brief at 130). Moreover, WMECo argues that it has relied extensively on in-house counsel, assigning lead roles to two in-house attorneys and a more limited role to a third in-house attorney (Company Brief at 130-131). The Company accuses the Attorney General of engaging in a "heads I win, tails you lose" game by faulting WMECo for its use of outside consultants while simultaneously criticizing the Company for relying on in-house staff to support its rate case proposal (Company Reply Brief at 20).

Regarding WMECo's selection of its revenue decoupling consultant, the Company notes that the Attorney General has not alleged that the choice of consultant was somehow improper and further contends that her criticisms are misplaced because the goal of competitive bidding is to determine whether a company engaged in a structured, objective competitive bidding process for particular services (Company Brief at 133, citing D.T.E. 03-40, at 153). The Company argues that although the consultant's decoupling services are above the initial estimate, this same consultant is considerably below budget for the marginal cost of service work it provided (Company Brief at 133-134).

Turning to WMECo's selection of a consultant to perform the depreciation study, the Company argues that this consultant was chosen through a competitive solicitation based on a number of factors, including the consultant's extensive experience with the Company (Company Brief at 134). The Company indicates that its depreciation consultant costs exceeded initial cost estimates because of extensive discovery, as well as the consultant's need to respond to certain questions pertaining to WMECo's decoupling proposal (Company Brief at 134).

The Company defends its reliance on an outside attorney for cost of capital issues based on his thorough knowledge of the subject matter, previous experience with other NU affiliates, and his long-term working relationship with the Company's cost of capital witness (Company Brief at 132, 135). According to the Company, it would have been unrealistic to conduct a RFP process and expect to receive responses from multiple individuals having the same qualifications as its cost of capital attorney (Company Brief at 132). Moreover, the Company argues that its cost of capital attorney bills at a lower rate than other legal firms and his cost estimates corresponded with costs he billed in a similar case with another Company affiliate in another jurisdiction (Company Brief at 135, citing RR-AG-6).<sup>67</sup> According to the Company, had it relied on its regular outside counsel for cost of capital issues, the hourly rates would have been higher than those of its cost of capital attorney (Company Brief at 135).

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<sup>67</sup> The Company suggests that, contrary to the Attorney General's concern that WMECo's cost of capital attorney may have taken advantage of his relationship with NU, WMECo has taken advantage of his superior knowledge at a lower billing rate (Company Brief at 135).

Finally, WMECo contends that it seeks recovery of only its actual rate case expense, not estimated costs (Company Brief at 136 & n.36). The Company contends that its revised revenue requirement schedules demonstrate that it has accurately revised its rate case expense, including eliminating the normalization of rate case expense associated with the D.T.E. 06-55 Settlement, and further claims that its proposed normalization period is consistent with Department precedent (Company Brief at 136, citing Exh. WM-JLM WP C-3.19, at 2; DPU-2-12).

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. 07-71, at 99; D.T.E. 05-27, at 157; D.T.E. 98-51, at 61-62.<sup>68</sup> Second, such expenses must be reasonable, appropriate, and prudently incurred. D.T.E. 05-27, at 160-161; 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 rate case expense among utilities has been, and remains, a matter of concern for the Department. 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

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<sup>68</sup> While petitioners may seek recovery of rate case expense incurred on a fixed fee basis for work performed after the close of the evidentiary record (e.g., for completion of necessary compliance filings), the reasonableness of the fixed fees must be supported by sufficient evidence. D.T.E. 02-24/25, at 196.

which companies must seek to contain costs. 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. The Department will continue to scrutinize the overall level of rate case expense and may require shareholders to shoulder a portion of the expense. D.P.U. 08-35, at 135. 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. See D.P.U. 93-233-B at 16.

b. Decoupling- and Depreciation-Related Outside Services

The Company's final cost associated with its decoupling study was \$248,627, which represents an increase of approximately 148.6 percent over the \$100,000 cost originally estimated by the Company for this activity (Exh. WM-JLM WP C-3.19, at 3; RR-AG-4, January 5, 2011 Update). The Company's final cost associated with its depreciation study was \$184,839, which represents an increase of approximately ten percent over the \$168,000 cost originally estimated by the Company for this activity (Exh. WM-JLM WP C-3.19, at 3; RR-AG-4 (January 5, 2011 Update)).

Cost overages in rate case expense can be analogized to cost overages on capital projects. A utility planning a capital project will derive and review project cost estimates, and make capital authorizations on the basis of those estimates. Once construction begins, however, unanticipated conditions may affect the overall project cost. See Bay State Gas Company, D.P.U. 05-27, at 80-81 (2005). Similarly, a company may estimate its rate case expense based on an analysis of vendor solicitations and past experience, only to have those estimates later prove to be understated. Previously unidentified parties may seek intervenor

status, discovery questions cannot be predicted with absolute certainty (at least beyond those asked in initial rounds), the length of time a witness may be in hearings will vary depending upon the issue and developments that occur during the proceedings, and new issues may arise during evidentiary hearings or the briefing stage. All of these factors will affect total rate case expense but the burden is on the Company to adequately explain and justify the reasons for the overrun. A 148 percent increase in a rate case consultant's expenses, as occurred with WMECo's decoupling study, clearly raises questions as to whether this cost overrun is justified.

The Department has directed companies to provide all invoices for outside rate case services that detail the number of hours billed, the billing rate, and the specific nature of the services performed. D.P.U. 10-55, at 331; D.P.U. 09-39, at 293; D.T.E. 03-40, at 157; D.T.E. 02-24/25, at 193-194; D.T.E. 01-56, at 75; D.T.E. 98-51, at 61; D.P.U. 96-50 (Phase I) at 79. Failure to provide this information has resulted in the Department's disallowance of all or a portion of rate case expense. D.P.U. 10-55, at 331; D.P.U. 09-39, at 293; D.T.E. 02-24/25, at 193; D.P.U. 96-50 (Phase I) at 79.

The Company has provided invoices related to the consultant's decoupling work covering the period December 1, 2009 through May 31, 2010 totaling \$94,279 (Exh. DPU-2-3, at 2, 17-37). Our review of such invoices indicates that the costs were reasonable, appropriate, and prudently incurred. However, there are no invoices covering the period on and after June 1, 2010. As such, the Department is unable to determine whether the remaining \$154,348 in claimed expenses is reasonable, appropriate, and prudently incurred.



Moreover, the lack of invoices makes it impossible to assess the causes of the decoupling consultant's cost overrun. Therefore, the Department denies recovery of \$154,348 in rate case expense associated with the Company's decoupling proposal.<sup>69</sup>

Similarly, the Company has provided \$145,185 in invoices related to the consultant's work on the depreciation study covering the period January 1, 2010 through May 31, 2010 (Exh. DPU 2-3, at 3-5). Our review of such invoices indicates that the costs were reasonable, appropriate, and prudently incurred. However, there are no invoices covering depreciation consulting services provided on and after June 1, 2010. As such, the Department is unable to determine whether the remaining \$39,655 in claimed expenses is reasonable, appropriate, and prudently incurred. Moreover, the lack of invoices makes it impossible to assess the causes of the depreciation consultant's cost overrun. Therefore, the Department denies recovery of \$39,665 in rate case expense associated with the Company's depreciation study.

c. Outside Legal and Marginal Cost Services

The final cost associated with outside services for the marginal cost study was \$56,756 and represents a decrease of approximately 29 percent from the \$80,000 cost originally estimated by the Company for this activity (Exh. WM-JLM WP C-3.19, at 3; RR-AG-4 (January 5, 2011 Update)). The final cost associated with WMECo's outside legal services

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<sup>69</sup> The Company's last update containing invoices supporting rate case expenses was made on October 28, 2010. When the Company submitted its last series of updates, on January 6, 2011, the Department was in the process of moving its operations, including all of its records, to new offices. In the event that the Company can demonstrate that it filed additional invoices supporting rate case expense prior to the close of the record in this case, the Company may file a motion for reconsideration.

was \$413,690 and represents a decrease of 45 percent from the \$754,000 costs originally estimated by the Company (Exh. WM-JLM WP C-3.19, at 3; RR-AG-4 ( January 5, 2011 Update)).

As noted above, the Department requires companies to provide detailed invoices for all outside rate case services and failure to provide this information has resulted in the Department's disallowance of all or a portion of rate case expense. D.P.U. 10-55, at 331; D.P.U. 09-39, at 293; D.T.E. 02-24/25, at 193; D.P.U. 96-50 (Phase I) at 79. WMECo has provided \$50,170 in invoices related to marginal cost study services covering the period February 1, 2010 through May 31, 2010 (Exh. DPU-2-3, at 6-16). The Company has provided \$50,480 in invoices related to its outside legal services from March 25, 2010, through June 30, 2010 (Exh. DPU 2-3, at 2, 38-49). Our review of such invoices indicates that the costs were reasonable, appropriate, and prudently incurred. However, there are no invoices covering marginal cost consulting services provided on and after June 1, 2010, or outside legal services provided on and after July 1, 2010. As such, the Department is unable to determine whether the remaining \$6,586 in claimed marginal cost expense and \$363,210 in claimed outside counsel expense is reasonable, appropriate, and prudently incurred. Therefore, the Department denies recovery of \$369,796 in rate case expense associated with the Company's marginal cost study and outside legal fees.

d. Cost of Capital Legal Services

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. 10-55, at 324; 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, including legal services, it must engage in a competitive bidding process for these services. D.P.U. 10-55, at 324, 342. 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. 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. 10-55, at 342.

As the Department noted in D.P.U. 09-30, at 230, the requirement of having to submit a competitive bid in a structured and organized process serves several important factors. First, it provides the Department with an objective method to determine whether the services could have been adequately provided at lower costs. D.P.U. 09-30, at 230; D.T.E. 03-40, at 151. Second, it keeps even a consultant with a stellar past performance from taking the relationship with a company for granted. D.P.U. 09-30, at 230; 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. 09-30, at 230; D.T.E. 03-40, at 152-153.

Companies also must demonstrate that the choice of consultant is both reasonable and prudent.<sup>70</sup> See D.P.U. 09-30, at 231-232; D.T.E. 03-40, at 153. Further, companies are on notice that they are at risk of non-recovery of rate expense expenses should they fail to sustain their burden to demonstrate cost containment associated with the selection and retention of

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<sup>70</sup> This policy also, by extension, applies to a company's selection of legal counsel.

outside service providers. D.P.U. 09-39, at 289-293; D.P.U. 09-30, at 238-239; D.T.E. 03-40, at 153.

In this case, with respect to its cost of capital attorney, we find that WMECo has failed to justify its departure from the requirement to conduct a competitive solicitation. WMECo's parent company has had a long-term relationship with its cost of capital attorney, and the attorney has both institutional knowledge of NU and a close working relationship with the Company's cost of capital witness. As noted above, however, a competitive RFP keeps a consultant from taking the relationship with a company for granted. D.P.U. 09-30, at 230; D.T.E. 03-40, at 152. Without a competitive solicitation based on which the Department can evaluate the cost of this attorney's services, the Department has no basis to evaluate WMECo's claim that the selected attorney's previous experience or relationship with the Company's cost of capital witness made him most qualified to perform the services at a reasonable cost. Therefore, having found that WMECo has failed to adequately demonstrate the reasonableness of the costs related to its cost of capital attorney, we disallow the associated expenses of \$41,563.<sup>71</sup> See D.P.U. 10-55, at 328; D.P.U. 07-71, at 100-101.

e. Attorney General Consultant Costs

Pursuant to G.L. c. 12, § 11E(b), the Attorney General may retain experts or other consultants to assist her in Department proceedings involving rates, charges, prices, and tariffs

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<sup>71</sup> We note that, even if the Department had found that the Company had demonstrated that the total expense for outside legal services for cost of capital was reasonable, WMECo provided only \$669 in invoices related to his services (Exh. DPU-2-3, at 50-51).

of an electric, gas, generator, or transmission company subject to the Department's jurisdiction. The cost of retaining such experts or consultants cannot exceed \$150,000 per proceeding, unless otherwise approved by the Department based upon exigent circumstances. G.L. c. 12, § 11E(b). All reasonable and proper expenses for such experts or consultants are to be borne by the affected company and are recoverable through the company's rates without further approval by the Department. G.L. c. 12, § 11E(b).

In this case, the Department authorized the Attorney General to expend up to \$275,000 for outside experts and consultants due to exigent circumstances. Western Massachusetts Electric Company, D.P.U. 10-70, Order on Attorney General's Notice of Retention of Experts and Consultants at 5 (August 25, 2010).<sup>72</sup> WMECo reports that the Attorney General's experts and consultants expense totaled \$165,550 as of January 5, 2011 (RR-AG-4 (January 5, 2011 Update)). WMECo proposes to include the \$165,550 in Attorney General's consultant costs as part of its total rate case expense and amortize the amount over five years (Exh. WM-JLM WP C-3.19, at 2).

Pursuant to G.L. c. 12, § 11E(b), reasonable and proper expenses for the Attorney General's experts or consultants are recoverable through the company's rates. The Department has broad discretion in selecting an appropriate rate recovery mechanism. See American

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<sup>72</sup> In authorizing the Attorney General to expend up to \$275,000 for outside experts and consultants in this proceeding, the Department did not address the merits of WMECo's proposed recovery mechanism, stating that this issue would be addressed during the course of the instant rate proceeding. Western Massachusetts Electric Company, D.P.U. 10-70, Order on Attorney General's Notice of Retention of Experts and Consultants at 5 (August 25, 2010).

Hoechst Corp. v. Department of Public Utilities, 379 Mass. 408, 411-413 (1980) (the Department is free to select or reject a particular method of regulation as long as the choice is not confiscatory or otherwise illegal).

The Department has consistently approved the recovery of the Attorney General's consultant costs through a reconciling tariff in recent cases. See NSTAR Electric Company, D.P.U. 10-81 (stamp approval, September 21, 2010); The Berkshire Gas Company, D.P.U. 10-GAF-02 (stamp approval, August 25, 2010); D.P.U. 09-39, at 302-303 (2009); D.P.U. 09-30, at 408 (2009). In this circumstance, a reconciling mechanism ensures that ratepayers pay only for the costs actually incurred. D.P.U. 09-39, at 302. Accordingly, the Department rejects the Company's proposal to include the Attorney General's consultant costs as part of rate case expense and, instead, directs the Company to submit as part of its compliance filing an Attorney General consultant expense tariff that allows recovery consistent with G.L. c. 12, § 11E(b) on a reconciling basis.<sup>73</sup> Further, the Company shall submit as part of its annual reconciliation filing the costs incurred by the Attorney General for experts and consultants for approval by the Department.

f. 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.T.E. 05-27, at 163; D.T.E. 03-40, at 163;

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<sup>73</sup> As we gain more experience with these types of expenses, we will consider whether these expenses are better recovered through base rates instead of in a reconciling mechanism. D.P.U. 10-55, at 426 n.273 .

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.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; D.P.U. 1490, at 33-34. 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.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.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).

In the instant proceeding, WMECo has proposed a rate case expense amortization period of five years (Company Brief at 136). The Company's calculation is inconsistent with Department precedent as it omits the present rate case and fails to take into consideration the actual number of months between rate cases (Exh. DPU-2-12). Thus, the Department has recalculated the normalization period in accordance with Department precedent and, based on

this calculation, finds that the appropriate normalization period is six years.<sup>74</sup> Accordingly, the Department will normalize the Company's rate case expense over a period of six years.

#### 4. Conclusion

The Company has requested recovery of a total rate case expense of \$1,174,926. The Department has excluded \$563,799 in undocumented expenses and \$41,563 for the Company's cost of capital attorney's fees, and has transferred \$165,550 representing the Attorney General's consultant costs to a reconciling mechanism, as set forth above. These adjustments result in an allowable rate case expense of \$404,014. Further, as explained above, the Department finds that the reasonable normalization period for rate case expense is six years.

Based on these findings, the Department concludes that the correct level of normalized rate case expense for WMECo is \$67,336 (i.e., \$404,014 divided by six years). Accordingly, because the Company has proposed a rate case expense of \$234,991, the proposed cost of service will be reduced by \$167,655.

Finally, 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 acknowledge WMECo's efforts to control rate case expense through the extensive use of in-house counsel and staff. We re-emphasize, however, our

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<sup>74</sup> The Department calculates the average interval between cases as follows. The Company's previous four rate cases, including the present case, are D.P.U 10-70 (filed July 16, 2010), D.T.E. 06-55 (filed October 19, 2006), D.T.E. 04-106 (filed November 16, 2004), and D.P.U. 91-290 (filed December 13, 1991). The intervals between these cases are 3.25 years, 1.92 years, and 13.08 years, respectively. The sum of these intervals is 18.25 years is divided by the three intervals, producing a rate case normalization period of six years.



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. 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. In recent cases, considerable resources have been expended by petitioners seeking to demonstrate that they have sufficiently controlled rate case expense, and by adversaries arguing that cost containment was not achieved. Ironically, the time and expense devoted to the examination of a petitioner's efforts to contain costs only serves to drive up rate case expense. Strict adherence to longstanding Department precedent regarding the recovery of rate case expense should mitigate this problem.

As noted above, and stated consistently in prior rate cases, all gas and electric distribution companies must engage in a competitive bidding process for outside rate case services, including legal consultants. D.P.U. 10-55, at 342; D.P.U. 09-39, at 287; D.P.U. 09-30, at 227; D.P.U. 08-35, at 127; D.T.E. 05-27, at 158-159; D.T.E. 03-40, at 148; D.T.E. 02-24/25, at 192. In all but the most unusual of circumstances, it is reasonable to expect that a gas or electric company can comply with the competitive bidding requirement. Nonetheless, significant resources have been spent in recent rate cases litigating a petitioner's justification for its decision to forgo the competitive bidding process.

The competitive bidding and qualification process provides an essential benchmark for the reasonableness of the cost of the services sought. D.P.U. 10-55, at 342; D.P.U. 09-30, at 228-229; D.P.U. 07-71, at 101; D.T.E. 03-40, at 152. Without such a benchmark, it will

be difficult for a petitioner to demonstrate that its choice of consultant is both reasonable and cost-effective. Accordingly, we fully expect that in all future rate cases, competitive bidding for outside rate case services, including legal services, will be the norm.

The competitive bidding process must be structured and objective, and based on an RFP process that is fair, open, and transparent. See D.P.U. 10-55, at 342; 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. The RFPs issued to solicit consultants must clearly identify the scope of work to be performed and the evaluation criteria by which the consultants will be evaluated.

As we have noted before, obtaining competitive bids does not mean that a company must necessarily retain the services of the lowest bidder. Nonetheless, companies must conduct and document a thorough bid evaluation process. While the Department will not substitute its judgment for that of a petitioner in determining which consultant may be best suited to serve the petitioner's interests, the petitioner must demonstrate that its choice of consultants is both reasonable and cost-effective. See D.P.U. 10-55, at 343; D.P.U. 09-30, at 230-231; D.T.E. 03-40, at 153. Again, the best evidence here is contemporaneous documentation of a well-analyzed bid evaluation process. D.P.U. 10-55, at 343; D.P.U. 09-30, at 228.

The Department will continue to closely scrutinize rate case expense and the requirement that a petitioner in a rate case engage in a competitive bidding process for its rate

case consultants will be enforced.<sup>75</sup> 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.

Finally, there are clear benefits to shareholders from approval of rate increases, and the Department has found that it may be appropriate for shareholders to shoulder a portion of the expense. D.P.U. 10-55, at 343; D.P.U. 08-35, at 135. As one means to demonstrate that rate case expense has been contained, the Department directs 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.

I. Medicare Part D

1. Introduction

As a corporate sponsor of a retiree health plan, WMECo received federal subsidies for its contribution to prescription drug benefits for its retirees under the Medicare Prescription Drug, Improvement and Modernization Act of 2003, which went into effect on January 1, 2006.<sup>76</sup> These subsidies, known as Medicare Part D, allowed the Company to offset retiree prescription drug costs by making such expenses tax deductible. The benefit of this tax deduction flowed to WMECo's customers through a reduction to the Company's income tax

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<sup>75</sup> The Department recognizes that it may not be feasible or cost effective for small water companies (i.e., those companies with less than 2000 customers) to engage in an RFP process for outside rate case services.

<sup>76</sup> Pub. L. 108-173; 117 Stat. 2066.

expense (Exh. AG-1, Art. 2.16(e)). The Company had established a deferred tax asset for this deduction in the amount of approximately \$1.7 million as of December 31, 2009 (Exh. WM-JLM at 51).

The Patient Protection and Affordable Care Act,<sup>77</sup> signed into law in March of 2010, eliminates this tax deduction. As a result, after 2012, the Company's contributions to prescription drug coverage will no longer be tax deductible and WMECo will no longer realize a tax benefit (Exh. WM-JLM at 51; Tr. 3, at 495). Generally accepted accounting principles ("GAAP") require WMECo to recognize the adverse financial impact of the new law by writing off its deferred tax asset (Exh. WM-JLM at 51-52). The Company proposes to amortize the write-off of this deferred tax asset over five years (Exh. WM-JLM at 52). The Company calculated the regulatory asset as follows. WMECo initially calculated a deferred asset of \$1,678,000 attributable to WMECo's distribution service for the period 2005 through 2009 (Exh. WM-JLM at 52; Tr. 3, at 492-493). To this account balance of \$1,678,000, WMECo adds \$713,000 to account for the tax benefits the Company passed on to customers through rates in effect through 2010, for a total of \$2,391,000 (Exh. WM-JLM at 52). This amount, when grossed up for income taxes,<sup>78</sup> produces a pre-tax regulatory asset of

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<sup>77</sup> Pub. L. 111-148; 124 Stat. 119.

<sup>78</sup> WMECo used the grossed-up factor of 1.6454 because the Company has a composite income tax rate of 39.225 percent (Exh. WM-JLM at 52). This means that any given asset is grossed up for income tax purposes by multiplying the asset balance times the inverse of the composite tax rate ( $1/1-0.39225$  or 1.6454) (Exh. WM-JLM at 52).

\$3,935,001<sup>79</sup> (Exhs. WM-JLM at 52; WM-JLM WP C-3.19, at 2). WMECo also seeks to apply a carrying charge<sup>80</sup> on the unamortized balance (Exh. WM-JLM WP C-3.19, at 4).

2. Positions of the Parties

a. Attorney General

The Attorney General agrees with the Company that the lost Medicare Part D benefits must be recognized and that a write-off is appropriate (Attorney General Brief at 63).

However, the Attorney General disputes the Company's calculation of the amount of the deferred tax asset, the appropriate amortization period, and the application of carrying charges to the deferred tax asset (Attorney General Reply Brief at 35-36). According to the Attorney General, the amount of the pre-tax regulatory asset is \$1,859,000, as opposed to a pre-tax amount of \$3,935,000 as calculated by WMECo, or a net difference on a pre-tax basis of \$2,076,000 (Exh. AG-DJE-3).

The Attorney General calculates WMECo's regulatory assets in the following manner. First, the Attorney General calculates the total accrued Medicare Part D subsidy of \$5,731,000 as of December 31, 2009 (Exh. AG-DJE-3). The Attorney General then subtracts from this amount the accrued Medicare Part D subsidy for the years prior to 2007 of \$2,801,000, resulting in a pre-tax amount of \$2,930,000 (Exh. AG-DJE-3). The Attorney General claims that the removal of pre-2007 Medicare Part D subsidy is justified because the benefits accrued

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<sup>79</sup> Both the Company and the Attorney General present all of their calculations on brief in rounded amounts.

<sup>80</sup> While WMECo did not explicitly provide a method for computing this carrying charge, Exhibit WM-JLM WP C-3.19, at 4 indicates that the Company is applying a customer deposit rate of 1.207 percent.

prior to 2007 were never reflected in the rates paid by customers, thus warranting the elimination of any benefits accrued in those years from any balance that the Company is allowed to recover from its customers (Attorney General Reply Brief at 35). Next, the Attorney General removes an additional \$1,868,000 that she characterizes as “tax-free subsidies” received or to be received for the period 2007 through 2012 (Exh. AG-DJE-3).<sup>81</sup> Subtracting these “tax-free subsidies” from \$2,930,000, the Attorney General calculates a “net accrued tax benefit lost” of \$1,062,000, which she then multiplies by the Company’s effective tax rate of 39.225 percent to arrive at a “net income tax impairment” of \$417,000 (Exh. AG-DJE-3). The Attorney General then adds \$713,000, representing lost income tax savings for 2010, producing a “total lost income tax savings” of \$1,130,000 (Exh. AG-DJE-3). After grossing up this amount for income taxes, the Attorney General concluded that the appropriate amount of the regulatory asset is approximately \$1,859,000 on a pre-tax basis (Exh. AG-DJE-3).

The Attorney General claims that the appropriate period over which to recover this regulatory asset should be 15 years, since the “lost tax benefits” on which the regulatory asset is based would have been realized over many years,<sup>82</sup> as opposed to the five-year period

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<sup>81</sup> The Attorney General explains that these subsidies are in the form of tax-free support for the Company’s post-retirements benefit costs (Exh. AG-DJE at 12).

<sup>82</sup> The Attorney General posits that the accrued subsidy the Company received in 2009 was \$5.7 million, while the actual subsidy as of December 2009 was \$326,000. According to the Attorney General, this implies that the accrued subsidy as of the end of 2009 would be realized over a period of approximately 17 years (Attorney General Brief at 64).

proposed by WMECo (Attorney General Brief at 64). Also, the Attorney General argues that by proposing to amortize the deferral over five years, the Company attempts to put itself in a better position than it would be in if the tax subsidy had not been eliminated (Attorney General Reply Brief at 36). Further, the Attorney General claims that the Idaho and Oregon public utility commission cases<sup>83</sup> cited by WMECo in support of its proposed amortization period are irrelevant to this case and should be disregarded (Attorney General Reply Brief at 36).

According to the Attorney General, there is no evidence that the circumstances in those other cases are at all relevant to WMECo in terms of amounts involved, prior regulatory treatment, or other matters (Attorney General Reply Brief at 36). Therefore, the Attorney General argues that the Company's proposed amortization amount of \$787,000 (\$3,935,000 divided by five) should be reduced by \$663,000, thus allowing WMECo to recover \$124,000 (\$1,859,000 divided by 15) in current rates (Attorney General Brief at 64; citing Exh. AG-DJE at 12-13).

The Attorney General opposes allowing any carrying charges on WMECo's unrecovered balance, on the basis that WMECo seeks to recover the write-off of an accrued benefit rather than an actual cash expenditure (Attorney General Reply Brief at 36). The Attorney General reasons that because there was no Company cash outlay associated with the write-off of the accrued tax subsidy, carrying charges are neither necessary nor appropriate, regardless of the recovery period (Attorney General Reply Brief at 36).

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<sup>83</sup> Idaho Public Utility Commission, Case No. PAC-E-10-04 (Rocky Mountain Power Company); Oregon Public Utility Commission, Docket No. UM 1479 (PacifiCorp).

b. Company

WMECo maintains that the correct regulatory asset balance is \$3,935,000, as opposed to the pre-tax asset amount of \$1,859,000 calculated by the Attorney General (Company Brief at 137). The Company asserts that the Attorney General would inappropriately remove approximately \$1.1 million<sup>84</sup> in tax benefits the Company earned prior to 2007 (Company Brief at 138). WMECo argues that customers benefited from the Medicare Part D subsidy even before 2007, because the tax savings served to offset other operating costs incurred by WMECo in the normal course of business (Company Brief at 140). In addition, WMECo claims that if the Attorney General's position is accepted, realized tax benefits would be double counted by approximately \$0.1 million<sup>85</sup> (Company Brief at 138). WMECo claims that the Attorney General has double counted \$87,000 in after-tax benefits (Company Brief at 139). The Company represents that the disallowance of pre-2007 tax benefits combined with the double counting issue produces approximately \$1.2 million in tax benefits, which when grossed-up for income taxes produce an amount of approximately \$1.97 million. This amount differs from the pre-tax \$2,076,000, because the \$1.97 million includes an adjustment for the alleged double counting of tax benefits. WMECo contends that the Company's estimate was provided by its actuary, and was examined by the Company's auditors in evaluating the

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<sup>84</sup> The Company calculates this amount by multiplying the pre-tax amount of \$2,801,000 calculated by the Attorney General by the composite tax rate of 39.225 percent (Company Brief at 138).

<sup>85</sup> The Company calculates this amount by adding the tax benefits of \$190,276 received in 2007 (Exh. AG-13-4), and the tax benefits of \$31,069 earned in 2007 (Exh. AG-13-6), then multiplying the sum by the composite tax rate of 39.225 percent, which equals \$87,000 (rounded to \$0.1 million) (Company Brief at 138).



reasonableness of WMECo's financial statements (Company Brief at 139, citing Exhs. AG-13-3; AG-13-4; AG-13-6).

The Company also argues that the Attorney General's proposal to remove \$1.1 million in tax subsidies earned prior to 2007 is incorrect (Company Brief at 139). WMECo argues that the fact that the 2006 Rate Settlement explicitly mentioned the Medicare Part D subsidy does not mean that those subsidies were not included in the Company's rates prior to 2007 (Company Brief at 139-140). Further, the Company argues that it is not appropriate for the Attorney General to single out credits for exclusion from rates without fully reviewing the Company's other operating costs to determine which expenses increased or decreased in the years prior to 2007, when the new rates took effect under the approved D.T.E. 06-55 Rate Settlement (Company Brief at 140, citing Exh. WM-JLM-REB). Therefore, the Company argues that there should be no adjustment for pre-2007 subsidies and the Department should reject the Attorney General's proposed reduction of \$2,076,000 as improper (Company Brief at 140).

Turning to the proposed amortization period, WMECo argues that there is no precedent for the 15-year amortization period proposed by the Attorney General (Company Brief at 140; Company Reply Brief at 14). According to WMECo, the only rationale the Attorney General provides for her proposed amortization period is her unsupported general statement that the subsidy has been collected for a long time (Company Brief at 140, citing Exh. AG-DJE at 13, lines 13-16; Company Reply Brief at 14-15). Further, the Company argues that the record indicates that public utility commissions in Idaho and Oregon dealing

with this issue have decided that a four-year and five-year amortization period are appropriate for the recovery of this deferred asset (Company Brief at 140-141, citing Exh. WM-JLM-REB at 11-12; Company Reply Brief at 15).

WMECo also seeks a carrying charge on the unamortized balance equal to the customer deposit rate of 1.207 percent (Exh. WM-JLM WP C-3.19, at 4). According to WMECo, a carrying charge is appropriate because the dollar amount of all of its deferred assets to be recovered in this case, including the tax write-off, is approximately \$13.6 million, representing about nine percent of the Company's distribution revenue (Company Brief at 141; citing Exh. WM-JLM WP C-3.19, at 2). WMECo contends that it should be compensated with a carrying charge, where the level of deferred assets represents such a significant proportion of distribution revenue (Company Brief at 141). Thus, WMECo concludes that it should be allowed to recover its proposed regulatory asset of \$3,935,000 amortized over a period of five years with its requested carrying charge (Company Brief at 137-141; Company Reply Brief at 15).

### 3. Analysis and Findings

The Department must determine the appropriate level of WMECo's Medicare Part D costs to treat as a deferred asset, as well as the appropriate amortization period. In addition, the Department must determine whether to allow carrying charges on the deleted asset.

Regarding the calculation of the Company's deferred asset, the Attorney General contends that pre-2007 Medicare Part D subsidies should be excluded from recovery on the

basis that these costs were never included in rates.<sup>86</sup> 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 expenses on a dollar-for-dollar basis. See D.P.U. 07-50-A at 51; Eastern Edison Company, D.P.U. 1580, at 13-22 (1984). The normal ebb and flow of customers, plant investment, and expenses make it impossible to capture every cost 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. Boston Gas Company, D.T.E. 96-50-C at 15-17 (1997); Western Massachusetts Electric Company, D.P.U. 85-270, at 141 n.21 (1986); Bay State Gas Company, D.P.U. 1122, at 46-49 (1982). Likewise, the fact that a company's depreciation rates may increase between rate cases would not entitle the company to recover those higher accrual rates that had not been included in customers' rates. Commonwealth Gas Company, D.P.U. 87-122, at 7-8 (1987).

Notwithstanding the fact that WMECo's pre-2007 Medicare Part D tax subsidy may not have been included in rates, the expense was part of the Company's cost of service and the Company is now obligated under GAAP to write off those associated deferred income taxes. For the above reasons, the pre-2007 Medicare Part D tax subsidy should not be removed from the calculation of the Company's deferred asset, and the Department rejects the Attorney

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<sup>86</sup> In addition, the Attorney General seeks to exclude approximately \$1,868,000 representing realized tax benefits attributable to 2007 through 2012 (Attorney General Brief at 64). The Department's analysis applies to both the Company's tax benefits attributable to 2007 through 2012 and tax benefits earned prior to 2007.

General's calculation for purposes of determining the appropriate rate recovery for the Company's loss of the ability to deduct the Medicare Part D tax subsidy. The Department has reviewed the Company's calculations and finds that WMECo has calculated the appropriate level of Medicare Part D subsidies. Accordingly, the Department finds that the appropriate level of WMECo's Medicare Part D subsidy eligible for recovery is \$3,935,001 (Exh. WM-JLM WPC-3.19, at 2).

Concerning the appropriate amortization period, the Company proposes five years, and the Attorney General proposes 15 years. Amortization periods are determined based on a case-by-case review of the evidence and underlying facts. Aquarion Water Company of Massachusetts, D.P.U. 08-27, at 99 (2009); Barnstable Water Company, D.P.U. 93-223-B at 14 (1994); Fitchburg Gas and Electric Light Company, D.P.U. 84-145-A at 54 (1985). In determining the proper amortization period, we must balance the interests of the Company and of ratepayers. Barnstable Water Company, D.P.U. 93-223-B at 14 (1994). In setting an amortization period, the Department has considered such factors as the amount under consideration for deferral, the value of such an amount to ratepayers based on certain amortization periods, and the impact of the adjustment on the company's finances and income. Aquarion Water Company of Massachusetts, D.P.U. 08-27, at 99 (2009); Barnstable Water Company, D.P.U. 93-223-B at 14 (1994). In this case, we consider the length of time over which the Medicare Part D subsidy was in effect, as well as the underlying facts giving rise to the Medicare Part D deferral. Based on these considerations and the record in this case, the Department finds five years to be an appropriate amortization period.

We now turn to the issue of an appropriate carrying charge. The Company claims that a carrying charge is appropriate because of the dollar magnitude of the deferral. The Attorney General opposes any carrying charges. In this case, the Department has found that a five-year amortization of the Medicare Part D deferred asset is appropriate. Given the amount of the deferred asset and the relatively short amortization period, the Department finds it inappropriate to include any carrying charges on the recovery of the Medicare Part D deferred asset. Accordingly, the Department will not include any carrying charges on WMECo's unamortized Medicare Part D deferral.

Application of a five-year amortization period to the \$3,935,001 in Medicare Part D deferral the Department has approved herein produces an annual amortization expense of \$787,000. Accordingly, the Company's proposed Medicare D deferral is accepted without carrying charges.

J. Manufactured Gas Plant Remediation Accruals

1. Introduction

During the test year, WMECo booked \$251,064 in expenses associated with the remediation of former manufacturing gas plant ("MGP") sites that were owned and operated by the Company's corporate predecessors (Exh. AG-1-59; RR-AG-65, at 2; Tr. 12, at 2056). MGP plants produced gas from coal and other petroleum processes, which resulted in byproducts throughout that were either sold or disposed of on- or off-site (Exh. AG-1-2(1) (2007 Form 10-K) at 17). See also Manufactured Gas Plants, D.P.U. 89-161, at 18-24 (1990). It has since been determined that these byproducts may, under certain conditions, cause

groundwater contamination or other environmental risks, thus requiring the remediation of MGP production and disposal sites (Exhs. AG-1-2(1) (2007 Form 10-K) at 17; AG-1-2(8) (2009 Annual Report) at 123.39). The Company has identified a number of sites where MGP by-products have either been confirmed as or are suspected to be present, including the former Easthampton Gas Company (“Easthampton Gas”) MGP and two former MGP sites operated by Amherst Gas Company (“Amherst Gas”) (Exh. AG-1-2(8) (2009 Annual Report) at 123.39).<sup>87</sup>

In order to address these costs, as well as other environmental remediation expenses, the Company has created reserve account 28845 (Exh. AG-3-21, at 2; Tr. 12, at 2057-2058). Each year, the Company determines the amount of environmental remediation expense, including that associated with MGP site remediation, to be booked to the reserve (Tr. 12, at 2057-2058). The Company later charges its actual environmental remediation expense against this account (Tr. 12, at 2057-2058; RR-AG-65, at 2).<sup>88</sup> During the test year, WMECo credited \$425,000 to the reserve account, and booked \$316,104 against the reserve to

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<sup>87</sup> Amherst Gas and Easthampton Gas were predecessor companies affiliated with WMECo. Report of the Special Commission on Control and Conduct of Public Utilities, House Document No. 1200, at 197 (March 1930). Amherst Gas was a combination gas and electric utility that operated a MGP facility in Amherst, Massachusetts at College Street from 1878 to 1910, and thereafter at Pelham Road from 1910 through 1934 (RR-AG-65). Easthampton Gas was also a combination gas and electric utility that operated a MGP facility in Easthampton, Massachusetts from 1864 through 1924 (RR-AG-65).

<sup>88</sup> Because the actual yearly expense will differ from the amount booked to the reserve, the balance in the reserve will vary from year to year (Tr. 12, at 2057-2058; RR-AG-65, at 2).

Account 588, Miscellaneous Distribution Expenses, and Account 930, Miscellaneous General Expenses (Exh. AG-1-59; RR-AG-65, at 2).

2. Positions of the Parties

a. Attorney General

The Attorney General opposes the inclusion of MGP remediation expense in WMECo's cost of service. According to the Attorney General, the Company has failed to demonstrate that these costs were prudently incurred and reasonable in amount (Attorney General Brief at 81, citing Town of Hingham v. Dep't of Telecomm. and Energy, 433 Mass. 198, 213-214 (2001), citing Metro. Dist. Comm'n v. Dep't of Pub. Utils., 352 Mass. 18, 24 (1967); Wannacomet Water Co. v. Dep't of Pub. Utils., 346 Mass. 453, 463 (1963); Attorney General Reply Brief at 42). The Attorney General reasons that because environmental damage does not typically result from prudent actions, the Department should require WMECo to demonstrate that the environmental damage at the Company's former MGP sites was not the result of imprudent actions by WMECo (Attorney General Reply Brief at 42).<sup>89</sup>

Moreover, the Attorney General also argues that WMECo has failed to demonstrate that its MGP remediation costs were associated with electric distribution service (Attorney General Reply Brief at 42). The Attorney General asserts that the Company's MGP sites could have been used to provide gas service or to generate electricity, neither of which relates to

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<sup>89</sup> The Attorney General maintains that the Department has rejected the inclusion of MGP remediation expenses in cost of service when the petitioner failed to explain or document these costs (Attorney General Brief at 81-82, citing The Berkshire Gas Company, D.T.E. 01-56, at 82 n.27 (2002)).

electric distribution operations (Attorney General Reply Brief at 42). The Attorney General also argues that the MGP sites being remediated may now be used for transmission purposes, in which case the associated remediation costs should be recovered through transmission rates (Attorney General Reply Brief at 42).

Furthermore, the Attorney General contends that WMECo's reported expense is merely an estimate of future costs (Attorney General Brief at 82, citing Dedham Water Company, D.P.U. 84-32, at 17 (1984); Attorney General Reply Brief at 42). Therefore, the Attorney General maintains that the Department should exclude WMECo's MGP environmental remediation expenses from cost of service (Attorney General Brief at 82; Attorney General Reply Brief at 42).

b. Company

WMECo maintains that the Attorney General's argument fails to recognize the evidentiary record in this proceeding (Company Brief at 150-151). The Company argues that there is no evidence to suggest that the MGP remediation costs were not incurred or were somehow inappropriate (Company Brief at 150-151, citing Tr. 12, at 2056-2059). WMECo argues that the evidence demonstrates that it has incurred MGP remediation costs (Company Brief at 152, citing Exh. AG-3-21, at 2; RR-AG-65; Company Reply Brief at 18).

The Company accuses the Attorney General of engaging in "unfounded speculation" contrary to record evidence as to WMECo's MGP remediation efforts (Company Reply Brief at 19). According to WMECo, its MGP remediation costs are a cost of doing business, often a legacy of a prior regulated utility business (Company Reply Brief at 18, citing Tr. 12,



at 2056-2057). Furthermore, the Company argues that the Attorney General fails to offer any record support for her contention that MGP costs are likely imprudent because environmental damage is not typically the result of prudent actions (Company Reply Brief at 19). The Company contends that, in view of the Attorney General's failure to inquire further into WMECo's MGP remediation expenses, her attempt to substantiate "wild claims of imprudence" in her reply brief is imprudent and must be rejected (Company Reply Brief at 19).

The Company further contends that the Attorney General has mischaracterized the Department's decision in D.T.E. 01-56 (Company Brief at 151). According to the Company, gas companies recover MGP remediation costs through a different approach from that applicable to electric companies (Company Brief at 151, citing D.P.U. 89-161). WMECo notes that the Department correctly found in D.T.E. 01-56 that The Berkshire Gas Company's proposed inclusion of MGP remediation expenses in cost of service would result in double-recovery of that company's MGP remediation costs (Company Brief at 151, citing D.T.E. 01-56, at 82). In contrast, WMECo argues that because it is not a gas company, the only means by which it can recover MGP remediation costs is through cost of service as determined in a rate case (Company Brief at 151; Company Reply Brief at 19).<sup>90</sup>

The Company defends its use of reserve accounting, arguing that because its annual environmental remediation costs vary by year, the use of a reserve account allows for these

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<sup>90</sup> The Company reasons that the Department is free if it so chooses to open a proceeding to investigate manufactured gas plant remediation for electric companies, and impose a new standard for recovery of these costs (Company Reply Brief at 19).

expenses to be smoothed out over a period of time (Company Brief at 152). WMECo notes that because its environmental remediation costs were \$508,440 in 2008 and \$316,104 in 2009, the test year amount booked to the reserve during the test year of \$425,000 represents a reasonable level of recovery for the Company (Company Brief at 152, citing Exh. AG-3-21, at 2).

### 3. Analysis and Findings

The Department's ratemaking treatment of MGP remediation expenses was approved as part of a settlement agreement involving the Attorney General and each of the gas distribution companies in Massachusetts. Manufactured Gas Plants, D.P.U. 89-161, at 30-37 (1990). WMECo, however, was not a party to D.P.U. 89-161, and was not a signatory to the D.P.U. 89-161 settlement. Consequently, the Department will evaluate WMECo's MGP environmental remediation expense based on well-established ratemaking standards.

WMECo is an electric distribution company, and has never directly owned or operated an MGP facility. However, as noted above, the Company's corporate predecessors include Amherst Gas and Easthampton Gas, which operated MGP facilities from the latter 1800s through 1934 and 1924, respectively (RR-AG-65, at 1). In addition to the information provided by the Company in Record Request AG-65, the Department is familiar with the history of MGP operations in Massachusetts. See D.P.U. 89-161, at 10-29; Annual Reports of the Department to the Legislature for the years 1885 through 1919, passim. We are satisfied

that gas produced at MGP facilities was not used as fuel for electric generating plants, and that the sites themselves are not being used for transmission purposes.<sup>91</sup>

The Attorney General asserts on brief that the Company fails to demonstrate that the environmental damage at the former MGP sites was not the result of imprudent activities (Attorney General Reply Brief at 43). In its investigation into the ratemaking treatment of the costs of investigating and remediating hazardous wastes associated with MGP sites, the Department acknowledged that the gas industry was generally aware, either in fact or constructively, of the hazardous nature of MGP wastes, including their potential for harm to public health and the environment. D.P.U. 89-161, at 38-39. Nevertheless, this general awareness does not readily translate into imprudence. D.P.U. 89-161, at 38-39. Nor can such knowledge of potential risks lead to the conclusion that MGP operators would have known that they or their successors would be obligated to remediate their own land or disposal sites “some two, ten, or even seventeen decades later.” Id. at 39. Furthermore, the Department acknowledged the inherent difficulties associated with MGP site-specific prudence

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<sup>91</sup> Department records show that Amherst Gas sold its electric operations to Western Counties Electric Company (“Western Counties”), another corporate predecessor of WMECo, in 1930, and discontinued gas operations in 1934. Western Counties Electric Company/Amherst Gas Company, D.P.U. 3770 (1930). Department records also show that Easthampton Gas sold its electric operations to Western Counties in 1930, and its remaining gas operations were acquired by Northampton Gas Light Company in 1935. Western Counties Electric Company/Amherst Gas Company, D.P.U. 3785 (1930); Northampton Gas Light Company/Easthampton Gas Company, D.P.U. 4981 (1935). In view of the ultimate dispositions of the gas businesses of both companies, the Department directs the Company to provide as part of its next Section 94 rate filing an explanation of WMECo’s relationship to Amherst Gas and Easthampton Gas for purposes of clarifying the Company’s status as a potentially liable party for these MGP sites.

investigations as a factor in our decision to accept the settlement in D.P.U. 89-161, to which the Attorney General was a signatory. D.P.U. 89-161, at 38-48. As described in D.P.U. 89-161, mounting the type of MGP site-specific prudence review that the Attorney General appears to be requesting would be a difficult task at best, given the passage of time, unavailability of witnesses, the general state of company records, and the present condition of MGP sites. D.P.U. 89-161, at 46-47. The site-specific information would likely be fragmentary and enigmatic, with cases potentially decided by “the chance survival or perishing of records from decades or even a century and a half ago.” D.P.U. 89-161, at 47. The Department is persuaded that the prudence review of the MGP facilities operated by Amherst Gas and Easthampton Gas during the late 1800s and early 1900s would be no less daunting.

The Company’s MGP remediation costs at issue relate primarily to consulting, laboratory and drilling fees (Exh. AG-3-21; RR-AG-65, at 2). During both the test year and the current year, the Company’s expenditures associated with the Easthampton Gas MGP site were related to groundwater sampling and the Massachusetts Department of Environmental Protection’s ongoing audit of the results of studies conducted in 2006 (RR-AG-65, at 1). During that same period, the Company’s expenditures associated with Amherst Gas’s former Pelham Road MGP site were related to characterizing environmental risks, updating the comprehensive site investigation report, and operating a coal-tar recovery system (RR-AG-65, at 1).<sup>92</sup> Based on WMECo’s description of its activities and the Department’s familiarity with

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<sup>92</sup> Because no adverse environmental impacts had been identified at Amherst Gas’s former College Street MGP site, there have been no recent remediation activities at this location, and none is expected in the future (RR-AG-65, at 1).

MGP site remediation, we are satisfied that the Company's MGP remediation activities have been prudently incurred and are reasonable in amount.

Turning to WMECo's use of reserve accounts to record its environmental remediation expenses, the Department considers accrual accounting to be integral to the ratemaking process. Western Massachusetts Electric Company, D.P.U. 84-25, at 68-69 (1984); The Berkshire Gas Company, D.P.U. 1490, at 37 (1983). However, when actual expenses are known and can be easily used to adjust for estimation errors in the accrual process, the Department will adjust booked test year expenses to match the actual expense incurred. Colonial Gas Company, D.P.U. 84-94, at 22-23 (1984). Cf. Western Massachusetts Electric Company, D.P.U. 84-25, at 67-68 (1984) (use of non-calendar test year precluded precise match of accrued and actual expenses).

From January 1, 2006 through December 31, 2009, WMECo booked \$1,505,000 to its environmental remediation reserve, and charged \$1,498,844 against the reserve (RR-AG-65, at 2). Although the overall difference during this period is small, the amounts credited to operating reserves are determined by a company's assessment of probable liabilities, and thus represent estimates of future events. See Western Massachusetts Electric Company, D.P.U. 300, at 52 (1983). Consequently, including the full amount booked to the reserve account in cost of service would overstate WMECo's environmental remediation expense. Moreover, the Company's proposal to include the test year amount booked to the reserve in cost of service constitutes a move towards a future test year, which the Department has consistently rejected. D.P.U. 07-50-A at 51-53 (2008); Eastern Edison Company,

D.P.U. 1590, at 19 (1984); Massachusetts Electric Company, D.P.U. 136 (1980); Boston Gas Company, D.P.U. 18264, at 2 (1975); New England Telephone and Telegraph Company, D.P.U. 18210, at 2-3 (1975); see also Massachusetts Electric Company v. Department of Public Utilities, 383 Mass. 675 (1981).

During the test year, WMECo booked \$425,000 to the reserve and expensed \$316,104 (Exh. AG-3-21, at 2; RR-AG-65, at 2). The Department finds that this actual environmental remediation expense of \$316,104 is representative of the Company's environmental remediation expense. Including this amount in cost of service will provide WMECo with sufficient revenues to fund a representative level of remediation expense. Accordingly, the Department will reduce the Company's proposed cost of service by \$108,896.

K. Shareholder Services

1. Introduction

The Company proposes to include \$ 24,969 in its cost of service for test year expenses for shareholder services (Exh. AG-1-76). Accordingly, the Company proposes to increase its cost of service by that amount (Exh. AG-1-76).

2. Positions of the Parties

a. Attorney General

The Attorney General recommends that the Department remove the shareholder services costs from cost of service (Attorney General Brief at 80, citing Exh. AG-1-76). The Attorney General states that the Department has long held that shareholder services should not be included as a separate line item in the cost of service (Attorney General Brief at 80-81, citing The Berkshire Gas Company, D.P.U. 90-121, at 150-151 (1991); Western

Massachusetts Electric Company, D.P.U. 88-250, at 47 (1989); Western Massachusetts Electric Company, D.P.U. 87-260, at 106-107 (1988).

b. Company

The Company claims that the cases supporting the Attorney General's recommended cost of service adjustment pertain to stock issuance costs, not shareholder costs, and that there is no Department precedent that excludes shareholder costs from cost of service (Company Brief at 149). WMECo states that D.P.U. 90-121 refers to expenses booked to Account 930, which is a different account from the one to which WMECo books expenses (Company Brief at 150, citing Exh. AG-1-76). Lastly, the Company states that the costs involve employee labor and related costs (Company brief at 150).

3. Analysis and Findings

The Department's policy has been to exclude shareholder-related expenses from the cost of service. D.P.U. 07-71, at 109-110; D.P.U. 94-50, at 326-327; D.P.U. 92-210, at 52; D.P.U. 88-250, at 47. WMECo has not provided the Department with any new evidence with regard to shareholder services that would persuade the Department to change its precedent as an outcome of this proceeding. The Department, therefore, will exclude shareholder services costs from the Company's cost of service. Accordingly, WMECo's proposed cost of service will be reduced by \$24,969.

VI. STORM COST RECOVERY

A. Introduction

Pursuant to the D.T.E. 06-55 Settlement the Company established a storm reserve with an initial funding level of \$300,000 (Exh. AG-1, ¶ 2.12). D.T.E. 06-55, at 8. The Company

funds an additional \$300,000 annually to the storm reserve through an accrual in the distribution component of rates (Exhs. WM-JLM at 45; AG-1, ¶ 2.12). The Company may charge the incremental storm expenses of major storms, exceeding \$300,000 per storm, against the fund, and pays or accrues interest on the fund balance at the customer deposit rate (Exh. AG-1, ¶ 2.12).<sup>93</sup> D.T.E.06-55, at 7-8.

The Company proposes to maintain the storm event threshold level at \$300,000 per storm, and increase the annual funding level to \$575,000 (Exhs. WM-JLM at 46; WM-BAY at 30). To calculate its proposed increased level of funding, the Company amortized the incremental costs for each storm event applied to the storm fund over five years, excluding the December 2008 storm, and then divided the sum of the monthly amounts for the first five years by five (Exh. WM-JLM WP C-3.18, at 11).

From 2007 through May 2010, there were seven storms with expenses that qualified for recovery through the storm reserve (Exhs. WM-JLM at 44; WM-BAY at 29; WM-BAY-3). The Company charged approximately \$16.9 million to the storm reserve for the seven storms (Exhs. WM-JLM at 44; AG-14-24).<sup>94</sup> Consequently, as of May 2010, the balance in the storm

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<sup>93</sup> If an individual storm event causes the Company to incur costs below the \$300,000 threshold, it would not be allowed to access the storm fund for reimbursement of any of the associated costs; if a storm event causes the Company to incur expenses that exceed the \$300,000 threshold, it could access the storm fund for reimbursement of all of the incremental expenses above \$300,000. D.T.E. 06-55, at 7.

<sup>94</sup> At the time of evidentiary hearings the costs of the 2010 storms were not finalized (Exh. WM-BAY-REB at 10).



reserve was a deficit of \$13.0 million (Exhs. WM-JLM at 44-45; WM-JLM, WP C-3.18, at 1). The Company proposes to amortize the storm reserve deficit over five years, resulting in a \$3,596,527 increase in base rates (Exhs. WM-JLM at 46; WM-JLM, WP C-3.18, at 1; AG-12-15, at 5).

The Company proposes to collect \$3,596,527<sup>95</sup> annually through base rates for both the amortization of the deficit balance (\$3,021,527) and the funding of the storm reserve (\$575,000) (Exhs. WM-JLM, WP-3.18, at 1; AG-12-15, at 5). Further, the Company proposes a change in the carrying charge rate applied to the storm reserve balance, from the customer deposit rate to the Company's weighted average cost of capital (Exh. WM-JLM at 47). The Company proposes to implement this change by including in rate base the deficit in the storm reserve of \$15,307,551 (Exhs. WM-JLM at 46-47; AG-12-15, at 5).

B. Positions of the Parties

1. Attorney General

a. Separate Investigation

The Attorney General claims that the Company has failed to provide sufficient evidence to support its recovery of storm related costs, and argues that the Department should deny any recovery until it has conducted a thorough investigation of these costs (Attorney General Brief at 93-94; Attorney General Reply Brief at 53). The Attorney General maintains that the Company has obstructed the investigation of the storm costs in this proceeding by failing to

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<sup>95</sup> In the January 6, 2011 updated filing, the Company updated the deficit balance from \$13,231,351 to \$15,107,636 and the annual amortization from \$3,178,189 to \$3,596,527 to include updated storm costs for June and July, 2010 (Exh. AG-12-15).

provide the necessary records in a timely fashion (Attorney General Brief at 94-97; Attorney General Reply Brief at 54). She claims that the Company “concealed” material relevant to a determination of the prudence of its storm costs and made the material available only when there was insufficient time for it to be reviewed and addressed (Attorney General Brief at 97; Attorney General Reply Brief at 54).<sup>96</sup> Furthermore, she argues that the material provided is deficient (Attorney General Brief at 95). She states that a significant amount of costs were supported by screen captures<sup>97</sup> and “Northeast Utilities Weekly Verification Reports,” which do not provide evidence that the costs are attributable to WMECo, are storm related and are incremental (Attorney General Brief at 95, citing Exh. AG-HWS (Supp) at 7). The Attorney General claims that neither she nor the Department has had sufficient time to conduct a thorough review of the costs in this proceeding (Attorney General Brief at 97). Therefore, the Attorney General advocates that the Department deny any storm fund deficit recovery in this proceeding and open a separate inquiry into the appropriate recovery of the Company’s storm fund deficit (Attorney General Brief at 97; Attorney General Reply Brief at 53-54). Alternatively, she advocates that the Department set the allowed return on equity at the low end of the range of reasonableness as a consequence of the Company’s deliberate obstruction of the review of the storm related expenses (Attorney General Reply Brief at 53, 55).

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<sup>96</sup> In support, she notes that on September 24, 2010, the Company provided the documentation of the storm costs in response to an August 30, 2010 record request, giving her expert witness only five calendar days for review prior to the September 29, 2010 deadline for intervenor testimony (Attorney General Brief at 94-95).

<sup>97</sup> A screen capture is an image file that shows the content of a computer screen at a given moment.

As a result of the Department's determination to open a separate investigation into the Company's storm costs as set forth below, we do not address the following issues raised by the Attorney General: the inclusion of 2010 storm costs, the calculation of the capitalization of outside contractor costs, the overhead allocation rates of NU affiliates, the inclusion of premium pay in storm costs, and the level of storm hardening activity in connection with the D.T.E. 06-55 Rate Settlement (Attorney General Brief at 98-116; Attorney General Reply Brief at 55-64). Those issues may properly be taken up in the separate investigation.

b. Amortization Period

The Attorney General objects to the Company's proposed five-year amortization period (Attorney General Brief at 106; Attorney General Reply Brief at 60-61). Specifically, she notes that the December 2008 storm was exceptional and the Company has not experienced a storm event of similar magnitude since 1996 (Attorney General Brief at 106; Attorney General Reply Brief at 61).<sup>98</sup> The Attorney General recommends that the Department factor in the level of expenditures and the frequency of comparably severe storms in determining the amortization period (Attorney General Reply Brief at 61). Therefore, she argues that the cost of storms should be amortized over a period of ten years (Attorney General Brief at 106-107; Attorney General Reply Brief at 61).

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<sup>98</sup> The Attorney General states that the 1996 storm referenced was significantly smaller in terms of outages and costs, and a storm of truly comparable magnitude would require an even longer period of investigation (Attorney General Brief at 106).

c. Carrying Charge

The Attorney General challenges the Company's inclusion of the storm reserve balance in rate base, which earns a return at the weighted average cost of capital (Attorney General at 109; Attorney General Reply Brief at 62). She states that the Company's proposal is inconsistent with the 2006 Rate Settlement, which provided for a return at the customer deposit rate (Attorney General Brief at 109). She asserts that the Company is treating its ratepayers as "cash cows," noting that the lower carrying charge rate was acceptable when the storm reserve had a positive balance and the Company was paying the return, but that the Company now wants to increase the rate when the fund is in a negative position and ratepayers are paying the return (Attorney General Brief at 109). She argues that allowing recovery of carrying charges at the weighted average cost of capital would provide no incentive for the Company to mitigate the costs of storm restoration (Attorney General Brief at 114, citing Exh. AG-TN at 10-12). She also argues that the Company's proposal shifts the financial risks of storm costs to ratepayers (Attorney General Brief at 115, citing Exh. AG-TN at 10-12). Furthermore, the Attorney General proposes that, should the Department decide that the reserve should be included in rate base, the amount included should reflect a reduction for the amount of amortization included in the cost of service (Attorney General Brief at 109, citing Exh. AG-HWS at 11).

d. Test Year Accrual

The Attorney General argues that the Company has improperly calculated the annual reserve amortization (Attorney General Brief at 107; Attorney General Reply Brief at 61). She

claims that during the test year the Company accrued \$300,000 to the reserve, which would require a corresponding accounting entry to amortization expense (Attorney General Brief at 108). Despite this accounting fundamental, the Attorney General contends that the Company failed to recognize the test year amortization expense in its proposed calculation (Attorney General Brief at 108). She maintains that to the extent that an expense is recorded in the test year, it has to be recognized as an offset when determining the pro forma adjustment to the expense (Attorney General Brief at 109).

2. Company

a. Separate Investigation

The Company argues that there is no basis for the Attorney General's claim that it has engaged in "willful misconduct," or that costs should be denied until the Department has completed a separate investigation of the supporting documentation (Company Brief at 165-166; Company Reply Brief at 23-24). The Company claims that it has provided complete and detailed documentation totaling over 10,000 pages to support the storm costs charged against the storm reserve (Company Brief at 165-166; Company Reply Brief at 23). WMECo states that it has provided complete and detailed accounts of the costs charged, including details of WMECo's labor, NUSCo's labor, restoration charges from other NU operating company crews, materials and supplies used for storm restoration work, payroll overheads, vehicle charges, and costs of outside contractors and vendors (Company Brief at 166, citing Exh. AG-12-16). The Company further states that responding to the Attorney General's request for this information in 18 business days was not unreasonable as the

Company could not provide that volume of material in the seven day requirement established in the ground rules for the proceeding (Company Brief at 166-167). The Company argues that the Department has comprehensive documentation of the Company's storm costs in this proceeding and, therefore, there is no basis for a second and separate proceeding (Company Brief at 167; Company Reply Brief at 23-24). In addition, the Company notes that the Department found in Western Massachusetts Electric Company, D.P.U. 09-01-D, Letter Order at 4 (February 2, 2010), an investigation into the Company's response to the December 2008 storm, that there was overwhelming evidence that the Company pursued its restoration process in a safe, reliable manner and concluded that there was no need for any further investigation (Company Brief at 162).

b. Amortization Period

The Company states that a ten-year amortization period of storm costs is inconsistent with Department precedent (Company Brief at 173, citing D.P.U. 09-39, at 211). WMECo notes that the Department's standard ratemaking treatment of extraordinary storm costs is to allow amortization over a period of three to five years (Company Brief at 173). The Company points out that that under the proposed five-year recovery period the Company will not fully recover its costs for seven years (Company Brief at 173).<sup>99</sup> In addition, the Company states that the Attorney General's proposed ten-year amortization would put a strain on the Company's financial position, particularly with respect to the likelihood that other severe storm

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<sup>99</sup> The Company began accruing the costs in 2008 and the proposal is to recover the costs over five years from the implementation of the rates approved in this docket.

events will occur during the ten-year period, adding to the storm costs to be recovered (Company Brief at 173).

c. Carrying Charge

The Company argues that it should be allowed to recover carrying charges at the weighted average cost of capital, consistent with the Department's decision in D.P.U. 09-39 (Company Brief at 175). WMECo further argues that the customer deposit rate is generally used for balances that are short-term in nature, and its recovery of storm costs over seven years is not a short-term process (Company Brief at 175). The Company argues that the Attorney General provides no evidence to support her claim that by allowing WMECo to recover the weighted average cost of capital, there may be an unnecessary increase in storm costs (Company Brief at 175).

d. Test Year Accrual

The Company argues that there is no basis for the Attorney General's claims that WMECo has not reflected the test year amortization of \$300,000 in its storm reserve calculation (Company Brief at 174). The Company states that it has properly accounted for the \$300,000 by reducing the amortization expense of deferred assets (Company Reply Brief at 25, citing Exh. AG-14-29). WMECo states that it recorded the \$300,000 test year storm amortization in FERC Account 407.30 (Regulatory Debits) and it was therefore included in the \$1,316,814 reduction to amortization expense (Company Brief at 174).

C. Analysis and Findings

1. Separate Investigation

The Company proposes to recover the storm reserve deficit of \$15,307,551 through a five-year amortization (Exhs. WM-BAY at 30; WM-JLM at 46; WM-JLM, WP C-3.18). The Attorney General has raised numerous objections to this proposal. The Attorney General has argued for the Department to defer any consideration of recovery of the deficit balance until a separate proceeding can be conducted to fully investigate the documentation supporting the costs (Attorney General Brief at 93-94; Attorney General Reply Brief at 53, 54). The Company claims that the Department has complete documentation regarding the costs for which recovery is sought (Company Brief at 165-166; Company Reply Brief at 23-24).

The Department finds that as a result of the volume and timing of the receipt of the Company's documentation of storm expenses, a reasonable examination by the Department and parties of such storm expenses is not feasible in this proceeding. Additionally, while the Department investigated the preparation and service restoration efforts of the Company related to the December 12, 2008 storm in Western Massachusetts Electric Company, D.P.U. 09-01-D, Letter Order (February 2, 2010), such proceeding did not include an examination of the costs and expenses associated with the Company's efforts.

While the Attorney General argues that recovery of the costs cannot commence until completion of a separate investigation, we find that recovery may commence if the recovery is



treated outside of base rates subject to reconciliation.<sup>100</sup> It is clear based on the Company's filing that it has incurred extensive storm related costs; however, the accuracy of the amount of the costs claimed must be determined. Therefore, in order to determine the amount of storm costs that the Company may recover, the Department will conduct a separate inquiry into the incremental storm costs to be applied to the storm fund. In that proceeding, the Company must demonstrate that all costs that it seeks to recover are reasonable, storm related, attributable to WMECo, incremental and have been prudently incurred. See D.P.U. 09-39, at 212.

## 2. Operation of Storm Fund

Through rate settlements, the Department has adopted storm funds for various electric distribution companies. Western Massachusetts Electric Company, D.P.U. 06-55, at 7-8 (2006); Boston Edison Company/Cambridge Electric Light Company/Commonwealth Electric Company/NSTAR Gas Company, D.T.E. 05-85, at 7-8 (2005). As noted above, the Company currently has a storm fund that was approved as part of the 2006 Rate Settlement (Exh. AG-1, ¶ 2.12). The Company proposes to continue its storm fund with certain changes. While the Attorney General does not object to the overall concept of a storm fund for the Company, she takes issue with certain aspects of the Company's proposed design of the fund. Even outside of the parameters of a rate settlement, we find that, where a storm fund is properly designed, it

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<sup>100</sup> The Department has found that it would be inappropriate to include the amortized deficit balance in rate base for these reasons: (1) the actual costs are not known and need to be determined in the separate investigation; and (2) rate base inclusion would result in fixed carrying charges until the Company's next rate case without an adjustment for changes in the unamortized amount.

has the potential to benefit both the Company and its customers by levelizing the effect of major storms on distribution rates. D.P.U. 09-39, at 206. Accordingly, we permit the Company to continue to operate a storm fund.

### 3. Funding and Threshold Levels

The increased funding level represents a change in the Company's experience with storms since the time of its last rate filing. The Department finds it appropriate to increase the funding level to a more representative level of the incremental storm costs incurred each year, to smooth out the cost for storms paid by ratepayers. The Department finds the calculations proposed by the Company to derive the annual funding level to be reasonable, and consequently allows the Company to include \$575,000 in rates for the purpose of funding the storm reserve each year.

With respect to the Attorney General's argument regarding the test year accrual, the Department finds that by reducing the amortization expense of deferred assets by \$300,000, the Company removed the accrual from its test year costs. Therefore, we reject the Attorney General's proposed adjustment. The Department finds that accruing \$575,000 annually to the storm reserve, with a \$300,000 storm event threshold, provides an appropriate balance between allowing the Company to recover the incremental costs of major storms and levelizing the rate impact and financial burden on the Company's ratepayers of storm-related costs.

### 4. Cost Recovery

In order to recover any costs from the storm fund, the Company must file for approval by the Department. The Company has acknowledged the potential for recovery through a

surcharge outside of base rates. The Department finds this approach to recovery to be appropriate for several reasons. First, recovery of incremental storm costs through a reconciling mechanism is consistent with the Department's finding in D.P.U. 09-39, at 211. Second, it allows for recovery to commence prior to the completion of the separate investigation, with the allowable amount finalized after completion of the investigation. Third, a separate reconciling mechanism ensures that the Company does not over collect amounts from customers through base rates, in the event that the date of its next base rate change falls significantly beyond the five-year amortization period.

Therefore, the Department directs that the Company shall recover its incremental storm costs through a reconciling charge. Accordingly, the Company shall submit as part of its compliance filing a storm cost tariff that provides for recovery of allowed costs on a reconciling basis. Further, the tariff shall be constructed so that all of the terms and calculations are clearly understood. Upon approval of the compliance tariff, the Company may collect the amount of \$3,596,527 through its surcharge, subject to reconciliation pursuant to the separate investigation. In addition, to provide the Department a better understanding of the magnitude of storm costs the Company incurs, WMECo is directed to submit as part of its annual true-up filing a report that outlines the total number and costs of all storms that occurred in the past calendar year.

To limit the balance in the fund from becoming too large and to prevent the fund from having a deficit balance that is excessive, the Department finds that, subsequent to the amortization recovery, it is appropriate for the storm fund to have a symmetrical cap (positive

and negative) of \$3 million. In the event the fund exceeds the cap, the excess amount shall be returned to ratepayers in the following year. In the event the storm fund balance reaches a deficiency amount outside of the cap, the Company may propose a method for recovery of the incremental costs that fall outside the cap. In any filing for incremental cost recovery, the Company must demonstrate that the costs it seeks to recover from the fund are: storm related, incremental to the Company, exceed the \$300,000 threshold, and prudently incurred.<sup>101</sup>

#### 5. Amortization Period

The Company proposes a five year amortization period, and the Attorney General proposes a ten year amortization period. Amortization periods are determined based on a case-by-case review of the evidence and underlying facts. Aquarion Water Company of Massachusetts, D.P.U. 08-27, at 99 (2009); Barnstable Water Company, D.P.U. 93-223-B at 14 (1994); Fitchburg Gas and Electric Light Company, D.P.U. 84-145-A at 54 (1985). In determining the proper amortization period, we must balance the interests of the Company and of ratepayers. Barnstable Water Company. D.P.U. 93-223-B at 14 (1994). In setting an amortization period, the Department has considered such factors as the amount under consideration for deferral, the value of such an amount to ratepayers based on certain amortization periods, and the impact of the adjustment on the company's finances and income. Aquarion Water Company of Massachusetts, D.P.U. 08-27, at 99 (2009); Barnstable Water Company, D.P.U. 93-223-B at 14 (1994). In this case, we consider the purpose of the storm fund, level of potential costs to be recovered and the means of recovery. Based on these

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The storm reserve is not intended to reimburse WMECo for incremental capital costs.

considerations and the record in this case, the Department finds five years to be an appropriate amortization period.

6. Carrying Charge

As discussed above, the Department has approved rate settlements between the Attorney General and a number of distribution companies, including WMECo, that provide for a storm reserve fund. The purpose of a storm fund is to levelize the costs of extraordinary storms in rates and to provide quicker rate relief to distribution companies. The use of a storm reserve fund is not intended to shift the financial risk of paying for major storms from distribution companies to ratepayers. D.P.U. 09-39, at 205. The Company's allowed return on equity is designed, in part, to recognize these business risks. Boston Edison Company, D.P.U. 1720, at 88-89 (1984). By including an appropriate funding level for the reserve in base rates, the Company is effectively recovering the incremental costs of major storms concurrently with the incursion of the costs rather than postponing recovery for some future time.

In the 2006 Rate Settlement, the Company and the Attorney General agreed on, and the Department approved, the application of carrying charges to the balance in the storm reserve (Exh. AG-1, ¶ 2.12). Under that provision, ratepayers, by making advance contributions to the storm fund, were compensated for the time value of money at the customer deposit rate (Exh. AG-1, ¶ 2.12). Conversely, when the storm reserve was in a deficit position, the Company would receive charges at the customer deposit rate (Exh. AG-1, ¶ 2.12). In the instant proceeding, the Company argues that the customer deposit rate is not the appropriate

rate for carrying charges, given the anticipated duration of the deficit position of the fund (Exh. WM-JLM at 47-48). The Company asserts that the weighted average cost of capital, established by the Department for National Grid' storm fund in D.P.U. 09-39, should be used for the storm reserve (Exh. WM-JLM at 47-48).

In the instant proceeding we find it necessary to re-examine the rate of carrying charges warranted for a storm fund with recovery of costs through a reconciling mechanism. At the outset, the Department notes that the Company has not demonstrated that it requires long-term financing for storm-related costs, which could provide some support for a higher carrying charge rate. Moreover, the funding level for a storm reserve is designed to prevent the reserve from having an excessive surplus or a deficit position. The Department finds applying a weighted average cost of capital as the carrying charge rate would disproportionately shift the risk of cost recovery for extraordinary storms to ratepayers. To balance the risk between ratepayers and shareholders that the fund is in a surplus or deficit position at any given time, the Department finds that the use of a carrying charge at the customer deposit rate for the recovery of incremental storm costs is warranted.

## VII. CPSL COST RECOVERY

### A. Introduction

The CPSL is a reconciliation mechanism established pursuant to article 2.15 of the 2006 Rate Settlement (Exhs. WM-JLM at 7; AG-1, at 12-13). This mechanism allows for the recovery of costs associated with the repair of manholes and stray voltage investigations incurred during 2007 and 2008 (Exhs. WM-JLM at 7-8, 53; AG-1, at 12-13; AG-37-4; Tr. II,

at 363-364). Pursuant to D.T.E. 06-55, the annual incremental revenue requirement associated with the CPSL projects was to be recovered in the same manner as for exogenous factor adjustments until the effective date of new distribution rates (Exh. AG-1, at 12).

During the test year, WMECo booked revenues of \$2,249,897 associated with the collection of the prior period deferral of CPSL expenses (Exhs. WM-JLM C-3.1; Tr. II, at 375). Because the settlement agreement in D.T.E. 06-55 provided that the CPSL recovery mechanism would terminate with the Company's next rate case, WMECo has proposed an adjustment to remove from revenues the \$2,249,897 that was collected during the test year (Exhs. WM-JLM at 8; WM-JLM C-3.1).

The CPSL mechanism was designed to recover costs in arrears, so costs incurred in one year would not be recovered until the following year (Exh. WM-JLM at 53). Consequently, the termination of the CPSL in the instant proceeding and the lag of recovery results in the stranding of \$438,871 in 2010 costs associated with the CPSL (Exh. WM-JLM at 53). To resolve this stranding issue, the Company initially proposed to recover the 2010 costs as a deferred asset amortized over five years (Exhs. WM-JLM at 53; WM-JLM C-3.19, at 2; WMECo Brief at 142). WMECo subsequently revised the amount of unrecovered 2010 CPSL costs to \$170,872<sup>102</sup> (Exhs. AG-3-9; AG-3-12). Amortizing this amount over a period of five years yields an annual amortization of \$34,174 (WMECo Brief at 143). The Company also

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<sup>102</sup> In response to a record request submitted by the Attorney General, the Company discovered that costs of removal were inadvertently included in the gross plant additions used as the basis for computing depreciation expense, property tax expense, and return on rate base associated with 2010 CPSL costs (Exhs. AG-3-12; WMECo Brief at 143).

proposes to collect carrying charges on the CPSL deferral at the rate applied to customer deposits (WMECo Brief at 143). No additional parties commented on the proposed CPSL adjustments.

B. Analysis and Findings

Proposed changes to test year revenues, expense, and rate base require a finding that the adjustment constitutes a known and measurable change to test year cost of service.

Dedham Water Company, D.P.U. 84-32, at 17 (1984). As noted above, the Company's deferred CPSL costs are associated with 2007 and 2008.

The settlement agreement in D.T.E. 06-55 provides that WMECo may continue to recover prudently incurred CPSL costs expensed on or before December 31, 2008 after this date. See D.T.E. 06-55. As such, the Department finds the deferred CPSL cost of \$170,872 is eligible for recovery.

Regarding the appropriate amortization period, WMECo proposes a five-year amortization period based on the average frequency of rate cases for the Company (Exh. WM-JLM at 55). Amortization periods are determined based on a case-by-case review of the evidence and underlying facts. Aquarion Water Company of Massachusetts, D.P.U. 08-27, at 99 (2009); Barnstable Water Company, D.P.U. 93-223-B at 14 (1994); Fitchburg Gas and Electric Light Company, D.P.U. 84-145-A at (1985). In determining the proper amortization period, we must balance the interests of the Company and of ratepayers. Barnstable Water Company, D.P.U. 93-223-B at 14 (1994). In setting an amortization period, the Department has considered such factors as the amount under consideration for deferral, the value of such



an amount to ratepayers based on certain amortization periods, and the impact of the adjustment on the company's finances and income. Aquarion Water Company of Massachusetts, D.P.U. 08-27, at 99 (2009); Barnstable Water Company, D.P.U. 93-223-B at 14 (1994). Based on these considerations, the Department will amortize WMECo's deferred CPSL cost over five years, which is consistent with the Company's proposal.<sup>103</sup>

Application of a five-year amortization period to the \$170,872 in deferred CPSL costs the Department has approved herein produces an annual amortization expense of \$34,174. Accordingly, WMECo's test year cost of service is increased by \$34,174, with no carrying charges.

#### VIII. ACTIVE HARDSHIP PROTECTED RECEIVABLES

##### A. Introduction

The Company proposes to recover the accounts receivable balance for its protected hardship accounts in two ways. First, the Company proposes to recover in base rates the amount of \$9 million amortized over five years (Exhs. WM-JLM at 25; WM-JLM WP C-3.0; WM-JLM WP C-3.19, at 2). The amount of \$9 million represents approximately 90 percent of the hardship protected account balances that were outstanding for more than 120 days at the end of the test year (Exh. WM-JLM at 25). Second, the Company proposes to recover through

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<sup>103</sup> The Company has requested the inclusion of carrying charges as part of its recovery of deferred CPSL costs. In this case, the Department has found that a five-year amortization of the CPSL related costs is appropriate. Given the amount of the balance and the relatively short amortization period, the Department finds it unwarranted to include any carrying charges on the recovery of the CPSL costs.

the residential assistance adjustment clause (“RAAC”) mechanism<sup>104</sup> (i) the remaining balance of hardship protected account receivables outstanding more than 120 days and (ii) going forward, all hardship protected account receivables outstanding more than 120 days (Exh. WM-JLM at 26-27). Under the Company’s proposal, any later payments received from hardship protected customers would be credited to the RAAC and reconciled on an annual basis (Exh. WM-JLM at 28).

Hardship protected accounts are residential service accounts that, in accordance with Department regulations, are protected from shut-off by the utility for non-payment. 220 C.M.R. §§ 25.03, 25.05. An account qualifies for this protected status where the customer has a financial hardship and: (1) a person residing in the household is seriously ill,<sup>105</sup> or (2) a child under the age of 12 months resides in the household,<sup>106</sup> or (3) the customer takes heating service between the period November 15<sup>th</sup> and March 15<sup>th</sup>,<sup>107</sup> or (4) all adults residing in the household are age 65 or older and a minor child resides in the household.<sup>108</sup> Also, an account qualifies for protected status where all residents of the household are age 65 or

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<sup>104</sup> The RAAC is a reconciling mechanism for electric and gas distribution companies that provides cost recovery of lost revenue associated with increased customer participation in a company’s low-income discounted rates. See Expanding Low-Income Consumer Protections and Assistance, D.P.U. 08-4, at 38-40 (2008).

<sup>105</sup> 220 C.M.R. § 25.03(1)(a)1 and (1)(b).

<sup>106</sup> 220 C.M.R. § 25.03(1)(a)2 and (1)(b).

<sup>107</sup> 220 C.M.R. § 25.03(1)(a)3 and (1)(b).

<sup>108</sup> 220 C.M.R. § 25.03(1)(a)4 and (1)(b).

older.<sup>109</sup> All of these qualified accounts are protected from shut-off for non-payment year round, except for heating customers with a financial hardship. These heating customers are protected from shut-off for non-payment only for the period from November 15<sup>th</sup> through March 15<sup>th</sup> (referred to as the winter moratorium period). 220 C.M.R. § 25.03(1)(a)3 and (1)(b).

Because these accounts cannot be shut off the Company classifies these accounts as “active,” and the Company has determined that it cannot write off the uncollected amounts associated with these accounts (Exh. WM-BAY at 12). The accounts receivable balance associated with these accounts has been increasing for several years, with an increase in the trend coincident with the economic downturn that began in 2008 (Exh. WM-BAY at 3). In addition, as a result of the easing of the eligibility for the Federal Low Income Home Energy Assistance Program, the eligibility requirements for hardship protection were expanded in 2005 and again in 2008 (Exh. WM-BAY at 7-8). The hardship protected account receivables outstanding for greater than 120 days have increased from \$4,100,000 in December 2006 to \$10,008,000 in December 2009 (Exhs. WM-BAY at 8; WM-JLM at 25).

B. Positions of the Parties

1. Attorney General

The Attorney General argues that the proposed treatment of hardship protected accounts is inappropriate for several reasons (Attorney General Brief at 73). She states that, contrary to the Company’s position, the Department’s traditional treatment of bad debt expense applies to

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<sup>109</sup> 220 C.M.R. § 25.05.

protected receivables (Attorney General Brief at 73-74; Attorney General Reply Brief at 51-52). She argues that the Department's Orders in D.P.U. 09-39 and D.P.U. 10-55 do not support the Company's position that recovery through a separate mechanism is appropriate (Attorney General Reply Brief at 49-50).

The Attorney General states that the Company's recovery of bad debt expense established in D.T.E. 06-55 remains effective until terminated or altered by the Department (Attorney General Brief at 74; Attorney General Reply Brief at 52). She states that WMECo, through its proposal, seeks to recover protected receivables that the Company incurred prior to the test year (Attorney General Brief at 75; Attorney General Reply Brief at 52). She argues that the Company failed to petition the Department for a deferral of expenses incurred prior to the test year, which would have allowed the Company to seek recovery in this filing (Attorney General Brief at 75; Attorney General Reply Brief at 53). In addition, she argues that allowing recovery of expenses incurred in years prior to the test year would make it possible for companies making an adequate return to "bank" expenses to a deferral account and collect them in a future rate case (Attorney General Brief at 75). Therefore, the Attorney General argues that because the Company failed to petition the Department for deferral of pre-test year amounts, allowing recovery of the expenses would constitute retroactive ratemaking (Attorney General Brief at 74, 75; Attorney General Reply Brief at 52). She also notes that approval of the proposed mechanism would result in double recovery without an adjustment to the bad debt expense allowed in base rates (Attorney General Reply Brief at 52).

The Attorney General argues further that under the proposed treatment of the active hardship protected accounts, the Company would lack an incentive to aggressively pursue collections activities on delinquent accounts (Attorney General Reply Brief at 49). Finally, she states that the Company failed to demonstrate how its proposal will benefit customers in any way (Attorney General Reply Brief at 53).

2. Company

The Company states that customers who have enrolled and stay in its NUSStart program<sup>110</sup> are eligible for arrearage forgiveness, and that those past due amounts for these customers are recoverable by the Company through the RAAC (Company Brief at 183, citing Exh. WM-BAY at 14, see also Exh. WM-JLM at 26). According to the Company, the majority of hardship protected account customers do not enroll in or are unable to remain in the NUSStart program; therefore, their unpaid balances remain on the Company's balance sheet and cannot be written off because the accounts remain active (Exh. WM-JLM at 30-31; Tr. 11, at 1781-1782). The Company maintains that the increase in active hardship protected accounts receivables is the product of social policies over which it has no control and is one of the most pressing financial risks that the Company faces (Company Brief at 178-179, 180; Company Reply Brief at 26). Further, the Company maintains that the current treatment of these balances is unsustainable (Company Brief at 178-179, 180; Company Reply Brief at 26). The

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<sup>110</sup> WMECo's NUSStart program is designed to help low-income customers manage their electric bills and maintain year-round service (Company Brief at 183, citing Exh. WM-BAY at 14). Participants in NUSStart are eligible for a monthly budget plan and the forgiveness of a portion of their outstanding balance (id. at 14).

Company asserts that, absent any probable recovery of the active hardship protected receivables, it would be required to treat the balance as an impaired asset, resulting in a significant charge to its income statement to fund a bad debt reserve for the amounts accumulated to date (Company Brief at 179, citing Exh. WM-JLM at 29). Additional charges to its income statement would be required in each subsequent year, it claims, as the protected receivables grow, age, and become impaired (Company Brief at 179). The Company notes that eligibility for financial hardship protection has been expanded over the past few years, contributing to the growth of hardship protected accounts (Company Brief at 181). The Company claims its proposed treatment resolves the problem, preventing the necessity of recording the charge to its income statement.

C. Analysis and Findings

The Company has proposed this ratemaking treatment because the Company is unable to collect the accounts receivable balance from its hardship protected account customers, and the amounts are not otherwise recoverable in rates (Exh. WM-BAY at 13). Public policy decisions and economic conditions persuade us to consider whether and how to treat these costs; otherwise, the Company will be required to take a considerable charge against its income statement, because the accounts receivable for the hardship protected account customers would be considered an impaired asset (Exh. WM-JLM at 29-30). Generally accepted accounting principles require that, without probable recovery of outstanding balances, the Company must recognize an impairment loss through a charge to its income statement and

establish a reserve account on its balance sheet for the impaired assets.<sup>111</sup> To assure the probability of recovery and avoid an impairment loss, the Company has proposed a treatment that would address the current outstanding amount and prevent a recurrence of a substantial build up of uncollectible balances on accounts with hardship protection (Exh. WM-JLM at 27). The Company's proposed amortization of \$9 million represents 90 percent of the protected account balances outstanding more than 120 days as of December 2009 (Exhs. WM-JLM at 25; WM-BAY at 8). Amortizing and collecting a significant level of the outstanding balance of hardship protected accounts receivable through base rates would allow the Company to be certain of recovery, thus maintaining the quality of the asset and removing the need to establish a reserve account (Exh. WM-JLM at 27). To prevent the recurrence of a substantial accumulation of uncollectible protected account balances, the Company has proposed, going forward, to collect through the RAAC the protected balances that exceed 120 days outstanding (Exh. WM-JLM at 27).

The Department recognizes that the issue facing the Company is a compounded problem resulting from several factors, including public policy directives, accounting standards, ratemaking practices and economic conditions.<sup>112</sup> Furthermore, the Department

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<sup>111</sup> See Statement of Financial Accounting Standards No. 144.

<sup>112</sup> Regarding the related ratemaking practices, there is no cost of service mechanism for the Company to recover the balance of protected hardship accounts receivable. Unlike expenses that may be deferred for recovery in a subsequent rate case, the balance of protected hardship accounts receivable cannot be recovered in rates unless the asset is deemed impaired and written off. As a result of such a write-off, the Company could propose recovery in a subsequent rate case as bad debt expense. Thus, we do not

understands that a charge against the Company's income statement for the impaired value of the accounts receivable for hardship protected accounts could present a material adverse impact to its financial position.<sup>113</sup> Such a financial impact could have unfavorable consequences not only for the Company's shareholders but also for the Company's ratepayers. Therefore, the Department finds that a remedy is warranted.

The Attorney General has argued that the Company's failure to seek a deferral of the costs when they were incurred prohibits recovery now through base rates<sup>114</sup>, and that to allow current recovery would constitute retroactive ratemaking. The Department does not agree. "The rule against retroactive ratemaking prevents utilities from collecting revenues to compensate for [prior over-or] under recoveries..." Southern California Edison Co. v. FERC, 805 F.2d 1068, 1070 n.2 (D.C. Cir. 1986) (citing Public Service Company of New Hampshire v. FERC, 600 F.2d 944, 955-961 (D.C. Cir.) (cert. denied 444 U.S. 990 (1979))). The rule does not apply here. The balance WMECo is seeking to recover does not retroactively change rates provided for prior service. As stated above, the Company accumulated the balance as a result of economic conditions, accounting practices, and regulatory policy. WMECo's normal process for the development of rates in prior proceedings would not reasonably have included a mechanism for recovery of such a growing uncollectible balance. Under these circumstances,

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consider that the ratemaking treatment approved for protected hardship accounts would result in "banking" as raised by the Attorney General.

<sup>113</sup> The Company's test year operating revenue amounted to \$122 million (Exh. WM-JLM, Sch. 1).

<sup>114</sup> The issue of deferral is addressed above in footnote 8.



we do not find in this case a violation of the rule against retroactive ratemaking, and we find that to deny WMECo a remedy on those grounds would be inequitable, and would adversely affect the financial integrity of the Company. See Attorney General v. Department of Public Utilities, 390 Mass. 208, 229-230 (1983).

The Attorney General argues that the Company's proposal ignores Department precedent concerning the net write offs of uncollectible customer accounts (Attorney General Brief at 73-74). She states that the Company has received revenues to recover the typical level of bad debt expense based on the three-year historical average through rates charged as a result of the D.T.E. 06-55 Settlement (Attorney General Brief at 74).<sup>115</sup> As an initial matter, we note that WMECo's calculation of bad debt expense is exclusive of the hardship protected account balances. Therefore, the Company has not recovered any portion of the hardship protected account balances through the bad debt expense.<sup>116</sup> Further, contributing to the substantial arrearage balance for protected hardship account were, among other things, the economic downturn and the expansion of eligibility for protected status (Exh. WM-BAY at 7). See D.P.U. 08-104-A.

As stated above, a ratemaking remedy is required to address this problem; nonetheless, the Department finds that the Company's proposed recovery plan is inappropriate. First, we

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<sup>115</sup> The Department does not find that any provisions of the D.T.E. 06-55 Settlement limit, restrict, or prohibit the rate recovery provided by the Department in this Order.

<sup>116</sup> Because the hardship protected accounts are treated as "active," the Company does not write off the amounts due and treat the amount as bad debt expense (Exh. WM-BAY at 12).

will address the appropriateness of recovering \$9 million of the current balance through base rates with a five-year amortization period, and then we will address the treatment of ongoing recovery through the RAAC.

The Company stated that the \$9 million represents 90 percent of the active hardship protected balances that are in arrearage (Exhs. WM-JLM at 25; WM-BAY at 8). For accounts that do not have financial hardship protection, the Company terminates service after 120 days of non-payment and writes off the balance shortly thereafter (Exhs. AG-12-13; WM-BAY at 12; Tr.12, at 1999). Furthermore, the Company states that the likelihood of receiving payment is greatly diminished once an account (protected or non-protected) goes beyond 120 days past due (Exh. WM-BAY at 9; Tr. 11, at 1836). The Department does not find these factors as a sufficient basis to use 120 days as the cutoff point to establish the amount that should be recovered through amortization. The Department recognizes that there is a distinction between the probability of recovery from protected and non-protected accounts. In addition, we note that, as of December 2009, 50 percent of the outstanding balance of the protected accounts was for the winter moratorium period only (Exh. WM-BAY at 10). The Company has provided no evidence that these balances will qualify for year-round protection when the winter moratorium period ends. At the end of the winter moratorium period, the accounts will be subject to service shut off and collection activities, and the arrearage balances can be written off.

Additionally, the Company alleges that the economy is in part responsible for the present situation (Exh. WM-BAY at 7; Tr. 7, at 1262; Tr. 10, at 1726). The Department finds

it reasonable to assume that the poor economic conditions in WMECo's service territory are not permanent, and that an economic recovery would improve the likelihood of the payment of past due amounts currently under financial hardship protection.

For the reasons stated above, we find that it is appropriate for the Company to amortize outstanding balances over 360 days (versus 120 days) past due over a reasonable amortization period. Recovery through amortization of balances greater than 360 days past due, which amounted to \$5.6 million as of December 31, 2009 (Exh. WM-BAY at 10), will balance the financial considerations of the Company and the bill impacts to ratepayers without hardship protected status. Further, the use of this past-due period will maintain an incentive for the Company to pursue mitigation of outstanding balances, including enrolling customers with hardship protection in energy efficiency programs and the Company's NUSstart program.

The Company has requested amortization of past due amounts to avoid an accounting treatment that would result in a significant charge to the Company's income statement (Exh. WM-JLM at 29). By allowing the amortization of a significant level of the protected account outstanding balance, the Department provides assurance to the Company of the probability of recovery, which should alleviate the need to record a significant charge to its income statement and the need to create a reserve account. Amortization periods are determined based on a case-by-case review of the evidence and underlying facts. Aquarion Water Company of Massachusetts, D.P.U. 08-27, at 99 (2009); Barnstable Water Company, D.P.U. 93-223-B at 14 (1994); Fitchburg Gas and Electric Light Company, D.P.U. 84-145-A at 54 (1985). In determining the proper amortization period, we must balance the interests of

the Company and of ratepayers. Barnstable Water Company. D.P.U. 93-223-B at 14 (1994).

In setting an amortization period, the Department has considered such factors as the amount under consideration for deferral, the value of such an amount to ratepayers based on certain amortization periods, and the impact of the adjustment on the company's finances and income.

Aquarion Water Company of Massachusetts, D.P.U. 08-27, at 99 (2009); Barnstable Water Company, D.P.U. 93-223-B at 14 (1994). In this case, we consider the size of the balance to be recovered, as well as the underlying facts giving rise to the accumulation of the balance, and the impact of current recovery on ratepayers. Based on these considerations and the record in this case, the Department finds five years to be an appropriate amortization period.<sup>117</sup>

To address the Attorney General's issue concerning double recovery, we direct the Company to track the accounts included in the balance of hardship protected accounts allowed for recovery so the associated costs are excluded from recovery through normal bad debt expense.

Going forward, the Company has proposed to recover protected account balances through the RAAC (Exh. WM-JLM at 27; Tr. 10, at 1728). The Company states that this treatment will prevent the accumulation of protected account receivables (Exh. WM-JLM at 27). The Department finds this treatment to be unwarranted. By providing rate relief for

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<sup>117</sup> The Company has requested the inclusion of carrying charges as part of its recovery of the hardship protected balances. In this case, the Department has found that a five-year amortization of the hardship protected account balances more than 360 days outstanding is appropriate. Given the amount of the balance and the relatively short amortization period, the Department finds it unwarranted to include any carrying charges on the recovery of the hardship protected account balance.

recovery of a portion of these costs through a five-year amortization of account balances greater than 360 days outstanding, the Department has addressed the potential financial consequences to the Company. Furthermore, recovery through a reconciling mechanism shifts the economic risk associated with these hardship protected accounts entirely to ratepayers. The Department finds that it is inappropriate to allow the dollar-for-dollar recovery of protected accounts.

Application of a five-year amortization period to the \$5.6 million in hardship protected account balances over 360 days past due the Department has approved herein produces an annual amortization expense of \$1,120,000, without carrying charges. Accordingly, the Company's annual amortization of hardship protected accounts shall be reduced by the amount of \$680,000.

In addition, as proposed by the Company, any payments made by customers toward balances that the Company has amortized shall be credited to the RAAC. Therefore, the Department denies the Company's proposal to recover, through its RAAC, the remaining current balance of hardship protected accounts and new balances for these accounts.

## IX. WORKFORCE REPLENISHMENT

### A. Company Proposal

#### 1. Introduction

WMECo proposes a workforce replenishment program ("WRP") that would allow the Company to add a total of eight line worker trainee positions beginning in 2011 in order to increase its overall line worker full time equivalent positions from 81 to 89 (Exhs. WM-BAY

at 24; WM-JLM at 62; Tr. 11, at 1923-1924).<sup>118</sup> WMECo states that these eight line worker trainee positions will be added to its base staffing to begin the training process in advance of anticipated increased retirements (Exh. WM-BAY at 24; Tr. 11, at 1923).

The Company states that the incremental operation and maintenance cost associated with maintaining these eight additional line worker trainee positions over a period of five years is \$359,873 per year (Exhs. WM-BAY at 26; WM-JLM at 62-63). The Company proposes to include this workforce replenishment program cost as a separate line item for the purpose of determining its proposed revenue requirement for recovery in base distribution rates (Exhs. WM-BAY at 26; WM-JLM at 63; WM-JLM A-1.0).

## 2. Workforce Replenishment Program

In developing its proposed WRP, WMECo notes that one half of its current workforce of 340 employees, 200 of whom are field personnel, will be eligible to retire in the next five years (Exh. WM-BAY at 20). WMECo observes that the greatest concentration of employees

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<sup>118</sup> The Company states that thirty two of the current 81 line workers, or 41 percent, are expected to retire within the next five years based on the Company's average historical retirement age of 60.8 years (Exh. WM-BAY at 23; Tr. 11, at 1920-1921; Tr. 18, at 2677). The Company adds that as supervisors retire, the Company expects that an additional five line workers will fill the positions of retiring supervisory personnel bringing the total number of needed line workers to 37 (Exh. WM-BAY at 23-24). The Company states that as during 2010, six line workers have retired, compared to one in 2009 and two in 2008 (Exh. WM-BAY-REB at 12; Tr. 11, at 1929).

eligible to retire in five years is in the line worker and meter and service classifications (Exh. WM-BAY at 20).<sup>119</sup>

WMECo states that although it is currently following regular hiring policies for new employees to replace those who retire or move to new roles, it is concerned that its current replenishment model would not be sustainable (Exh. WM-BAY at 20). WMECo claims that, while gradual hiring to replace workforce attrition was adequate in the past, such hiring rates will not be sufficient for larger and more accelerated attrition over the next five years, when the retirement rate is expected to increase significantly (Exh. WM-BAY at 20).

WMECo claims that, given the expected level of retirements, it anticipates encountering difficulties in hiring and training enough new employees to replace those who will retire because demand for skilled workers is expected to exceed supply (Exh. WM-BAY at 21).<sup>120</sup> WMECo explains that, in turn, this will compromise the current level of service quality, reliability, and safety and restoration times, especially in severe weather and emergency situations (Exh. WM-BAY at 21). WMECo states that, although it plans to hire a number of experienced line workers as a short-term solution, it claims that this is not a viable long-term

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<sup>119</sup> WMECo states that 41 percent of line workers, 57 percent of meter and service technicians, and 41 percent of field supervisors will reach the average retirement age of 60.8 years within five years (Exh. WM-BAY at 21; Tr. 18, at 2676).

<sup>120</sup> WMECo claims that such a problem associated with workforce attrition is not unique to the Company noting that a report, published by the United States Department of Energy in August 2006, forecasts an industry-wide shortage of line workers that will equal nearly 20 percent of the current workforce (Exh. WM-BAY at 21, citing “Workforce Trends in the Electric Utility Industry: A Report to the United States Congress Pursuant to Section 1101 of the Energy Policy Act of 2005,” U.S. Department of Energy, August 2006 (Exh. WM-BAY-2, Att.).

solution since a majority of those experienced line workers also are expected to be close to retirement age (Exh. WM-BAY at 21-22).<sup>121</sup> The Company concludes that hiring new employees will be the key to a sustainable workforce (Exh. WM-BAY at 22). The Company adds that absent funding to implement the WRP would have an impact on its operations to maintain its distribution infrastructure and ability to respond to service outages, storm restoration, and emergency situations (Tr. 11, at 1931-1932).

WMECO explains that it takes at least four years to develop a fully-qualified line worker, including more than 720 hours of classroom time as well as on-the-job training (Exhs. WM-BAY at 22; AG-20-14; Tr. 11, at 1921-1922). Accordingly, WMECo developed its program for workforce replenishment based on a two-pronged strategy: (1) new employees should be hired before veteran employees retire, allowing time for an overlap so that knowledge transfer and field training can occur, ensuring that the level of service and safety remains the same; and (2) thorough and proper training must be the cornerstone of the program to replenish the Company's aging workforce (Exh. WM-BAY at 23).

The Company states that it would evaluate annually the success of this strategy by examining demographic and actual attrition data (Exh. WM-BAY at 24). The Company adds that it plans to conduct a complete review of its program and its results on the fifth year of program implementation (Exh. WM-BAY at 24). WMECo states that if its analysis determines

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<sup>121</sup> WMECo states that for the past three years it has hired an average of eleven replacement field workers per year across all skilled labor classifications, a level which the Company claims to be sufficient to address historical attrition rates, but not the anticipated high level of attrition in the future (Exh. WM-BAY at 26).



that the level or expectation of increased attrition has subsided, staffing would be adjusted to previous levels taking into account other factors (Exh. WM-BAY at 24).

### 3. Workforce Replenishment Program Costs

In determining the workforce replenishment program cost of \$359,873, proposed to be included in its distribution revenue requirement, the Company first determined the total labor cost per line worker per year of \$51,707 (Exhs. WM-JLM D-1.0; AG-12-8, at 3; Tr. 11, at 1924-1925).<sup>122</sup> Then the Company added per line worker benefits of \$8,630 resulting in a total annual payroll with benefits of \$60,337 per line worker, for an annual total of \$482,696 for eight line workers (Exhs. WM-JLM D-1.0; AG-12-8, at 2). The Company reduced this amount by 39.8 percent representing the capital portion of cost resulting in a total O&M labor cost of \$290,583 (Exhs. WM-JLM D-1.0; AG-12-8, at 2, 4).

Next, the Company determined the other components of O&M costs equal to:

(1) \$4,000 for the cost of tools per line worker; (2) \$850 for the cost of fire retardant clothing per line worker; and (3) \$19,075 for the cost of vehicle for every two line workers, resulting in a total annual other O&M cost of \$115,100 for the eight line workers (Exhs. WM-JLM D-1.0; AG-12-8, at 2). Again, applying the 39.8/60.2 percent capital/expense split results in a total annual other O&M cost of \$69,290 for the eight line workers (Exhs. WM-JLM D-1.0;

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<sup>122</sup> This estimated annual total labor cost or annual salary for each line worker is equal to the existing Bargaining Unit Contract Step 1 and Step 2 blended rate of \$24.10, based on line mechanic time merit progression rates effective October 4, 2009, plus a 3.15 percent escalation factor resulting in \$24.86 per hour, multiplied by 40 hours per week and the result multiplied by 52 weeks to determine the annual total cost of labor per line worker (Exh. AG-12-8, at 2-3).

AG-12-8, at 2, 4). The sum of the total labor O&M and total other O&M costs for the eight line workers is equal to \$359,873 (= \$290,583 + \$69,290), which represents the amount that the Company proposed to be recovered in base distribution rates (Exhs. WM-JLM A-1.0; WM-JLM D-1.0; WM-BAY at 26; AG-12-8, at 2). The Company stated that because its proposal is unique, it did not include this amount of workforce replenishment cost within its original requested revenue requirement relief in order to assist the Department in better identifying the costs of its proposal (Exh. WM-JLM at 63).

The Company acknowledged that this workforce replenishment cost of \$359,873 for the WRP has not yet been incurred since such a program was not pursued during the test year (Tr. 3, at 488; Tr. 11, at 1936-1937). The Company, however, stated that it intends to spend this annual amount, absent any unforeseen event, in order to maintain the target level of 89 line workers (Tr. 3, at 574- 575; Tr. 11, at 1923-1926). The Company added that if it does not spend this total amount of \$359,873, it will look back and see if it is necessary to create some kind of offsetting deferral for that amount to ensure that the unspent funds remain available for workforce development (Tr. 3, at 574-575).

B. Positions of the Parties

1. Attorney General

The Attorney General asserts that the Company has not shown that its workforce replenishment program will result in an increase in expenses (Attorney General Brief at 52-55; Attorney General Reply Brief at 30). The Attorney General recommends that the Company's pro forma adjustment for the workforce replenishment program cost be eliminated and its test

year revenue requirement be reduced by \$360,000 (Attorney General Brief at 55; Attorney General Reply Brief at 30).

The Attorney General notes that the proposed cost adjustment is intended to recognize the hiring and training of eight additional employees to be added to the workforce complement in 2011 in order to increase the number of Company line workers from 81 to 89 (Attorney General Brief at 52-53). The Attorney General suspects that this special workforce replenishment request is related to re-staffing from changes that may come about as a result of the recently announced NU-NSTAR merger (Attorney General Brief at 53). The Attorney General adds that typically, a merger between utilities does not happen overnight, and the Department should consider this when deliberating on the new rate treatment for the replacement of retirees (Attorney General Reply Brief at 28). The Attorney General recommends that the Department should not permit the Company to shift merger related costs onto customers through this distribution rate case (Attorney General Brief at 53).

In addition, the Attorney General claims that NU has a history of requesting rate increases for new hires but then not actually hiring those employees (Attorney General Brief at 53). More specifically, the Attorney General claims that NU requested a similar adjustment in rates for worker training costs with regard to its operating company, CL&P (Attorney General Brief at 53, citing Connecticut Light and Power Company, Docket 07-07-01 (January 8, 2008), at 52-55. The Attorney General, claims that the Connecticut Department of Public Utility Control (“DPUC”) found that, although NU claimed in previous cases that it would hire more workers, and the company was accordingly compensated in the previous

dockets, NU failed to hire all of the skilled workers it asserted it needed, thereby allowing the shareholders to pocket the increase (Attorney General Brief at 53, citing Connecticut Power and Light Company, Docket 07-07-01 (January 8, 2008), at 52-53, citing Connecticut Power and Light Company, Docket 03-07-02 (December 17, 2003)).

The Attorney General argues that the proposed WRP will result in additional expenses only to the extent that the WRP results in an increase in the number of employees on the Company's payroll (Attorney General Brief at 53-54). More specifically, the Attorney General explains that if older employees retire before the new employees are added, or if the addition of new employees is offset by retirements, then there will be no increase in the employee complement or in the payroll expense incurred by the Company (Attorney General Brief at 54; Attorney General Reply Brief at 29).

The Attorney General claims that in the normal course of business utility companies will generally experience turnover of their employee complement with older employees retiring and new employees, who require training, are added (Attorney General Brief at 54, citing Exh. AG-DJE, at 5-6). The Attorney General claims that WMECo has not shown that the circumstances in 2011 will be substantially different from the circumstances in the test year and that WMECo has not identified any additional workload in 2011 that will require an increased number of employees (Attorney General Brief at 54, citing Exh. AG-DJE at 5-6).

The Attorney General asserts that it makes little sense for the Company to hire eight additional employees to begin training, which would occupy about 180 hours per year for the new employee or only about ten percent of their time and reduce the workload of senior line

workers, without defined work requirements for the remainder of their time (Attorney General Brief at 54, citing Exh. AG-DJE at 5-6; Attorney General Reply Brief at 29-30). Noting that the Company has seen six line workers retire as of October 2010, compared to two in 2008 and one in 2009, the Attorney General claims that the Company did not provide any evidence indicating that these retirements in any way disrupted the Company's operations or compromised its quality of service, nor did the Company explain how these retirements would result in an increase in the level of expenses (Attorney General Brief at 54, citing Exh. WM-BAY-REB at 12).

The Attorney General contends that planning for workers retirements is an important function and is a part of the core responsibilities for an electric distribution utility and therefore no special program should be created to assist the Company in fulfilling this obligation (Attorney General Reply Brief at 28). The Attorney General argues that, assuming the Department approves WMECo's WRP proposal and once the Department establishes a new ratemaking principle through such a proposal, other electric and gas distribution companies will seek the same, similar, or larger-scale programs (Attorney General Reply Brief at 28).

The Attorney General claims that there is no precedent for the Company's proposed pro forma WRP cost adjustment and that the Company does not cite any instance where a similar adjustment has been approved for a regulated utility (Attorney General Reply Brief at 29). The Attorney General adds that the Company would need to make a much greater showing than it has done here in order for the Department to depart from its well-established cost of service principles (Attorney General Reply Brief at 28). Accordingly, the Attorney

General recommends that Company's pro forma adjustment for the cost of its workforce replenishment program should be eliminated, and its pro forma test year revenue requirement should be reduced by \$360,000 (Attorney General Brief at 55; Attorney General Reply Brief at 29-30).

2. Company

Regarding the Attorney General's claim that the WRP "may be related to restaffing from changes that may come about as a result of the recently announced NU-NSTAR merger" and that the Company may "shift merger related costs surreptitiously on to customers" through this case, the Company asserts that this claim is unsupported by evidence (Company Brief at 194, citing Attorney General Brief at 53). The Company adds that this assertion by the Attorney General is unfounded because the NU-NSTAR merger was proposed well after the instant case was filed (Company Brief at 194-195). The Company reiterates that it has committed to hiring the eight trainees if the Department approves the WRP, and states that it will report annually to the Department for the five years of the program to confirm that it has hired and maintained all eight trainee positions (Company Brief at 195, citing Attorney General Brief at 53; Tr. 3, at 488, 575; Tr. 11, at 1926, 1931).

The Company rejects the Attorney General's claim that the Company has not shown that the WRP will result in an increase of expenses (Company Brief at 195, citing Attorney General Brief at 52; Company Reply Brief at 31). The Company explains that the WRP will increase the Company's line worker staff by eight, from 81 to 89, for a period of five years representing an increase to expenses over test year levels that will continue for at least five

years (Company Brief at 195, citing Exh. AG-12-8; Company Reply Brief at 31). The Company contends that it defies logic that the Attorney General would argue that WMECo could add eight employees with no increased costs (Company Reply Brief at 31).

Regarding the Attorney General's claim that the Company has not presented evidence that the Company's operations were compromised or disrupted by retirements, WMECo asserts that without a fully trained line worker staff, service quality, reliability, safety and service restoration time, particularly during severe weather, will be compromised (Company Brief at 195, citing Exh. WM-BAY, at 21). The Company adds that line workers are the most important operations positions within the Company in terms of service quality and system maintenance (Company Brief at 195-196, citing Tr. 11, at 1932). The Company contends that it should not have to wait until its operations are disrupted before putting in place a proactive program to avoid a line worker shortage that could severely impact service quality and public safety (Company Brief at 195).

The Company rejects the Attorney General's claim that the Company has not cited any instance where a similar workforce replenishment program has been approved for a regulated utility (Company Reply Brief at 31-32, citing Attorney General Brief at 29). More specifically, the Company claims that a recent order from the Indiana Utility Regulatory Commission, dated August 25, 2010, approved an aging workforce adjustment of \$3,925,207 through 2012 for Northern Indiana Public Service Company ("NIPSCO") (Company Reply Brief at 31-32, citing Exh. DPU-3-4, att.; Final Order on the Petition of Northern Indiana

Public Service Company to Modify Its Rates and Charges, Cause No. 43526 , at 64-65

(August 25, 2010).

C. Analysis and Findings

It is a well-established Department precedent that base rate filings are 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 & Telegraph Company, D.P.U. 18210, at 2-3 (1975); Boston Gas Company, D.P.U. 18264, at 2-4 (1975); see also Mass. Elec. Co. v. Dep't of Pub. Utils., 383 Mass. 675, 680 (1981). 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 Investigation Into Rate Structures that Will Promote Efficient Deployment of Demand Resources, D.P.U. 07-50-A at 51 (2008).

The Company's proposed workforce replenishment program is designed to add a total of eight line worker trainee positions beginning in 2011 to increase its overall line worker full time equivalent positions from 81 to 89 and maintain that level thereafter. The record shows



that while the Company has hired an average of eleven replacement field workers each year from 2007 to 2009, two line workers and one line worker retired in 2008 and 2009, respectively (Exhs. WM-BAY at 26; WM-BAY-REB at 12; Tr. 11, at 1929). The record also shows that, at the presumed Company average retirement age of 60.8 years, the number of anticipated retirements in 2010 for (1) line workers, (2) meter and service technicians, and (3) field supervisors are nine, eight, and four, respectively, for a total of 21 for those three categories of workers (Exh. AG-12-004, at 2). In addition, the total annual anticipated incremental increase in the number of retirements for these three categories of workers in 2011, 2012, 2013 and 2014 is two, two, six and four, respectively (Exh. AG-12-4, at 2).

As the basis of estimating the cost of implementing its proposed WRP starting in 2011, the record shows that the Company determined the total labor and other O&M cost of this program equal to \$359,873 based on 2009 costs, including certain assumptions on the wage escalation rate, percentage split of total labor cost between capital and expense, and payroll benefit loader (Exh. AG-12-8, Att. at 2-6). The Company did not implement a similar WRP during the test year and, therefore, the Company incurred no actual WRP cost during the 2009 test year (Tr. 3, at 488; Tr. 11, at 1936-1937).

The Company, however, committed that, should the Department approve the WRP, it will spend the requested annual amount to be recovered in base distribution rates, absent any unforeseen event, in order to maintain the target level of 89 line workers (Tr. 3, at 575; Tr. 11, at 1923-1926). In addition, the Company suggested that if it were not able spend the

total amount requested and recovered in base distribution rates, WMECo will review and determine whether it is necessary to create some form of offsetting deferral (Tr. 3, at 575).

Based on its review of the record in this case, the Department finds that existing Department precedent, based on test year costs adjusted for known and measurable changes, does not and cannot support the Company's proposed WRP. Further, the facts and circumstances in this case do not warrant a deviation from this precedent.<sup>123</sup>

Based on the above consideration, we deny the Company's proposed workforce replenishment program. Accordingly, we direct the Company to reduce its distribution revenue requirement by \$359,873. We note that, pursuant to the provisions of G.L. c. 164, § 94, the Company can seek for rate relief if it deems that necessary in order to recover future costs associated with workforce replacement efforts that are required to meet its service obligations.

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<sup>123</sup> We emphasize and reiterate that the Company is obligated to provide safe and reliable distribution service at all times. See, e.g., G.L. c. 164, §§ 1F(7) (quality and reliability of service standards); 69H (oversight by Energy Facilities Siting Board); 69I (long-range forecasts); 95 (accident reporting requirements); Rate Decoupling, D.P.U. 07-50, at 5 (2007) (a goal of the Department is to ensure that the public utility companies it regulates provide safe, reliable, and least-cost service); Service Quality Guidelines, D.T.E. 04-116-B at 10 (2006) (Department update of benchmarks utilities must meet in providing safe and reliable service); Service Quality Standards, D.T.E. 99-84, at 19-22 (Department established requirements that utilities must meet to demonstrate providing safe and reliable service); Commonwealth Gas Company, D.P.U. 94-174-A at 22-31 (utilities must meet certain requirements in proposing commodity contracts to advance goals of safe and reliable service); Incentive Regulation, D.P.U. 94-158, at 3 (1995) (since the inception of the Department and its predecessors, we have set standards to require companies to provide safe, reliable, and least-cost service); Integrated Resource Planning, D.P.U. 94-164, at 51-52 (1995) (Department emphasizing that electric companies required to provide safe, reliable, least-cost service even though no longer required to submit initial resource portfolios).

The Department recognizes the importance of workforce hiring and training, especially in light of the Company's aging workforce and the limited availability of trained workers. We applaud the Company's effort to address this issue directly through a workforce replenishment program. Furthermore, we encourage the Company to consider coordinating its workforce training activities with other utilities in the region that are facing similar issues in order to reduce costs and maximize the impact of the activities.

X. CAPITAL STRUCTURE AND COST OF CAPITAL

A. Introduction

The Company proposes an 8.11 percent weighted average cost of capital ("WACC") representing the rate of return to be applied on rate base to determine the Company's total return on its investment (Exhs. WM-GJE at 3, 28-29, 62; WM-GJE-2, at 1). This rate is based on: (1) a proposed capital structure that consists of 50.7 percent common equity and 49.3 percent long-term debt; (2) a proposed cost of long-term debt of 5.66 percent; and (3) a proposed ROE of 10.50 percent (Exhs. WM-GJE at 3, 24-28, 29-30, 30-54, 62; WM-GJE-2A at 1-2; WM-GJE-2D at 1). In determining its proposed ROE, the Company applied the discounted cash flow ("DCF") model, the risk premium model ("RPM"), and the capital asset pricing model ("CAPM") using the market and financial data developed for a proxy group of 23 electric distribution companies (Exhs. WM-GJE at 34, 37-40; WM-GJE-2C at 3-4; WM-GJE-3, at 3-7, 15-19, 22-29, 33-49; WM-GJE-4, at 1, 17-18, 35; WM-GJE-6, at 2, 12, 14). The Company also applied the comparable earnings method ("CEM") as a test

of reasonableness using the market financial data for 31 non-utility companies (Exhs. WM- GJE at 54-58; WM-GJE-6).

The components of the Company's proposal, including the companies within the proxy group and the rate of return impact of the Company's proposed revenue decoupling mechanism, are discussed below. In addition, we discuss the recommendations of the Attorney General's cost of capital witness, as well as the comments on rate of return of the other parties to the proceeding.

B. Capital Structure

1. Company's Proposal

As of the end of the test year, WMECo's average capital structure consisted of \$246,033,000 in long-term debt and \$240,988,000 in common equity (Exh. WM-GJE-2D). The Company proposed a pro forma ratemaking capital structure consisting of \$339,806,000 in long-term debt and \$349,418,000 in common equity, which incorporated \$95,000,000 in debt issued on March 8, 2010, as well as capital contributions from the Company's parent, NU, of \$66,143,000 made in March 2010 and an additional \$36,457,000 made in June 2010 (Exhs. WM-GJE at 24; WM-GJE-2A at 1-2, 4). The resulting capital structure corresponded to a capitalization ratio of 49.3 percent long-term debt and 50.70 percent common equity (Exhs. WM-GJE at 24-29; WM-GJE-2A; WM-GJE-2B).

The Company's pro forma test year long-term debt consists of \$343,800,000 of bonds issued by WMECo carrying interest rates ranging from 5.00 percent to 6.70 percent, all of which WMECo adjusted for \$770,000 in premiums, \$2,767,000 in debt expense, \$49,000 in

rate lock expense, and \$407,000 in losses on reacquired debt, totaling \$3,993,000 in adjustments, for a net carrying value of \$339,806,000<sup>124</sup> (Exhs. WM-GJE at 24, 29; WM-GJE-2A at 3-4).

## 2. Attorney General's Proposal

In the course of her analysis, the Attorney General calculated the average capital structure of her proxy group ("Electric Proxy Group")<sup>125</sup> over the past four quarters, as well as the average capital structure of NU over the past four quarters (Exh. AG-JRW at 11-12). This produced the average common equity ratio over the period of 44.90 percent for the Electric Proxy Group and 42.57 percent for NU (Exhs. AG-JRW at 11-12; AG-JRW-5, at 1-3). The Attorney General states that the Company's bond ratings are dependent upon the operating and financial profile of NU (Exh. AG-JRW at 12).

The Attorney General begins her capital structure proposal with the Company's recommended capital structure of \$339,806,000 long-term debt to \$349,418,000 common equity (Exhs. AG-JRW at 12; AG-JRW-5, at 1). She then removes the \$102,600,000 in post-test year capital contributions stating that, while the contributions are known and measurable, the Department does not allow companies to add post-test year capital contributions to the balance of common equity (Exh. AG-JRW at 12). On this premise, the Attorney General recommends a capital structure for the Company of 57.93 percent long-term debt and

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<sup>124</sup> This calculation includes a rounding error.

<sup>125</sup> The determination of the composition of the Attorney General's proxy group is explained in Section X.D, below.

42.07 percent common equity (Exhs. AG-JRW at 12; AG-JRW-5, at 1). Lastly, in light of the aforementioned capital structure adjustment, the Attorney General does not include short-term debt in WMECo's capital structure (Exh. AG-JRW at 12-13).

3. Positions of the Parties

a. Attorney General

The Attorney General claims that, since the equity capital contributions by NU do not represent stock issuances by WMECo, it is the Department's policy to exclude post-test year amounts of equity capital contributions of this form from the common equity balance (Attorney General Brief at 123-124). The Attorney General asserts that the Department defined a stock issuance and rejected post-test year changes to the balance of retained earnings (Attorney General Brief at 124, citing Massachusetts Electric Company/Nantucket Electric Company, D.P.U. 09-39, at 338 (2009); Milford Water Company, D.P.U. 92-101, at 36-37 (1992)).

The Attorney General pointed to a decision in which the Department determined that shareholder paid-in contributions are not common stock issuances and, therefore, do not qualify for post-test year equity adjustments (Attorney General Brief at 124, citing Bay State Gas Company D.P.U. 04-80, at 9 (2004)). The Attorney General further argues that the Department has found that capital contributions are not stock issuances and should not be included in the capital structure, in the same way that retained earnings are not stock issuances (Attorney General Reply Brief at 18, citing Attorney General Brief at 123-124; D.T.E. 05-09, at 12; D.T.E. 04-76, at 16-17).

The Attorney General maintains that WMECo has not given the Department cause to treat capital contributions and retained earnings inconsistently (Attorney General Reply Brief at 18). The Attorney General further argues that because utilities do not need Department approval for capital contributions, the timing and amount of a capital contribution are at the discretion of the utilities, leading them to start “window dressing” their capital structures to boost equity ratios and obtain a higher WACC<sup>126</sup> for ratemaking purposes (Attorney General Reply Brief at 18).

b. Company

The Company argues that it is unfair and unreasonable for the Attorney General to include post-test year long-term debt issuance, but exclude post-test year equity contributions from her proposed capital structure for the Company (Exh. WM-GJE-REB at 2). The Company notes that it specifically designed the equity contribution for the purpose of offsetting the effect of the debt issuance and achieving an appropriate capital structure (Exh. WM-GJE-REB at 2; Company Brief at 197).

WMECo contends that the Attorney General’s average capital structure calculations for her Electric Proxy Group figures are distorted by the inclusion of short-term debt, as well as by the use of data from the parent/holding company level rather than the utility operating company level (Exh. WM-GJE-REB at 3-4). The Company further argues that NU’s operating and financial profiles influence, but do not dictate, the Standard & Poor’s (“S&P”) ratings of

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<sup>126</sup> Any equity ratio that is higher than a corresponding long-term debt ratio will increase the overall cost of capital or WACC.

WMECo's bonds, and have little effect on its ratings by Moody's Investors Service or Fitch Ratings (Exh. WM-GJE-REB at 5-6).

The Company claims that the Attorney General's proposed capital structure would have an extremely negative impact on WMECo's financial health, putting "severe pressure" on WMECo's key credit ratios (Exh. WM-GJE-REB at 5; Company Brief at 205). WMECo states that it has been able to raise needed capital only because of its investment grade rating (Company Brief at 197). Yet, WMECo states that its credit standing has deteriorated since the Department approved the settlement in D.P.U. 06-55 and is now below average for the industry (Company Brief at 198). Further, WMECo states that the decline of its key financial ratios has been due to the disappointing financial performance of its distribution business (WMECo Brief at 198, citing Exh. WM-GJE at 14).

#### 4. Analysis and Findings

A company's capital structure typically consists of long-term debt, preferred stock, and common equity. D.P.U. 08-35, at 184; D.T.E. 05-27, at 269; 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.



The Department will normally accept a utility's test year-end capital structure, allowing for known and measurable changes, unless the capital structure deviates substantially from sound utility practice. D.T.E. 03-40, at 319; High Wood Water Company, D.P.U. 1360, at 26-27 (1983); Blackstone Gas Company, D.P.U. 1135, at 4 (1982). Adjustments to test year-end capitalization to recognize redemptions, retirements, or issuances of new debt or equity are allowed, provided that they are known and measurable and the proposed issuance or retirement of securities has actually taken place by the date of the Order. D.T.E. 03-40, at 323. In reviewing and applying utility company capital structures, the Department seeks to protect ratepayers from the effect of excessive rates of return. D.T.E. 03-40, at 319; Assabet Water Company, D.P.U. 1415, at 11 (1983); see Mystic Valley Gas Co. v. Dep't of Pub. Utils., 359 Mass. 420, 430 n.14 (1971).

The \$102.6 million capital adjustment resulting from NU's capital contributions to WMECo is a known and measurable change to test year-end capitalization. In this circumstance, the Department accepts this adjustment to WMECo's capital structure. See Fitchburg Gas and Electric Light Company, D.P.U. 07-71, at 122 (2008). Therefore, the Company's capital structure consists of \$343,800,000 of long-term debt with a ratio of 49.30 percent, and \$349,418,000 of common equity with a ratio of 50.70 percent.

Notwithstanding our acceptance of this adjustment, the Department is concerned that a parent company capital contribution is not subject to regulatory review. These capital contributions by NU are not stock issuances by WMECo under G.L. c. 164, § 14. Therefore, the \$102.6 million capital contributions by NU were not subject to the test under G.L. c. 164,

§ 14 as to whether the contributions were reasonably necessary to accomplish some legitimate purpose in meeting WMECo's service obligations. See Fitchburg Gas and Elec. Light Co. v. Dep't of Pub. Utils., 395 Mass. 836, 842 (1985), citing Fitchburg Gas and Elec. Light Co. v. Dep't of Pub. Utils., 394 Mass. 671, 678 (1985). Although parent holding companies can be a source of financial strength to subsidiaries, capital contributions to a subsidiary outside of the regulatory review process could have consequences where the adjustment to the subsidiary's capital structure results in a higher rate of return. We do not find grounds to question NU's capital contributions to WMECo in this case, but we will examine parent holding company capital contributions for potential adverse rate effects.

C. Cost of Debt

1. Company's Proposal

WMECo has proposed to use a cost of long-term debt of 5.66 percent (Exhs. WM-GJE at 29; WM-GJE-2A at 1). The Company derived this rate by dividing the adjusted (pro-forma) annual cost of long-term debt of \$19,248,000 by the adjusted (pro-forma) "net carrying value" of the long-term debt of \$339,806,000 (Exhs. WM-GJE at 29; WM-GJE-2A at 3, 5). The Company stated that its annual cost of long-term debt consists of \$18,892,000 in annual interest costs, \$336,000 in amortizations of premiums, and \$50,000 in amortization of debt acquisition expense, less \$130,000 in rate lock expense (Exh. WM-GJE-2A at 5). The Company stated that the "net carrying charge" consists of the \$343,800,000 face value of its long-term bonds outstanding, less the following: (1) \$770,000 in debt discounts;

(2) \$2,767,000 in issuance costs; (3) \$49,000 in rate lock expense; and (4) \$407,000 in losses on reacquired bonds (Exh. WM-GJE-2A at 3).

2. Attorney General's Proposal

The Attorney General relied on the Company's proposed cost rate for long-term debt of 5.66 percent (Exh. AG-JRW at 13).

3. Positions of the Parties

WMECo did not submit a brief on the issue of the cost of debt. However, the Attorney General states that she accepts the Company's proposed cost of debt of 5.66 percent (Attorney General Brief at 125).

4. Analysis and Findings

The Department recognizes that costs associated with the issuance of long-term debt, such as issuance costs, debt discounts, and other amortizations, are necessary operating expenses and are expected to occur from time to time as long-term debt is issued by a company. The Berkshire Gas Company, D.T.E. 01-56, at 99 (2002). The Department has found that the appropriate ratemaking treatment of issuance costs is to include them in the effective cost of debt by amortizing the issuance costs over the life of the issue without providing a return on the unrecovered portion of the issuance costs. D.T.E. 01-56, at 99 ; Massachusetts Electric Company, D.P.U. 92-78, at 91-92 (1992); The Berkshire Gas Company, D.P.U. 90-121, at 160-161 (1990); Boston Edison Company, D.P.U. 86-71, at 12 (1986).

While WMECo's proposed debt expense appropriately considers issuance costs, the Company has also deducted various amortizations associated with these issuance costs from its outstanding debt (Exh. WM-GJE-2A at 3, 5). By reducing its outstanding debt balance, the Company's proposed cost of debt serves to overcollect its associated issuance costs. The Berkshire Gas Company, D.P.U. 90-121, at 160-161 (1990); Boston Edison Company, D.P.U. 86-71, at 12 (1986). Therefore, the Department rejects the Company's proposed cost of long-term debt.

As noted above, WMECo's annual cost of debt is \$19,248,000, and the total face value of its bonds is \$343,800,000 (Exh. WM-GJE-2A at 3, 5). The Department finds it appropriate to derive WMECo's cost of long-term debt based on these components. Dividing these numbers produces a cost of long-term debt of 5.60 percent, not 5.66 percent as the Company claims. Therefore, the Department will apply a cost of long-term debt of 5.60 percent.

D. Proxy Groups

1. Description of the Company's Proxy Groups

WMECo performed its cost-of-equity analysis using market-based data of the companies included in its chosen proxy group (Exhs. WM-GJE at 34, 37-40; WM-GJE-3, at 3-7, 15-19, 22-29, 32-49, 52; WM-GJE-4, at 1, 17-18, 35). The Company ultimately relied on one proxy group titled, "Institutional Investor-WMECO Proxy Group" in its analysis of the Company's cost of equity (Exhs. WM-GJE at 34; WM-GJE-3, at 44). However, WMECo constructed eleven proxy groups in order to test the sensitivity of the results to the composition

of the Institutional Investor-WMECO Proxy Group (Exhs. WM-GJE at 34, 37-40; WM-GJE-3, at 3-7, 33, 36-46; WM-GJE-4, at 1, 17).

In creating the eleven proxy groups, WMECo first combined the publicly traded electric utility companies that the Edison Electric Institute (“EEI”) lists with those companies listed by Value Line Investment Survey (“Value Line”) (Exh. WM-GJE-3, at 3). This produced WMECo’s first two proxy groups, the EEI electric utility industry and the Value Line electric utility industry groups (Exh. WM-GJE-3, at 4). These were split into three more proxy groups each: the Value Line East, Central and West categories, and the EEI Regulated, Mostly Regulated and Diversified categories (Exh. WM-GJE-3, at 4). Next, using the full universe of EEI’s list of publicly traded electric utility companies, as in the EEI electric utility industry group above, WMECo eliminated a company if any of the following five screens applied to a company: (1) not listed on a U.S. Stock Exchange; (2) debt below investment grade; (3) publicly known target of possible takeover or involved in mergers; (4) dividend instability (does not pay a dividend, or is perceived to have dividend instability going forward); and (5) more than 50 percent of revenues are from a non-electric source (Exh. WM-GJE-3, at 5, 16). The Company utilized the remaining 23 companies as its Institutional Investor-WMECO Proxy Group (Exh. WM-GJE-3, at 5-6, 44). Lastly, the Company divided the final proxy group into those companies that are affected by single-state regulation or multi-state regulation, creating two more proxy groups, for a total of eleven proxy groups with the Institutional Investor - WMECO Proxy Group that the Company has mainly relied upon in its modeling (Exh. WM-GJE-3, at 6, 45-46).

The Company claims that, in theory, although it should have screened its Institutional Investor-WMECO Proxy Group on the basis of size in addition to the five screens mentioned above, very few companies would pass an additional size screen and remain in the proxy group (Exh. WM-GJE-3, at 5-6). Additionally, the Company applied an “acceptance criteria” band around the return on equity figures it calculated for the Institutional Investor WMECO-Proxy Group (Exhs. WM-GJE at 38-40; WM-GJE-3, at 6-7, 47-49). The Company utilized this approach based on its determination that some of the resulting ROE figures were unrealistically high or low and, therefore, the criteria required the proxy group companies to fall within a range of reasonableness (Exh. WM-GJE at 39). WMECo rejected any company with an ROE lower than 8.22 percent or higher than 12.14 percent, resulting in the elimination of eight companies (Exh. WM-GJE-3, at 7, 48). This created a pre-acceptance average ROE of 11.02 percent and a post-acceptance average ROE of 10.51 percent<sup>127</sup> (Exh. WM-GJE-3, at 49). The Company then added back into the group the companies with the two lowest ROEs, to reach a final post-acceptance average figure of 10.31 percent (Exhs. WM-GJE-3, at 18-19, 47, 49).

## 2. Description of Attorney General’s Proxy Group

The Attorney General’s Electric Proxy Group is the same proxy group as the Institutional Investor-WMECO Proxy Group, before the Company’s application of its acceptance band, consisting of 23 companies (Exhs. AG-JRW at 10-11; AG-JRW-4, at 1).

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<sup>127</sup> The specific modeling used by the Company to arrive at these pre- and post-acceptance ROE figures is discussed in Section X. E, below.

The Attorney General claims that the Electric Proxy Group has a few very large companies, so that the average figures for the group are skewed; therefore, the Attorney General utilizes medians as a better measure of central tendency (Exh. AG-JRW at 10-11).

3. Position of the Company

The Company argues that there is always a tradeoff between the degree of similarity between the Company and companies in the proxy group versus the need to have a large enough sample of companies for statistical adequacy (Company Brief at 207, citing Exh. AG-30-17). WMECo also argues that the results for the other ten proxy groups are fairly similar to those of the Institutional Investor5-WMECO Proxy Group, although slightly higher on average, confirming the fairness of its chosen group (Company Brief at 208, citing Exh. WM-GJE-3, at 33-46).

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 a 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 95-96. 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. Western Massachusetts Electric Company, D.P.U. 1300, at 97 (1983).

In our evaluation of the proxy groups used by the parties, we recognize that it is neither necessary nor possible to find a group that matches 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 utilities will be in the proxy group, and then 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 expert witnesses 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 results in a limited number of companies in the proxy group. The Department expects parties to limit criteria to the extent necessary and to develop a larger proxy group rather than to narrow proxy groups overall. See D.P.U. 10-55, at 481-482. To the extent that a particular company's characteristics may 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.

With respect to the comparison groups used in this case, the Department identifies and discusses two factors that we will take into consideration in determining the appropriate ROE for the Company. First, WMECo's proposed decoupling mechanism is but one form of a wide range of revenue recovery mechanisms that the financial market and regulatory community consider to be a revenue stabilization mechanism. D.P.U. 10-55, at 482; D.P.U. 09-39, at 348; D.P.U. 09-30, at 308; see also, D.P.U. 07-50-A at 72. Second, some of the holding



companies in the proxy group are also involved in non-regulated businesses beyond electric distribution activities, potentially making these companies more risky, all else being equal, and in turn, more profitable than the Company. D.P.U. 09-39, at 350; D.P.U. 09-30, at 308; D.P.U. 08-35, at 175; D.P.U. 07-71, at 135.

We accept the Company's Institutional Investor-WMECO Proxy Group and the Attorney General's Electric Proxy Group of electric utility companies with publicly traded stocks as a basis for cost of capital proposals, but will consider the investment risk of the Company versus the comparison groups when determining the appropriate ROE for the Company.

E. Return on Equity

1. Introduction

WMECo proposes to apply a 10.50 percent ROE for the Company based on the results of three equity cost models: the DCF model, CAPM and Empirical CAPM ("ECAPM"), and the RPM (Exhs. WM-GJE at 30-31, 54; WM-GJE-3; WM-GJE-4; WM-GJE-5). WMECo also applied a fourth model, the CEM, as a test of the reasonableness of the other models (Exhs. WM-GJE at 31, 54; WM-GJE-6). Based on its analyses, WMECo determined ROEs of 11.48 percent, 11.60 percent, 10.88 percent and 10.60 percent using the DCF model, CAPM, RPM, and CEM, respectively (Exhs. WM-GJE at 41, 50, 53-54, 57; WM-GJE-3, at 21; WM-GJE-4, at 16; WM-GJE-5, at 4; WM-GJE-6, at 6). Based on the results of the DCF model, CAPM, and RPM, WMECo determined a recommended 10.50 percent ROE (Exhs. WM-GJE at 3, 29, 54, 62; WM-GJE-2A at 1).

WMECo asserts that the Department should not reduce the Company's allowed ROE if it approves the proposed decoupling mechanism in this case, claiming that some of the companies in the Institutional Investor-WMECO Proxy Group currently have decoupling mechanisms, thereby eliminating or substantially reducing the need for an ROE adjustment due to the proposed decoupling mechanism (Exh. WM-GJE at 58-62). WMECo's application of the DCF model, CAPM, RPM and CEM are discussed in the following sections. The cost of equity impact of revenue decoupling is also discussed below.

The Attorney General proposes, instead, to apply a 9.25 percent ROE for the Company based on the results of two equity cost models: the DCF model; and the CAPM (Exhs. AG-JRW at 2-3, 20-21, 36, 46; AG-JRW-1; AG-JRW-10; AG-JRW-11). On the basis of her analyses, the Attorney General calculated ROEs of 9.77 percent and 7.3 percent using the DCF model and CAPM, respectively (Exhs. AG-JRW at 46; AG-JRW-10, at 1; AG-JRW-11, at 1). The Attorney General asserts that the Department should reduce the Company's ROE further if the Department approves a decoupling mechanism in this proceeding (Exh AG-JRW at 47). Although the Attorney General offered no specific increment for the further reduction, she made her reduction recommendation based on the effect of the adoption of any of the Company's proposed trackers and the adjustments made by other commissions for rate design mechanisms (Exh. AG-JRW at 48-49).

As set forth in Section s XI.C.2. and XV.B.1, below, both UMA and Easthampton have expressed dissatisfaction with WMECo's quality of service, and recommend that the

Department lower WMECo's ROE based on alleged poor service quality<sup>128</sup> (Exhs. UMA-RAB at 4, 23-25; UMA-PAD at 35-36; UMASS Brief at 30; Easthampton Brief at 9-10; Easthampton Reply Brief at 6).

2. Discounted Cash Flow Model

a. Company's Proposal

WMECo states that the DCF model calculates the value of an asset as the present value of the expected future cash flows of the asset (Exhs. WM-GJE at 32; WM-GJE-3, at 1). The Company notes that the resulting equity investors' required return can be estimated as the sum of an expected dividend yield plus an expected growth rate (Exh. WM-GJE at 33).

WMECo used a form of the DCF model referred to as the Gordon DCF model,<sup>129</sup> which assumes an infinite investment horizon and a constant growth rate (Exh. WM-GJE-3, at 1). WMECo's stance is that the Gordon DCF model has extreme, strict assumptions and is highly simplified (Exhs. WM-GJE at 32; WM-GJE-3, at 1). The Company states that due to these conditions, the DCF model can run into difficulty in practice because the underlying assumptions of the model do not correspond to reality (Exh. WM-GJE-3, at 1-2). WMECo asserts that the allowed returns in rate cases are a factor in future growth and that growth is a

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<sup>128</sup> While several of the parties offered testimony regarding WMECo's alleged poor service quality, only UMA and Easthampton chose to express their dissatisfaction in terms of the allowed ROE in this case.

<sup>129</sup> The Gordon DCF model is expressed as:  $k = D_1/P_0 + g$ , where  $k$  is the investors' required return on common equity (or simply the cost of equity),  $D_1$  is the dividends per share ("DPS") paid in the next period,  $P_0$  is the current market price per share of the common stock,  $D_1/P_0$  is the expected dividend yield, and  $g$  is the investors' mean expected long-run growth rate in DPS. See, e.g., D.P.U. 08-35, at 193; D.P.U. 07-71, at 125.

factor in the DCF model, causing circularity when applying the DCF model to regulated companies (Exh. WM-GJE-3, at 2-3). WMECo opines that this circularity reinforces the need to use multiple models in setting an allowed return on equity (Exh. WM-GJE-3, at 3).

The Company utilized several steps in calculating its dividend yield. First, the Company provided the high and low stock price for the universe of 57 electric utility holding companies for the period from December 2009 through May 2010 (Exh. WM-GJE-3, at 8, 24). WMECo then calculated the monthly stock price by averaging the monthly high and low stock price for each company (Exh. WM-GJE-3, at 8, 25). Lastly, WMECo averaged the monthly stock prices onto six-, three-, and one-month averages for each of the 57 companies, resulting in stock prices of \$30.87, \$30.93, and \$30.05, respectively (Exh. WM-GJE-3, at 8, 26). Next, the Company provided the actual last four quarterly dividends paid by each of the companies during the recovery period (Exh. WM-GJE-3, at 8, 27). WMECo then calculated the annual dividend by summing the actual four last quarterly dividends paid (Exh. WM-GJE-3, at 8, 28).

With these figures, the Company then calculated the dividend yields for each company using the six-, three-, and one-month average stock prices and the annual dividend resulting in yields of 4.674 percent, 4.663 percent, and 4.808 percent, respectively (Exh. WM-GJE-3, at 8, 29).

WMECo states that the appropriate dividend to use in the DCF model is a prospective dividend rather than the current dividend because an investor expects dividends to grow over the next year (Exh. WM-GJE-3, at 15). Therefore, the Company calculated an adjusted

dividend yield by multiplying the current dividend by the long-term annual growth rate for each company resulting in an average growth rate of 6.12 percent for the 57 companies (Exh. WM-GJE-3, at 10, 15, 32).

WMECo then used the sum of the projected average dividend yield and the projected average growth rate to calculate an ROE for each of the 57 companies (Exh. WM-GJE-3, at 15, 33-35). The Company further provided the ROE for the Institutional Investor-WMECO Proxy Group of 11.02 percent, equaling the adjusted dividend yield plus the growth rate (Exh. WM-GJE-3, at 44).

The Company then applied the acceptance criterion mentioned above, eliminating six companies with ROEs that exceeded the reasonableness range, resulting in an acceptance-criteria-adjusted average ROE of 10.31 percent for the Institutional Investor-WMECO Proxy Group (Exh. WM-GJE-3, at 17-18, 47). WMECo then adjusted this group to exclude two more companies having the lowest ROEs, resulting in a post-acceptance adjusted average ROE of 10.51 percent (Exh. WM-GJE-3, at 18-19, 48-49).

Lastly, the Company decided to add a 17-basis point issuance cost adjustment to its acceptance adjusted average ROE of 10.31 percent (Exhs. WM-GJE at 40-41; WM-GJE-3, at 20, 50-51). On March 20, 2009, NU issued 18,975,000 shares of common stock at a share price of \$20.20 (Exh. WM-GJE-3, at 50). WMECo reported \$383,295,000 in gross proceeds from the sale and \$12,564,402 in expenses, making the net proceeds \$370,730,598 and the net share price \$19.54 (Exh. WM-GJE-3, at 50). WMECo explained that after paying the difference (\$0.6622 per share or 3.28 percent) in expenses, NU received net proceeds of only

\$19.54 per share rather than the full issuing price per share of \$20.20 to invest in its operating subsidiaries (Exh. WM-GJE-3, at 20). WMECo maintains that a 17-basis point issuance cost adjustment is required to earn the investors' required return on the net proceeds available to NU (Exh. WM-GJE at 41). WMECO addresses this point by reducing the stock prices for each of the companies in the Institutional Investor-WMECO Proxy Group by 3.28 percent (representing the 17-basis point increase to the dividend yield) and, thereby, increasing the DCF model results to 10.48 percent (Exh. WM-GJE-3, at 20-21, 52).

The Company states that its DCF model supports an ROE of between 11.17 and 10.48 percent (Exhs. WM-GJE at 41; WM-GJE-3, at 21, 52).

b. Attorney General's Proposal

Prior to presenting her calculations of the DCF model, the Attorney General comments on the dividend discount model, which presents the DCF model in three stages (Exh. AG-JRW at 22-23). She further notes that the public utility industry is in the maturity, or steady-state, stage of the model, which is described as an industry in which new investment opportunities offer only slightly attractive returns on equity (Exh. AG-JRW at 23-24). The Attorney General states that in the constant-growth version of the DCF model, the current dividend payment and stock price are directly observable, and therefore the controversy is in estimating investors' expected dividend growth rate (Exh. AG-JRW at 24).

On this basis, the Attorney General provides the dividend yields on the common stock of the 23 companies in her Electric Proxy Group with a median<sup>130</sup> of 4.9 percent for the six months ending September 2010 (Exhs. AG-JRW at 25; AG-JRW-10, at 2). However, the Attorney General then adjusts this dividend yield to reflect the growth in the coming year (Exh. AG-JRW at 26). Her argument is that an equity cost rate times a future, yet-to-be achieved, rate base results in an inflated dividend yield and growth rate (Exh. AG-JRW at 27). The Attorney General adjusts the dividend yield by one-half the expected growth, or a factor of 1.02375<sup>131</sup>, to reflect growth over the coming year (Exhs. AG-JRW at 27; AG-JRW-10, at 1). The product of the 4.9 percent unadjusted dividend yield and the adjustment factor bears a 5.02 percent adjusted dividend yield (Exh. AG-JRW-10, at 1).

In her analysis of the growth rate portion of the DCF model, the Attorney General included the historic and projected earnings per share, DPS, and book value per share figures provided by Value Line (Exhs. AG-JRW at 33; AG-JRW-10, at 3-4). Also included were the sustainable growth rates<sup>132</sup> from Value Line as well as the average of the projected earnings per share from Zacks Investment Research, First Call and Thomson Reuters (Exhs. AG-JRW at 33-34; AG-JRW-10, at 4-5). The Attorney General's average of the historic and projected

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<sup>130</sup> As noted above, the Attorney General asserts that the median is better than other measures of central tendency (Exh. AG-JRW at 11).

<sup>131</sup> This factor is calculated by multiplying the 4.75 percent growth rate explained below by one-half and adding 1 to it, resulting in 1.02375 (Exh AG-JRW-10, at 1).

<sup>132</sup> Sustainable growth or prospective internal growth for the group is measured by Value Line's average projected retention rate and return on shareholders' equity (Exh. AG-JRW at 33).

growth rates from Value Line is 4.3 percent. (Exhs. AG-JRW at 35; AG-JRW-10, at 6). She also calculated the average of the projected and prospective sustainable growth rate indicators, resulting in a 5.0 percent average growth rate (Exhs. AG-JRW at 35; AG-JRW-10, at 6). In sum, the Attorney General used the midpoint of these two growth rates, or 4.75 percent (Exh. AG-JRW at 35).

Combining her adjusted dividend yield of 5.02 percent with her growth rate of 4.75 percent, the Attorney General calculated a DCF-derived ROE of 9.77 percent (Exhs. AG-JRW at 35; AG-JRW-10, at 1).

c. Positions of the Parties

i. Attorney General

The Attorney General contends that the Company's exclusive use of the projected long-term earnings per share ("EPS") estimates of Wall Street analysts is its most significant error in determining its DCF growth rates (Exh. AG-JRW at 52). The Attorney General claims that these analysts' projections are overly optimistic, and her approach relies on multiple surveys, studies, and publications from a diverse selection of authors and presses (Exh. AG-JRW at 53-63; Attorney General Brief at 127-128; Attorney General Reply Brief at 22-24).

The Attorney General criticized the research that the Company presented on the topic, stating that the studies WMECo refers to are out-of-date and/or pertain to analysts' estimates of quarterly EPS, not long-term EPS growth rates (Attorney General Brief at 128).



ii. Company

WMECo refutes the Attorney General's attempt to correct for analysts' misplaced optimism by blending their forecasts with growth rates such as historic and dividend growth, which the Company considers biased downward and poor predictors of future growth (Exh. WM-GJE-REB at 6; Company Brief at 209). The Company claims that there are no peer-reviewed published articles that have found that analysts' forecasts of stable companies' earnings are overly optimistic, and that the articles that found excessive optimism referred to young companies in unstable industries (Company Brief at 209-210, citing Exh. WM-GJE-REB at 7). The Company also argues that because the market for financial forecasts is highly competitive, any analyst providing overly optimistic or overly pessimistic forecasts would either correct his or her bias or be replaced by a more credible analyst (Company Brief at 210-211, citing Exh. WM-GJE-REB at 7). Finally, the Company adds that the relevant growth rate captures the forward-looking expectations of investors that are reflected in current stock prices, without taking into account any optimism or pessimism (Company Brief at 211, citing Exh. WM-GJE-REB at 8). The Company claims that since investors base their expectations on the growth rates analysts put forward, growth rates are useful in inferring investors' required returns (Exh. WM-GJE-REB at 8).

WMECo goes on to argue that historical growth rates should be used with caution given that: (1) past performance may not reflect future performance; (2) analysts' expectations already incorporate historical data; and (3) in special circumstances one should not incorporate exceptionally bad or exceptionally good conditions into expectations (Exh. WM-GJE-REB

at 12; Company Brief at 212-213). Further, the Company takes the position that earnings are the fundamental driver of a company's ability to pay dividends in the long term, and that earnings growth is a better predictor of long-term growth than dividend growth (Exh. WM-GJE-REB at 14; Company Brief at 213).

The Company asserts that the Attorney General understates the dividend yield by halving the expected dividend growth rate, and that WMECo's use of the full year's dividend growth is the correct measure (Exh. WM-GJE-REB at 18). WMECo claims that the Attorney General's adjustment fails to measure the full dividend flow expected by the investor and underestimates the cost of equity by approximately 15-20 basis points (Exh. WM-GJE-REB at 18).

d. Analysis and Findings

Both the Company and the Attorney General used a form of the DCF model referred to as the Gordon DCF model, which assumes an infinite investment horizon and a constant growth rate (Exh. WM-GJE-3, at 1). The constant growth or Gordon DCF model used by WMECo and the Attorney General has a number of very strict assumptions (Exhs. WM-GJE at 32; WM-GJE-3, at 1). In addition, the DCF model has other limitations, including an element of circularity when applied in a rate case, because investors' expectations depend upon regulatory decisions (Exh. WM-GJE-3, at 2-3). The Department is not persuaded by the validity of the assumptions that underlie the constant growth rate DCF model. See D.P.U. 08-35, at 199. Accordingly, we will consider these model limitations in evaluating the DCF-determined ROEs presented in this proceeding.

Regarding the Company's proposed flotation, or issuance cost adjustment, which increases its DCF-determined ROE by 17 basis points, WMECo argues that this adjustment is necessary to earn the investors' required return on the net proceeds available to NU (Exh. WM-GJE at 41). The Department has consistently rejected issuance cost adjustments for these purposes. The Berkshire Gas Company, D.P.U. 90-121, at 180 (1990). Based on our review of the record in this case, we are not persuaded to re-evaluate our previous findings on this issue. WMECo's proposed issuance cost adjustment relies on issuance costs that investors are well aware of upon entry into the market for publicly traded stock and, thus, contains the same defects that the Department has previously identified. Boston Gas Company, D.P.U. 88-67 (Phase I) at 193 (1988). Accordingly, the Department rejects WMECo's proposed issuance cost adjustment as used in the DCF model as well as in the CAPM and RPM.

3. Capital Asset Pricing Model

a. Company's Proposal

WMECo maintains that the CAPM<sup>133</sup> provides a formal risk-return relationship that quantifies the risk premium required for bearing incremental risk in the context of a highly diversified portfolio (Exh. WM-GJE at 41-42). The Company states that the CAPM requires a size adjustment to reflect the assumption that investors require a higher return on small, less liquid stocks (Exh. WM-GJE at 42). The Company also applies an empirical CAPM

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<sup>133</sup> WMECo states that the CAPM is expressed as:  $K_e = R_f + \beta(R_m - R_f)$ , where  $K_e$  is the equity cost of capital,  $R_f$  is the risk free rate of return,  $\beta$  is a measure of risk,  $R_m$  is the market rate of return, and  $(R_m - R_f)$  is the market risk premium (Exh. WM-GJE at 42).

(“ECAPM”), claiming that it was developed to correct for the CAPM’s understatement of returns on low beta stocks (Exh. WM-GJE at 42).

WMECo chose the 30-year Treasury bond yield to depict its risk-free rate of return,  $R_f$ , stating that the best available proxy for the risk-free rate in the CAPM is the return on the longest term Treasury bond that is traded (Exh. WM-GJE at 42-43). According to the Company’s analysis, the twelve-month, six-month and three-month average 30-year Treasury bond yields were 4.44 percent, 4.55 percent, and 4.67 percent, respectively (Exhs. WM-GJE at 43; WM-GJE-4, at 26). The Company also provides a forecasted 30-year Treasury yield of almost 6.03 percent in 2015 and an average yield of 5.29 percent over the five-year period of 2010-2015 (Exhs. WM-GJE at 43; WM-GJE-4, at 26). However, the Company used a 4.55 percent risk free-rate in its CAPM (Exh. WM-GJE at 47).

WMECo states that the beta coefficient,  $\beta$ , is the measure of systematic risk that cannot be avoided (Exh. WM-GJE at 43). The Company utilized a beta of 0.70, which closely reflects the Institutional Investor-WMECO Proxy Group Value Line adjusted beta of 0.68 (Exhs. WM-GJE at 45; WM-GJE-4, at 17-18).

The Company then embedded a second DCF model into its CAPM, which it applied to the S&P 500 Index<sup>134</sup> to calculate a market return,  $R_m$ , of 12.92 percent (Exhs. WM-GJE at 46;

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<sup>134</sup> The S&P 500 is a free-float capitalization-weighted index of the prices of 500 large-capitalization common stocks actively traded in the United States .

WM-GJE-4, at 5-8, 28). WMECo used a dividend yield on the S&P 500 of 1.87 percent<sup>135</sup> and adjusted it for growth by multiplying it times one plus the growth rate for an adjusted dividend yield of 2.08 (Exh. WM-GJE-4, at 6). The Company used a 10.85 percent long-term growth rate, which it calculated by using the long-term EPS growth of each of the 500 companies and its market capitalization to figure a weighted growth per company (Exhs. WM-GJE at 46; WM-GJE-4, at 20-24). The Company summarizes the market risk premium,  $(R_m - R_f)$ , as 12.92 percent minus 4.55 percent or 8.37 percent (Exhs. WM-GJE at 47; WM-GJE-4, at 8, 28). The Company calculated its initial CAPM result of 10.41<sup>136</sup> percent from the product of the market risk premium and the beta plus the treasury yield (Exhs. WM-GJE at 47; WM-GJE-4, at 8, 28).

However, WMECo states that if it were a stand-alone publicly traded company, investors would expect to earn a return that is approximately 235 basis points higher (Exhs. WM-GJE at 47-48; WM-GJE-4, at 12). The Company further stresses its point saying that even NU requires an 85 basis point increase based on its size (Exhs. WM-GJE at 48; WM-GJE-4, at 32). Based on these arguments, the Company adjusted the traditional CAPM of 10.40 percent by 85 basis points to 11.25 percent (Exhs WM-GJE at 48; WM-GJE-4, at 12).

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<sup>135</sup> WMECo took the sum of the cash dividends on the index over the four quarters ending March 21, 2010, of \$21.904, and divided it by the closing quarterly price in March of 2010 of \$1,169.43, equaling a yield of 1.87 percent (Exh. WM-GJE-4, at 25).

<sup>136</sup> The Company chose to use 10.40 for its traditional CAPM going forward (Exhs. WM-GJE at 47; WM-GJE-4, at 18).

WMECo also adds a 15-basis point ECAPM adjustment to the traditional CAPM (Exh. WM-GJE at 48). The Company used the following ECAPM formula to estimate the adjustment:  $K_e = R_f + \alpha + \beta [(R_m - R_f) - \alpha]$  where,  $\alpha$ , compensates the investor for, WMECo argues, the theory that low beta stocks have higher rates of return than predicted by the traditional CAPM model (Exhs. WM-GJE at 48; WM-GJE-4, at 13, 30). WMECo selected a 0.50 alpha from a list of selected financial research articles on the topic (Exh. WM-GJE-4, at 30). Thus, the Company's ECAPM analysis produces a 10.55 percent rate of return.<sup>137</sup>

Lastly, WMECo adjusts the CAPM for the March 2010 issuance costs (Exh. WM-GJE at 49). The Company's CAPM issuance adjustment is based on its argument that if investors purchased the shares with an expectation of annually earning the requested 10.50 percent, then they expect to receive on average annually \$2.12 (equal to \$20.20 divided by 10.50 percent) (Exh. WM-GJE at 49). After having paid the expenses on the offering, NU earned a net \$19.54 per share, as stated above (Exh. WM-GJE-4, at 14). The Company argues that NU must earn a higher return on the net proceeds to meet investor expectations of \$2.12 on the 10.50 percent return (Exhs. WM-GJE at 49; WM-GJE-4, at 14-15, 36). To calculate how much higher its earnings must be, the Company divided the expected \$2.12 by the net proceeds of \$19.54 to arrive at a required return on equity of 10.86 percent (Exhs. WM-GJE at 49;

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<sup>137</sup> WMECo presents the elements of its ECAPM as:  
 $10.56\% = (4.55\% + 0.50\%) + [0.70 \times (8.37\% - 0.50\%)]$ , and it chooses to utilize the approximation of a 15-basis point adjustment to the traditional CAPM (Exh. WM-GJE-4, at 13).

WM-GJE-4, at 15). The Company chose a 35-basis point increase<sup>138</sup> to the traditional CAPM result of 10.40 percent to 10.75 percent (Exh. WM-GJE-4, at 15-16, 37).

In summary, WMECo made an ECAPM adjustment of 15 basis points to its 10.40 percent traditional CAPM figure, resulting in an ECAPM of 10.55 percent (Exh. WM-GJE-4, at 16, 37). The Company then made a size adjustment of 85 basis points, increasing the ROE to 11.40 percent (Exh. WM-GJE-4, at 16, 37). Finally, the Company made an issuance cost adjustment of 35 basis points further increasing the ROE to 11.75 percent (Exh. WM-GJE-4, at 16, 37).

b. Attorney General's Proposal

The Attorney General concurs with the Company that in the CAPM there are two types of risk: firm-specific (unsystematic) and market risk (systematic), and that investors receive a return only for bearing systematic risk (Exh. AG-JRW at 36).

The Attorney General utilizes the 30-year Treasury bond rate in her CAPM (Exh. AG-JRW at 38). The Attorney General maintains that the yield on 30-year Treasury bonds has been in the 3.5 percent to 4.0 percent range over the months preceding the date of her testimony, and that as of September 17, 2010, it was 3.89 percent (Exhs. AG-JRW at 38; AG-JRW-11, at 2). The Attorney General chose to use a 4.0 percent risk-free rate of return in her CAPM (Exh. AG-JRW at 38). The Attorney General employs the Value Line betas for the

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<sup>138</sup> A \$2.10 return is expected by investors using the traditional CAPM figure of a 10.40 percent required return, producing an alternate 35-basis point adjustment that the Company chose over the 36-basis point adjustment resulting from the \$2.12/10.50 percent scenario (Exh. WM-GJE-4, at 15).

Electric Proxy Group companies, calculating a median figure of 0.70 for her CAPM analysis (Exhs. AG-JRW at 39; AG-JRW-11, at 3).

The Attorney General compiled a list of studies of equity risk premium from which she extracts a subset of studies published after January 2, 2010 (Exhs. AG-JRW at 42-43; AG-JRW-11, 5-6). She then categorized this list into historical risk premium, ex ante models, surveys, and building block methodology (Exhs. AG-JRW at 42; AG-JRW-11, at 6). The Attorney General used the median equity risk premium for the 2010 studies and surveys, which was 4.68 percent in her CAPM (Exhs. AG-JRW at 43; AG-JRW-11, at 6).

The Attorney General calculates her CAPM in the same way the Company calculates its traditional CAPM, resulting in a 7.30 percent ROE (Exhs. AG-JRW at 45; AG-JRW-11, at 1).

c. Positions of the Parties

i. Attorney General

The Attorney General claims that the current long-term United States Treasury rates are below 4.0 percent and therefore that the Company's utilization of a 4.55 percent risk-free interest rate overstates WMECo's equity cost rate (Attorney General Brief at 129, citing Exh. AG-GJE at 67). The Attorney General states that the ECAPM the Company used provides for weights that are utilized to adjust the risk-free rate and market risk premium in applying the ECAPM (Attorney General Brief at 130-131, citing Exh. AG-JRW at 68). The Attorney General testified that the adjusted betas that are used by both the Company and the Attorney General address the empirical issues with the CAPM, and that there is no need for an ECAPM adjustment (Exh. AG-JRW at 68).



The Attorney General states that the primary error in the Company's approach of applying the DCF model to the S&P 500 companies, and subtracting the risk-free rate, is that WMECo's expected DCF model growth rate is the projected five-year EPS rate for the companies in the S&P 500 as reported by Wall Street analysts (Attorney General Brief at 130, citing Exh. AG-JRW at 68-69). The Attorney General opines that this produces an overstated expected market risk premium, since Wall Street analysts' five-year estimates of EPS growth are upwardly biased (Attorney General Brief at 130-131; Attorney General Reply Brief at 25, citing Exh. AG-JRW at 69). The Attorney General averages gross national product, S&P 500 stock prices, EPS and DPS growth rates over the period beginning in 1960 to the present with a result of 6.12 percent (Attorney General Brief at 131, citing Exh. AG-JRW at 70). Comparing this average to the Company's long-run growth rate projection of 10.85 percent suggests that companies in the United States would be expected to increase their growth rate of EPS by over 50 percent in the future and maintain that growth indefinitely (Attorney General Brief at 131, citing Exh. AG-JRW at 70; Attorney General Reply Brief at 25).

With regard to the size adjustment added by the Company, the Attorney General claims that WMECo's use of historical market returns produces a survivorship bias and unattainable return bias (Attorney General Brief at 133, citing Exh. AG-JRW at 72; Attorney General Reply Brief at 27). The Attorney General states that, unlike industrial stocks, utility stocks do not exhibit a significant size premium (Attorney General Brief at 133, citing Exh. AG-JRW at 72, citing Utility Stocks and the Size Effect: An Empirical Analysis by Annie Wong (1993)). The Attorney General also states that one-half of the historic return premium for small

companies disappears once biases are eliminated and historic returns are properly computed, and further that the small firm premium arises from the assumption of monthly portfolio rebalancing and the serial correlation<sup>139</sup> in historic small firm returns (Attorney General Brief at 133, citing Exh. AG-JRW at 73, citing On Computing Mean Returns and the Small Firm Premium by Richard Roll (1983)).

The Attorney General opposes a flotation cost adjustment based on her analysis of historic and projected growth rate measures, growth in dividends, book value, and earnings per share (Attorney General Brief at 126-127, citing Exh. AG-JRW at 27-35). She argues that these are more reliable than those cited by the Company, which consist of the forecasted earnings per share growth rates of Wall Street analysts and Value Line in estimating DCF equity cost rates (Attorney General Brief at 127, citing Exh. AG-JRW at 27-35).

ii. Company

The Company offers two reasons why the Attorney General calculates such a disparate CAPM from its own, an extremely low equity risk premium and the lack of a size premium (Company Brief at 215-216, citing Exh. WM-GJE-REB at 19). WMECo claims that the Attorney General did not properly calculate a forward-looking equity risk premium, but rather, selected a summary of historical results instead of the current investor expectations (Company Brief at 216, citing Exh. WM-GJE-REB at 19-20). The Company claims that the Attorney General selected those studies with very low estimates and ignored those with higher rates of return (Company Brief at 216, citing Exh. WM-GJE-REB at 20). WMECo opines that it is not

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<sup>139</sup> See n. 119 on negative serial correlation, below.

difficult for anyone to find a subset of all of the available risk premium studies to support any proposition that he or she chooses (Company Brief at 217). The Company argues that, given all the available risk premium studies, it is not surprising that the Attorney General's equity risk premium is far below the average of historical data (Company Brief at 217).

WMECo asserts that there is a lack of consensus as to the means of measuring or estimating the market risk premium (see Company Brief at 217, citing Exhs. AG-JRW at 14; WM-GJE-REB at 23). WMECo states that the Attorney General's building blocks approach produces an extraordinarily and unreasonably low CAPM result (Exh. WM-GJE-REB at 24). The Company argues that the Attorney General rationalized her recommended ROE by referring to currently low long-term interest rates, and further argues that these low yields on long-term debt are due to extreme disorientation in the financial market and investor pessimism (Exh. WM-GJE-REB at 26).

WMECo disagrees with the Attorney General's claim of an upward bias when using the arithmetic mean<sup>140</sup> in calculating an equity risk premium, as well as with her preference for the geometric mean<sup>141</sup> (Company Brief at 217-218, citing Exh. WM-GJE-REB at 29; AG-JRW

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<sup>140</sup> The arithmetic mean can be defined as:  $\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i$  where,  $\bar{x}$  is the arithmetic mean,  $x_i$  is a given observation (specifically, the  $i^{\text{th}}$  observation) or set of samples,  $n$  the number of observations in a sample. Simply put, the arithmetic mean is the sum of all the numbers in the series divided by the count of all the numbers in the series, commonly referred to as "average" or "mean." Derivations from the arithmetic mean are significant information, as they indicate risk.

<sup>141</sup> The geometric mean can be defined as:  $G = \sqrt[n]{x_1 \cdot x_2 \cdot \dots \cdot x_n}$  where,  $G$  is the geometric mean,  $n$  is the number of observations in a sample, and  $x_1, x_2, \dots, x_n$  is a set of observations. Simply put, it is the average of a set of products. The geometric

at 79). The Company faults the Attorney General, stating that she “has created an example characterized by artificial and extreme negative serial correlation”<sup>142</sup> (Company Brief at 218-219, citing Exhs. WM-GJE-REB at 29; AG-JRW at 79). The Company further argues that the existence of extreme negative serial correlation would undermine the accuracy of the arithmetic mean, and that actual market data do not exhibit negative serial correlation (Exh. WM-GJE-REB at 30).

WMECo also takes issue with the Attorney General’s lack of a size premium in her CAPM calculations (Company Brief 219-222, citing Exhs. WM-GJE-REB at 30-33, WM-GJE-4, at 9, 11-12; AG-JRW- at 72-73). The Company maintains that the most likely reason for the need to adjust the CAPM for the size effect is that the shares of smaller capitalization stocks are less liquid than those of large capitalization stocks (Company Brief

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mean is typically used when data are in the form of percentages, and cannot be directly used when calculating a sample that includes any form of negative numbers (or negative returns in finance). In that circumstance, one uses geometric mean *return*, which can be defined as: where,  $R_G$  is the geometric mean return,  $t$  is a point in time a stated number of time periods from today,  $R_t$  is a return at time period  $t$ , and  $T$  represents the number of time periods in a sample. The geometric mean return of a data set is less than or equal to the arithmetic mean of a given data set. One generally uses the geometric mean return to produce an apples-to-apples comparison of investments where the amount of money invested is not known, or compounding (as in interest) is involved.

<sup>142</sup> When error terms from different (usually adjacent) time periods (or cross-section observations) are correlated, the error term is serially correlated. Though statistically unlikely, with negative serial correlation, errors in one time period are negatively correlated with errors in the next time period; hence the assumption of independence of the errors is violated. Negative first-order serial correlation occurs when a positive (negative) error is followed by a negative (positive) error. That is, the current error negatively influences the following error introducing bias.

at 220 citing Exh. WM-GJE-4, at 9). WMECo refers to the Attorney General's argument, stating that while a small company typically earns a higher return in the short term while it is still small, it may, over time, become a larger company and may no longer merit a size premium as firm size is a changing characteristic (Company Brief at 222, citing Exh. WM-GJE-REB at 32).

The Company maintains that low beta stocks such as utilities should have higher rates of return than predicted by the CAPM and claims that this is due to the slope of the capital market line differing from that predicted by the CAPM (Company Brief at 222-223, citing Exh. WM-GJE at 48). WMECo utilizes the ECAPM to correct for this bias and states that the Attorney General does not provide any evidence in support of her opposition (Company Brief at 223, citing Attorney General Brief at 128).

With regard to its flotation cost adjustment, the Company argues that it is economically irrelevant whether the traditional process is followed, or whether the underwriter (of NU's March 2010 stock issuance) pays the gross proceeds to NU and NU then writes a check to the underwriter for its underwriter fees (Exh. WM-GJE-REB at 34). The Company argues that the Attorney General's opposition to flotation costs is illogical because the historical and projected growth rates she cites have no bearing on the issue of flotation costs (Company Brief at 224, citing Attorney General Brief at 126-127). Further, the Company claims that it is just and reasonable for WMECo to bear its fair share of those costs (Company Brief at 224, citing Exh. WM-GJE-REB at 34).

d. Analysis and Findings

The Department has rejected the use of the traditional CAPM as a basis for determining a utility's cost of equity because of a number of limitations, including questionable assumptions that underlie the model. D.P.U. 08-35, at 207; D.T.E. 03-40, at 359-360; D.P.U. 956, at 54.<sup>143</sup> The Department notes that, using the financial and market data of the companies in its proxy group, WMECo made three adjustments in its analysis when applying the CAPM.

First, WMECO added 85 basis points to the ROE resulting from its application of the CAPM based on the Company's small size (Exhs. WM-GJE at 48; WM-GJE-4, at 12). WMECo argues that if it were a stand-alone publicly traded company, investors would expect to earn a return that is approximately 235 basis points higher (Exhs. WM-GJE at 47-48; WM-GJE-4, at 12). The Department has previously rejected similar adjustments that relied on the size premium because of our concerns with both the comparability of the entities contained therein to a comparison group, and some of the limitations resulting from the use of the traditional CAPM to determine size premiums. D.P.U. 08-35, at 216-217. WMECo has not presented any new evidence that would serve as a basis for the Department to re-evaluate our

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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. D.P.U. 08-35, at 207 n.131.

previous findings here. Accordingly, the Department rejects WMECo's proposed size premium adjustment to CAPM.

Second, the Company makes an ECAPM adjustment, increasing ROE by 15 basis points, which, the Company argues, compensates the investor for the deficiency produced by low beta stocks that have higher rates of return than predicted by the traditional CAPM model (Exhs. WM-GJE at 48; WM-GJE-4, at 13, 30). The ECAPM used by the Company incorporates alpha values<sup>144</sup> as a measure of financial performance into the traditional CAPM equation (WM-GJE-4, at 13, 30-31). The Company claims to be achieving alpha returns while at the same time experiencing a declining financial condition. The Department is not persuaded by the record evidence provided by the Company that it is achieving alpha returns in this case. Therefore the Department rejects this second proposed ECAPM adjustment to the CAPM.

Lastly, the Company's proposed a CAPM related issuance cost adjustment, which increases by 35 basis points its CAPM-determined ROE (Exh. WM-GJE-4, at 15-16, 37). As stated above, the Department has consistently rejected issuance cost adjustments.

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<sup>144</sup> An alpha can be defined by the mathematical estimate of the return on a security when the market return as a whole is zero. Alpha is derived from  $\alpha$  in the formula:

where,  $R_i$  is the return on a security,  $\beta$  is the securities beta, and  $R_m$  is a given return on the market. Alpha is a measure of risk-adjusted performance usually generated by regressing the security's excess return on the S&P 500 excess return. The beta adjusts for the risk (the slope coefficient). The alpha is the intercept. Simply put, it is a measure of performance after adjusting for risk, and compares the volatility of a security to some benchmark. The alpha is the excess return of the security over that benchmark.

D.P.U. 90-121, at 180. Accordingly, the Department rejects WMECo's proposed issuance cost adjustment as used in the CAPM.

Based on the above considerations, the Department finds that the traditional CAPM would have a limited value in determining the Company's ROE in this case and tends to overstate the Company's required ROE. The Department further finds that the Attorney General's CAPM analysis has similar limitations.

4. Risk Premium Model

a. Company's Proposal

WMECo developed an ROE from the RPM, which the Company testifies takes the return on debt and adds an equity risk premium that is estimated from past market returns (Exh. WM-GJE at 50). The Company expresses the RPM as:  $K_e = D + R_p$  where,  $D$  is the cost (interest rate) of a company's debt, and  $R_p$  is the investor's risk premium over a debt instrument (Exh. WM-GJE at 50). WMECo uses its 4.55 percent treasury yield plus a credit spread of 175 basis points, representing BBB<sup>145</sup> rated 30-year utility bonds, in its estimate of its own current cost of long-term debt (Exhs. WM-GJE at 52-53; WM-GJE-5, at 3, 9-10). This results in a 6.30 percent cost of WMECo debt for its RPM analysis (Exhs. WM-GJE at 53; WM-GJE-5, at 4). The Company then adds a 423 basis point equity risk premium calculated from the S&P 500 Electric Utility Common Stock Index and Public Utility Bond Yield (Exhs. WM-GJE at 52; WM-GJE-5, at 4-5, 8). The Company sums the 6.30 percent cost of

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<sup>145</sup>

A BBB rating by Standard & Poor's represents a good credit quality with medium risk.



debt with the 4.23 percent equity risk premium to arrive at an initial 10.53 percent ROE (Exh. WM-GJE-5, at 4).

However, WMECo also adjusts its RPM for issuance costs in the same way it adjusted its CAPM, which adds 35 basis points to its ROE for a final figure of 10.88 percent (Exh. WM-GJE at 53).

b. Positions of the Parties

i. Attorney General

The Attorney General lists the following six errors in WMECo's RPM equity risk premium estimate: (1) biased historical bond returns; (2) use of the arithmetic versus the geometric mean return; (3) use of historical stock and bond returns to measure the equity risk premium; (4) unattainable and biased historical stock returns; (5) company survivorship bias; and (6) "The Peso Problem" – U.S. stock market survivorship bias<sup>146</sup> (Exh. AG-JRW at 77; Attorney General Brief at 131-132). Among these concerns, the Attorney General states that since the Company's study covers more than one period and assumes that dividends are reinvested, it should employ the geometric mean and not the arithmetic mean (Exh. AG-JRW at 78; Attorney General Brief at 131-132). The Attorney General also points out that the S&P 500 only includes companies that have survived (not gone out of business) (Exh. AG-JRW at 81; Attorney Brief at 131-132).

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<sup>146</sup> The "Peso Problem" indicates that historic stock returns are overstated as a measures of expected returns, because the United States markets have not experienced the disruptions of other major markets around the world (Exh. AG-JRW at 82).

ii. Company

The Company states that the use of a variety of models is important because all known ROE models have shortcomings (Company Brief at 223). WMECo claims that recent events provide an example of why multiple methods are necessary. It cites to the Federal Reserve Board's recent actions affecting the price of U.S. Treasury Bonds, which may cause distortions in CAPM results (Company Brief at 223 n.75). The Company further argues that since its RPM uses the yield on utility bonds as the benchmark interest rate, it is a useful control for such distortions (Company Brief at 223 n.75).

c. Analysis and Findings

The Department has repeatedly found that a risk premium analysis could overstate the amount of company-specific risk and, therefore, overstate the cost of equity. See D.P.U. 90-121, at 171; D.P.U. 88-135/151, at 123-125; 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. 90-121, at 171; D.P.U. 88-67 (Phase I) at 182-183.

The risk premium model, like the other equity cost models used by WMECo, 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 acknowledged the value of the RPM as a supplemental approach to other ROE models and accords it, at best, limited weight in our determination of the cost of equity.

D.P.U. 07-71, at 137; D.T.E. 99-118, at 85-86. As it suffers from the same limitations previously noted in the CAPM, the Department finds that WMECo's RPM tends to overstate the required ROE for the Company.

5. Comparable Earnings Model

a. Company's Proposal

The Company states that the CEM is designed to measure the returns expected to be earned on the original cost book value of companies that have similar risk to WMECo but are not subject to cost of service regulation (Exh. WM-GJE at 54). WMECo used three steps in implementing the CEM: (1) selecting a sample of unregulated companies with risk comparable to itself; (2) determining an appropriate time period over which book rates of return were to be measured; and (3) adjusting the Unregulated Reference Group results for its risk differential as compared with the Institutional Investor-WMECO Proxy Group (Exh. WM-GJE at 55).

Starting with the 500 companies listed by the S&P 500 Index, the Company utilized five screens to develop its Unregulated Reference Group. WMECo screened out companies that: (1) did not have beta coefficient within 0.1 of the Institutional Investor-WMECO Proxy Group beta of 0.70; (2) did not have a Value Line safety rating of equal to or less than the Institutional Investor-WMECO Proxy Group rating of approximately three; (3) had earnings variability over the past ten years that was higher than the Institutional Investor-WMECO Proxy Group; (4) did not have ten years of comparable historic earnings data in Value Line; and (5) would create an overrepresentation of any one industry (Exhs. WM-GJE at 56; WM-GJE-6, at 2-3, 7-9). WMECo's final Unregulated Reference Group consisted of

31 S&P 500 companies, representing 16 industries (Exhs. WM-GJE at 56; WM-GJE-6, at 3, 8-9).

The Company chose the eight years 2002 through 2009 to develop an unregulated to regulated conversion factor<sup>147</sup> of 55.33 percent, which it refers to as, “the ratio of a regulated utility reference group ROE to an unregulated reference group ROE” (Exh. WM-GJE-6, at 10). The data collected by WMECo for this conversion factor were based on the claim that the last business cycle ended in November 2001, according to the National Bureau of Economic Research (Exhs. WM-GJE-6, at 4 & n.7, 8; WM-GJE-6, at 11-16). The Company states that the ten-year average Unregulated Reference Group return on book equity is 19.17 percent and that the five-year projected average Unregulated Reference Group return on book equity is 19.15 percent (Exh. WM-GJE-6, at 4, 6). WMECo further claims that the average returns on book equity are too high to be directly transferable to a utility (Exh. WM-GJE-6, at 4). The Company multiplied its conversion factor of 55.33 percent by the 19.15 percent five-year projected average return on book equity to calculate an expected return on book equity over the next five years of 10.60 percent (Exhs. WM-GJE at 57-58; WM-GJE-6, at 6).

b. Positions of the Parties

No parties commented on the Company’s CEM.

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<sup>147</sup> WMECo presents its conversion factor as:

$$(ROE_R/ROE_U) = ((M/B)_R/(M/B)_U) \times ((P/E)_U/(P/E)_R) \text{ (Exh. WM-GJE-6, at 10).}$$

c. Analysis and Findings

The Department has generally rejected the results of the CEM because the risk criteria provided were not sufficient to establish the comparability of the non-regulated group of firms with the distribution company being considered. D.P.U. 08-35, at 210; D.T.E. 01-56, at 116. Although the companies remaining after the Company applied its risk criteria screen are comparable to the Institutional Investor - WMECO Proxy Group, there are other risk criteria<sup>148</sup> beyond the Company's screens that must be evaluated as the basis for selecting an appropriate comparison group of companies for use in this model. D.P.U. 08-35, at 210; D.T.E. 01-56, at 116.

We note that WMECo used the results from the CEM only to test the reasonableness of the results of its market-based ROE models (Exhs. WM-GJE at 31; WM-GJE-6, at 1). For all of these reasons, the Department will not rely on the results of the CEM as a basis for determining the allowed ROE for the Companies.

6. Other Parties' Positions on ROE

a. UMA

UMA claims that the Company has neither planned for improving, nor committed to addressing, its extraordinarily poor quality of service (Exh. UMA-RAB at 24). UMA states that WMECo has been unresponsive to UMA's requests to improve service and reduce the frequent outages that UMA has been experiencing (Exh. UMA-RAB at 24; UMA Brief at 30).

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Another risk criterion would be the nature of the business. D.T.E. 01-56, at 116.

Further, UMA argues that it has “serious doubts” as to whether the Company’s service quality will be adequate or reliable over the next several years (Exh. UMA-PAD at 36).

To penalize what UMA expresses as inadequacies and deficiencies in the Company’s service, UMA recommends that the Department reduce the Company’s ROE within a range of 25 to 75 basis points (Exhs. UMA-PAD at 36; UMA-RAB at 25; UMA Brief at 30). In addition, UMA recommends that this penalty should remain in place until WMECo demonstrates in its next rate case that it is responsive to all of its customers and has addressed and resolved the chronic reliability issues that UMA is experiencing (Exh. UMA-RAB at 25; UMA Brief at 30).

b. Easthampton

Easthampton claims that the record evidence in this case demonstrates WMECo’s lack of overall prudence, responsiveness, and reasonableness in addressing Easthampton’s concerns with respect to streetlights (Easthampton Brief at 9-10). Easthampton states that its concerns stem from the Company’s reluctance to appropriately revise its tariff for municipally-owned streetlights (Easthampton Brief at 9-10; Easthampton Reply Brief at 6). Easthampton argues that incentives to use efficient lighting are distorted and/or destroyed by the system currently in place, and would continue in the Company’s proposed S-2 Tariff for municipally-owned streetlights (Easthampton Brief at 9; Easthampton Reply Brief at 6). Easthampton states that because the Company fails to meet its obligation to be a reasonable and prudent utility a reduction in WMECo’s rate of return is warranted (Easthampton Brief at 10). Easthampton made no specific recommendation regarding the precise number of basis points or other

measure by which to reduce the Company's rate of return. However, it did recommend that the reduction in rate of return should be ordered until such time as the S-2 Tariff is appropriately revised (Easthampton Brief at 10).

F. Impact of Decoupling on Cost of Equity

1. Company's Proposal

As discussed in Section III, above, WMECo proposed to implement a revenue decoupling mechanism (Exh. WM-RJA at 3). The Company maintains that if the Department approves WMECo's proposed decoupling mechanism, the allowed ROE in this case should not be reduced (Exh. WM-GJE at 58). Further, WMECo states that its risk profile with decoupling is not significantly different from its peers and chosen proxy group (Exh. WM-GJE at 58).

The Company further offered 76 regulatory commission decisions that allowed decoupling and calculated, from the holding companies that have a subsidiary with decoupling, an average beta coefficient of 0.7306 (Exhs. WM-GJE at 60; WM-GJE-7, at 1-4).

Lastly, WMECo alleges, that by WMECo itself lowering its requested ROE by a far greater amount than could be supported by any reduction to risk, the Company is attempting to eliminate the need to address the potentially contentious question of whether the proposed trackers and decoupling should lead to a lower ROE in this proceeding. (Exh. WM-GJE at 61-62).

2. Attorney General's Proposal

The Attorney General compiled a list of several regulatory commission decisions in which adjustments to ROE, based on decoupling and straight-fixed variable mechanisms, range from 10 to 50 basis points (Exh. AG-JRW at 48). The Attorney General states that these decisions indicate that an adjustment of up to 50 basis points may be appropriate to recognize the risk reduction associated with decoupling (Exh. AG-JRW at 48). The Attorney General also believes that the Department should take into consideration the risk reduction associated with any trackers that may be adopted in this proceeding (Exh. AG-JRW at 49).

3. Positions of the Parties

a. Attorney General

The Attorney General points out that the Company did not indicate the percent of revenues covered by decoupling of the companies in its list of 76 regulatory commission decisions (Exh. AG-JRW at 87). She further testified that many of the companies have unregulated revenues, other revenue sources, and/or, in many cases, are gas companies (Exh. AG-JRW at 87).

b. Company

WMECo claims that the cases cited by the Attorney General present an incomplete picture and that the Company's review of 76 cases, 20 of which make an ROE adjustment, was far more comprehensive (Company Brief at 26 n.76, citing Exhs. WM-GJE-REB at 37; WM-GJE at 60-61). The Company further explains that most companies in the proxy group have some form of revenue decoupling and/or some other tracking mechanisms (Exh. WM-GJE-REB at 37). WMECo also argues that decoupling would not make the Company less



risky than the proxy group, rather it would render WMECo more comparable to its peers, and therefore no adjustment is justified (Company Brief at 227&n.7, citing Exh. WM-GJE at 60).

4. 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 arising from energy efficiency, demand-response, and distributed resources initiatives, by definition decoupling reduces earnings volatility. D.P.U. 07-50-A at 72; D.P.U. 07-50, at 1-2. The Department added that 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 72-73.

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.

The Attorney General maintains that a number of regulatory commissions that have adopted decoupling mechanisms for electric and gas companies have recognized the risk reduction associated with the adoption of decoupling (Exh. AG-JRW at 48). The Attorney General recommends that an adjustment of up to 50 basis points may be appropriate to recognize the risk reduction associated with decoupling (Exh. AG-JRW at 48).

Under the revenue decoupling mechanism approved in this proceeding, at the end of each annual period, WMECo will compare the difference between the annual target base distribution revenue with the actual collected base distribution revenues, and refund or collect the difference through the revenue reconciliation component of the revenue decoupling plan (Exh. WM-RJA at 4, 17). Because the Company will recover fully during the ensuing years its approved base distribution revenue requirement (including a component return on rate base), we find that the decoupling revenue adjustment will result in rate year distribution revenues that will closely reflect the distribution revenue requirement approved in this base rate proceeding.

The Department has previously rejected proposals for adjusting rate year revenues due to deviations in weather. See, e.g., D.T.E. 03-40, at 407, 423; D.P.U. 92-210, at 157-172, 199; D.P.U. 92-111, at 18-33, 60-61. In rejecting those proposals, the Department found that a weather adjustment would result in a less risky profile for the Company, and that any resulting reduction in risk of equity investments should be shared with ratepayers through a commensurate adjustment in a company's rate of return on capital. D.T.E. 03-40, at 423; D.P.U. 92-210, at 199; D.P.U. 92-111, at 60-61. In the instant case, in which changes in sales arising from all factors, including weather, are decoupled from the Company's approved base distribution rates, we reaffirm the above findings regarding the resulting lowered risk profile of a company and the resulting impact on its cost of equity. See D.P.U. 09-30, at 369. In addition, based on the specific record in this case, we confirm the Department's generic finding in D.P.U. 07-50-A at 72-73 that, because decoupling is designed to ensure that

distribution companies' revenues are not adversely affected by reductions in sales arising from energy efficiency, demand-response, and distributed resources initiatives, such a reduction in revenues and earnings volatility should reduce risks to shareholders and, thereby, serve to reduce the required ROE. In sum, we find that the revenue decoupling mechanism that we have approved in this case 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 367, 371-372; D.P.U. 07-50-A at 72-73.

The Company claims that by lowering its requested ROE by a greater amount than could be supported by any risk reduction from applying the decoupling mechanism as presented in this case, it is attempting to eliminate the need for the Department to address the question of whether the proposed decoupling mechanism should lead to a lower ROE in this proceeding (Exh. WM-GJE at 61-62). The Department makes note of the Company's position in this regard; however, we do not accept the Company's argument that there is no need to consider the equity cost impact of decoupling because the Company took it upon itself to artificially lower its requested ROE. We are not convinced that the Company's method correctly captures the risk reducing impact of the Company's decoupling mechanism.

As noted above, as a support for her proposed 50-basis point reduction to the Company's ROE, the Attorney General surveyed the ROE downward adjustments by a number of regulatory commissions indicating a range of reductions of 10 basis points to 50 basis points (Exh. AG-JRW at 48). While we will accord this evidence appropriate weight, we recognize that those commissions' decisions were based on the specific underlying facts of those cases.

Thus, we cannot mechanically apply a 50-basis point reduction for the change in investors' risk perception associated with the Company's implementation of revenue decoupling. We will, instead, examine the specific risk profile of the Company and the specific features of the revenue decoupling proposal we are approving today to arrive at the appropriate determination of the effect on risk on WMECo's required ROE.

G. Conclusion

The standard for determining the allowed ROE is set forth in Bluefield Water Works & Improvement Co. vs. Pub. Service Comm., 262 U.S. 679, 692-693 (1923) ("Bluefield"); and Federal Power Comm. v. Hope Natural Gas Co., 320 U.S. 591 (1942) ("Hope"). The allowed ROE should preserve the Company's financial integrity, allow it to attract capital on reasonable terms, and be comparable to returns on investments of similar risk. See Bluefield at 692-693; Hope at 603, 605.

In support of its calculations of an appropriate ROE, WMECo has presented analyses using the DCF model, CAPM and RPM incorporating the financial data of a proxy group. The Attorney General has presented her own analyses using the DCF model and CAPM employing the financial data of the same proxy group as the Company. 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 (1997). 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 the Company's ROE. We note, for example, the limitations of the DCF model, used by both WMECo and the Attorney General, including the simplifying assumptions that underlie the Gordon DCF model and the inherent limitations in comparing the Company to publicly-traded companies. As stated above, we reject WMECo's attempt to adjust the DCF-determined (acceptance adjusted) ROE of 10.31 percent by adding a flotation cost adjustment of 17 basis points. Moreover, we also note, the CAPM relied upon by WMECo and the Attorney General is limited, both by the simplifying assumptions underlying CAPM theory, as well as by the subjective nature associated with estimating market risk premiums.

As noted above, we recognize that the revenue decoupling mechanism we have approved in this case 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 proxy groups used by WMECo and the Attorney General have some forms of revenue stabilization or decoupling mechanisms, the degree of revenue stabilization varies among the companies in the proxy groups and, on the whole, is not as comprehensive as the decoupling mechanism approved for the Company in this Order.

Further, we note that a portion of the revenues of the electric companies in WMECo's Institutional Investor WMECO-Proxy Group and the Attorney General's Electric Proxy Group are derived from non-regulated and competitive lines of business. This mix of regulated and non-regulated operations could skew the risk profile comparability with that of the regulated electric distribution operations of the Company in a manner that, all else being equal, would tend to overstate the proxy groups' risk profiles 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. 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 Co. v. Dep't of Pub. Utils., 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.<sup>149</sup>

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<sup>149</sup> For example, the Department has set ROEs that are at the higher or lower end of the reasonable range based on above average or subpar management performance. See, e.g., Aquarion Water Company of Massachusetts, D.P.U. 08-27, at 134-138 (2009); Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25, at 231 (2002); Cambridge Electric Light Company, D.P.U. 92-78, at 115 (1992); Commonwealth Electric Company, D.P.U. 08-114/90-331/91-80 (Phase One) at 225 (1991).

In this case, one factor we have considered in determining the allowed ROE relates to WMECo's use of fully reconciling mechanisms to recover certain costs outside of base rates. WMECo presently has in place fully reconciling mechanisms for a range of expense categories, including basic service, supply-related bad debt, and a RAAC that fully reconciles costs related to demand-side management and residential assistance adjustments. WMECo also has a fully reconciling pension and post-retirement benefits other than pension ("PBOP") mechanism<sup>150</sup>. As a result of this Order, WMECo will retain these reconciling mechanisms and implement revenue decoupling. The presence of these fully reconciling mechanisms covering a significant portion of the Company's expenses will result in lower risk for WMECo.

With regard to the service quality issues raised by the Attorney General regarding WMECo's storm response, UMA regarding quality of service, and Easthampton regarding streetlighting service, the Department has not found sufficient evidence to conclude that the Company is providing substandard of service to its customers. Consequently, the Department is not persuaded that a specific ROE adjustment on the basis of service quality is warranted. Moreover, as discussed in Section IV.D.3, above, concerning the Company's JOA with

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<sup>150</sup> As she did in D.P.U. 10-55, the Attorney General argues that the ROE set in this proceeding should be the same as the assumed returns on the equity investments in the Company's pension and PBOP trust funds (Attorney General Brief at 135-138, citing Exh. AG-TN at 7-10). As we found in that proceeding, there is no basis to support the notion that the two rates, computed differently for different purposes, are somehow interchangeable. D.P.U. 10-55, at 283.

Verizon, the Department finds that the Company's actions do not rise to a level that warrants a specific ROE adjustment.

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 9.60 percent is within a reasonable range of rates that will preserve the Company's financial integrity, will allow 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 parties' various methods for determining the Company's proposed ROE, as well as the arguments of and evidence presented by the parties in this proceeding.

## XI. RATE STRUCTURE

### A. Rate Structure Goals

Rate structure defines the level and pattern of prices charged to each customer class for its use of utility service. The rate structure for each rate class is a function of the cost of serving that rate class and how rates are designed to recover the cost to serve that rate class. The Department has determined that the goals of designing utility rate structures are to achieve efficiency and simplicity as well as to ensure continuity of rates, fairness between rate classes, and corporate earnings stability. National Grid Electric Company, D.P.U. 09-39, at 401 (2009); Boston Gas Company, D.T.E. 03-40, at 365; Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25, at 252; The Berkshire Gas Company, D.T.E. 01-56, at 134; Blackstone Gas Company, D.T.E. 01-50, at 28 (2001); Boston Gas Company, D.P.U. 96-50



(Phase I) at 133 (1996). Efficiency means that the rate structure should allow a company to recover the cost of providing the service and should provide an accurate basis for consumers' decisions about how to best fulfill their needs. The lowest-cost method of fulfilling consumers' needs should also be the lowest-cost means for society as a whole. Thus, efficiency in rate structure means that it is cost-based and recovers the cost to society of the consumption of resources to produce the utility service. National Grid Electric Company, D.P.U. 09-39, at 401 (2009); Boston Gas Company, D.T.E. 03-40, at 365-366; Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25, at 252; The Berkshire Gas Company, D.T.E. 01-56, at 135. 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.

The Department has determined that a rate structure achieves the goal of simplicity if it is easily understood by consumers. Rate continuity means that changes to rate structure should be gradual to allow consumers 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. National Grid Electric Company, D.P.U. 09-39, at 402 (2009); Boston Gas Company, D.T.E. 03-40, at 366; Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25, at 252-253; The Berkshire Gas Company, D.T.E. 01-56, at 135.

There are two steps in determining rate structure: cost allocation and rate design. Cost allocation assigns a portion of the company's total costs to each rate class through an embedded allocated cost of service study ("COSS"). The COSS represents the cost of serving each class at equalized rates of return given the company's level of total costs. National Grid Electric Company, D.P.U. 09-39, at 402 (2009); Boston Gas Company, D.T.E. 03-40, at 366; Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25, at 253; The Berkshire Gas Company, D.T.E. 01-56, at 135; Blackstone Gas Company, D.T.E. 01-50, at 29 (2001); Boston Gas Company, D.P.U. 96-50 (Phase I) at 133 (1996).

There are four steps to develop a COSS. The first step is to functionalize costs. In this step, costs are associated with the production, transmission, or distribution function of providing service. The second step is to classify expenses in each functional category according to the factors underlying their causation. Thus, the expenses are classified as demand-, energy-, or customer-related. The third step is to identify an allocator that is most appropriate 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. National Grid Electric Company, D.P.U. 09-39, at 402-403 (2009); Boston Gas Company, D.T.E. 03-40, at 366-367; Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25, at 253; The Berkshire Gas Company, D.T.E. 01-56, at 136; Fitchburg Gas and Electric Light Company, D.T.E. 98-51, at 131-132 (1998); Boston Gas Company, D.P.U. 96-50 (Phase I) at 133-134 (1996).

The results of the COSS are compared to the revenues collected from each rate class in the test year. If these amounts are close, then the revenue increase or decrease may be allocated among the rate classes so as to equalize the rates of the return and ensure that each rate class pays the cost of serving it. If, however, the differences between the allocated costs and the test-year revenues are great, then, for reasons of continuity, the revenue increase or decrease may be allocated so as to reduce the difference in rates of return, but not to equalize the rates of return in a single step. National Grid Electric Company, D.P.U. 09-39, at 403 (2009); Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25, at 253-254; The Berkshire Gas Company, D.T.E. 01-56, at 136; Blackstone Gas Company, D.T.E. 01-50, at 29 (2001).

As the previous discussion indicates, the Department does not determine rates based solely on costs but also explicitly considers the effect of its rate structure decisions on customers' bills and the Department's goals with respect to rate structures. For instance, the pace at which fully cost-based rates are implemented depends, in part, on the effect of the changes on customers. For example, considering the goals of efficiency and fairness, the Department has also ordered the establishment of special rate classes for certain low-income customers and considers the effect of such rates and rate changes on low-income customers. National Grid Electric Company, D.P.U. 09-39, at 403-404 (2009); Boston Gas Company, D.T.E. 03-40, at 367; Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25, at 254; The Berkshire Gas Company, D.T.E. 01-56, at 137; Blackstone Gas Company, D.T.E. 01-50, at 29-30 (2001).

In order to reach fair decisions that encourage efficient utility and consumer actions, the Department's rate structure goals must balance the often divergent interests of various customer classes and work to decrease inter-class subsidies unless a clear record exists to support — or a statute requires — such subsidies. See, e.g., G.L. c. 164, § 1F(4)(i). The Department reaffirms its rate structure goals that result in rates that are fair and cost-based and enable customers to adjust to changes. National Grid Electric Company, D.P.U. 09-39, at 404 (2009); Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25, at 254; The Berkshire Gas Company, D.T.E. 01-56, at 137; Blackstone Gas Company, D.T.E. 01-50, at 30 (2001).

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. National Grid Electric Company, D.P.U. 09-39, at 404 (2009); Boston Gas Company, D.T.E. 03-40, at 368; Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25, at 254-255; The Berkshire Gas Company, D.T.E. 01-56, at 136-137; Blackstone Gas Company, D.T.E. 01-50, at 30 (2001). Rate design is particularly important with respect to the goals of achieving efficiency in customer consumption decisions.

B. Cost Allocation

1. Introduction

The Company performed an allocated COSS as a basis to assign or allocate costs to customer rate classes (Exh. WM-EAD at 3). The COSS identified each item contributing to WMECo's revenue requirement for distribution service only (Exh. WM-EAD at 4).

WMECo used a three-step process to allocate costs to the various rate classes in the COSS. First, WMECo categorized plant investment costs and operating expenses by the operational functions with which they are associated (i.e., primary distribution, secondary distribution, and customer)<sup>151</sup> (Exh. WM-EAD at 4, 6-7). Second, WMECo classified the functional cost elements by the factor of use most closely matching cost causation (i.e., customer or demand) (Exh. WM-EAD at 4, 7). Third, the Company allocated the functionalized and classified costs to the various rate classes (Exh. WM-EAD at 4).

The COSS includes all rate classes, with the residential non-heating Rate R-1 and the residential non-heating low-income Rate R-2 combined due to similar usage profiles and the residential heating Rate R-3 and the residential heating low-income Rate R-4 also combined due to similar usage profiles (Exhs. WM-EAD at 6; WM-EAD-1, at 3-18). The COSS also includes a new rate class proposed by the Company, Extra Large Primary Service Time-of-Use, Rate T-5 (Exh. WM-EAD at 6).

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<sup>151</sup> The primary distribution function refers to service provided at 13.8 kV or higher. The secondary distribution function refers to service provided below 13.8 kV. The customer function refers to all costs that are specific to serving individual customers.

The Company determined a total distribution revenue requirement of \$149,600,000 (Exh. WM-EAD at 5). WMECO then allocated this revenue requirement among the three functions referenced above (i.e., primary distribution, secondary distribution, and customer) (Exh. WM-EAD at 6-7). Then, within each function, WMECo allocated the costs between “customer,” or “demand” according to the system design or operating characteristics that cause them to be incurred (Exh. WM-EAD at 7). The Company then allocated the functionalized, classified revenue requirement among the rate classes (Exhs. WM-EAD at 10-12; WM-EAD-1, at 6-18). The allocation among the rate classes was based on causal relationships (Exh. WM-EAD at 10-12). WMECo allocated demand-related assets based on non-coincident peaks at the appropriate service level: primary distribution and secondary distribution (Exh. WM-EAD at 10). The Company allocated customer-related assets based on the customers served for each specific cost item (Exh. WM-EAD at 10).

In developing its COSS, the Company used external and internal allocators (Exh. WM-EAD at 8-9). External allocators are developed outside of the COSS using such information as load research, accounting and engineering data derived from the Company’s accounting records, operating records, and other records (Exh. WM-EAD at 8). Examples of external allocators are numbers of customers in each rate class and class non-coincident peak demands (Exh. WM-EAD at 8-9). Internal allocators are developed by the cost of service model, within the allocation process (Exh. WM-EAD at 9). The Company cites, as an example, that the internal allocator for rate base is based on all of the costs for distribution rate

base: plant, accumulated depreciation, and additions and subtractions (Exhs. WM-EAD at 9; WM-EAD-1 at 8).

2. Positions of the Parties

a. Attorney General

The Attorney General objects to two demand allocators that the Company used in its embedded COSS (Attorney General Brief at 142). First, the Attorney General asserts that the record does not support the Company's assumption that Rate 23 (controlled water heater customers) customers have the same load profile as Rate G-0 (small commercial) customers (Attorney General Brief at 142-143). Second, the Attorney General disagrees with WMECo's assumption that Rate 24 (houses of worship) customers have a similar load profile to G-2 (medium commercial) customers (Attorney General Brief at 142-143).

The Attorney General also disagrees with the Company's alternative allocation method for distribution plant (Attorney General Brief at 143). This alternate allocation method would involve allocating certain distribution plant based on the number of customers on the system and not based on any measure of usage, including demand (Attorney General Brief at 143, citing Exh. WM-EAD at 8). Although the Company did not employ this alternate method in its COSS, the Attorney General recommends that the Department require the Company to continue allocating distribution plant as it has done in this case, which is consistent with Department precedent (Attorney General Brief at 144).

b. WMECo

The Company states that the embedded COSS conducted by WMECo was consistent with industry standards and Department precedent (Company Brief at 234). WMECo avers that its embedded COSS is consistent with the NARUC Cost Allocation manual and numerous COSSs approved by the Department, including the Department's most recent electric base rate proceeding, National Grid Electric Company, D.P.U. 09-39 (Company Brief at 234).<sup>152</sup>

3. Analysis and Findings

The Attorney General asserts that the Company's assumptions regarding the load profiles of Rate 23 and Rate 24 customers are not supported by the record. This disagreement appears to be a question of judgment based on the information that was available to the Company when it performed its COSS. The Attorney General disagrees with the Company's assumptions. However, the Department can find no evidence to suggest that the Company's assumptions with regard to the load profiles for Rate 23 and Rate 24 were unreasonable.

The Attorney General also takes issue with an allocation method that was not used by the Company in its COSS in this proceeding. Because the Company did not use the allocation method objected to by the Attorney General, the Department need not address this concern here. Below we find the Company's COSS to be consistent with Department precedent. In the event that this alternative allocation method is proposed in a future COSS, the Department will address whether this allocation method is appropriate at that time.

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<sup>152</sup> On Brief, the Company did not directly address the Attorney General's objections to the COSS.



The Department finds the Company's COSS to be consistent with Department precedent and, therefore, accepts WMECo's COSS. National Grid Electric Company, D.P.U. 09-39, at 413 (2009).

C. Rate Design

1. Introduction

The Company states that the results of the COSS act as a guide in establishing the revenue requirement for each rate class in this proceeding (Exh. WM-CRG at 7). The revenue deficiency or excess for each rate class is determined by comparing the revenue requirement at the proposed cost of capital to the revenue at current rates for each rate class (Exh. WM-CRG at 7-8).

The Company operated under two main principles when allocating the revenues to each rate class (Exh. WM-CRG at 9). First, the Company attempted to reflect the results of the COSS as closely as possible by setting rate class revenue requirements at the Company's equalized rate of return ("ROR") (Exh. WM-CRG at 9). Second, the Company considered rate continuity to temper rate class or individual customer bill impacts where equalized ROR would result in unacceptably large bill impacts, particularly as they relate to any individual rate class versus other rate classes (Exh. WM-CRG at 9).

Along with continuity, the Company also considered the objective of designing distribution rates that reflect, to the extent possible, the fixed nature of distribution costs (Exh. WM-CRG at 12). The Company also considered Department precedent when setting certain

rates, such as setting demand rates that are not based on rolling, ratcheted demands<sup>153</sup>, and proposing inclining block rates for the residential rate classes (Exh. WM-CRG at 13, 15).

The Company proposed an increase to the distribution component of bills of 26.6 percent (Exh. WM-CRG at 10). This percentage increase is based solely on current base distribution revenues and is exclusive of distribution-related tracking revenues, such as for the low-income discount (Exh. WM-CRG at 10). The Company examined the increase or decrease in base distribution revenues necessary to produce the allocated cost of service at WMECo's equalized ROR for each rate class (Exh. WM-CRG at 10-11). For those rate classes for which the equalized ROR is reasonably close to the Company average, WMECo proposes that the percentage distribution increase be set close to the 26.6 percent increase (Exh. WM-CRG at 10). For those rate classes for which the equalized ROR is substantially below the Company average ROR, the Company proposes a distribution rate increase equal to 1.2 times the 26.6 percent average (Exh. WM-CRG at 10). For those rate classes that are currently above the equalized ROR, WMECo proposes a distribution rate increase no less than 0.5 times the average distribution rate increase of 26.6 percent (Exh. WM-CRG at 10-11).

Based on the Company's proposal, the rate classes that would receive the maximum distribution rate increase would be Rate R-1, Rate R-3 and Rate 24 (Exh. WM-CRG at 12).

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<sup>153</sup> Under a demand ratchet, customers are billed every month on the basis of an annual contract demand, or a demand level previously established, instead of the customer's actual demand usage for the billing month as, for example, when billing is based on the peak monthly demand or usage of the customer during the twelve months immediately preceding the particular monthly bill.

The rate classes that would receive the minimum distribution rate increase would be Rate 23, Rate T-2 and Rate T-5 (Exh. WM-CRG at 12).

The Company is proposing a new rate class in this proceeding, Extra Large Primary Service Time-of-Use (Rate T-5) (Exh. WM-CRG at 19). The Company states that it needs this new rate class to address a rate design issue that it has identified related to the Rate G-2 and Rate T-2 rate classes (Exch. WM-CRG at 16). The Company is proposing to modify the customer demand charges for these rate classes in order to mitigate large swings in charges due to small changes in demand levels for customers in these rate classes (Exh. WM-CRG at 16-17). The Company claims that it has redesigned Rate T-2 in such a way as to avoid creating undue bill impacts for all but the very largest customers, hence the need for a new rate class for these largest customers (Exh. WM-CRG at 19). This new rate class, Rate T-5, would be available to business customers whose maximum demands are 2,500 kW or higher (Exh. WM-CRG at 19). Under the Company's proposal, the customer charge would be set at \$3,500 and the distribution demand charge would be set at \$4.90 per kW for all Rate T-5 customers (Exh. WM-CRG-6, at 12).

The Company is also proposing to modify its currently applicable time-of-use ("TOU") rates (Exh. WM-CRG at 19-23). First, the Company proposes to reopen Rates T-0 and T-4, the companion TOU rates for small and medium sized C&I customers, which have been closed to new customers since 1999, to new customers effective with the implementation of new rates in this proceeding (Exh. WM-CRG at 20-21). The Company states that, consistent with the Department's Order in D.T.E. 97-120, WMECo evaluated its existing TOU rates and

considered opportunities to expand the use of such rates by reopening Rates T-0 and T-4 (Exh. WM-CRG at 20-21). Second, the Company proposes to reduce the current 16-hour on-peak (seven a.m. to eleven p.m., weekdays) definition for all TOU rates to an eight-hour period (12:00 p.m. to 8 p.m., weekdays) (Exh. WM-CRG at 21-22). The Company states that this new on-peak period will allow its TOU customers to better take advantage of the lower off-peak rates because the rates will be effective for a longer period of the day (Exh. WM-CRG at 22-23).

WMECo is also proposing to unbundle its streetlighting rates (Rate S-1 and Rate S-2) (Exh. WM-CRG at 24). The Company states that it has performed the unbundling of the streetlighting rates on a revenue-neutral basis (Exh. WM-CRG at 26). The Company states that the unbundling of the streetlighting rates will provide more transparency within streetlight rates (Exh. WM-CRG at 24). In addition, the Company states that unbundling streetlighting rates will allow WMECo to accommodate the partial streetlighting service that it is also proposing in this proceeding (Exh. WM-CRG at 24). The partial streetlighting service, the “midnight option”, would be a voluntary option under which the streetlights would turn on at dusk but then turn off at midnight (Exh. WM-CRG at 26-27). Customers who opt for this service will also have to pay the cost of a programmable device needed to provide this service (Exh. WM-CRG at 27, 29-30). Rate S-1 customers will be charged \$10.00 by the Company while Rate S-2 customers will be required to purchase their own programmable device or photocells (Exh. WM-CRG at 27, 29-30). WMECo proposed this optional service in order to

provide municipalities the opportunity to save on energy costs by choosing the “midnight option” (Exh. WM-CRG at 27).

The Company proposes to increase the customer charges for all rate classes, with the exception of Rate T-2 and Rate T-5 (Exh. WM-CRG-6). These proposed increases are discussed in the individual rate class section, below. In addition, the Company proposes inclining block rates for the R-1, R-2, R-3 and R-4 rate classes (Exh. WM-CRG at 34). For the R-1 and R-2 rate classes (residential non-heating), the Company set the block break at 600 kWh, which the Company states is approximately equal to the average usage per month by customers in these rate classes (Exh. WM-CRG at 34). For the R-3 and R-4 rate classes (residential heating), the Company set the block break at 1,000 kWh, which the Company states is approximately equal to the average usage per month by customers in these rate classes (Exh. WM-CRG at 34). The Company set the rate for the second block for all affected rate classes at 1.0 cent per kWh higher than the rate for the first block (Exh. WM-CRG at 34).

The Company is also proposing to reduce the distribution energy charge to zero for all general service (commercial and industrial) rate classes and instead recover all distribution revenue through the customer charge and the demand charge (Exh. WM-CRG at 49-50). WMECo states that such rate design recognizes the fixed cost nature of distribution service and, therefore, sends a more appropriate price signal to these general service customers (Exh. WM-CRG at 50).

With regard to transmission rates, WMECo is proposing to allocate the costs it incurs for transmission service from wholesale tariffs approved by the Federal Energy Regulatory

Commission (“FERC”), which currently average 1.316 cents per kWh to each of its rate classes using the 12 CP allocation method (coincident peak for all twelve months) (Exh. WM-CRG at 62-63). The Company states that this reallocation will address inequity issues that exist among and within rate classes (Exh. WM-CRG at 63). For those rate classes with a demand charge, the Company’s proposed transmission rate design would result in transmission costs being recovered through the demand charge, rather than through a volumetric charge (Exh. WM-CRG at 63). The Company states that such pricing for transmission service more accurately reflects the fact that transmission expense is driven by peak demands on the system (Exh. WM-CRG at 63).

WMECo is also proposing to eliminate its Rate PR, which is the Company’s standby rate for partial requirements customers (Exh. WM-CRG at 35). The Company states that the elimination of this rate is consistent with the Department’s directives in WMECo’s restructuring proceeding, Western Massachusetts Electric Company, D.P.U. 97-120 (1999) (Exh. WM-CRG at 35).

The Company is also proposing a variety of changes to its tariffs and the way that transmission and transition rates are charged (Exh. WM-CRG at 59-68). Among these proposed changes are an elimination of the Rider CWH for controlled water heaters, the termination of the CPSL tariff and the elimination of the Power Outage Notification Service in the Extended Metering Options tariff (Exh. WM-CRG at 62, 65-66). The Company is also proposing a variety of changes to the language contained within its terms and conditions tariffs (Exh. WM-CRG at 66-68).

2. Positions of the Parties

a. WMIG

The Western Massachusetts Industrial Group (“WMIG”) is generally supportive of the Company’s proposed Rate T-5 (WMIG Brief at 5). In addition, WMIG agrees with the Company’s proposal to reduce the number of peak hours from 16 to eight for TOU customers (WMIG Brief at 5). However, WMIG argues that because the Rate T-5 rate class will be small (20 customers), WMECo should regularly update the class allocation figures used to assign transmission costs to each rate class to avoid unreasonably increasing the transmission rate for the remaining customers in the Rate T-5 rate class should one or more customers leave the Company’s service (WMIG Brief at 6-8; WMIG Reply Brief at 2, 9-10). WMIG states that such updates could occur during annual true-up proceedings (WMIG Brief at 8). WMIG argues that not updating this data on a regular basis would be in opposition to the Department’s rationale for directing decoupling reconciliations be performed on a company-wide basis rather than class by class (WMIG Reply Brief at 10, citing D.P.U. 07-50-A at 54-55).

WMIG also argues that the Company should afford interval-metered customers within the Rate T-2 and Rate T-5 rate classes the opportunity to voluntarily take transmission service under the Federal Energy Regulatory Commission (“FERC”) Open Access Transmission Tariff (“OATT”), which allocates transmission costs to customers on the basis of the 12 CP allocation method (WMIG Brief at 14-15; WMIG Reply Brief at 3). WMIG counters the Company’s argument that NU’s FERC OATT is not at issue in this proceeding by stating that the cost imposed by the Company’s transmission obligation under the OATT and the retail

transmission rate design to collect these costs have clearly been put at issue by WMECo (WMIG Reply Brief at 3).

WMIG maintains that providing this direct billing option would not require the Company to change its OATT or make any filing with FERC (WMIG Brief at 15; WMIG Reply Brief at 1, 4). WMIG argues that the Company's witness acknowledged that WMIG was not proposing any change to any FERC jurisdictional tariff (WMIG Reply Brief at 4-5, citing Tr. 4, at 733). WMIG states that such an option provides Rate T-2 and Rate T-5 customers an opportunity to reduce costs, which will benefit all WMECo customers through reduced transmission costs (WMIG Brief at 14). WMIG avers that this proposal has additional benefits of reducing congestion on the Company's system, lowering locational marginal prices and eventually leading to flatter load profiles (WMIG Reply Brief at 6).

WMIG claims that this transmission billing option for interval-metered customers can be administered based on readily available meter data and is not discriminatory to any other customer or customer class (WMIG Reply Brief at 1). WMIG states that WMECo already is proposing a change to how transmission costs are collected from customers; however, WMIG claims that the Company's rate design is inferior to WMIG's proposal (WMIG Reply Brief at 4). WMIG states that this proposal is no more "discriminatory" than the Company's own proposal, but that WMIG's proposal is more efficient and more likely to produce benefits for all of WMECo's customers (WMIG Reply Brief at 8). For these reasons, WMIG urges the Department to direct WMECo to redesign the transmission portion of the T-2 and T-5 rates to



reflect a pass through of costs incurred by the Company under the OATT (WMIG Reply Brief at 2).

WMIG also urges the Department to approve the Company's use of the 12 CP allocation factors for each rate class to allocate transmission costs rather than allocating transmission costs on a per-kWh basis (WMIG Brief at 16; WMIG Reply Brief at 2, 9). WMIG recommends that the Department direct WMECo to allocate all future increases in transmission costs on the same 12 CP basis (WMIG Brief at 17).

b. UMA

The University of Massachusetts Amherst ("UMA") objects to the Company's proposed rate design for the Rate T-5 rate class (UMA Brief at 14, 19-20). UMA argues that the proposed rate design fails to recognize actual costs and results in unacceptably extreme and disparate bill impacts on some customers (UMA Brief at 15). UMA also states that the proposed rate design does not satisfy the Department's standards for rate design, particularly with respect to rate continuity and "gradualism" (UMA Brief at 15). UMA avers that under the Company's proposed Rate T-5 rate design the proposed increase for this rate class would be borne almost entirely by two customers (i.e., UMA and Solutia) (UMA Brief at 21-22). UMA claims that the Department should examine bill impacts for the individual customers within the Rate T-5 rate class to ensure that the goal of rate continuity is being met for these customers (UMA Brief at 22-23). UMA also contends that the Department should evaluate the Company's rate design proposal solely on the basis of the distribution rate increase experienced by customers rather than in the context of total bill increases (UMA Reply Brief at 2). UMA

argues that because the Company's proposed Rate T-5 increases distribution rates by over 40 percent for some customers while significantly decreasing distribution rates for other customers, WMECo's proposed Rate T-5 should be rejected (UMA Reply Brief at 2).

UMA proposes a redesign of the Company's Rate T-5, which UMA claims is a reasonable way to mitigate the rate impacts on Rate T-5 customers (UMA Brief at 25). Under UMA's proposal, the customer charge for Rate T-5 customers with monthly demand between 2,500 kW and 3,000 kW would be set at \$11,278.28, while for Rate T-5 customers with monthly demand in excess of 3,000 kW the customer charge would be set at \$15,573.72 (Exh. UMA-RAB-3). UMA also proposes a distribution demand charge of \$2.39 per kW for all Rate T-5 customers (Exh. UMA-RAB-3). UMA states that under its proposal monthly distribution bill impacts are more moderate and the distribution rate increases are much more evenly distributed than what the Company proposes (UMA Brief at 25; UMA Reply Brief at 2-3). UMA claims that it has maintained many aspects of the Company's rate design in its alternative proposal (UMA Brief at 24-25). UMA recommends that the Department reject the Company's proposed Rate T-5 rate design and, instead, adopt UMA's alternative Rate T-5 rate design (UMA Brief at 26; UMA Reply Brief at 3).

UMA supports the Company's proposed revenue allocation to each rate class as the proposed allocation reasonably moves rate classes closer to the system average cost of service (UMA Brief at 17). However, UMA does recommend that the Department consider requiring

the use of the minimum size<sup>154</sup> or zero-intercept<sup>155</sup> method described in the 1992 National Association of Regulatory Utility Commissioners (“NARUC”) Electric Utility Cost Allocation Manual to more accurately allocate costs to rate classes in future rate cases (UMA Brief at 18).

c. Solutia

Solutia Inc. (“Solutia”) recommends a two-year transition period before implementing the Company’s proposal to eliminate its Rate PR, which is for partial requirement customers, which refers to customers who have on-site generation (Solutia Brief at 3, 5-7; Solutia Reply Brief at 2). Solutia argues that such a transition period will allow Rate PR customers to adjust operations to minimize adverse bill impacts resulting from these customers changing to service under either Rate T-2 or Rate T-5 (Solutia Brief at 3, 7).

Solutia states that even though the elimination of Rate PR was an issue in WMECo’s restructuring proceeding, D.T.E. 97-120, the Company has done nothing to indicate its plans regarding the elimination of Rate PR since that Order was issued by the Department in 1999 (Solutia Brief at 2; Solutia Reply Brief at 4). Solutia claims that it first heard of the

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<sup>154</sup> The minimum-size method assumes that a minimum size distribution system can be built to serve the minimum loading requirements of the customers, which involves determining the minimum size pole, conductor, cable, transformer and service that is currently installed by the utility (Exh. UMA-RAB-2, at 8).

<sup>155</sup> The zero intercept method or minimum intercept method seeks to identify that portion of plant related to a hypothetical no-load or zero-intercept situation, which involves relating installed cost to current carrying capacity or demand rating, creating a curve for various sizes of the equipment involved, using regression techniques, and extending the curve to a no-load intercept (Exh. UMA-RAB-2, at 10).

Company's plans three weeks before this rate case was filed with the Department (Solutia Brief at 2, 7-11).

Solutia also argues that self-generation customers should have the option of paying actual transmission charges on a direct billing basis under the FERC OATT (Solutia Brief at 11-14; Solutia Reply Brief at 5). Solutia argues that making the OATT available to Rate PR and Rate T-5 customers will benefit not just Solutia and similar customers with load-shifting capabilities, but also will help minimize transmission charges for all WMECo customers (Solutia Brief at 13). Solutia states that the transmission billing proposal put forth by WMIG and supported by Solutia does not require a change in WMECo's filing with FERC (Solutia Reply Brief at 6). Solutia disagrees with the Company's assertion that WMIG's transmission pricing proposal would be administratively burdensome or that the OATT is outside the Department's jurisdiction and should not be considered in this proceeding (Solutia Reply Brief at 6).

Finally, Solutia recommends that the Department encourage or require WMECo and interested parties to engage in discussions regarding a new rate class for self-generators (Solutia Brief at 14; Solutia Reply Brief at 4). Solutia suggests that these discussions commence no more than one month after the Order is issued in this proceedings, and that the parties present a recommendation to the Department not later than the third quarter of 2011 (Solutia Brief at 14).

d. Springfield

Springfield argues that the Company has failed to justify any rate increase to the Rate S-1 and Rate S-2 street lighting rate classes (Springfield Brief at 3-4). Springfield states that because the Company's witness has stated that the Rate S-1 and Rate S-2 rates are not currently reflective of cost to serve, the Department should defer any rate increase to the Rate S-1 and Rate S-2 rate classes until WMECo performs and completes a thorough analysis of these rates (Springfield Brief at 4). Springfield also asserts that the Company should not be allowed a rate increase for the streetlight rate classes because the Company has not demonstrated that it runs its streetlight business in an efficient manner (Springfield Brief at 4-5).

Springfield also notes that the Company's billing system for streetlight customers is incomprehensible (Springfield Brief at 6-7, citing Exh. Springfield-1; Springfield Reply Brief at 2). Springfield also urges the Department to open an investigation on behalf of the municipalities served by WMECo, similar to the investigation conducted by the Connecticut Department of Public Utility Control in 2004, that would focus on possible billing discrepancies for streetlight service (Springfield Brief at 7-8). Springfield urges the Department to direct WMECo to file with the Department for periodic review the Company's new business policies concerning streetlight service (Springfield Brief at 19).

Springfield also takes issue with the amount of the distribution rate increase that WMECo assigned to the streetlight rate classes (Springfield Brief at 14-15). Springfield states that it is in no position to absorb an increase in excess of \$300,000 for street lighting, nor are other municipalities in the Commonwealth (Springfield Brief at 15). Springfield also objects to

the Company's proposal to increase the attribute charges<sup>156</sup> under the Rate S-1 tariff by forty percent (Springfield Brief at 15; Springfield Reply Brief at 2).<sup>157</sup> Springfield argues that the 1.5 multiplier used by the Company to calculate this 40 percent increase is arbitrary and lacks the support of relevant underlying cost data (Springfield Brief at 16). Springfield also maintains that the Company's proposed 40 percent increase that applies to attributes associated with premium decorative lighting is particularly egregious since the Company itself promoted this premium service as a means of beautifying downtown areas and business districts (Springfield Brief at 17-19). Springfield requests that the Department reject any and all such unreasonable increases to these charges (Springfield Brief at 18-19).

Springfield avers that the delivery component of the Company's streetlight rates should be charged on a per-watt demand charge basis (Springfield Brief at 9-11). Springfield takes issue with the Company's representation that Springfield has "a continuing lack of recognition" that Rates S-1 and S-2 are different, stating that Springfield made multiple statements on brief that differentiates between delivery service and the rental component of S-1 rates (Springfield Reply Brief at 1). Springfield also states that WMECo's assertion that Springfield has contended that equipment rental costs are usage based is not supported by the record (Springfield Reply Brief at 1-2). As proposed, Springfield argues that the Company's Rate S-1

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<sup>156</sup> The attribute charges are those charges that apply to the lamps, luminaires, poles and accessories used by Rate S-1 customers (Exh. WM-CRG-1, Proposed M.D.P.U. No.1009Y).

<sup>157</sup> The forty percent increase results from multiplying the 26.6 percent increase by the 1.5 multiplier.

tariff is neither just nor reasonable (Springfield Brief at 12). Consequently, Springfield recommends that the Department defer any change to the Rate S-1 and Rate S-2 tariffs until the Company can implement new tariffs that bear a relationship to the cost to serve (Springfield Brief at 12). Finally, Springfield argues that the Rate S-1 streetlight tariff should be reduced by 8.07 percent, which is based on a uniform 0.85 cents per-watt charge for all varieties of streetlight (Springfield Brief at 17, 19).

e. City of Easthampton

The City of Easthampton (“Easthampton”) claims that the Company’s proposed Rate S-2 tariff is unjust and unreasonable and should be rejected by the Department (Easthampton Brief at 4-5, 10; Easthampton Reply Brief at 3). Easthampton argues that the Department cannot approve the proposed Rate S-2 tariffs because the charges have no relationship to underlying consumption (Easthampton Brief at 5; Easthampton Reply Brief at 3). Easthampton states that it has had a longstanding issue with the lack of a rational relationship between consumption and WMECo’s Rate S-2 charges, which it has brought to the attention of both the Company and the Department (Easthampton Brief at 5). Easthampton claims that it was advised by the Company that such an issue could be addressed in the Company’s next general rate case (Easthampton Brief at 5). Easthampton urges the Department to address in this proceeding the inappropriateness of WMECo’s failure to base streetlight rates on consumption and costs (Easthampton Brief at 5). Easthampton recommends that the Department require WMECo to submit Rate S-2 rates that reflect streetlight electricity consumption, taking into

consideration street lighting's flat load profile and predominantly off-peak usage (Easthampton Brief at 8).

Easthampton further argues that consumption-based streetlight rates are important in promoting energy conservation and sending the proper price signal to streetlight customers (Easthampton Brief at 8). Easthampton states that it would be ironic for the Department to countenance pricing that is not based on consumption at the same time that the Department is implementing energy efficiency aspects of the Green Communities Act and creating demand-side management incentives through decoupling (Easthampton Brief at 9; Easthampton Reply Brief at 6). Easthampton states that the Department cannot find WMECo's proposed Rate S-2 streetlight distribution rates to be just and reasonable, and that therefore they should be rejected (Easthampton Reply Brief at 4,7).

Easthampton argues that the Department should not use the possibility of addressing issues in future rate cases as a rationale to allow unfair rate increases in the instant proceeding (Easthampton Reply Brief at 5). Easthampton recommends that the Department reject any streetlight rate increases in this proceeding (Easthampton Reply Brief at 5). Easthampton argues that rejection of streetlight rates here would provide WMECo with a real monetary incentive to develop and propose fair, rational and comprehensible streetlight rates (Easthampton Reply Brief at 5).

f. DOER

DOER supports the Company's proposed inclining block rates for the residential rate classes and urges the Department to approve them (DOER Brief at 6-7). DOER does object to



the Company's proposal to eliminate the distribution energy charges for the commercial and industrial rate classes (DOER Brief at 7). DOER recommends that the Department reject the Company's proposal and, at a minimum, require the Company to maintain the existing level of distribution energy charges, thereby partially mitigating the significant increases in demand charges proposed by WMECo (DOER Brief at 7).

DOER supports WMIG's proposal for voluntary direct billing of transmission services for interval-metered accounts (DOER Brief at 7). DOER also argues that the Company should base Rate S-2 rates on a measure of the consumption of streetlights, which would provide an incentive for cities and towns to improve the efficiency of their lighting (DOER Brief at 9).

DOER believes that WMECo has given too little weight to the consideration of rate continuity, stability and the Commonwealth's energy policies in its rate design proposals as they affect the Company's largest combined heat and power ("CHP") customers (e.g., UMA and Solutia) (DOER Brief at 10). DOER states that because CHP is an important aspect of the Commonwealth's energy policies, it is vital how current and future CHP customers are charged (DOER Brief at 10-11). Consequently, DOER recommends that the Department open a generic proceeding to determine the appropriate service and rates for CHP customers that would provide a better balance of traditional rate design principals with the Commonwealth's energy policies and initiatives (DOER Brief at 11). In addition, DOER supports postponing the elimination of Rate PR until a clear policy is established for CHP customers (DOER Brief at 11).

g. ENE

ENE objects to the Company's proposal to eliminate the distribution energy charges from its commercial and industrial rate classes (ENE Brief at 7-10; ENE Reply Brief at 2). ENE states that the Company's proposal does not promote a reduction in energy consumption (ENE Brief at 8; ENE Reply Brief at 1-2). ENE claims that it is important that customer rates maintain price signals that support customer efforts to reduce energy consumption as well as peak demand (ENE Brief at 8; ENE Reply Brief at 2). ENE states that while the commodity energy charge sends an important price signal to customers, the distribution energy charge also sends significant price signals and should be retained in order to support the state's energy policy goals (ENE Reply Brief at 4). ENE recommends that, in order to support the Commonwealth's energy policy objectives, the Department should modify the Company's rate design by reducing or even eliminating the proposed increase in fixed demand and customer charges and maintaining a per-kWh energy charge for the commercial and industrial rate classes (ENE Brief at 10).

ENE supports DOER's suggestion that the Department address the elimination of Rate PR by opening a generic proceeding on the service and pricing issues related to CHP customers (ENE Reply Brief at 5). ENE states that because CHP customers constitute an important component of the Commonwealth's Climate Implementation Plan<sup>158</sup>, any rate design that affects CHP customers should be closely reviewed (ENE Reply Brief at 5). Alternatively,

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<sup>158</sup> The Climate Implementation Plan provides a framework for implementing the Global Warming Solutions Act (St. 2008, c 298).

ENE supports Solutia's proposed extension of the transition period to allow the affected Rate PR customers an opportunity to adjust to the rate impacts of eliminating Rate PR (ENE Reply Brief at 5-6).

h. Attorney General

The Attorney General contends that WMECo's rate philosophy and rate design are not fully consistent with the Department's long-standing rate setting principles (Attorney General Brief at 140). The Attorney General suggests that the Department direct WMECo to develop a plan to fix many of the rate design issues identified in this case (Attorney General Brief at 141). The Attorney General recommends that WMECo undertake a revenue-neutral rate redesign in 2013, when the Company's transition charge is scheduled to decrease to \$0.005 per kWh (Attorney General Brief at 141).

The Attorney General agrees with the Company that there is consensus on such issues as revenues allocation, Rate T-2 rate design, TOU rates and the need to balance rate design objectives. However, the Attorney General disagrees with the Company that there is consensus concerning cost based rates and the termination of Rate PR (Attorney General Reply Brief at 65).

The Attorney General objects to the Company's proposal to include inclining block rates for the residential rate classes and recommends that the Department reject these rates (Attorney General Brief at 144-146). The Attorney General contends that the inclining block rates are not cost based and will result in higher rate increases for larger customers whether their usage is efficient or inefficient (Attorney General Brief at 145). The Attorney General

avers that these inclining block rates violate the Department's ratemaking principle of efficiency because they send improper, non-cost based, price signals to customers (Attorney General Brief at 146). The Attorney General also claims that inclining block rates violate the Department's goal of simplicity because it is difficult for customers to determine when their consumption may be moving into the higher priced tailblock (Attorney General Brief at 147).

As an alternative to inclining block rates, the Attorney General has proposed seasonal residential rates (Attorney General Brief at 146, citing Exh. AG-LS at 4). Under the Attorney General's proposal, flat summer rates would be set one cent higher than flat winter rates, because electric distribution costs as well as generation costs are driven by summer load (Attorney General Brief at 146). The Attorney General claims that this alternative would send appropriate price signals to customers without creating rate continuity concerns (Attorney General Brief at 146; Attorney General Reply Brief at 66).

The Attorney General opposes the Company's proposal to increase the customer charges for many of its rate classes (Attorney General Brief at 147-148). The Attorney General states that these proposed customer charges are higher than the customer costs established in the Company's embedded COSS (Attorney General Brief at 147-148). In addition, the Attorney General asserts that the proposed increase to the Rate R-1 rate class results in significant intra-class bill impact differences, in violation of the principle of rate continuity (Attorney General Brief at 148). According to the Attorney General, this proposed increase also violates the principle of equity because small customers will be charged more as a result of a higher monthly customer charge (Attorney General Brief at 148). The Attorney

General recommends no increase to the Rate R-1 customer charge (Attorney General Brief at 148).

The Attorney General further recommends the reduction of the customer charge for Rate 23 (controlled water heater) from \$18 to \$10 (Attorney General Brief at 148-149). The Attorney General also recommends that the Company remove from its allowed revenue requirement the revenue reduction resulting from this reduced customer charge as a penalty for not maintaining the demand response potential of controlled water heaters (Attorney General Brief at 149).

The Attorney General opposes the elimination of distribution energy charges from the general service rate classes (Attorney General Brief at 149-151). The Attorney General argues that the elimination of these charges will reduce these customers' incentive to conserve energy, and that this shift toward fixed charges is not consistent with the principle that rates should incent efficient behavior (Attorney General Brief at 150-151; Attorney General Reply Brief at 66). The Attorney General also avers that the elimination of these charges will result in much higher bill impacts on customers with poorer load factors, which is not substantiated with evidence that poor load factor customers create higher costs for the Company (Attorney General Brief at 151). The Attorney General also states that while it is true that general service customers will still pay energy charges for non-distribution service, these customers will also observe that the energy charges are decreasing, which allows these customers to use more energy while still incurring lower bills by shifting load off of their monthly peak loads (Attorney General Reply Brief at 67).

The Attorney General states that the elimination of Rate PR will result in significant adverse bill impacts on those Rate PR customers (Attorney General Brief at 151).

Consequently, the Attorney General recommends that the Department require the Company to phase in any rate increase to the Rate PR customers and defer collection of any revenue deficiency allocated to those customers until such time as the Department has approved these phasein rates (Attorney General Brief at 151; Attorney General Reply Brief at 67).

The Attorney General supports WMIG's proposal that the Company offer optional transmission billing through the FERC OATT for interval-metered general service customers (Attorney General Reply Brief at 67-68). The Attorney General states that the details of this optional tariff need to be clear, comprehensive and precise to ensure this service is available to all qualifying customers and that the reconciliation of all transmission costs are addressed appropriately (Attorney General Reply Brief at 68). The Attorney General suggests that the Department direct the Company to file: (1) a proposal for a fully reconciling, optional direct billing transmission cost recovery mechanism; and (2) all necessary modifications to its Transmission Cost Adjustment tariff (M.D.T.E. No. 1028-B), in order to charge all customers for costs not incurred based on system peak and to appropriately reconcile all under/over recoveries and true-up charges (Attorney General Reply Brief at 68-69). The Attorney General suggests that this filing should be the subject of a separate investigation that allows all interested parties to comment and present alternatives for investigation, comment and review (Attorney General Reply Brief at 69).

The Attorney General supports the Company's proposal to reallocate the transmission rate on the basis of a 12 CP allocator (Attorney General Brief at 152). The Attorney General also supports WMIG's recommendation that the Department should ensure that the Company updates the 12 CP allocators annually concurrent with the normal January 1 update of the transmission rate (Attorney General Brief at 152).

The Attorney General contends that the Company's proposed streetlight tariffs, Rate S-1 and Rate S-2, fail to meet the principles of simplicity, continuity, and fairness (Attorney General Brief at 153). The Attorney General also asserts that because the Company has not demonstrated that these rates are based on current and accurate costs of service for the various components of the tariffs, they violate the principles of continuity and fairness (Attorney General Brief at 153, 154-156). As a result, the Attorney General recommends that the Department leave the Company's streetlight rates unchanged pending additional study, investigation and analysis (Attorney General Brief at 154). The Attorney General states that this investigation should be part of the revenue-neutral rate redesign in 2013 proposed earlier by the Attorney General (Attorney General Brief at 154).

The Attorney General claims that the evidence demonstrates that the Company's streetlight bills and tariffs are incomprehensible to the municipal customers, and therefore violate the principle of simplicity (Attorney General Brief at 153, 157-159, citing RR-AG-67 and Exh. Springfield-1). The Attorney General recommends that the Department require the Company to modify its tariffs and billing system as necessary to provide streetlight customers

with bills that are intelligible and allow a customer to independently audit its electric bill (Attorney General Brief at 159).

i. Company

WMECo states that its rate design proposal was designed with a balance of the Department's rate structure and design goals in mind (Company Brief at 230, 254-255; Company Reply Brief at 45). WMECo states that there are instances in which these rate design goals can be in conflict with each other (Company Brief at 230, 254). For example, the Company states that the heart of the intervenor concerns in this proceeding stems from a conflict between fairness (i.e., that customers pay no more than their cost to serve) and rate continuity (i.e., that there is gradualism in moving rates toward the fairness goal) (Company Brief at 230). The Company states that any rate change will produce "winners" and "losers," and that the Company has struck the most appropriate rate design balance with its proposed rate design (Company Brief at 255).

The Company argues that fairness should be among the Department's highest priorities when assessing WMECo's rate design proposal (Company Brief at 231). The Company states that fairness is present in the rate design proposal in the move toward cost-based rates and in the proposal to design rates that reflect the fixed-cost nature of distribution service (Company Brief at 231). The Company argues that because it has been almost 20 years since WMECo last was before the Department with a fully adjudicated base rate case, there are customer classes that have been paying far less than their cost to serve (Company Brief at 231).



WMECo claims that rate design in this proceeding must make significant corrections to these customer inequities (Company Brief at 231).

WMECo states that there are a number of rate design issues on which the intervenors and the Company agree, such as: (1) revenue allocation; (2) Rate T-2 rate design; (3) the reopening of TOU rates; (4) revising the peak hours for TOU rates; (5) moving toward cost-based rates; (6) the elimination of Rate PR in its current form; (7) the provision of wholesale service for transmission generators; and (8) the need to balance rate design objectives (Company Brief at 232-233).

The Company states that it considered the principle of rate continuity when designing rates to temper rate class and customer bill impacts where a fully equalized ROR would result in unacceptably large bill impacts (Company Brief at 237). The Company avers that fairness dictated that all rate classes share in the proposed distribution rate increase (Company Brief at 238). Consequently, even those rate classes that would otherwise receive a rate decrease in order to move toward cost-based rates would receive an increase under the Company's proposal (Company Brief at 238).

Regarding the Rate T-5 rate design, the Company explains that it based its proposed rate design on the need for individual customers, not just the class as a whole, to contribute their fair share toward the cost to serve (Company Brief at 239). The Company acknowledges that within the Rate T-5 class load factors vary widely, which has significant implications for the bill impacts on individual customers (Company Brief at 239-240). In an attempt to balance the rate design goals of fairness and continuity, the Company argues that it proposed to move

the demand charge for the Rate T-5 class closer to the cost of service demand charge as determined in the equalized COSS (Company Brief at 240).

WMECo avers that rate continuity must be evaluated in the context of a customer's total electricity bill, not just with respect to the distribution component of the bill (Company Brief at 240). The Company states that when viewed on a total bill basis, the lack of rate continuity that is alleged by certain parties to this proceeding is far less dramatic than those parties claim (Company Brief at 240).

WMECo argues that UMA's alternative rate design proposal for Rate T-5, which includes a much smaller demand charge, would violate the principle of fairness (Company Brief at 240). The Company states that UMA's proposal does not make adequate progress toward the Rate T-5 demand charge indicated by the equalized COSS (Company Brief at 240-241). The Company claims that its proposal to make a significant move toward, but remain considerably short of, cost-based rates strikes the best possible balance between rate equity among all customers and rate continuity from a total bill perspective (Company Brief at 241).

WMECo states that its proposal to unbundle streetlight rates is necessary to accommodate the implementation of the partial street lighting service proposed in this case as well as to provide greater price transparency within streetlight rates (Company Brief at 242). The Company states that it proposed the "midnight option" partial street lighting service in order to give municipalities an additional tool to reduce their electricity bills (Company Brief at 242-243). The Company also avers that the midnight option can result in substantial bill

savings as well as reduce energy consumption, which is consistent with the objective of energy conservation (Company Brief at 243).

The Company states that the proposed revenue responsibility for the Rate S-1 and Rate S-2 rate classes, as laid out in the equalized COSS, should not be in dispute (Company Brief at 243). The Company counters Springfield's statement that WMECo's COSS results are contradicted by the Company's own witness, noting that the Company's statement that "the equalized COSS results speak for themselves," only refers to the total revenues responsibility of Rates S-1 and S-2 (Company Reply Brief at 46). The Company further contends that Springfield's statement is not backed up by the evidentiary record (Company Reply Brief at 46).

The Company has proposed equivalent rate increases to both Rate S-1 and Rate S-2 for the delivery portion of distribution service, and has proposed an additional increase to Rate S-1 charges based on a separate increase related to the dedicated streetlight equipment used solely by Rate S-1 customers (Company Brief at 244). The Company states that in order to address continuity issues, it applied the fixture-specific rate increases on an across-the-board basis, which retains the existing rate relationship between fixtures (Company Brief at 244). The Company avers that had it applied different rate increases to the various fixture-specific rates, there would have been a wide range of bill impacts within Rates S-1 and S-2 (Company Brief at 244).

While the Company acknowledges that streetlight rates are not perfectly aligned with consumption, WMECo maintains that there has been no showing that these rates cannot be

found to be just and reasonable (Company Brief at 244). The Company states that WMECo did not include a complete redesign of streetlight rates here because the Company did not want to layer the potential bill impacts that could result from that rate redesign on top of the general rate increase (Company Brief at 245; Company Reply Brief at 46).

WMECo disputes DOER's assertion that Rate S-2 customers will have no incentive to improve the efficiency of street lighting (Company Brief at 245). The Company states that the energy supply price and other non-distribution portions of the Rate S-2 customer's bill will continue to provide substantial conservation price signals for Rate S-2 customers (Company Brief at 245).

WMECo states that there seems to be a continuing lack of recognition that cost responsibility for Rates S-1 and S-2 are very different (Company Brief at 246). The Company acknowledges that there is a common delivery component of service for both classes, but that unlike Rate S-2, the majority of the Rate S-1 cost responsibility rests with the dedicated streetlight equipment and related services provided by WMECo for Rate S-1 customers (Company Brief at 246). Because of this difference, the Company states that there is no basis for charging for equipment-specific costs using a demand or usage based charge (Company Brief at 246).

The Company states that its proposed inclining block rates for the residential rate classes are consistent with Department precedent (Company Brief at 247). The Company states that its proposed inclining block rates are similar to those proposed by National Grid in D.P.U. 09-39 (Company Brief at 247). WMECo states that the Attorney General's alternative

rate design (seasonal rates) for the residential rates classes would create the same problem that the Attorney General uses to argue against inclining block rates, which is that these rates will result in higher rate increases for larger customers (Company Brief at 247-248; Company Reply Brief at 46-47). The Company contends that its proposal for inclining block rates is superior to the alternative residential rate design proposed by the Attorney General (Company Reply Brief at 47).

Regarding the elimination of Rate PR, the Company states that its proposal to migrate Rate PR customers to their otherwise applicable rates is appropriate (Company Brief at 249; Company Reply Brief at 48). However, should the Department decide that, for rate continuity purposes, a phase-out of Rate PR is appropriate, WMECo would not object as long as the reduced revenue associated with the phase-out is recovered from other rate classes, so that the Company has the ability to recover the full, authorized revenue requirement approved in this case (Company Brief at 249-250; Company Reply Brief at 48).

The Company supports WMIG's proposal to update transmission rate allocators in the annual transmission rate filings (Company Brief at 250). WMECo states that because transmission costs are driven by peak demand on the system, it is more appropriate to allocate transmission rates each time the allocators change, based on current class demand characteristics (Company Brief at 250-251).

However, the Company does not support WMIG's proposal to allow interval-metered commercial/industrial customers to opt into the FERC OATT for retail transmission service (Company Brief at 251). First, the Company states that NU's FERC jurisdictional tariff is

outside the scope of this proceeding, so WMIG's proposal is not properly before the Department (Company Brief at 251). Second, the Company claims that WMIG's proposal would be a dramatic departure from traditional transmission rate design (Company Brief at 251). WMECo avers that WMIG's proposal would be highly complex for the Company and would require significant modification to NU's FERC jurisdictional transmission tariffs (Company Brief at 251; Company Reply Brief at 49, 51). The Company states that these tariffs apply not only to WMECo but also to Connecticut Light and Power Company and Public Service of New Hampshire, so changes to these tariffs just for WMECo may not be practical (Company Brief at 252). The Company states that should the Department be inclined to explore WMIG's proposal, the Department should conduct an inquiry in a generic proceeding involving all Massachusetts electric distribution companies (Company Reply Brief at 49, 51).

The Company also asserts that should the Department accept WMIG's proposal, because of the regional nature of transmission service and pricing, all other customers in New England will eventually be allocated the costs avoided by WMECo's industrial customers (Company Reply Brief at 49). For this reason, eventually all industrial customers in Massachusetts and every other transmission owner under ISO-New England, Inc.'s jurisdiction can be expected to demand equal treatment (Company Reply Brief at 50).

WMECo also argues that making these retail transmission rates available only to those customers that have interval meters is unfair to those customers that do not have the metering capability and, therefore, would not have the opportunity to take advantage of the FERC

jurisdictional rates (Company Brief at 252). The Company claims that such treatment could be considered undue rate discrimination (Company Brief at 252). The Company states that the nature of rate design is such that costs to serve many customers are blended together to develop class rate design (Company Brief at 252). The Company states that retail transmission rates are designed in the same fashion, so it would be unfair if some customers within a rate class could potentially avoid paying a portion of the cost to serve a rate class as a whole (Company Brief at 252-253).

The Company maintains that its proposal to eliminate the per-kWh distribution charges for the general service rate classes is reasonable as it better reflects the fixed cost nature of utility distribution service (Company Brief at 253). The Company argues that distribution service costs are driven mainly by demand-related factors, rather than being a function of kWh consumption (Company Brief at 253). The Company avers that because distribution rates represent less than half of a customer's total bill, there are still ample price signals that encourage energy conservation (Company Brief at 253). WMECo states that a majority of non-distribution charges are based on per-kWh rates, which provide ample incentive for customers to conserve electricity (Company Brief at 253-254; Company Reply Brief at 48). The Company argues that ENE and the Attorney General have opposed this proposal based on policy goals rather than on the grounds of cost causation (Company Reply Brief at 47). WMECO avers that demand containment and reduction are an important part of the overall energy efficiency policy (Company Reply Brief at 47, citing D.P.U. 07-50-A at 27).

The Company also contends that its proposed increases to the residential customer charges are reasonable and should be approved by the Department (Company Brief at 254).

### 3. Analysis and Findings

The Department must determine, on a rate class by rate class basis, the proper level at which to set the customer charge and delivery charges for each rate class, based on a balancing of our rate design goals. 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, e.g., D.T.E. 02-24/25, at 256; D.T.E. 01-56, at 139; D.P.U. 92-250, at 193-194; D.P.U. 92-210, at 214. This allocation method satisfies the Department's rate structure goal of fairness. Nonetheless, the Department must balance its goal of fairness with its goal of continuity. To arrive at this balance, we have reviewed the changes in total revenue requirements by rate class and bill impacts by consumption level within rate classes. Based upon our review, we accept the Company's proposal to address the goal of continuity, whereby no rate class shall receive an increase less than 50 percent or greater than 120 percent of the overall distribution rate increase. The Department finds that 50 percent to 120 percent is an appropriate bandwidth that meets our rate structure goals of fairness and continuity by ensuring that: (1) the final rates for 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. The Department directs WMECo to provide in its compliance filing a copy of its COSS results, rerun using all the costs approved in this



proceeding. In addition, to determine the portion of the revenue requirement to be collected from each rate class, the Department directs the Company to allocate the amount above the 120 percent cap to the non-capped rate classes based on the ratio of the class revenue requirement at equalized rates of return to the sum of the class revenue requirements at equalized rates of return for all non-capped rate classes, as illustrated on Schedule 10.

Regarding the proposed increases to the customer charges for all rate classes (except Rate T-2), the Department has examined the bill impacts that will result from these proposed increases. In addition, the Department has reviewed the evidence regarding the unitized revenue requirement for customer-related costs for each rate class. The Department is also mindful of the goal of balancing economic efficiency with the goal of sending the proper price signals for end-use efficiency. The Department must consider as well the impacts that changes to the customer charge will have on low-use customers. Based on the evidence and the balancing of these goals, the Department finds that the Company's proposed customer charges are not reasonable and are hereby rejected. In this case, the Department finds that lowering the customer charge so that more revenues will be recovered through the volumetric charges best balances our rate design goals. The Department will specify what the customer charge shall be for each rate class in Section XI. E, below.

In D.P.U. 08-35, at 249, the Department 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. To best meet these goals, the Department has found that rates should have an

inclining block rate structure and any resulting loss in revenues from declining sales should be recovered through a decoupling mechanism as discussed in D.P.U. 07-50-A at 59-60.

WMECo has properly included inclining block rates as part of its proposed residential rate design. The arguments raised by the Attorney General in this proceeding were addressed by the Department in D.P.U. 08-35. The Department also determined that distribution rates with an inclining price structure are best designed to meet these goals. D.P.U. 03-35, at 249. The same considerations apply here. Therefore, the Department finds that WMECo's proposed inclining block rate design comports with the Department's directives in both D.P.U. 08-35 and D.P.U. 07-50-A.

The Department notes that the Attorney General's alternative proposal for flat but seasonally differentiated rates, while not accepted in this proceeding, may offer an advantage relative to inclining block rates in that they may provide more clarity regarding when customers would experience the higher rate. We decline to accept this proposal primarily because the record does not demonstrate that seasonally differentiated rates offer sufficient advantages over inclining block rates for WMECo's ratepayers. Going forward, the Department will consider seasonally differentiated rates, as well as other dynamic pricing alternatives to inclining block rates, in light of the following questions. Which rate design best reflects the underlying costs of the distribution system? Which rate design is most likely to encourage customers to consume electricity most efficiently? How should the lessons from the dynamic pricing components of the on-going smart grid pilot programs be used in establishing alternative rate designs. See Fitchburg Gas and Electric Light Company d/b/a Unitil, D.P.U.

09-31 (2010); Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, D.P.U. 09-32 (2010); and NSTAR Electric Company, D.P.U. 09-33 (2010).

D. General Rate Design Issues

1. Re-Opening TOU Rates and Changing Peak Hours

a. Introduction

The Company proposes that Rate T-0 and Rate T-4 be opened to new applicants (Exh. WM-CRG at 20-21). Both of these rates have been closed to new customers since 1999 (Exh. WM-CRG at 20-21). The Company also proposes to change the definition of on-peak hours for TOU rates (Exh. WM-CRG at 21-22). The current definition of on-peak hours is from 7:00 a.m. to 11:00 p.m. weekdays, which the Company proposes to change to 12:00 p.m. to 8:00 p.m. weekdays (Exh. WM-CRG at 21-22).

b. Analysis and Findings

No party objected to either of these proposals. The proposed peak hours are a more accurate representation of the times at which WMECo experiences its peak loads (Exh. WM-CRG at 22). Reducing the number of on-peak hours is a reasonable proposal that will provide C&I customers the option to take service under a TOU rate with a greater opportunity for savings through shifting load to the off-peak hours. This increased opportunity for savings will likely generate an increased demand for these rates. In addition, opening the TOU rates to new applicants promotes the efficient use of electricity. Accordingly, the Company's proposal to open optional Rate T-0 and Rate T-4 to new applicants is reasonable. Therefore, the Department approves the Company's proposal to re-open Rate T-0 and Rate T-4 to new applicants and WMECo's proposal to change the definition of on-peak hours for TOU rates.

2. Volumetric Charges for General Service Rate Classes

a. Introduction

As mentioned above, the Company is proposing to reduce the distribution energy charge to zero for all general service rate classes and instead recover distribution costs through either the customer charge or the demand charge (Exh. WM-CRG at 49-50). WMECo states that such rate design recognizes the fixed cost nature of distribution service and, therefore, sends a more appropriate price signal to these general service customers (Exh. WM-CRG at 50).

b. Analysis and Findings

In the Department's decoupling Order, D.P.U. 07-50-A, we stated that decoupling revenues should be reconciled through the volumetric component of the distribution charge, because that rate design would provide customers with a greater incentive to reduce their energy consumption and would further the goal of promoting demand resources. D.P.U. 07-50-A at 59. Allowing the Company to reduce the volumetric distribution charge to zero in this proceeding is contrary to the Department's findings in D.P.U. 07-50-A. A primary rate principle for the Department is to provide customers with the appropriate incentive to consume electricity as efficiently as possible.

In addition, while there is certainly an amount of distribution costs that is fixed, it is clear that not all distribution costs are fixed, because some distribution costs are driven by peak demands on circuits. Although pricing distribution service on demand usage may support the cost-to-serve principle, it is not the best rate structure to promote energy efficiency.

Therefore, it would be inappropriate to adopt the Company's proposal to recover all distribution costs through either customer charges, which are fixed, or demand charges, which are more difficult to avoid through energy efficiency.

Another factor in the Department's decision is the design of the TOU rates proposed by the Company in this proceeding. Given the proposed changes to the way the distribution, transmission, and transition costs are recovered through rates, the TOU rates proposed by the Company provide a price signal to consume energy during off-peak periods only through the transition charge (See Exh. WM-CRG-1, Proposed M.D.P.U. Nos. 1005U, 1007U and 1008U). Since the transition charge will only decrease over time, eventually decreasing to zero, such rate design for TOU rates will ultimately send no price signal to TOU customers.

For these reasons, the Department rejects the Company's proposal to reduce the volumetric distribution charge for each of the general service rate classes to zero. The Company is hereby directed to maintain the volumetric distribution charges at their current levels when designing distribution rates in compliance with this Order. Given that the volumetric distribution charges will remain unchanged, the entire increase to distribution rates for the general service rate classes should be applied to the demand and customer charge components of distribution rates. Therefore, all customers will continue to be charged a volumetric charge for distribution service. The Department also directs WMECo, when designing the rates for the individual rate classes, to truncate the variable per kWh charges after five decimal places and truncate the variable per kW demand charges after two decimal places so that rates are designed to collect no more than the allowed revenue requirement.

3. Optional Interval Metered Transmission Pricing

a. Introduction

WMIG proposed that the Department direct the Company to offer interval-metered customers within the Rate T-2 and Rate T-5 rate classes the opportunity to take transmission service under the FERC OATT, which allocates transmission costs to customers on the basis of the 12 CP allocation method (Exh. WM-ES at 6-8; WMIG Brief at 14-15; WMIG Reply Brief at 3). Under WMIG's proposal, each month the Company would assign transmission costs directly to individual customers based on their actual demand at the time of the system peak that month (Exh. WM-ES at 7). WMIG states that this direct billing option gives these customers the ability to "peak shave" through load shifting, with the benefits flowing directly to the customer (Exh. WM-ES at 7).

b. Analysis and Findings

Transmission pricing is an issue that has implications not just in the WMECo service territory but also in the rest of the state and the region. WMIG's proposal is a case of first impression for the Department. While there has been discussion on the record regarding WMIG's proposal, it remains unclear what the magnitude of the potential savings is for those customers who opt to take service under this direct billing option. It is also unclear how much of an administrative burden this proposal would impose on the Company. Further, it is unclear what the implications of this approach would be if it were applied to all electric distribution companies in Massachusetts.

Because of these remaining questions, the Department is not convinced that accepting WMIG's proposal for WMECO customers at this time would serve the public interest. Therefore, the Department rejects this proposal.

Nonetheless, the Department recognizes that the WMIG proposal may have merit. In order to ensure that the outstanding questions that stem from this proposal are addressed, the Department directs the Company, after consulting with WMIG (and all other interested parties) to file a report in the Company's next reconciliation filing that details the estimated savings that could be achieved by customers who opt for direct billing of transmission service. In addition, this report should provide a detailed description of the changes that the Company would need to make to accommodate the direct billing option. This description should include a cost estimate for these changes. Finally, this report should discuss any implications that the direct billing option would have on regional transmission pricing issues. The Department will use this report to inform future deliberations on this proposal for WMECo's service territory and other Massachusetts electric distribution companies.

4. Transition Charge Adjustment

a. Introduction

WMECo is proposing to adjust the transition charge for general service customers to partially offset the impact of other changes to rate design for these rate classes (Exh. WM-CRG at 64-65). Because the Company is proposing to eliminate per-kWh charges for distribution service, WMECo is proposing to eliminate the demand charge for the transition charge, and instead recover the transition charge on a per-kWh basis (Exh. WM-CRG at 64).

For TOU tariffs, the Company is proposing to set the block rates such that 75 percent of the transition charge revenues are recovered through the on-peak rate and 25 percent of the revenues are recovered through the off-peak rate (Exh. WM-CRG at 64). WMECo states that this proposed rate recovery for the transition charge will strengthen energy efficiency price signals to both TOU and non-TOU general service customers (Exh. WM-CRG at 64-65).

b. Analysis and Findings

At the outset of the restructuring of the electric industry, the transition charge was established and was designed as a volumetric cents per kWh charge for the residential rate classes, but some C&I rate classes paid the transition charge as a volumetric dollar per kW charge. Recovering transition costs through a cents per kWh charge for the C&I rate classes, although a desirable result, was not possible as companies were also under the directive that all customers had to receive a ten percent discount on their electric bills, which limited the parameters of rate design.

In this proceeding, the Company is proposing to recover transition costs through a volumetric cents per kWh charge. No party objected to this proposal. The Department finds that this proposal is reasonable and consistent with the intent of the Electric Restructuring Act and the Commonwealth's energy efficiency goals. Therefore, the Company is directed to implement its proposal to collect transition revenues through a volumetric per kWh charge for the C&I rate classes.



5. Transmission Pricing

a. Introduction

WMECo is proposing to use the 12 CP allocator method to allocate the costs to provide transmission service it incurs under FERC-approved wholesale transmission rates. (Exh. WM-CRG at 62-63). The Company states that this allocation method will address inequity issues that exist among and within rate classes (Exh. WM-CRG at 63). For those rate classes with a demand charge, the Company's proposed transmission rate design would result in transmission costs being recovered through the demand charge, rather than through a volumetric charge (Exh. WM-CRG at 63). The Company states that such pricing for transmission service more accurately reflects the fact that transmission costs are driven by peak demands on the system (Exh. WM-CRG at 63).

b. Analysis and Findings

The Company's proposal to use the 12 CP allocation method for transmission rates is generally supported by the parties to this proceeding (see, e.g., Attorney General Brief at 152; WMIG Brief at 16; WMIG Reply Brief at 2, 9). This proposed allocation method would send a more accurate price signal to general service customers regarding the true cost of transmission service and be consistent with how FERC designs transmission rates, under which WMECo receives wholesale transmission service. The Department finds that the use of the 12 CP allocation method for the allocation of transmission costs is reasonable and, therefore, it is approved.

The question was raised as to how often the Company should update the data that are used to derive these allocators. An annual update filed with the Company's annual transmission reconciliation filing would provide customers with the most current information. Such an update would be easy to administer, as it would involve a simple update based on load data from the prior year. Therefore, WMECo is directed to update the 12 CP allocators on an annual basis in its transmission reconciliation filing.

The Company is also proposing to change the way transmission service is charged to its general service customers. Under WMECo's proposal, transmission costs would be recovered solely through a demand charge for those rate classes that are currently charged a demand charge, effectively eliminating the per-kWh volumetric charge for transmission rates (Exh. WM-CRG at 62-63). Transmission costs are incurred based on peak demands on the system and are priced at the wholesale level based on peak demand (Exh. WM-CRG at 63). Recovering transmission costs through the demand charge should provide customers with an incentive to reduce monthly peak demand, thereby potentially reducing transmission costs for all customers. For these reasons, the Department approves the Company's proposal to recover transmission costs through the demand charge for the general service rate classes.

E. Rate-by -Rate Analysis

1. Rate R-1 and Rate R-3

a. Introduction

Rate R-1 and Rate R-3 are available to all residential customers in private dwellings, individual apartments, houses of worship (with the exception of those houses of worship on

Rate R-24), and farms (Exhs. WM-CRG-1, Proposed M.D.P.U. Nos. 1000U and 1001U).

Rate R-3 is available to all such customers who use electricity as the primary source of space heating (Exh. WM-CRG-1, Proposed M.D.P.U. No. 1001U). WMECo proposed to increase the monthly customer charge from \$8.53 to \$9.00 per month for Rate R-1 and from \$8.53 to \$9.50 per month for Rate R-3 (Exhs. WM-CRG at 44, 47; WM-CRG-1, Proposed M.D.P.U. Nos. 1000U and 1001U).

The Company proposed inclining block volumetric charges for the R-1 rate class with the block break set at 600 kWh per month, which is approximately equal to the average usage per month for the R-1 rate class (Exh. WM-CRG at 44). The proposed R-1 volumetric charge for the tail block would be set \$0.01 per kWh higher than the volumetric charge for the head block (Exh. WM-CRG at 44). The Company also proposed inclining block volumetric charges for the R-3 rate class with the block break set at 1,000 kWh per month, which is approximately equal to the average usage per month for the R-3 rate class (Exh. WM-CRG at 46). The proposed R-3 volumetric charge for the tail block would be set \$0.01 per kWh higher than the volumetric charge for the head block (Exh. WM-CRG at 46).

b. Analysis and Findings

The Department finds that the Company's proposed method for establishing the volumetric charges for Rate R-1 and Rate R-3 is reasonable and complies with the Department's directives in D.P.U. 08-35, D.P.U. 07-50-A and D.P.U. 09-39. The Department also finds that the Company's proposal to set the volumetric charge block break at 600 kWh for Rate R-1 is reasonable, as it approximates the average monthly consumption for

the customers in this rate class (Exh. WM-CRG at 44). Further, the Department finds that the Company's proposal to set the volumetric charge block break at 1,000 kWh for Rate R-3 is reasonable as it approximates the average monthly consumption for the customers in this rate class (Exh. WM-CRG at 46). Therefore, WMECo is directed to maintain a \$0.01 per kWh differential between the head block and tail block rates when setting the volumetric charges for Rate R-1 and Rate R-3.

Regarding the customer charges for Rate R-1 and Rate R-3, the Company proposed a customer charge of \$9.00 for Rate R-1 and \$9.50 for Rate R-3. As stated above, the Department must balance economic efficiency with price signals that promote end-use efficiency. Because the rates for low-income customers will be set at the same level as non-low-income customers as a result of this proceeding (except for the low-income discount that is applied to the entire rate design), the Department must consider what effect the rate design for Rate R-1 and Rate R-3 will have on low-income customers. The Department is concerned about the bill impacts that would result from the Company's proposal to increase the customer charge for low-use low-income customers. Consequently, the Company is directed in its compliance filing to design rates for Rate R-1 and Rate R-3 using a customer charge of \$6.00. All remaining revenues should be recovered through the volumetric per kWh charge for these rate classes. Such a customer charge will mitigate the bill impacts on low-use low-income customers while sending a stronger price signal for end-use efficiency to residential ratepayers.

The Department notes that in response to RR-DPU-25, the Company acknowledged that there is unnecessary language in both the Rate R-3 and Rate R-4 tariffs.<sup>159</sup> The Company is directed to remove this language from these tariffs in its compliance filing to this Order.

2. Rate R-2 and R-4

a. Introduction

Rate R-2 and Rate R4 are subsidized rates that are available at single locations to all qualifying low-income residential customers in private dwellings and individual apartments (Exhs. WM-CRG-1, Proposed M.D.P.U. Nos. 1034R and 1035R). Rate R-4 is available to those qualifying low-income customers who use electricity as the primary source for space heating (Exh. WM-CRG-1, Proposed M.D.P.U. No. 1035R). A customer will be eligible for one of these rates 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. See Investigation Commencing a Rulemaking Pursuant to 220 C.M.R. §§ 2.00 et seq., D.P.U. 08-104 (2008).

The Company proposed to change the way that the low-income discount is calculated consistent with the Department's directives in Western Massachusetts Electric Company, D.P.U. 10-43 (2010) (Exh. WM-CRG at 45, 47). Currently the level of the discount applied

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<sup>159</sup> The unnecessary language in these tariffs is in the Applicability section relating to the period of service for a customer (RR-DPU-25).

to the distribution rate component of the bill is calculated to achieve the same discount off the total bill as was in effect prior to March 1, 1998, up to the discount level at which the distribution rate is zero pursuant to Expanding Low-Income Protections and Assistance, D.P.U. 08-4, at 36 (2009) (see Exh. WM-CRG at 45-46). The Company proposes to apply the low-income discount to all bill components (Exh. WM-CRG at 45). The level of the discount would be 32 percent, which was the level of the total low-income discount prior to the unbundling of rates in 1998 (Exh. WM-CRG at 45, 47). Under WMECo's proposal, the distribution rates for both the R-1 and R-2 rate classes would be the same, with the 32-percent low-income discount provided to Rate R-2 customers through a line item on Rate R-2 customers' bills (Exh. WM-CRG at 45). Similarly, under the Company's proposal, the distribution rates for both the R-3 and R-4 rate classes would be the same, with the 32 percent low-income discount provided to Rate R-4 customers through a line item on Rate R-4 customers' bills (Exh. WM-CRG at 47).

b. Analysis and Findings

Pursuant to G.L. c. 164, § 1F, the Department requires distribution companies to provide discounted rates for low-income customers comparable to the low-income discount rate received off the total bill for rates in effect prior to March 1, 1998. See D.P.U. 08-4, at 36. In National Grid Electric Company, D.P.U. 09-39, at 429-432 (2009), the Department endorsed a new method for designing low-income rates. Specifically, the distribution charges for each low-income class shall be set at the applicable non-discounted rate. D.P.U. 09-39, at 432. In addition, the tariff shall state that the total bill amount will be discounted at the level

received off the total bill for rates in effect prior to March 1, 1998, pursuant to G.L. c. 164, § 1F. D.P.U. 09-39, at 432. The Department finds that the Rate R-2 and Rate R-4 tariffs filed by the Company in this proceeding (M.D.P.U. No. 1034R and 1035R) comply with the Department's directives stated in D.P.U. 09-39 and confirmed in D.P.U. 10-43. Based on the discussion above, the Company is directed in its compliance filing to design Rate R-2 rates to be the same as those for Rate R-1 and Rate R-4 rates to be the same as those for Rate R-3.

The Department notes that the applicability clause for both Rate R-2 and Rate R-4 contains language that states that the income eligibility level for the low-income home energy assistance program ("LIHEAP") is 200 percent of the federal poverty level (Exhs. WM-CRG-1, Proposed M.D.P.U. Nos. 1034R and 1035R). However, the income eligibility requirements for LIHEAP were modified to 60 percent of the state median income in 2008 and the Department codified this change in its regulations for gas and electric distribution companies in Investigation Commencing a Rulemaking Pursuant to 220 C.M.R. §§ 2.00 et seq., D.P.U. 08-104 (2008). Consequently, the Department directs the Company to modify the language in the applicability clauses of Rate R-2 and Rate R-4 to comply with LIHEAP standards regarding eligibility for the low-income discount.

3. Rate R-23

a. Introduction

Rate R-23 is an optional rate for business customers with separately metered water heaters (Exhs. WM-CEG at 48; WM-CRG-1, Proposed M.D.P.U. No. 1002U). WMECo is proposing to close this optional rate to new customers (Exh. WM-CRG at 48). WMECo is

aware that most Rate 23 customers either no longer have controlling devices or the controlling devices are no longer operable (Exh. WM-CRG at 48). The Company has opted to close this rate rather than eliminate it because eliminating the rate would cause Rate 23 customers to incur an additional cost to rewire their water heaters (Exh. WM-CRG at 48). WMECo proposed to increase the monthly customer charge from \$16.47 to \$18.00 per month for Rate 23 (Exhs. WM-CRG-6, at 5; WM-CRG-1, Proposed M.D.P.U. No. 1002U).

b. Analysis and Findings

Because the Company no longer offers controlled water heaters, the Department finds that closing Rate 23 to new customers is a reasonable proposal. Therefore, the Department approves the closing of Rate 23 to new customers.

The Company proposed to increase the customer charge for Rate 23 from \$16.47 to \$18.00 (Exhs. WM-CRG-6, at 5; WM-CRG-1, Proposed M.D.P.U. No. 1002U). The Department finds that there is no evidence that the cost to serve the remaining customers on Rate 23 has increased so much as to warrant an increase to the customer charge for this rate class. Consequently, the Company is directed in its compliance filing to design rates for Rate 23 using a customer charge of \$16.00. The remaining revenue is to be recovered through the volumetric per kWh distribution charge.

4. Rate R-24

a. Introduction

Rate R-24 is an optional rate for houses of worship (Exh. WM-CRG-1, Proposed M.D.P.U. No. 1003U). This optional rate has been closed to new customers since 1992 (Exh.



WM-CRG at 48). WMECo is proposing to move the rate design for this rate class closer to the rate design for general service rates (Exh. WM-CRG at 48-49). The Company states that it intends to achieve this rate design in steps over time (Exh. WM-CRG at 49). WMECo proposed to increase the monthly customer charge from \$63.43 to \$70.00 per month for Rate 24 (Exhs. WM-CRG-6, at 6; WM-CRG-1, Proposed M.D.P.U. Nos. 1003U).

b. Analysis and Findings

Regarding the rate design for Rate 24, the Department rejects the Company's proposal to increase the customer charge for this rate class. The Department seeks to establish a customer charge that will provide a proper balance between economic efficiency and end-use efficiency, as well as adhere to Department rate setting goals, such as rate continuity. Based on these considerations, the Department finds that a decrease to the customer charge is warranted at this time. The Department directs the Company in its compliance filing to design rates using a customer charge of \$60.00 for Rate 24. This, while addressing rate continuity issues by not lowering the customer charge too much in this proceeding. In addition, in order to be consistent with our discussion in Section XI.D.2 above, the Department directs the Company to maintain the existing volumetric per kWh distribution charge (\$0.00253 per kWh) when designing rates for Rate 24. All remaining revenues shall be collected through the demand charge for Rate 24. Based on a review of the bill impacts on customers, the Department finds that the Rate 24 rates, including the customer charge and the volumetric per kWh distribution charge mentioned above, satisfy continuity goals and produces bill impacts that are moderate and reasonable.

5. Rate G-0

a. Introduction

Rate G-0 is available to C&I customers with maximum demand below 350 kW (Exhs. WM-CRG at 50; WM-CRG-1, Proposed M.D.P.U. No. 1004U). These customers have a choice of either Rate G-0 or Rate G-2 (Exh. WM-CRG at 50). Rate G-0 tends to be more beneficial for customers at the lower end of the 0 to 350 kW demand scale as the Rate G-0 rates are designed so that customers are billed for all demand over 2 kW (Exhs. WM-CRG at 50; WM-CRG-1, Proposed M.D.P.U. 1004U). The Company proposed to increase the customer charge for Rate G-0 customers from \$31.92 to \$40.00 per month (Exhs. WM-CRG at 50; WM-CRG-1, Proposed M.D.P.U. No. 1004U). The Company also proposes to eliminate the per-kWh distribution charge for Rate G-0, as it proposes to do for all C&I rate classes (Exh. WM-CRG at 50).

b. Analysis and Findings

The Department rejects the Company's proposal to increase the customer charge for this rate class. The Department seeks to establish a customer charge that will provide a proper balance between economic efficiency and end-use efficiency, as well as adhere to Department rate setting goals, such as rate continuity. Based on these considerations, the Department finds that a decrease to the customer charge is warranted at this time. The Department directs the Company in its compliance filing to design rates using a customer charge of \$30.00 for Rate G-0. In addition, in order to be consistent with our discussion in section XI.D.2 above, the Department directs the Company to maintain the existing volumetric per kWh distribution

charge (\$0.00178 per kWh) when designing rates for Rate G-0. All remaining revenues shall be collected through the demand charge for Rate G-0. Based on a review of the bill impacts on customers, the Department finds that the Rate G-0 rates, including the customer charge and the volumetric per kWh distribution charge mentioned above, satisfy continuity goals and produces bill impacts that are moderate and reasonable.

6. Rate G-2

a. Introduction

Rate G-2 is available to C&I customers with demand below 350 kW per month (Exhs. WM-CRG at 52; WM-CRG-1, Proposed M.D.P.U. No. 1006U). Customers taking service under Rate G-2 must take service at the primary level (Exh. WM-CRG-1, Proposed M.D.P.U. No. 1006U). Rate G-2 tends to be more beneficial for customers at the higher end of the 0 to 350 kW demand scale as the Rate G-2 rates are designed such that customers are billed for all kW of demand (Exhs. WM-CRG at 51-52; WM-CRG-1, Proposed M.D.P.U. No. 1006U). The Company proposed to increase the customer charge for Rate G-2 customers from \$326.71 to \$350.00 per month (Exhs. WM-CRG at 52; WM-CRG-1, Proposed M.D.P.U. No. 1006U). The Company also proposes to eliminate the per kWh distribution charge for Rate G-2, as it proposes to do for all C&I rate classes (Exh. WM-CRG at 52)

b. Analysis and Findings

The Department rejects the Company's proposal to increase the customer charge for this rate class. The Department seeks to establish a customer charge that will provide a proper balance between economic efficiency and end-use efficiency, as well as adhere to Department

rate setting goals, such as rate continuity. Based on these considerations, the Department finds that a decrease to the customer charge is warranted at this time. The Department directs the Company in its compliance filing to design rates using a customer charge of \$325.00 for Rate G-2. In addition, in order to be consistent with our discussion in section XI.D.2 above, the Department directs the Company to maintain the existing volumetric per kWh distribution charge (\$0.00178 per kWh) when designing rates for Rate G-2. All remaining revenues shall be collected through the demand charge for Rate G-2. When designing the demand charges for Rate G-2, the Company should recover 15 percent of the remaining revenues through the demand charge for the first 50 kW of demand and 85 percent of the remaining revenues through the demand charge for all consumption greater than 50 kW. Based on a review of the bill impacts on customers, the Department finds that the Rate G-2 rates, including the customer charge and the volumetric per kWh distribution charge mentioned above, satisfy continuity goals and produces bill impacts that are moderate and reasonable.

7. Rate T-0

a. Introduction

Rate T-0 is an optional complementary TOU rate to Rate G-0 for C&I customers with demand below 350 kW per month (Exh. WM-CRG at 51). Rate T-0 has been closed to new customers since 1999, but WMECo proposes to re-open this rate to new customers (Exh. WM-CRG at 51). The customer and demand charges are the same as for Rate G-0, except that the demand charge is established based only on demands during the on-peak hours (12:00 p.m. to 8:00 p.m.) (Exh. WM-CRG at 51). The Company proposed to increase the customer

charge for Rate T-0 customers from \$35.45 to \$40.00 per month (Exhs. WM-CRG-6, at 8; WM-CRG-1, Proposed M.D.P.U. No. 1005U). The Company also proposes to eliminate the per-kWh distribution charge for Rate T-0, as it proposes to do for all C&I rate classes (Exh. WM-CRG at 50).

b. Analysis and Findings

The Department rejects the Company's proposal to increase the customer charge for this rate class. The Department seeks to establish a customer charge that will provide a proper balance between economic efficiency and end-use efficiency, as well as adhere to Department rate setting goals, such as rate continuity. Based on these considerations, the Department finds that a decrease to the customer charge is warranted at this time. The Department directs the Company in its compliance filing to design rates using a customer charge of \$30.00 for Rate T-0. In addition, in order to be consistent with our discussion in Section XI.D.2 above, the Department directs the Company to maintain the existing volumetric per kWh distribution charges (\$0.00284 per kWh for on-peak consumption and \$0.00076 per kWh for off-peak consumption) when designing rates for Rate T-0. All remaining revenues shall be collected through the demand charge for Rate T-0. Based on a review of the bill impacts on customers, the Department finds that the Rate T-0 rates, including the customer charge and the volumetric per kWh distribution charges mentioned above, satisfies continuity goals and produces bill impacts that are moderate and reasonable.

8. Rate T-4

a. Introduction

Rate T-4 is a complementary TOU rate to Rate G-2 for C&I customers with demand below 350 kW per month (Exh. WM-CRG at 52-53). Rate T-4 has been closed to new customers since 1999, but WMECo proposes to re-open this rate to new customers (Exh. WM-CRG at 52-3). The customer and demand charges are the same as for Rate G-2, except that the demand charge is established based only on demands during the on-peak hours (12:00 p.m. to 8:00 p.m.) (Exh. WM-CRG at 53). The Company proposed to increase the customer charge for Rate T-4 customers from \$330.25 to \$350.00 per month (Exhs. WM-CRG-6; WM-CRG-1, Proposed M.D.P.U. No. 1007U). The Company also proposes to eliminate the per kWh distribution charge for Rate T-4, as it proposes to do for all C&I rate classes (Exh. WM-CRG at 50).

b. Analysis and Findings

The Department rejects the Company's proposal to increase the customer charge for this rate class. The Department seeks to establish a customer charge that will provide a proper balance between economic efficiency and end-use efficiency, as well as adhere to Department rate setting goals, such as rate continuity. Based on these considerations, the Department finds that a decrease to the customer charge is warranted at this time. The Department directs the Company in its compliance filing to design rates using a customer charge of \$325.00 for Rate T-4. In addition, in order to be consistent with our discussion in Section XI.D.2 above, the Department directs the Company to maintain the existing volumetric per kWh distribution

charges (\$0.00267 per kWh for on-peak consumption and \$0.00076 per kWh for off-peak consumption) when designing rates for Rate T-4. All remaining revenues shall be collected through the demand charge for Rate T-4. When designing the demand charges for Rate T-4, the Company shall recover 15 percent of the remaining revenues through the demand charge for the first 50 kW of demand and 85 percent of the remaining revenues through the demand charge for all consumption greater than 50 kW. Based on a review of the bill impacts on customers, the Department finds that the Rate T-4 rates, including the customer charge and the volumetric per kWh distribution charges mentioned above, satisfy continuity goals and produces bill impacts that are moderate and reasonable.

9. Rate T-2

a. Introduction

Rate T-2 is a TOU rate for C&I customers with monthly demand at or above 350 kW up to 2,500 kW (Exhs. WM-CRG at 53; WM-CRG-1, Proposed M.D.P.U. No. 1008U). The Company is proposing to reduce the number of customer charge blocks from six to three (Exh. WM-CRG at 54). The proposed customer charge would be \$700 for Rate T-2 customers with demand between 350 kW and 999 kW per month (Exhs. WM-CRG-6, at 11; WM-CRG- 1, Proposed M.D.P.U. No. 1008U). For Rate T-2 customers with demand between 1,000 kW and 1,499 kW per month, the proposed customer charge is \$1,500 (Exhs. WM-CRG-6, at 11; WM-CRG-1, Proposed M.D.P.U. No. 1008U). For Rate T-2 customers with demand between 1,500 kW and 2,500 kW per month, the proposed customer charge is \$2,500 (Exhs. WM-CRG at 53; WM-CRG-6, at 11; WM-CRG-1, Proposed M.D.P.U. No.

1008U). All of these proposed customer charges are significantly lower than the current Rate T-2 customer charges (Exh. WM-CRG-6, at 11). The Company also proposes to eliminate the per-kWh distribution charge for Rate T-2, as it proposes to do for all C&I rate classes (Exh. WM-CRG at 54). In addition, the Company proposes to increase the demand charge for Rate T-2 from \$1.66 per kW to \$7.70 per kWh (Exh. WM-CRG-6, at 11).

b. Analysis and Findings

The Company has proposed a significant redesign of Rate T-2 in order to mitigate bill impacts for those customers that are on the cusp of the 350 kW floor for taking service under Rate T-2 (Exh. WM-CRG at 16-18). The evidence demonstrates that, under existing rates, there is a significant increase in the customer charge for those customers who migrate from Rate G-2 to Rate T-2 (Exh. WM-CRG at 16). The Company's proposal reduces the increase to the customer charge experienced by those customers who migrate from Rate G-2 to Rate T-2. No party objected to this redesign of the customer charge for Rate T-2. The Department finds that it is a reasonable proposal and accepts WMECo's proposed customer charges for Rate T-2.

In order to be consistent with our findings in Section XI.D.2 above, the Department directs the Company in its compliance filing to maintain the existing volumetric per kWh distribution charges (\$0.00257 per kWh for on-peak consumption and \$0.00076 per kWh for off-peak consumption) when designing rates for Rate T-2. All remaining revenues shall be collected through the demand charge for Rate T-2. The Company shall properly account for the demand credits that are offered to Rate T-2 customers at their current rate when calculating



the demand charge for Rate T-2. Based on a review of the bill impacts on customers, the Department finds that the Rate T-2 rates, including the customer charges and the volumetric per kWh distribution charges mentioned above, satisfy continuity goals and produces bill impacts that are moderate and reasonable.

10. Rate T-5

a. Introduction

The Company is proposing a new rate class, Rate T-5, for C&I customers whose monthly demand is 2,500 kW and above (Exhs. WM-CRG at 55; WM-CRG-1, Proposed M.D.P.U. No. 1049A). The proposed customer charge for Rate T-5 is \$3,500 per month, which is significantly lower than the customer charge of \$13,504 that these customers would be subject to under the current Rate T-2 (Exhs. WM-CRG at 55; WM-CRG-6, at 12). The Company is proposing a rate design for Rate T-5 that includes a per-kWh distribution charge of zero, consistent with the rate design for the other general rate classes (Exhs. WM-CRG-6, at 11). WMECo is also proposing a demand charge of \$4.90 per kW for Rate T-5 customers (Exhs. WM-CRG-6, at 12; WM-CRG at 55).

b. Analysis and Findings

Rate T-5 is a new rate class for extra large C&I customers that the Company is proposing because the redesign of the customer charges for Rate T-2 would likely result in excessive bill impacts for these customers (Exh. WM-CRG at 19). No party objected to the Company's proposed creation of Rate T-5. However, there was opposition from UMA to the rate design that the Company proposed for this new rate class (UMA Brief at 14-15, 19-22).

UMA proposed an alternative rate design for Rate T-5 that included an increased customer charge and a reduced demand charge (Exh. UMA-RAB-3).

The Company's proposed customer charge for Rate T-5 will provide a more gradual increase than UMA's proposal for those customers who migrate from Rate T-2 to Rate T-5. UMA's proposed customer charges would likely result in undesirable bill impacts for those customers that migrate from Rate T-2 to Rate T-5. Customers that migrate from Rate T-2 to Rate T-5 would see the customer charge increase by almost \$12,000 per month. Such a situation is exactly what the Company addressed in its proposed redesign of the customer charges for Rate T-2. Therefore, the Department accepts the Company's proposed customer charges for Rate T-5 as it will allow for a more gradual increase to the customer charge.

In order to be consistent with our findings in Section XI.D.2 above, the Department directs the Company in its compliance filing to maintain the existing volumetric per kWh distribution charges (\$0.00257 per kWh for on-peak consumption and \$0.00076 per kWh for off-peak consumption) when designing rates for Rate T-5. All remaining revenues shall be collected through the demand charge for Rate T-5. The Company shall properly account for the demand credits that are offered to Rate T-5 customers at the current rate when calculating the demand charge for Rate T-5. Based on a review of the bill impacts on customers, the Department finds that the Rate T-5 rates, including the customer charges and the volumetric per kWh distribution charges mentioned above, satisfy continuity goals and produces bill impacts that are moderate and reasonable.

11. Rate PR

a. Introduction

Rate PR is a partial requirements rate, that is available to customers who self-generate all, or a portion of, their electrical power requirements (Exh. WM-CRG-1, M.D.P.U. No. 1013V). This rate has been closed to new customers since September 17, 1999 (Exh. WM-CRG-1, M.D.P.U. 1013V). There are currently four customers taking service under Rate PR (Exh. WM-CRG at 35). The Company is proposing to eliminate Rate PR in this proceeding, with current Rate PR customers being moved to the otherwise applicable rate (either Rate T-2 or Rate T-5) (Exh. WM-CRG at 36). WMECo states that two of the customers are directly connected to WMECo's system at transmission level voltage and that the Company expects these customers to subscribe for delivery service directly through a FERC transmission rate (Exh. WM-CRG at 35).

b. Analysis and Findings

The Company originally proposed to eliminate Rate PR in its restructuring proceeding, D.T.E. 97-120. The Department rejected WMECo's proposal and stated that Rate PR was to be closed to new customers and, "that services to existing customers under Rate PR will only continue during the transition period and for as long as they remain under standard offer service." D.T.E. 97-120, at 165.<sup>160</sup> The Department also expressed concerns about the bill impacts that would be experienced by the customers on Rate PR if the rate was terminated. D.T.E. 97-120, at 165.

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<sup>160</sup> The transition period under which standard offer service was offered terminated on March 1, 2005.

The Department agrees with WMECO that it is now time to eliminate Rate PR. The Department encourages the development of CHP, as well as other forms of distributed generation. D.P.U. 07-50-A at 23-25. However, the decoupled rates established in this docket will eliminate the risk to the Company of losing revenues from CHP projects, and eliminates the need for Rate PR.

Solutia, one of the Company's customers currently served under Rate PR, has raised concerns here regarding the bill impacts for Rate PR customers should the rate be eliminated. In response to Record Request DPU-24 (CONFIDENTIAL), the Company indicated that the distribution component of Solutia's overall bill would increase by 117 percent. While the Department typically views bill impacts based on a customer's total bill, it is difficult to argue that the Department's goal of rate continuity is being met when a customer would be receiving a distribution rate increase that is almost four times the maximum increase to a rate class.

Solutia has argued for a two-year delay before Rate PR is eliminated, thus giving the affected customers time to prepare for the rate change. The Department is not convinced by Solutia's argument that regulatory uncertainty paralyzed Solutia from acting in the intervening eleven years since the Department issued its Order in D.T.E. 97-120. Clearly it was only a matter of time before the elimination of Rate PR would be proposed by the Company. On the other hand, the Company could have done a better job communicating its intent to propose the elimination of Rate PR to the four customers that currently take service under this tariff.

In order to strike a balance between these considerations, the Department rejects the Company's proposal to eliminate Rate PR effective February 1, 2011. Instead, WMECo is

directed to eliminate Rate PR effective February 1, 2013. In the interim, the Company is directed in its compliance filing to increase all the distribution rate components for Rate PR by the same percentage as distribution rates are being increased for Rate T-2 and Rate T-5, which is 50 percent of the overall granted distribution rate increase.

The Department notes that Solutia, DOER and ENE all recommended that the Department open a separate investigation to examine rates for self-generation customers and, more specifically, customers who install CHP. At this time, the Department finds that such an investigation is not necessary. With the onset of decoupling, electric distribution companies should be indifferent to the installation of CHP in their service territories. The Department stated in our decoupling Order that providing a more level playing field for CHP, and all other forms of distributed generation, was one of the main reasons for instituting decoupling in the Commonwealth. D.P.U. 07-50-A at 23-25. While the Department supports the goal of developing CHP, there is no evidence that current rate designs create a barrier to achieving that goal. Accordingly, the Department sees no need at this time to commence an investigation into rates specific to customers that install CHP.

12. Street Lighting

a. Introduction

The Company currently has two street lighting rate classes: (1) Rate S-1 for Company-owned and maintained distribution poles, and Company-owned and maintained luminaires ; and (2) Rate S-2 for Company-owned distribution poles that are maintained by the customer, and customer-owned and maintained luminaires (Exhs. WM-CRG-1, Proposed M.D.P.U. No.

1009Y; WM-CRG-1, Proposed M.D.P.U. No. 1010Y). Rates S-1 and S-2 recover the costs for basic delivery infrastructure (i.e., poles, wires, transformers, etc.) (Exh. WM-CRG at 57). Rate S-1 also recovers associated operations and maintenance costs along with the costs of the lamps, luminaires and other related accessories (Exh. WM-CRG at 57). Rate S-1 also recovers the costs related to streetlighting accessories such as premium decorative lighting (Exh. WM-CRG at 57).

The proposed Rate S-1 streetlight rates were established by first increasing the luminaire portion of the monthly rate by 1.5 times the 26.6 percent overall proposed distribution rate increase (Exh. WM-CRG at 58). Second, the delivery portion of the rate (i.e., the portion of the rate that is common to both Rates S-1 and S-2) was increased by the same equivalent cent-per-kWh rate needed to collect the remaining class revenue requirement (Exh. WM-CRG at 58). The Company states that under this rate design approach the rate relationship for delivery service is retained between Rates S-1 and S-2 (Exh. WM-CRG at 58).

b. Analysis and Findings

Street lighting rates have been a contentious issue in this rate case. Several parties have suggested that the Company not be allowed to increase rates for Rates S-1 and S-2 because WMECo has not demonstrated that its streetlight rates are cost-based. The Company's witness testified that the fixture rates for Rates S-1 and S-2 are essentially 20-year old rates that have been modified over the years as a result of restructuring and rate settlements (Tr. 13, at 2195-2197). Consequently, according to the Company, the fixture rates that are in place today bear little, if any, relationship to the cost to serve (Tr. 13, at 2196-2197). Rather than attempt

to modify these fixture rates so that they are more closely tied to the cost to serve, the Company chose to increase these fixture rates by a uniform amount (Tr. 13, at 2197-2198).

The record is clear that Rate S-1 is not paying its fair share of the Company's revenues to allow WMECo to earn its rate of return (Exh. WM-CRG at 9). The Company's cost of service study demonstrates that Rate S-2 is currently providing a rate of return of -2.2 percent (Exh. WM-CRG at 9). This evidence demonstrates that Rate S-1 customers are currently being subsidized by the other WMECo ratepayers. In the interest of moving the Rate S-1 revenue requirement closer to the cost to serve this class at equalized rates of return, our fairness rate design goal dictates that Rate S-1 should receive some level of increase. Therefore, the Department rejects the proposal that the street lighting rate classes receive no increase in this proceeding.

While it would be ideal to correct the cost inequities that most likely exist within the current fixture rates for street lighting, in this case rate continuity restricts how much rates can be increased to correct historic imperfections in rates when the company has not had a fully adjudicated rate case in nearly 20 years. For the sake of our fairness and rate continuity goals the Department approves the Company's proposal to apply a uniform increase to the distribution rate for Rates S-1 and S-2.

The Company also proposed to increase the dedicated equipment portion of the Rate S-1 monthly rate by 1.5 times the overall proposed distribution rate increase, or nearly 40 percent (Exh. WM-CRG at 58). The Department can find no justification for this one rate element within the Company's rates receiving an increase that exceeds the cap that WMECo

has used as a parameter for the rest of the distribution rate design. The Department is concerned that such an increase could have an inordinately large impact on certain customers who happen to be billed for a greater amount of dedicated equipment, or such equipment as decorative streetlights. Consequently, the Department rejects the Company's proposal. Instead, the Department directs the Company in its compliance filing to increase the dedicated equipment rates by the same percentage increase as the rate class as a whole receives. As such, when designing streetlight rates the Company shall increase all distribution rate elements by the same percentage that the streetlight classes receive as a whole.

WMECo indicated that it intends to undertake a thorough review of the streetlight rates for all of the NU companies in the near future (Tr. 13, at 2225-2227). During this review, the Company intends to take a "bottom up" approach to building its streetlight rates (Tr. 13, at 2225-2227). The Department expects WMECo to follow through on this representation that it will review its streetlight rates in the near future and propose a redesign of streetlight rates that will more accurately reflect the cost to serve these rate classes. In addition, the Department directs the Company to address the issue of high efficiency lighting when it conducts this review of its streetlight rates. The Department expects the Company to design streetlight rates that will allow Rate S-1 and Rate S-2 customers to take full advantage of all high efficiency streetlight options that are available.

The Company also proposed the "midnight option" for street lighting service (Exh. WM-CRG at 26-30). The "midnight option" is a voluntary service option available to municipalities that may elect this option to save money on streetlights (Exh. WM-CRG



at 26-30). Because this program is voluntary, the Department approves this service option. In order to support the “midnight option” service, the Company proposed to unbundle the street lighting rates (i.e., move more of the costs into a per-kWh charge) (Exh. WM-CRG at 28-29). The Department approves the proposal to unbundle the street lighting rates, as a move towards more per-kWh charges will encourage efficiency among street lighting customers.

Another issue raised during this proceeding is the format of the bills for street lighting customers (Exh. Springfield-1). The Department’s ratemaking goal of simplicity dictates that rates should be easy to understand. That goal applies to the bill received by the customer, as well as the underlying rates. The Company has not met this requirement with the current format of its street lighting bills. A customer should not be expected to have to consult with a Company representative in order to understand his or her electric bill. Consequently, the Department directs the Company to meet with interested municipalities and other interested parties to discuss modifications that could be made to the streetlight bills to make them easier to understand. After consulting with the interested parties, the Company is to file a report to the Department within four months of the date of this Order with a clear plan for revising its street lighting bills.

Springfield has recommended that the Department open a separate investigation on behalf of the municipalities of the Commonwealth into the billing of streetlight rates (Springfield Brief at 8). The Department is aware that there are currently pending legal actions between the Company and municipalities regarding claims of improper streetlight billing. The Department finds that the prudent course of action is to await the conclusion of these

proceedings before the Department determines if it is necessary for the Department to conduct a broader investigation of streetlight billing. Consequently, the Department declines to open an investigation at this time.

## XII. OTHER TARIFF CHANGES

### A. Introduction

The Company has proposed to eliminate the Controlled Water Heater Rider (“Rider CWH”) which has been available to the residential rate classes since the 1980s (Exh. WM-CRG at 59-62). The Company’s rationale for the elimination of Rider CWH is that WMECo no longer controls these water heaters (Exh. WM-CRG at 60). Since 2001 the Company has worked to move participating customers off Rider CWH (Exh. WM-CRG at 60-62). The Company has reduced the number of customers who receive the credit under Rider CWH from 20,323 in 2001 to 1,550 in 2009 (Exh. WM-CRG at 62).

The Company also proposes to eliminate the Power Outage Notification Service contained within the Extended Metering Options tariff (Exhs. WM-CRG at 65; WM-CRG-1, Proposed M.D.P.U. No. 1037C). WMECo states that no customer has taken this service since December 2006 (Exh. WM-CRG at 65).

The Company is also proposing to eliminate the following tariffs: 1) Economic Development Tariff (M.D.P.U. No. 1022B); 2) Business Recovery Rider (M.D.P.U. No. 1020B); and 3) Competitive Generation and Business Retention Rider (M.D.P.U. No. 1021B). WMECo states that no customers are taking service under these tariffs and that the Company is

effectively precluded from offering any discounts as a result of utility deregulation (Exh. CRG at 66).

WMECo is also proposing to eliminate the Standard Offer tariff (M.D.P.U. No. 1025D) because the tariff is no longer in use. In addition, the Company proposes to terminate the CPSL effective February 1, 2011 (Exh. WM-CRG at 66).

The Company is also proposing changes to Terms and Conditions tariffs (Exh. WM-CRG at 66-68). The following changes are proposed for the Terms and Conditions for Distribution Service: 1) updated customer service and competitive supplier referral program charges in Appendix A; 2) modifications to the definitions contained within Sections I.2 and II.1E to reflect the proposal to allow transmission level generators to be exempt from retail rates; and 3) modifications to Section II.4A that specifies the location of meters and customer liability for devices attached to the Company meter by a third-party (Exhs. WM-CRG at 66-67; WM-CRG-1, Proposed M.D.P.U. No. 1023C). The following changes are proposed for the Terms and Conditions for Supplier Service: 1) modifications to Section 2 to clarify the enrollment period for customers signing up for third-party service; 2) modifications to Section 2 to add a definition for ISO-NE Settlement meter domains to ensure that all generation and load are accounted for properly; and 3) modifications to Section 3A to allow customers to notify the Company if they wish to be protected from unwarranted solicitations (Exhs. WM-CRG at 67; WM-CRG-1, Proposed M.D.P.U. No. 1024E).

The Company has also proposed modifications to the Extended Metering Options and Interval Data Services tariffs to reflect current metering technology and to include updated one-time fees for these services (Exh. WM-CRG at 67).

WMECo is also proposing to increase its customer service charges, such as returned check charges, service reconnection charges and service call charges (Exhs. WM-BAY at 30-32; WM-BAY-4; WM-CRG-1, Proposed M.D.P.U. No. 1023C, Appendix A). The Company states that many of these charges have not been updated for more than 20 years and that these charges need to be increased to reflect current labor costs and actual costs associated with providing these services (Exh. WM-BAY at 30). The Company is also proposing two new customer service charges, one for a secondary service reconnection in a manhole and the second for a “Can’t Get In” that would occur when a customer does not keep an appointment for a service reconnection (Exh. WM-BAY at 31).

The Company has also made the change throughout its tariffs replacing the term “default service” with the term “basic service” (Exh. WM-CRG at 68). Finally, the Company has added a telemetering requirement to all TOU tariffs, which requires TOU customers to provide a telephone line and access so that the interval meters can be read by the Company (Exh. WM-CRG at 68).

B. Analysis and Findings

No party objected to these proposed modifications to the Company’s tariffs. In addition, no party objected to the termination of the tariffs identified above. The Department has reviewed these tariff language changes and service charge changes and finds them to be

reasonable. All of these changes are designed to bring the Company's tariffs in compliance with Department precedent and to make them consistent with other proposals put forth by the Company in this proceeding. In addition, the Department finds it reasonable to terminate the tariffs identified above.

Regarding the termination of Rider CWH, the Department finds it reasonable for the Company to cease the payment of a credit to controlled water heating customers since these water heaters are no longer being controlled by the Company. Therefore, the Department approves the termination of Rider CWH.

### XIII. BASIC SERVICE COST ADJUSTMENT PROVISION

The Company proposed to amend its existing default service tariff by modifying, among other things, the section relating to the default service cost adjustment provision (M.D.P.U. No. 1026AV, cancels M.D.P.U. No. 1026AU).<sup>161</sup> Although the proposed tariff amendments refer to certain changes relating to the uncollectible components of basic service, such changes do not include reference to a specific amount of certain administrative cost

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<sup>161</sup> The service provided by the Company to a customer who is not receiving generation service from a competitive supplier is referred to as a "default service" in the Company's existing tariff (M.D.P.U. No. 1026AU). In Western Massachusetts Electric Company, D.P.U. 08-89, at 1, n. 1 (2010), the Department noted that it has previously approved the term "basic service" in Procurement of Default Service Power Supply for Residential and Small Commercial and Industrial Customers, D.T.E. 04-115-A (2005) and adopted that term in Order Adopting Regulations, D.P.U. 07-105 (2008). The Department, accordingly, directed the Company to change its tariff language in future filings. Western Massachusetts Electric Company, D.P.U. 08-89, at 1, n. 1. In its filing in this case, the Company revised its existing default service tariff, among other things, by deleting the phrase "default service" and inserting "basic service" (M.D.P.U. No. 1026AV).

related to the procurement of basic service supply, the recovery of which was transferred from base distribution rates to basic service rates as part of a settlement approved by the Department in Costs to Be Included in Default Service, D.T.E. 03-88A-F (2005).

That transfer was done on a revenue-neutral basis by applying a credit to distribution rates that returned to ratepayers the amount transferred for recovery in basic service rates. Costs to be Included in Default Service, D.T.E. 03-88A-F (2005). The total amount of administrative cost transferred to basic service rates was \$141,290, consisting of: solicitation (\$100,812); administration (\$6,771); legal (\$7,500); billing (\$10,200); regulatory (\$1,560); and communications (\$14,447) (see: Exh. WM-JLM-3, at 10 in Western Massachusetts Electric Company, D.P.U. 09-115 (2009); Exh. WM-EAD-1 of the settlement agreement approved in Western Massachusetts Electric Company, D.T.E. 03-88-F (2005)). The corresponding credit in base distribution rates for this transfer of administrative cost recovery to the basic service rates, approved in Western Massachusetts Electric Company, D.P.U. 09-115 (2009), was \$0.00004 per kWh for the period July 2008 through June 2009 (Exh. JLM-3, at 8 in Western Massachusetts Electric Company, D.P.U. 09-115 (2009)). No party commented on this matter.

In its filing in this case, the Company did not propose to adjust the total amount of administrative cost determined in the settlement agreement approved in Western Massachusetts Electric Company, D.T.E. 03-88-F (2005). In the past, the Department has not allowed companies to adjust these costs on an annual basis and, instead, has required companies to include a set level of the costs in the reconciling mechanism since these costs have been

previously determined to be analogous to test year costs included in base distribution rates that have been moved out of distribution rates simply because such costs relate to supply.

Massachusetts Electric Company, D.P.U. 09-39, at 320 (2009), citing: Fitchburg Gas and Electric Light Company, D.P.U. 07-71, at 144-145 (2008); Bay State Gas Company, D.T.E. 05-27, at 313 (2005); Fitchburg Gas and Electric Light Company, D.T.E. 02-24/25, at 281-284 (2002); Fitchburg Gas and Electric Light Company, D.T.E. 98-51, at 154 (1998); Boston Gas Company, D.P.U. 96-50 (Phase I) at 50 (1996).

Accordingly, the Department directs the Company in its compliance filing to this Order to revise its proposed basic service tariff (M.D.P.U. No. 1026AV) indicating the fixed level of administrative costs in the total amount of \$141,290 for recovery in the Basic Service Cost Adjustment Factor, which is a component of basic service rates. See M.D.P.U. No. 1162-A at 1, Massachusetts Electric Company, D.P.U. 09-39 (2009). The basic service tariff shall also indicate that the Company is allowed to collect in the Basic Service Adjustment Factor the bad debt costs associated with the amounts the Company bills for basic service supply, as found in Section V.C, and that the Company is allowed to collect the cost of working capital related to the provision of basic service, as found in Section IV.E. Further, the credit to base distribution rates of \$0.00004 per kWh shall be terminated, and in return the Company's operating expenses shall be reduced by \$141,290.

#### XIV. SEPARATE TARIFF FOR SUMMARY OF CHARGES

WMECo provided a schedule that summarizes the charges for all the Company's rates in the form of a separate tariff (RR-DPU-12). This separate tariff shows for each rate class:

(1) the M.D.P.U. number; (2) the applicable blocks of kWh hours use; (3) customer and other distribution charges; (4) other charges including pension and PBOP adjustment factor, RAAF, default service adjustment, transition, transmission, renewable, and energy efficiency charges; and (5) the date of the last change of the rates (RR-DPU-12).

WMECo expressed concern that removing all rates from the tariffs for the individual rate classes could prove confusing to customers (Tr. 4, at 758-759). The Company indicated that it would be amenable to making such a summary tariff filing (Tr. 4, at 760). No party commented on the separate tariff that summarizes the charges for each rate class of WMECo.

The Department finds the use of a summary tariff is administratively efficient, consumer-friendly, and consistent with Department precedent. See, e.g., D.P.U. 09-39, at 442-443; D.P.U. 07-71, at 197-198; NSTAR Electric, D.T.E. 05-85 (2005) (M.D.P.U. No. 190). Accordingly, the Department directs the Company in its compliance filing to include a separate tariff that summarizes the approved charges for each rate class consistent with the schedule shown in its response to Record Request DPU-12. In addition, the Department directs WMECo to revise its tariffs for each rate class by removing all charges and, instead, placing notations, where appropriate, referring to the tariff schedule showing the summary of charges by rate class.

## XV. QUALITY OF SERVICE AT UMA

### A. Introduction

UMA raises three issues with respect to WMECo's quality of service. First, UMA asserts that it has been experiencing an increased number of power interruptions/outages



(UMA Brief at 4). Second, UMA contends that WMECo's current distribution system is inadequate to serve UMA's long-term needs (UMA Brief at 7-8). Third, UMA asserts that the Department should revise its service quality standards, e.g., to capture additional data and provide for certain penalties (UMA Brief at 27-30).

UMA<sup>162</sup> is currently one of the largest users of electricity in the WMECo service territory, and after it completes its planned expansion, UMA will be WMECo's largest customer (Exhs. UMA-2-1; UMA-2-2; Tr. 10, at 1601-1062).<sup>163</sup> UMA is served by the Podick and Amherst substations, each of which provides two parallel circuits (Exh. UMA-BM/KF at 3). The Podick circuits, 18G1 and 18G2, are always connected to the UMA campus and are the primary feed (Exh. UMA-BM/KF at 3). The Amherst substation provides backup or conditional service via circuits 17K3 and 17K4 when the Podick substation is down or the UMA load exceeds the capacity of the Podick circuits (Exhs. UMA-BM/KF at 4; UMA-PD at 4-5; WM-UMA-1-36). When UMA requires back-up service, UMA must perform a manual connection to the Amherst substation circuits because UMA does not have automatic switching capabilities. In addition, UMA has on-site cogeneration facilities consisting of a 9-MW gas turbine, which came on-line in 2008, a 4-MW steam turbine, which

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<sup>162</sup> UMA has an enrollment of more than 27,000 undergraduate and graduate students, and it employs over 1,100 full-time instructional faculty (see [www.umass.edu/umhome/about](http://www.umass.edu/umhome/about)). UMA is one of the nation's top public research universities, involved in research in a variety of disciplines (see [www.umass.edu/umhome/research/php](http://www.umass.edu/umhome/research/php)).

<sup>163</sup> Within the next five years, UMA's load is expected to be two to three times larger than that of WMECo's next largest customer; the next largest customer has a load between twelve and 13 MW (Exh. UMA-2-2).

came on-line in 2009, and a 2-MW steam turbine constructed but not yet in service (Exh. UMA-PD at 5).

B. Positions of the Parties

1. UMA

UMA asserts that WMECo's service quality is unacceptably poor, with frequent service outages and disruptions at the UMA campus and other areas of Amherst (UMA Brief at 2).

UMA asserts that the outages endanger the safety of people on campus and threaten the vitality of UMA's research activities (UMA Brief at 4). Specifically, UMA contends that since 2008, the Company has experienced almost 400 outage events on the circuits emanating from the Podick substation (UMA Brief at 5, citing Exh. UMA-1-19). UMA argues that the Company attempts to mask the magnitude of the problem by pointing to the performance of the Podick and Amherst substations relative to the Company's other substations (UMA Brief at 5, citing Exh. UMA-3-31). UMA maintains that such a comparison simply highlights that WMECo's system-wide service quality is unacceptable (UMA Brief at 5-6, citing WM-DFW, at 2).

UMA also contends that the damage caused by the outage events, whether sustained or momentary, is extensive (UMA Brief at 6). UMA highlights the amount it has spent to purchase uninterruptible power supply systems and repair or replace research equipment (UMA Brief at 6, citing Exhs. WM-UMA-1-6; WM-UMA-1-7). UMA also asserts that the interruptions to power connected to research equipment results in lost data that can invalidate entire research projects, sometimes causing researchers to repeat or recreate lost experiments or data (UMA Brief at 6). UMA maintains that the invalidation of research projects can

threaten grant funding and have a detrimental impact on the reputation of the faculty and UMA (UMA Brief at 6).

UMA contends that a high number of the outages relate to storm damage that impacts the Podick substation (UMA Brief at 6 n.9, citing Exh. WM-UMA-1-5). As a result, UMA states that it has been disconnecting from the Podick substation and islanding (i.e., separating part of its internal distribution system from WMECo), whenever UMA anticipates a storm that could potentially cause an outage on the Podick substation circuits (UMA Brief at 7). During these periods, UMA asserts that it serves the islanded portion of its system from its on-site generation and connects the remainder of its system to the Amherst substation (UMA Brief at 7). UMA maintains that such an approach is not without problems and that the islanding can cause momentary outages on campus or force UMA to shed load if its on-site generation and Amherst substation are unable to provide enough power (UMA Brief at 7, citing Exh. UMA-BM/KF at 9-11).

UMA asserts that its long-term growth plans will require upgrades to WMECo's distribution service and, thus, UMA asks that the Department allocate funding from WMECo's proposed CRRC towards such upgrades (UMA Brief at 11; UMA Reply Brief at 2). UMA asserts that since 2002, it has been undergoing a long-term plan to upgrade its infrastructure, add new buildings, and rehabilitate and modernize other buildings (UMA Brief at 7). UMA maintains that over the next five years, it expects to add an additional 20 MW to 25 MW in

new load (UMA Brief at 8).<sup>164</sup> UMA argues that WMECo has acknowledged that its current distribution system is only adequate to serve UMA's load until 2012 (UMA Brief at 9, citing Exh. UMA-1-7). UMA contends that by 2012, WMECo will be required to perform an upgrade of certain switches to achieve an additional 3 MW of capacity, which according to UMA will serve UMA's load until 2014 (UMA Brief at 9). UMA argues that by 2014, major upgrades to WMECo's distribution service will be required, which may include a dedicated substation or an upgrade of either the Podick or Amherst substations (UMA Brief at 9). UMA contends that because an upgrade may take upwards of five years, it is unclear whether WMECo can complete the work in time to provide UMA with adequate service (UMA Brief at 10).

Finally, UMA asks that the Department take this opportunity to revise its SAIDI and SAIFI metrics. First, UMA argues that the metrics should be modified to capture outages that are less than a minute (UMA Brief at 27). Second, UMA asserts that the Department should provide negative incentives, i.e., monetary penalties, which will encourage WMECo to correct fault problems at its Podick and Amherst substations (UMA Brief at 28). Third, UMA contends that the Department should consider customer weighting in the calculation of its existing service metrics (UMA Brief at 28). That is, UMA notes that it is considered one customer for purposes of measuring SAIDI and SAIFI, and UMA argues that the outage of the UMA campus should not be considered equal to the outage of one residential customer (UMA

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<sup>164</sup> UMA contends that its new Life Science Building, projected to add 2.2 MW, is the only capital project currently on hold due to the economic recession (UMA Brief at 8).

Brief at 28-29). Fourth, UMA maintains that the Department should create a service quality metric that requires WMECo to conduct annual or semi-annual visual inspections of its Amherst-area distribution rights-of-way to ensure that appropriate tree-trimming efforts are undertaken (UMA Brief at 29-30).

2. Company

WMECo argues that UMA's reliability issues are likely caused to some significant extent by UMA's own system and its configuration with the WMECo system (Company Brief at 256). The Company disagrees with UMA's assertion that other customers in Amherst have been affected by outages and maintains that this lack of corroboration supports a conclusion that UMA's own system is at fault (Company Brief at 257). WMECo asserts that it is committed to working with UMA to identify the cause of UMA's service quality issues (Company Brief at 256).

WMECo also maintains that UMA presented substation outage statistics in a way that is not supported by the record, and the Company disagrees with UMA's contention that there are an inordinate and unacceptable number of outage events (Company Brief at 256, citing UMA Brief at 3). Specifically, WMECo asserts that the record shows that customers served through the Podick substation experience an average of between 0.1 and two outages per year, which, according to the Company, is not an inordinate number (Company Brief at 50, 257, citing Exh. UMA-4-17). The Company also asserts that the outage statistic cited by UMA represents outages spread across a large number of customers and many miles of line, and that no customer is affected by every event (Company Brief at 257, citing Tr. 1, at 107-108).

With respect to UMA's long-term growth plans, WMECo maintains that it has been meeting with UMA to develop options to address its increased load (Company Brief at 258, citing Exhs. UMA-1-3; UMA-4-1; Tr. 1, at 95-96). WMECo asserts that it has adequate capacity to serve UMA's existing and projected load through 2014 (Company Brief at 259, citing Tr. 1, at 98). WMECo contends that the ongoing collaborative effort with UMA to develop a solution to its planned load growth is the best way to ensure that UMA receives the service quality it desires (UMA Brief at 259).

With regard to service quality metrics, WMECo contends that UMA's request that the Department adjust its own service quality metrics to give special emphasis to UMA is likely beyond the scope of a base rate proceeding, and would be more appropriately considered in a service quality proceeding (WMECo Brief at 260). Nonetheless, the Company argues that were the Department to accept UMA's proposals, such proposals would overcomplicate the Department's existing service quality requirements (WMECo Brief at 259-260).

C. Analysis and Findings

While WMECo and UMA agree that there have been electric service interruptions on UMA's campus, the parties are in disagreement as to the level and cause of the interruptions (see, e.g., Company Brief at 256-257; UMA Brief at 5, 27). Based on the record before us, the Department is unable to determine that WMECo is providing substandard service to UMA. First, the number of sustained interruptions recorded by WMECo for the Podick and Amherst substations are typical compared to the interruptions experienced by other WMECo circuits (Exhs. UMA-3-29; UMA-3-31(A)). Specifically, the record shows that the number of

sustained interruptions at the Podick and Amherst substations are within one standard deviation from the interruptions experienced by other WMECo circuits (Exhs. UMA-3-29; UMA-3-31(A)). Further, the record shows that the number of sustained interruptions experienced by WMECo are consistent with those experienced by other Massachusetts electric companies (Exh. AG-DED-1, Sch. 19).

Second, the majority of the sustained interruptions were not directly caused by WMECo, but rather by such factors such as equipment malfunction or system degradation. Specifically, the record shows that there were 385 outages at the Podick substation from 2008 to August 2010 (Exh. UMA-1-19). Of these outages, only approximately eleven percent were directly related to equipment failures (Exh. UMA-1-19). Approximately 75 percent were the types of service interruption issues that all Massachusetts utilities experience (Exh. UMA-1-19). For example, approximately 60 percent related to acts of nature such as snow storms and lightning strikes,<sup>165</sup> eleven percent related to damage caused by animals, and four percent related to vehicle accidents (Exh. UMA-1-19).

Third, only seven events, or less than two percent, of the 385 outage events reported from 2008 to August 2010 directly affected UMA (Exhs. WM-DFW-REB at 28-29; UMA-1-19). That is, 98 percent of the outages affected customers other than UMA (Exhs. WM-DFW-REB at 28-29; UMA-1-19).

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<sup>165</sup> UMA argues that the Company's tree-trimming program for the Podick Substation is inadequate, which results in unnecessary outages during snow storms (UMA Brief at 6, n.9). The record shows, however, that the rights-of-way for the Podick Substation circuit are cleared of trees and that the Company undertakes tree-trimming on a regular basis (see, e.g., Exh. REB-DFW at 29-30; Tr. 10, at 1608-1609).

Finally, the record indicates that UMA's system configuration and the existence of UMA's on-site generators are the cause of some of the outages (Exhs. WM-UMA-1-5; WM-UMA-1-33). For example, the record evidence shows that there were numerous occasions when UMA's system failed but WMECo showed no outage event (Exh. WM-UMA-1-33).

UMA asserts that in addition to sustained outages, there have been momentary outages that have not previously been tracked (UMA Brief at 6, 27). WMECo has recently installed power quality monitoring equipment that enables the Company to track all power quality issues, including momentary outages, which will assist the Company in ultimately tracking the source of UMA's service quality issues (Exhs. WM-DFW-REB at 26-27; UMA-3-12). To advance the resolution of this matter, we direct the Company to analyze the results from its recently-installed power quality monitoring equipment, as well as previously tracked outages, and report the results to the Department and UMA on a quarterly basis April 1, 2011. The report should include supporting documentation and should separately identify the party responsible (e.g., WMECo or UMA) for causing each power quality disruption.

UMA also asserts that it expects to add an additional 20 MW to 25 MW in new load over the next five years, and that WMECo is not taking appropriate steps to upgrade its facilities to meet UMA's long-term growth plans (UMA Brief at 7-8). Given the size of UMA's enrollment and its research operations, UMA is one of WMECo's larger customers (Exhs. UMA-2-1; UMA-2-2; Tr. 10, at 1601). In addition, the Amherst campus is the flagship school in the University of Massachusetts system and, thus, expansion projects at



UMA benefit the entire Commonwealth. Further, UMA should be able to have confidence that it can rely on WMECo's system for future growth.

To ensure that the Company's system is adequate to meet UMA's increased load by 2014, we recognize that WMECo must undertake appropriate planning. Thus, we direct WMECo to work with UMA to ensure that its distribution system will adequately address UMA's long-term needs. Further, we direct WMECo to submit a quarterly report April 1, 2011 to the Department that outlines the solutions the parties have determined are necessary to address UMA's long-term growth needs.

Finally, UMA urges the Department to revise its service quality standards as a part of this proceeding. The Department has established service quality standards that require companies to monitor and report on electric reliability measures and ensure that the reporting companies remediate any problems that arise. Service Quality Standards, D.T.E. 04-116-C, Appendix at 8-9 (2007). We conclude that it is not appropriate to revise the current Department service quality metrics in this proceeding. Instead, we agree with the Company that any revision to our service quality standards is beyond the scope of a rate case proceeding and should be handled in a separate docket in which all Massachusetts utilities and interested parties may participate. Because we are uncertain as to the ultimate cause of UMA's outages, we decline to open such a proceeding at this time. Instead, we will determine whether such a proceeding is warranted upon our review of the quarterly reports that we have directed the Company to submit.

**XVI. SCHEDULES****A. Schedule 1 – Revenue Requirements and Calculation of Revenue Increase**

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
<b>COST OF SERVICE</b>				
Total O&M Expense	63,104,872	(2,320,687)	(405,446)	60,378,739
Depreciation	21,571,169	0	(53,316)	21,517,853
Amortization	6,563,407	324,329	(4,518,691)	2,369,045
Taxes Other Than Income Taxes	14,053,869	(130,114)	29,975	13,953,730
Income Taxes	13,348,842	41,331	(1,501,273)	11,888,900
Return on Rate Base	30,949,761	97,621	(2,783,061)	28,264,320
Workforce Replenishment	359,873	0	(359,873)	0
Total Cost of Service	149,951,793	(1,987,520)	(9,591,686)	138,372,587
<b>OPERATING REVENUES</b>				
Operating Revenues	108,102,957	0	0	108,102,957
Revenue Adjustments	13,467,266	0	0	13,467,266
Total Operating Revenues	121,570,223	0	0	121,570,223
Total Base Revenue Deficiency	28,381,570	(1,987,520)	(9,591,686)	16,802,364

B. Schedule 2 – Operations and Maintenance Expenses

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
Energy Purchases Expense	1,650,639	0	0	1,650,639
Test Year Distribution O&M Expense	57,199,116	0	0	57,199,116
ADJUSTMENTS TO O&M EXPENSE:				
Computer Software	(160,104)	0	0	(160,104)
Facilities	69,748	0	0	69,748
Field Operations	258,892	0	0	258,892
Insurance	665,289	6,100	0	671,389
Regulatory	424,711	0	0	424,711
Rent	188,222	(6,975)	0	181,247
Bad Debt	(745,154)	(2,171,636)	0	(2,916,790)
Vehicles	(255,870)	0	0	(255,870)
Payroll	1,749,015	(13,120)	0	1,735,895
Payroll Incentive	199,170	(749)	(79,721)	118,700
Employee Benefits	1,106,884	0	0	1,106,884
Inflation	296,359	0	(5,699)	290,660
Environmental Remediation Expense	0	0	(108,896)	(108,896)
Normalization of Rate Case Expense	0	0	67,336	67,336
Shareholder Services	0	0	(24,969)	(24,969)
Administrative Costs	0	0	(141,290)	(141,290)
Total Other O&M Expenses	3,797,162	(2,186,380)	(293,239)	1,317,543
<b>Total Distribution O&amp;M Expense</b>	<b>60,996,278</b>	<b>(2,186,380)</b>	<b>(293,239)</b>	<b>58,516,659</b>
Uncollectibles on Proposed Rate Increase	457,955	(134,307)	(112,207)	211,441
<b>Total O&amp;M Expense</b>	<b>63,104,872</b>	<b>(2,320,687)</b>	<b>(405,446)</b>	<b>60,378,739</b>

C. Schedule 3 – Depreciation and Amortization Expenses

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
Depreciation Expense (WMECo and NUSCo)	21,570,940	0	(53,087)	21,517,853
Property Sales	229	0	(229)	0
Amortization of Storm Recovery	3,178,189	418,338	(3,596,527)	0
Hardship Receivables	1,800,000	0	(680,000)	1,120,000
Medicare	787,000	0	0	787,000
Deferred Farm Credit	43,043	0	(7,173)	35,870
CPSL	87,774	(53,600)	(0)	34,174
Amortization of Prior Rate Case Expense	275,400	(40,409)	(234,991)	0
Former Flowthrough Approved in D.T.E. 06-55	392,000	0	0	392,000
Connecticut Sales Tax Refund	0	0	(110,080)	(110,080)
<b>Total Depreciation &amp; Amortization Expenses</b>	<b>28,134,576</b>	<b>324,329</b>	<b>(4,682,088)</b>	<b>23,776,817</b>

**D.     Schedule 4 – Rate Base and Return on Rate Base**

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
Utility Plant in Service	656,136,785	0	0	656,136,785
LESS:				
Reserve for Depreciation and Amortization	184,026,549	0	0	184,026,549
Net Utility Plant in Service	472,110,236	0	0	472,110,236
ADDITIONS TO PLANT:				
Storm Reserve	13,015,944	2,091,692	(15,107,636)	0
Cash Working Capital	9,688,039	(67,515)	(656,486)	8,964,038
Materials and Supplies	2,968,705	0	0	2,968,705
Total Additions to Plant	25,672,688	2,024,177	(15,764,122)	11,932,743
DEDUCTIONS FROM PLANT:				
Reserve for Deferred Income Tax	113,597,594	820,466	(3,372,441)	111,045,619
Unclaimed Funds	425,736	0	0	425,736
Unamortized ITC-Pre1971	3,075	0	0	3,075
Customer Deposits	1,616,328	0	0	1,616,328
Customer Advances	515,520	0	0	515,520
Total Deductions from Plant	116,158,253	820,466	(3,372,441)	113,606,278
RATE BASE	381,624,671	1,203,711	(12,391,681)	370,436,701
COST OF CAPITAL	8.11%	8.11%	7.63%	7.63%
RETURN ON RATE BASE	30,949,761	97,621	(2,783,061)	28,264,320

E. Schedule 5 – Cost of Capital

PER COMPANY				
	PRINCIPAL	PERCENTAGE	COST	RATE OF RETURN
Long-Term Debt	\$339,806,000	49.30%	5.66%	2.79%
Preferred Stock			0.00%	0.00%
Common Equity	\$349,418,000	50.70%	10.50%	5.32%
Total Capital	\$689,224,000	100.00%		8.11%
Weighted Cost of Debt				2.79%
Equity				5.32%
Cost of Capital				8.11%

COMPANY ADJUSTMENTS				
	PRINCIPAL	PERCENTAGE	COST	RATE OF RETURN
Long-Term Debt	\$339,806,000	49.30%	5.66%	2.79%
Preferred Stock		0.00%	0.00%	0.00%
Common Equity	\$349,418,000	50.70%	10.50%	5.32%
Total Capital	\$689,224,000	100.00%		8.11%
Weighted Cost of Debt				2.79%
Equity				5.32%
Cost of Capital				8.11%

PER ORDER				
	PRINCIPAL	PERCENTAGE	COST	RATE OF RETURN
Long-Term Debt	\$339,806,000	49.30%	5.60%	2.76%
Preferred Stock	\$0	0.00%	0.00%	0.00%
Common Equity	\$349,418,000	50.70%	9.60%	4.87%
Total Capital	\$689,224,000	100.00%		7.63%
Weighted Cost of Debt				2.76%
Equity				4.87%
Cost of Capital				7.63%

F. Schedule 6 – Cash Working Capital

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
Retail Operating Expense				
O&M Expense				
Basic Service	177,338,000	0	(177,338,000)	0
Transition Costs	34,102,000	0	0	34,102,000
TC IPP Costs	(1,927,000)	0	0	(1,927,000)
Transmission Costs	43,182,000	0	0	43,182,000
Conservation	12,429,000	0	0	12,429,000
Renewables	1,823,000	0	0	1,823,000
Other O&M Costs	63,104,872	(2,320,687)	(405,446)	60,378,739
Total O&M Expense	330,051,872	(2,320,687)	(177,743,446)	149,987,739
Taxes:				
Local Property	11,536,340	0	0	11,536,340
Federal Unemployment	22,504	(1,535)	0	20,969
Mass Unemployment	121,709	(8,242)	0	113,467
FICA	1,870,434	(126,241)	29,975	1,774,168
Medicare	499,028	0	0	499,028
MA Universal Health	3,854	(224)	0	3,630
Federal Income	6,507,000	0	0	6,507,000
Mass Income	2,280,000	0	0	2,280,000
Connecticut Sales Taxes	0	6,128	0	6,128
Total Taxes	22,840,869	(136,242)	29,975	22,734,602
Proforma Working Capital	352,892,741	(2,456,929)	(177,713,471)	172,722,341
Less: Securitization	337,000	0	0	337,000
Cash Working Capital	352,555,741	(2,456,929)	(177,713,471)	172,385,341
Lead-Lag Days	10.03	10.03	18.98	18.98
CWC Factor (Days/365)	2.7479%	2.7479%	5.2000%	5.2000%
CWC Allowance	9,688,039	(67,515)	(656,486)	8,964,038

G. Schedule 7 – Taxes Other Than Income Taxes

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
FICA Taxes	1,870,434	(126,241)	29,975	1,774,168
Medicare Taxes	499,028	0	0	499,028
Federal Unemployment Taxes	22,504	(1,535)	0	20,969
Mass Unemployment Taxes	121,709	(8,242)	0	113,467
Mass Universal Health	3,854	(224)	0	3,630
Property Taxes	11,536,340	0	0	11,536,340
Connecticut Sales Tax	0	6,128	0	6,128
<b>Total Taxes Other Than Income Taxes</b>	<b>14,053,869</b>	<b>(130,114)</b>	<b>29,975</b>	<b>13,953,730</b>



H. Schedule 8 – Income Taxes

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
Rate Base	381,624,671	1,203,711	(12,391,681)	370,436,701
Return on Rate Base	30,949,761	97,621	(2,783,061)	28,264,320
LESS:				
Interest Expense	10,647,467	33,584	(456,998)	10,224,053
Total Deductions	10,647,467	33,584	(456,998)	10,224,053
Amortization of Investment Tax Credit	(201,386)	0	0	(201,386)
Taxable Income Base	20,100,908	64,037	(2,326,064)	17,838,881
Gross Up Factor	1.6454134	1.6454134	1.6454134	1.6454134
Taxable Income	33,074,303	105,368	(3,827,337)	29,352,334
Mass Franchise Tax 6.50%	2,149,830	6,849	(248,777)	1,907,902
Federal Taxable Income	30,924,473	98,519	(3,578,560)	27,444,432
Federal Income Tax Calculated	10,823,566	34,482	(1,252,496)	9,605,551
Total Income Taxes Calculated	12,973,396	41,331	(1,501,273)	11,513,453
Tax Impact of Permanent / Flowthrough Differences	576,832	0	0	576,832
Amortization of Investment Tax Credit	(201,386)	0	0	(201,386)
<b>Total Income Taxes</b>	<b>13,348,842</b>	<b>41,331</b>	<b>(1,501,273)</b>	<b>11,888,900</b>

I. Schedule 9 - Revenues

	PER COMPANY	COMPANY ADJUSTMENT	DPU ADJUSTMENT	PER ORDER
<b>OPERATING REVENUES PER BOOKS</b>	108,102,957	0	0	108,102,957
<b>Revenue Adjustments</b>				
Unbilled Sales	507,937	0	0	507,937
Reconciliation Mechanisms	7,134,920	0	0	7,134,920
Reconnect, Surge Protection, Late Payment Fees	1,084,421	0	0	1,084,421
Tariff 7	1,650,639	0	0	1,650,639
Other	3,089,349	0	0	3,089,349
Total Revenue Adjustments	13,467,266	0	0	13,467,266
<b>Adjusted Total Operating Revenues</b>	<b>121,570,223</b>	<b>0</b>	<b>0</b>	<b>121,570,223</b>

J. Schedule 10

## For Illustrative Purposes Only

REVENUE INCREASE PER ORDER

\$16,803

Rate Class	PER COSS				Department Approved Revenue at EROR	Department Approved Revenue Increase	Department Approved Revenue Target	Increase Indicated for EROR	120 Percent Cap on Max. Increase	Company Proposed Increase Allocation	Increase At Company Proposed Allocation	Share of Increase Cap or Non-capped Classes	Allocation of Revenue Shortfall	Final Revenue Requirement	Distribution Rate Increase (%)
	Proposed COSS Target Revenue	Current Revenue	Proposed Deficiency at EROR	Share of COSS Target Revenue											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Residential R-1/R-2	\$ 63,136	\$ 44,090	\$19,046	43.68%	\$57,905	\$13,815	\$57,905	31.3%	\$51,771	120%	\$51,771	0.00%	\$0	\$51,771	17.4%
Residential R-3/R-4	\$ 12,723	\$ 8,533	\$4,190	8.80%	\$11,669	\$3,136	\$11,669	36.7%	\$10,019	120%	\$10,019	0.00%	\$0	\$10,019	17.4%
Rate 23	\$ 12	\$ 13	-\$1	0.01%	\$11	-\$2	\$11	-15.3%	\$15	50%	\$14	0.02%	\$0	\$14	8.5%
Rate 24	\$ 501	\$ 320	\$181	0.35%	\$459	\$139	\$459	43.6%	\$376	120%	\$376	0.00%	\$0	\$376	17.4%
Small C/I G-0	\$ 25,009	\$ 24,012	\$997	17.30%	\$22,937	-\$1,075	\$22,937	-4.5%	\$28,195	90%	\$27,149	39.00%	\$303	\$27,452	14.3%
Small C/I T-0	\$ 31	\$ 30	\$1	0.02%	\$29	-\$1	\$29	-4.5%	\$35	90%	\$34	0.05%	\$0	\$34	14.3%
Medium C/I G-2	\$ 13,373	\$ 12,243	\$1,130	9.25%	\$12,265	\$22	\$12,265	0.2%	\$14,375	90%	\$13,842	19.89%	\$155	\$13,997	14.3%
Medium C/I T-4	\$ 172	\$ 157	\$15	0.12%	\$158	\$0	\$158	0.2%	\$185	90%	\$178	0.26%	\$2	\$180	14.3%
Large C/I T-2	\$ 15,130	\$ 15,109	\$21	10.47%	\$13,876	-\$1,232	\$13,876	-8.2%	\$17,741	50%	\$16,205	23.28%	\$181	\$16,386	8.5%
Large C/I T-5	\$ 2,840	\$ 2,511	\$329	1.97%	\$2,605	\$94	\$2,605	3.7%	\$2,948	50%	\$2,693	3.87%	\$30	\$2,723	8.5%
Rate PR	\$ 5,104	\$ 4,512	\$592	3.53%	\$4,681	\$169	\$4,681	3.7%	\$5,298	50%	\$4,840	6.95%	\$54	\$4,894	8.5%
Streetlight/S-1	\$ 6,306	\$ 4,035	\$2,271	4.36%	\$5,784	\$1,749	\$5,784	43.3%	\$4,738	70%	\$4,445	6.39%	\$50	\$4,495	11.4%
Streetlight/S-2	\$ 189	\$ 183	\$6	0.13%	\$173	-\$10	\$173	-5.3%	\$215	90%	\$207	0.30%	\$2	\$209	14.3%
Total Company	\$144,526	\$115,748	\$28,778	100%	\$132,551	\$16,803	\$132,551	14.5%	\$135,912		\$131,773	100%	\$778	\$132,551	14.5%

## NOTES:

- (1) Exhibit WM-EAD-1, page 4, line 45 less line 13
- (2) Exhibit WM-EAD-1, page 4, line 12
- (3) Column (1) - Column (2)
- (4) Column (1) Rate Class share of Column (1) Total
- (5) Column (4) \* Column (5) Total
- (6) Column (5) - Column (2)
- (7) Column (2) + Column (6)
- (8) (Column (5)/Column (2)) - 1
- (9) Column (2) \* (1 + (1.2 \* Column (8) (Total Company Percent Increase)))
- (10) Company Proposed Allocation of Distribution Increase (Exh. WM-CRG at 12)
- (11) Column (2) \* (1 + (Column (10) \* Column (8) (Total Company Percent Increase)))
- (12) (Only for uncapped rate classes) Column (11)/Column (11) Total (Less Revenue from capped rate classes)
- (13) Column (12) \* (Column (7) Total - Column (11) Total)
- (14) Column (11) + Column (13)
- (15) (Column (14) - Column (2))/Column (2)

XVII. ORDER

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

ORDERED: That the tariffs That the tariffs M.D.P.U. No. 1000U through 1008U, M.D.P.U. No. 1009Y, M.D.P.U. No. 1010Y, M.D.P.U. No. 1013V, M.D.T.E. No. 1015F, M.D.T.E. No. 1022B, M.D.P.U. No. 1023C, M.D.P.U. No. 1024E, M.D.P.U. No. 1026AV, M.D.P.U. No. 1034R, M.D.P.U. No. 1035R, M.D.P.U. No. 1037C, M.D.P.U. No. 1038B, M.D.P.U. No. 1040H, M.D.P.U. No. 1049A, M.D.P.U. No. 1050A, M.D.T.E. No. 1020B, M.D.T.E. No. 1021B, and M.D.T.E. No. 1025D filed by Western Massachusetts Electric Company on July 16, 2010, to become effective on February 1, 2011, are DISALLOWED; and it is

FURTHER ORDERED: That Western Massachusetts Electric Company shall file new schedules of rates and charges designed to increase annual rate revenues by \$16,802,364; and it is

FURTHER ORDERED: That Western Massachusetts Electric 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 Western Massachusetts Electric Company shall comply with all other orders and directives contained herein; and it is

FURTHER ORDERED: That the new rates shall apply to electricity consumed on or after February 1, 2011, 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/  
Tim Woolf, Commissioner

/s/  
Jolette A Westbrook, 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.